S T A T E   O F   M I C H I G A N

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

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In the matter of the application of **DTE ELECTRIC COMPANY** for authority to increase its rates, amend its rate schedules and rules governing the distribution and supply of electric energy, and for miscellaneous accounting authority.	)))))))	Case No. U-21297

At the December 1, 2023 meeting of the Michigan Public Service Commission in Lansing, Michigan.

PRESENT: Hon. Daniel C. Scripps, Chair
Hon. Katherine L. Peretick, Commissioner
Hon. Alessandra R. Carreon, Commissioner

ORDER

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I. HISTORY OF PROCEEDINGS

On February 10, 2023, DTE Electric Company (DTE Electric) filed an application requesting authority to increase its retail rates by approximately $622 million,[1] or $619 million if the investment recovery mechanism (IRM)[2] proposed by the company is accepted, effective as early as December 10, 2023. DTE Electric also requested other forms of regulatory relief, including amending its rate schedules and rules governing the distribution and supply of electric energy and the approval of several pilots and various accounting proposals. The utility is currently providing service pursuant to rates established by the November 18, 2022 order in Case No. U-20836 (November 18 order) and various special contracts. DTE Electric's application, pp. 1-2.

According to DTE Electric, the rate increase sought in this case is based on the utility's projections from relevant items of investment, expense, and revenue for a test year covering the 12-month period from December 1, 2023 through November 30, 2024. DTE Electric explained in its application that the starting point for determining its revenue deficiency was the historical data from year-end 2021, which was then normalized and adjusted for known and measurable changes to arrive at the utility's projected test year. DTE Electric's application, p. 3.

In its application, DTE Electric stated that the rate increase was necessary to recover increased investments in plant involving generation; to support the company's carbon reduction plans and

[1] In its reply brief, DTE Electric supported a revised revenue deficiency of $580 million (or $583 million without approval of the IRM). DTE Electric's reply brief, pp. 2-3, Attachments A and B. In exceptions and replies to exceptions, DTE Electric continued to support the $580 million (or $583 million without approval of the IRM). DTE Electric's exceptions, p. 17; DTE Electric's replies to exceptions, p. 60.

[2] Some parties refer to the IRM as the "investment recovery mechanism" while others throughout this case have referred to it as the "infrastructure recovery mechanism." For the purposes of this order, the Commission considers them to be interchangeable.

the state's clean energy goals; to recover investments in the electric distribution system; to improve power reliability; to recover associated depreciation and property tax increase; to allow the utility a reasonable opportunity to recover its costs of operation, including a reasonable rate of return (ROR); and to account for a sales decline from the level included in current rates and the impact of inflation on DTE Electric's operation and maintenance (O&M) and debt costs. DTE Electric proposed a return on equity (ROE) of 10.25% with an overall ROR of 5.70% after tax, 7.11% pre-tax. The utility also requested a permanent capital structure of approximately 50% equity and 50% long-term debt and included a projected average rate base of approximately $22.6 billion for the test year.[3] DTE Electric's application, pp. 3-4.

On March 6, 2023, Administrative Law Judge Sharon L. Feldman (ALJ) conducted a prehearing conference at which the ALJ granted petitions to intervene filed by the Michigan Department of Attorney General (Attorney General); Energy Michigan; Michigan Energy Innovation Business Council, Advanced Energy United, and Institute for Energy Innovation (collectively, MEIU); ChargePoint, Inc. (ChargePoint); Bloom Energy Corporation (Bloom Energy); the Foundry Association of Michigan (FAM); Michigan Environmental Council, Natural Resources Defense Council, Inc., Sierra Club, and Citizens Utility Board of Michigan (collectively, MNSC); Michigan Cable Telecommunications Association, Inc.; Association of Businesses Advocating Tariff Equity (ABATE); The Kroger Co. (Kroger); Gerdau MacSteel, Inc.

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[3] In its initial brief, DTE Electric adjusted its projected rate base to $22.34 billion, and then in its reply brief, the company supported a rate base projection of $22.534 billion for the test year (comprised of $21.283 billion net plant balance and $1.251 billion in working capital). DTE Electric's initial brief, pp. 19-20; DTE Electric's reply brief, p. 63, Attachment A, p. 2. In exceptions, the company maintained a rate base projection of $22.534 billion for the test year. DTE Electric's exceptions, pp. 17-18. The company's requested ROE, ROR, and capital structure remained the same throughout the entire case.

(Gerdau); Utility Workers Union of America, AFL-CIO Local 223 (Local 223); Environmental Law and Policy Center of the Midwest,[4] Ecology Center, Inc., Union of Concerned Scientists, and Vote Solar (collectively, the Clean Energy Organizations or the CEOs); Michigan Municipal Association for Utility Issues (MI-MAUI); City of Ann Arbor (Ann Arbor); Walmart Inc. (Walmart); Great Lakes Renewable Energy Association, Inc. (GLREA); Residential Customer Group; Soulardarity and We Want Green, Too (collectively, the Detroit Area Advocacy Organizations or the DAAOs); International Transmission Company (ITC); and EVgo Services LLC (EVgo). DTE Electric and the Commission Staff (Staff) also participated in the proceeding. A schedule for the case was also established by the ALJ in accordance with the 10-month timeframe set forth in MCL 460.6a(5).

On March 24, 2023, the ALJ adopted a protective order for use in the matter.

By June 13, 2023, direct testimony and exhibits were filed by the Staff, the Attorney General, ABATE, MNSC, MEIU, Ann Arbor, MI-MAUI, the CEOs, Bloom Energy, Energy Michigan, EVgo, Kroger, Walmart, ITC, and the DAAOs. By July 7, 2023, DTE Electric, the Staff, MI-MAUI, MEIU, ABATE, Kroger, and the DAAOs filed rebuttal testimony. Evidentiary hearings were held on July 19, 20, 21, and 24, 2023, wherein testimony and exhibits were bound into the record and cross-examination took place. Thereafter, the parties filed initial briefs on August 15, 2023,[5] and reply briefs on August 30 and September 1, 2023.

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[4] Although typically referred to as the Environmental Law & Policy Center, or ELPC, the entity's true name per the Office of the Illinois Secretary of State is the Environmental Law and Policy Center of the Midwest.

[5] The Staff filed a corrected initial brief on August 16, 2023. *See*, Case No. U-21297, filing #U-21297-0605.

The ALJ issued a proposal for decision (PFD) on October 5, 2023. On October 27, 2023, DTE Electric, the Staff, the Attorney General, MI-MAUI, the DAAOs, Bloom Energy, the CEOs, Kroger, ITC, ABATE, MNSC, MEIU, and EVgo filed exceptions. On November 8, 2023, MI-MAUI/Ann Arbor, Energy Michigan, ABATE, the Staff, MNSC, MEIU, the DAAOs, the CEOs, the Attorney General, and DTE Electric filed replies to exceptions. On that same date, MNSC filed a motion to strike asking the Commission to strike portions of DTE Electric's exceptions and require the company to refile its exceptions. DTE Electric filed a response to MNSC's motion to strike on November 15, 2023, contending that the motion is unnecessary and should be denied. *See*, Case No. U-21297, filing #U-21297-0648, pp. 1-3.

The record consists of testimony from 96 witnesses contained within 4,795 pages of transcript, along with 595 exhibits, several of which also have a confidential version.[6] The ALJ provided an overview of the parties' positions on pages 3 through 29 of the PFD and provided an extensive summary of the record for each disputed issue throughout the PFD, which will not be repeated in this order.

As a preliminary matter, the Commission will address MNSC's motion to strike here. Pursuant to the Michigan Constitution, the Commission's decisions must be authorized by law and supported by competent, material, and substantial evidence on the whole record. Const 1963, art 6, § 28. Further, under the Michigan Administrative Procedures Act of 1969, MCL 24.201 *et seq*. (APA), a final decision by the Commission shall include conclusions of law that are "supported by authority or reasoned opinion" and findings of fact that are "based exclusively on the evidence and on matters officially noticed." MCL 24.285. A final order "shall not be made except upon

[6] The docket also contains a large number of public comments that are available in the Case No. U-21297 docket for public viewing.

consideration of the record as a whole or a portion of the record as may be cited by any party to the proceeding and as supported by and in accordance with the competent, material, and substantial evidence." *Id*. Consistent with these constitutional and statutory requirements, the final order in this case is based on admitted evidence on the whole record and does not rely on an executive summary or portions of the company's exceptions to the PFD. Even under the assumption that MNSC's motion to strike is proper, the Commission finds that granting the motion and the relief requested therein would have no bearing on the Commission's final decision in this matter as the Commission's decision is based on the properly weighed and evaluated evidence on the whole record. Therefore, the Commission dismisses MNSC's motion as moot. However, the Commission notes that MNSC included the same arguments contained in its motion to strike in its replies to exceptions filed on the same date. The Commission further finds that the arguments in its motion to strike are more appropriately framed as replies to exceptions and therefore, the Commission will consider MNSC's arguments and support as replies to exceptions.

II. LEGAL STANDARDS

DTE Electric discussed the legal standards, including the Commission's jurisdiction over this case, the applicable standard of review, and rate setting legal requirements applicable to this case. DTE Electric's initial brief, pp. 10-17; *see also*, DTE Electric's reply brief, pp. 3-5 (responding to other parties' arguments with constitutional protections and other legal arguments surrounding the utility's past earnings, new or expanded programs without acknowledged necessary funding, and social policy changes to shift costs).

The ALJ summarized the legal standards applicable to rate cases and, in concluding this section of the PFD, found that, "in the absence of any issues rising to the level of a constitutional concern, this [ALJ] will primarily look to past decisions of the Commission for guidance in determining how to resolve disputed issues involving rate case elements." PFD, p. 30.

Noting that the ALJ's recitation of the legal standards for this case was not a finding of fact or conclusion of law, DTE Electric nonetheless takes exception to portions of the PFD. The company first asserts its constitutional rights not listed by the ALJ including its due process rights, protections against takings, and the Commission's constitutional obligation to base decisions on competent, material, and substantial evidence on the whole record. DTE Electric's exceptions, pp. 12-14. DTE Electric then sets forth the evidentiary standards and burden of proof it believed to be applicable. DTE Electric further notes that the ALJ reached conclusions that may not have aggrieved the company but followed what DTE Electric characterized as inaccurate or objectionable discussion and to the extent such conclusions are beyond the proper scope of a PFD pursuant to MCL 24.281, the company generally excepts. DTE Electric's exceptions, pp. 14-16. Lastly, the company raises its testimony regarding the allowance for funds used during construction (AFUDC) offset and insists that because disallowances of projects with an AFUDC offset have no impact on the revenue deficiency, it is appropriate to not reduce the company's requested rate base and leave the full AFUDC credit as filed in projected net income. *Id*., p. 17 (citing 5 Tr, 1541, 1573-1574).

In its replies to exceptions, the Staff points to the same AFUDC methodology included in its initial brief as the company proposed in its exceptions. The Staff states its agreement with the company. Staff's replies to exceptions, p. 20 (citing DTE Electric's exceptions, p. 17).

In replies to exceptions, the Attorney General supports the ALJ's recited legal standards and states that DTE Electric's exceptions seek to muddy the waters with disjointed arguments that the ALJ applied incorrect legal standards and present due process and takings arguments that are not relevant in this case. The Attorney General contends that DTE Electric "misleadingly" cites the standard for appellate review which is not relevant at this stage and, while the company noted it has a logistical burden of proof, the Attorney General points out that this burden is a legal one, not just logistical. Attorney General's replies to exceptions, p. 13. Lastly, in response to the company's comments on the unprecedented length and scope of the PFD, the Attorney General points to the intricacy of the issues at stake and the necessity of the parties and the ALJ to discern DTE Electric's intent. *Id*., pp. 13-14.

The Commission finds that its final decision in this case is based on a proper application of law and weighing of evidence in the record, represents the appropriate balance between customer and shareholder interests in the ratemaking process of fixing just and reasonable rates, and ensures that the utility has the opportunity to earn a reasonable return of and on its investments in this matter. *See*, *Bluefield Waterworks Improvement Co v Pub Serv Comm of West Virginia*, 262 US 679, 690-694; 43 S Ct 675; 67 L Ed 1176 (1923); *Fed Power Comm v Hope Natural Gas Co*, 320 US 591, 603; 64 S Ct 281; 88 L Ed 333 (1944); *Michigan Bell Tel Co v Mich Pub Serv Comm*, 332 Mich 7, 38; 50 NW2d 826 (1952).

III. TEST YEAR

In developing its rates for this case, DTE Electric relied on a projected test year from December 1, 2023 through November 30, 2024, explaining that it used normalized and adjusted actual results from the historical test year ended December 31, 2021 to arrive at its filed projected revenue deficiency of approximately $622 million (or $619 million if the IRM proposed by the company is accepted). DTE Electric's initial brief, p. 17. DTE Electric also presented estimated 2022 spending, based in substantial part on actual spending with the remainder of the year estimated. The period from January 1, 2023 through November 30, 2023 is referred to as the 11-month bridge period, and when combined with 2022 spending, is referred to as the 23-month bridge period.

ABATE objected to the company's use of a projected test year with projected capital expenditures and argued that DTE Electric's proposed capital expenditures combined with the use of a projected test year is a major contributor to the company's excessive recovery of costs. ABATE's initial brief, pp. 2-6. ABATE contended that the Commission should instead approve a revenue requirement based on a historic test year, or, if it finds a projected test year to be appropriate, the Commission should ensure that DTE Electric's projected investments and expenditures are precisely quantified as to the amount and the specific quarter in which the company will incur these investments and expenditures. *Id*., p. 6. ABATE also recommended that the Commission adopt an earnings sharing mechanism (ESM). Additionally, ABATE asked that the Commission be more vigilant in ensuring that projected expenditures and projects are necessary to provide reliable electric services at the lowest reasonable cost and that the company is irrevocably committed to incur projected expenditures and investments. *Id*., pp. 7-11. In its counter argument, DTE Electric stated that the Commission has approved the current projected test year methodology since 2003 and argued that the company has provided substantial support and justification for the projected expenditures in this case. DTE Electric relied on MCL 460.6a; past Commission orders in Case Nos. U-20836, U-20561, and U-20162; as well as decisions from the Court of Appeals affirming the use of the projected test year in support of its position. DTE Electric's reply brief, pp. 6-8.

The ALJ found that the use of a projected test year to set rates for a 12-month period following the expected date of a Commission order in this case is reasonable. The ALJ reasoned that using a historical test year as a basis for a future test year with adjustments for known and measurable changes is an approach used by the Commission for several years. The ALJ also stated that the Commission has made clear that it is not obligated to accept DTE Electric's projections if it finds them to be unsupported or finds that the money is not likely to be spent as projected. The ALJ further explained that the company bears the burden of proof to show by a preponderance of the evidence that it will spend the funds as it projects, and if it fails to do so, the Commission may ignore the projection or substitute an alternative it finds to be reasonable and appropriate, such as an historical average. PFD, pp. 36-37.

The Commission agrees with the ALJ and approves the company's projected test year from December 1, 2023 through November 30, 2024. As pointed out by the ALJ, the Commission's approval of projected test years is permissible under MCL 460.6a and challenges to the use of a projected test year have been well-settled by the Court of Appeals.[7] Further, as the Commission has previously stated, "the burden is on the company to prove the accuracy of each and every test year projection." December 22, 2021 order in Case No. U-20963 (December 22 order), p. 10. ABATE's request for an ESM and recommendations for future rate cases are addressed below in similar order as they were addressed in the PFD.

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[7] The Court of Appeals affirmed the Commission's approval of a projected test year in Case No. U-20162, and the Supreme Court declined to hear the case. *See*, *In re Application of DTE Electric Co to Increase Rates*, unpublished opinion per curiam of the Court of Appeals, issued February 25, 2021 (Docket Nos. 349924 and 350008), *recon den* (April 19, 2021), *lv den* (November 2, 2021), *recon den* (January 31, 2022). The Court of Appeals again affirmed the use of a projected test year in Case No. U-20561, and the Supreme Court declined to hear the case. *In re Application of DTE Electric Co*, unpublished per curiam opinion of the Court of Appeals, issued December 21, 2021 (Docket No. U-353767), *lv den* 509 Mich 989; 974 NW2d 192 (May 31, 2022).

IV. RATE BASE

Rate base consists of the capital invested in utility plant, less accumulated depreciation, plus the utility's working capital requirements. In this case, rate base also includes net capital lease property and net nuclear fuel property, less capital lease obligations. Net plant is the primary component of rate base, and its key elements are total utility plant (plant in service, plant held for future use, and construction work in progress (CWIP)) less the depreciation reserve, which includes accumulated depreciation, amortization, and depletion. In its application, DTE Electric initially projected a rate base consisting of $22.611 billion. DTE Electric's application, p. 3. By the briefing stage of this case, DTE Electric projected a revised jurisdictional rate base of $22,533,543,000. DTE Electric's reply brief, Attachment A, p. 1. The Staff calculated a jurisdictional rate base of $22,450,330,000 for the test year. Staff's reply brief, Appendix A.

Contested rate base issues are addressed *ad seriatim*, following a description by the ALJ of some general concerns from the parties regarding the increasing volume of the company's rate base and capital expenditures.

Following a recitation of the legal standards that the Commission applies to its decision-making regarding rate base, the ALJ described concerns expressed by the parties regarding DTE Electric's evidentiary presentation in this case and the significant increases in rate base and capital expenditures that appear in this case and that have appeared in recent electric rate cases. PFD, pp. 38-42. The ALJ agreed that review of the company's rate case filings is challenging given the increased expenditures and restrictive statutory timelines. *Id.*, p. 42. Recalling the large volume of expenditures that were within the scope of review in one of DTE Electric's previous rate cases, Case No. U-20561, the ALJ similarly highlighted the hundreds of projects that make up the $9.92 billion in capital expenditures for review in the instant case to illustrate the enormity of the task of reviewing these expenditures and noted that her comment does not account for the concerns expressed by the parties that DTE Electric failed to file all of the information necessary to adequately evaluate these projects. PFD, pp. 42-43.

Following her findings and recommendations on each issue, the ALJ found a total projected rate base of $21.858 billion. *Id*., p. 413, Appendix B.[8]

DTE Electric takes exception and argues that its total projected rate base is $22.534 billion. DTE Electric's exceptions, pp. 17-18.

As noted above, MNSC filed a motion to strike the executive summary included in DTE Electric's exceptions to the PFD. MNSC included the same arguments regarding the company's executive summary in its replies to exceptions. This portion of its replies to exceptions addresses several issues throughout the PFD and this order, but because it predominantly pertains to the company's requested rate base and accompanying rate increase, the Commission addresses MNSC's replies to exceptions on this issue here.

In its replies, MNSC first states that the ALJ considered the entirety of the extensive record in this case to arrive at her recommended revenue deficiency and yet DTE Electric resorted in its executive summary to non-record evidence and scare tactics, claiming that it would be unable to continue investments in clean energy and grid modernization. After addressing the company's claims regarding minimal increases to customer bills, MNSC states that the company again relied on non-record evidence to assert that state, federal, and agency support is available to vulnerable customers. Regarding DTE Electric's argument that this case includes a correction from the

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[8] Regarding revenue deficiency, the PFD states that the revenue deficiency in this case is $290.4 million. PFD, p. 569; *see also*, PFD, Appendix A, line 12. However, the ALJ's stated revenue deficiency did not correctly capture all of her decisions in the PFD impacting the revenue deficiency and therefore, her stated $290.4 million is inadvertently inaccurate.

improper sales forecast approved in Case No. U-20836, MNSC argues that the company failed repeatedly in that case to prove that the Commission-approved sales forecast was flawed. MNSC then recites the company's recent history of jurisdictional rate base increases as well as the projected rate base increase in the instant case that will be borne by ratepayers in opposition to DTE Electric's statement that is has not received a meaningful base rate increase since May 2020. To conclude, MNSC contends that DTE Electric's executive summary is based on non-record evidence, rife with spurious claims, and should be rejected by the Commission. MNSC's replies to exceptions, pp. 1-5.

The Attorney General similarly addresses DTE Electric's executive summary in its replies to exceptions and argues that the following statements by the company are unsupported or untrue based on the evidence in this record and decisions in recent rate cases: (1) this order will determine whether the company can continue its clean energy and grid improvement initiatives, (2) the company has not received a meaningful rate increase during recent periods, and (3) the company's vulnerable customers will not be left behind. Attorney General's replies to exceptions, pp. 3-5. The Attorney General also disputes several statements included in the section of the company's exceptions entitled, "The Significance of This Rate Case" insisting that the company's claims are unsupported, framed incorrectly, non-issues, misleading, or incorrect. Attorney General's replies to exceptions, pp. 5-11. The Attorney General urges the Commission not to be swayed by the inaccuracies included in DTE Electric's exceptions. *Id.*, p. 11.

The Attorney General also continues to dispute the company's projected rate base and insists that the proper rate base amount is $21.858 billion. Attorney General's replies to exceptions, p. 15.

Consistent with the determinations made for each contested issue discussed below, the Commission finds DTE Electric to have a total projected rate base of $22,150,952,000.

A. Production Plant (Non-Nuclear)

DTE Electric's non-nuclear production plant contains four categories of spending: (1) steam power generation, (2) hydraulic power generation, (3) other power generation, and (4) Midwest Energy Resources Company (MERC)/fuel supply. Exhibit A-12, Schedule B5, lines 2-4. DTE Electric's spending in the first three categories shows 2021 spending on the first three of the categories totaling $524.6 million, estimated 2022 spending of $451.9 million, projected 11-month bridge spending of $503.5 million, and projected test year spending of $520.5 million. Exhibit A-12, Schedule B5, p. 1, lines 2-3. As background, the ALJ recounted that DTE Electric's most recent integrated resource plan (IRP) case included approval of the company's plan to retire Monroe units 3 and 4 in 2028, to retire Monroe units 1 and 2 in 2032 subject to further analysis of alternative retirement dates, and its conversion of the Belle River plant to natural gas beginning in 2025. PFD, p. 45. The ALJ noted that the parties raised questions about avoidable capital expenditures regarding the Monroe units and that in DTE Electric's last rate case, Case No. U-20836, the Commission noted DTE Electric's failure to support its projections in numerous circumstances. *Id*.

1. Monroe

The ALJ explained that the disputed issues among the parties pertaining to capital expenditures for Monroe include disputes as to the extent to which costs are avoidable under the company's plan to retire units 3 and 4 in 2028. PFD, p. 47.

a. Undisputed Avoidable Costs of $59.6 Million

Through DTE Electric's initial testimony and the course of these proceedings, avoidable capital expenditures for Monroe units 3 and 4 were discovered totaling approximately $59.6 million. *See*, 5 Tr 2343, Table 1; Exhibit S-21.4; DTE Electric's reply brief, Attachment A, p. 2, column (e) (showing the agreed upon avoidable cost of $59.583 million). The ALJ noted that no party disputes that this amount[9] should be excluded from the company's revenue requirement. PFD, p. 48.

Having no exceptions filed and finding that no party disputes this issue, the Commission finds that the approximate $59.6 million in avoidable costs for Monroe units 3 and 4 should be excluded from the revenue requirement.

b. Disputed Avoidable Costs

i. Bottom Ash Conversion (Schedule B5.1, page 2, line 5)

DTE Electric testified that this project converts DTE Electric's bottom ash handling system to a dry drag chain system to comply with U.S. Environmental Protection Agency (EPA) effluent limitation guidelines and stated that $17.2 million of the company's identified costs for this project were avoidable. The Staff identified further avoidable costs and requested a reduction of approximately $19.2 million for the 11-month bridge period and approximately $20.6 million for the test year for a total of $39.8 million. 7 Tr 4510-4512; Exhibit S-21.1, p. 2; Staff's initial brief,

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[9] The ALJ noted the following line items from DTE Electric's Exhibit A-12, Schedule B5.1, p. 7 that make up the approximate $59.6 million: expansion joints (line 203); reheat outlet pendants (line 204); unit 3 coal mill classifier (line 209); feedwater heater #6 south (line 210); economizer tubes (line 211); horizontal reheater tubes (line 212); selective catalytic reduction (SCR) cleaning system (line 213); SCR inlet & outlet dampers (line 215); combustion coils (line 217); coal mill feeder controls (line 218); unit 4 waterwall tubes (line 220); unit 4 coal mill classifiers (line 223); and avoidable projects under $1 million (line 6). PFD, p. 48.

pp. 13-14. ABATE argued that recovery of this expenditure is premature because DTE Electric has not yet issued a request for proposals (RFP).

The ALJ agreed with the Staff's adjustment of $39.8 million, pointing out that the Staff's detailed information on pages 2-6 of Exhibit S-21.1 contradicts DTE Electric's discovery response and reveals significantly higher costs in the specific cost breakdown for units 3 and 4 when separated out from common costs for the project. While DTE Electric asserted that the difference between the company's figures and the Staff's lie in the avoidable costs attributable to common costs, the ALJ found that, "the total common costs for the bridge and test year[s] reflected in Exhibit S-21.1 for this project are $7.2 million and $1.2 million respectively, for a total of $8.4 million, of which Staff's adjustment includes half, or $4.2 million." PFD, p. 55. The ALJ further stated that DTE Electric did not explain the discrepancy and that the Staff's adjustment is consistent with the avoidable cost estimates that DTE Electric testified to in its IRP, Case No. U-21193, which was referenced in this record. PFD, p. 55.

DTE Electric excepts and argues that the Staff's assumptions regarding the impact of the 2028 retirement of units 3 and 4 are incorrect. The company contends that its common system costs will remain the same whether there are two or four units in operation. DTE Electric points to the Staff's Exhibit S-21.1 which identified ongoing and unavoidable construction expenditures that could only have been halted in August 2023 after the final decision in the company's IRP was issued. The company asserts that the maximum avoidable cost, including the August through December 2023 expenditures, for Monroe units 3 and 4 is $27.9 million ($17.2 million for January through November 2024 expenditures, plus the $10.7 million for August through December 2023 expenditures). DTE Electric's exceptions, pp. 19-20.

The Staff disagrees with the company's statement that "construction expenditures throughout 2023 associated with Monroe units 3 and 4 that could only reasonably be halted in August 2023 after the July 26, 2023 Order in Case No. U-21193 addressing the Company's [IRP] . . . ." are unavoidable. Staff's replies to exceptions, p. 9 (quoting DTE Electric's exceptions, p. 19). The Staff explains that as of June 13, 2023 with the filing of direct testimony, it was aware that the company had submitted its Notice of Planned Participation to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) to opt into a 2028 retirement for units 3 and 4. Therefore, per the Staff, the company should have been limiting capital expenditures in early 2023, not August 2023 as the company claims. Staff's replies to exceptions, p. 9 (citing 5 Tr 1259-1260; 7 Tr 4511).

Finding the PFD to be well-reasoned and based on substantial evidence on the record, the Commission adopts the ALJ's recommended $39.8 million adjustment. In exceptions, DTE Electric points to nothing in the record that addresses the discrepancy between the common costs alleged at different stages of this case that would persuade the Commission of the certainty or reasonableness of recovery beyond the amount found reasonable and prudent by the ALJ.

ii. Unit 3 Waterfall Tubes (Schedule B5.1, page 7, line 202)

DTE Electric identified $6.5 million of the total $19 million in projected bridge year and test year costs for this project that are avoidable due to the 2028 retirement date of units 3 and 4. 5 Tr 2343-2344. Reasoning that the company scaled the project back to approximately half its original scope, the Staff questioned why the avoidable costs were not also halved and requested a further reduction of $2.5 million. 7 Tr 4513-4514. MNSC pointed out that in DTE Electric's IRP, the company projected $0 in costs for this project under the 2028 retirement plan and argued that it would be imprudent to pass DTE Electric's alleged costs in this case onto ratepayers. 6 Tr 3530, n. 21.

The ALJ found that the Staff's position was reasonable and supported by the record and recommended that the Commission adopt the Staff's adjusted total disallowance of approximately $9 million. PFD, p. 57.

DTE Electric takes exception, arguing that the Staff's additional disallowance amount is incorrect and based on an unfounded assumption that the cost of the waterwall tube replacement is directly proportional to the square footage being replaced. The company points to its rebuttal testimony where it listed aspects of the projects that are not reduced even though the project size is being reduced. That list includes erecting stage areas, installing temporary power and lights, and others enumerated at 5 Tr 2419. DTE Electric's exceptions, p. 20.

The Commission finds the PFD to be well-reasoned and based on substantial evidence on the record as presented by the Staff. The company failed to support its substantial increase in projected spending from $0 in its recently approved IRP under a 2028 retirement scenario to $17.5 million. The Commission finds that given the company's reduced scale of this project, the Staff arrived at a reasonable disallowance. *See*, 6 Tr 3530, n. 21.

iii. Distributed Control System and Control Room (Schedule B5.1, page 6, line 155; page 7, line 207)

DTE Electric requested recovery of $1.2 million in 2023 and $3.8 million in 2024 projected capital expenditures for this project at Monroe unit 3. Finding these expenditures avoidable due to the 2028 retirement, the Staff recommended removing the full amount of $1.2 million for the 11 months ending November 30, 2023, and $3.8 million for the 12 months ending November 30, 2024, from the company's revenue requirement. 7 Tr 4513; Exhibit S-21.2. The Attorney General similarly called for a full disallowance of this project's costs. 6 Tr 3712-3713; Exhibit AG-1.26.

Agreeing with the Staff and the Attorney General, the PFD recommended that the full costs for the distributed control system (DCS) and control room project should be excluded from the revenue requirement. The ALJ also cited the company's discovery response which stated that only a portion of the project may be required. PFD, p. 60. Per the ALJ, "[t]hat DTE[[10]] 'may' spend some amount of money on this project is an inadequate justification for including it in projected rate base, and DTE's intransigence on this item calls into serious question its claim to use a 'known and measurable' standard, or any appropriate standard, for its rate case projections." *Id*.

DTE Electric excepts to the ALJ's full disallowance, arguing that the ALJ's characterization of the company's discovery response is inaccurate and unjustified and repeats the contents of its discovery response. DTE Electric's exceptions, p. 21.

In replies to exceptions, the Staff explains that DTE Electric stated in a discovery response that the DCS and control room project were specifically to support the bottom ash conversion project. Because that project is not required due to the planned retirement at Monroe units 3 and 4, these DCS and control room costs are no longer projected to be incurred. The Staff notes that the company is reviewing the upgrades to the DCS and control room system and therefore, the necessity of the upgrades is uncertain. Staff's replies to exceptions, pp. 9-10 (citing Exhibit S-21.2; DTE Electric's exceptions, p. 21).

The Commission agrees with the ALJ that the company's support for this expenditure was insufficient to demonstrate that the company would indeed spend these dollars for a portion of the project that it claimed would still be needed despite the planned 2028 retirement. *See*, DTE Electric's initial brief, p. 25. Therefore, finding the ALJ's recommendation to be well-reasoned

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[10] Unless otherwise noted, references to "DTE" appearing in quoted materials throughout this order refer to DTE Electric.

and based on substantial evidence on the record, the Commission adopts the PFD and disallows $1.2 million in 2023 and $3.8 million in 2024 for this project.

iv. Monroe Ash Removal System (Schedule B5.1, page 7, line 213)

DTE Electric included a $2.4 million projected expenditure in 2024 to install a new ash removal system for Monroe unit 3. The Attorney General objected to this expenditure, relying on DTE Electric's discovery response indicating that the current system could continue to operate through 2028, and thus, the cost is avoidable.

The ALJ recognized that DTE Electric did not address the Attorney General's argument in rebuttal, but she pointed out that DTE Electric included the $2.4 million in Table 1 of its witness Mr. Morren's direct testimony as an avoidable cost. 5 Tr 2343, Table 1. Therefore, the ALJ included it in the $59.6 million of undisputed avoidable costs associated with 2028 retirement discussed above and listed *supra* in footnote 9 as SCR cleaning system (line 213).

Having no exceptions filed and finding that there is no dispute among the parties that the $2.4 million for the SCR cleaning system is avoidable, the Commission adopts the findings and recommendations of the ALJ.

v. Summary of Monroe Disputed Avoidable Costs

The ALJ summarized her recommended adjustments for the disputed avoidable costs associated with Monroe units 3 and 4. In adopting the Staff's adjustments as reflected in Exhibit S-21.4, the ALJ recommended a reduction to DTE Electric's Schedule B5.1 projections of $22,291,013 for the 11-month bridge period and $66,286,440 for the test year. PFD, pp. 61-62.

c. Monroe Flue Gas Desulfurization Backup (Schedule B5.1, page 6, lines 140, 149, 153, 160)

DTE Electric requested approximately $5.85 million for backup generation for each of the Monroe unit flue gas desulfurization (FGD) systems. 5 Tr 2323, 2325-2327; Exhibit A-12, Schedule B5.1, p. 6, lines 140, 149, 153, 160. The Attorney General objected to these expenditures (precisely, $1.716 million for unit 1, $1.512 million for unit 2, $1.578 million for unit 3, and $1.046 million unit 4 for 2023, totaling $5.852 million), citing DTE Electric's discovery response to argue that DTE Electric did not provide cost data to support this expenditure and that a backup power system already exists for the FGD systems. 6 Tr 3709-3710.

The ALJ found that DTE Electric failed to justify recovery for these line items and provided a nonresponsive answer to the Attorney General's inquiry as to why, if these backup power systems are deemed critical to reliability, they were not part of the initial installation. The ALJ found that DTE Electric's explanation as to the necessity of the project to provide backup power in the event of a complete site blackout was contradicted by its discovery response in which it recounted an example of the current system failing due to an equipment failure. The ALJ continued that:

> by failing to answer the Attorney General's question and by providing contradictory information suggesting the current system is adequate except in the event of a 'site blackout,' DTE has failed to establish that the $5.9 million expense (as well as the expense to remediate the FGD damage alluded to in Schedule Z9 of Exhibit A-35) could not have been avoided or reduced with reasonable initial planning.

PFD, p. 66.

While recommending a disallowance of the $5.9 million, the ALJ nonetheless recommended that the Commission allow the company to present a report in its next rate case to establish that the additional costs it seeks to recover could not have been avoided or minimized with reasonable and prudent design and initial installation of the FGD system, and if additional costs resulted from design failure, DTE Electric may explain any recourse against the manufacturer or designer of that system. *Id*.

DTE Electric takes exception, arguing that its discovery response sufficiently explained the need for the FGD system backup generators to provide power in the event of site blackout. DTE

Electric's exceptions, pp. 21-22 (citing Exhibit A-35, Schedule Z9, pp. 1-4). The company states that such an event did occur and resulted in an extended outage to remove limestone slurry that had hardened. DTE Electric's exceptions, p. 22 (citing Exhibit A-35, Schedule Z9). DTE Electric further takes exception to the ALJ's questioning of the reasonableness of the initial design of the system and states that rather than speculating, the ALJ's proper role in an adversarial proceeding is to weigh the evidence and arguments set forth by the parties. Next, the company argues that the Attorney General's suggestion to utilize temporary grid power as a backup ignores the company's extensive explanations provided in discovery and the need to protect the system from extensive damage in the event of a site blackout or larger grid blackout. Lastly, speaking to the ALJ's recommendation for the company to present a report in its next rate case on whether these costs could have been avoided with a reasonable and prudent design of the FGD system, the company asserts that this recommendation is moot if recovery is permitted. However, if the Commission adopts the disallowance, the company agrees that it should be permitted to justify and seek future recovery of these costs but rejects that recovery should be conditioned on filing such a report. DTE Electric's exceptions, pp. 22-24.

In replies to exceptions, the Attorney General characterizes DTE Electric's exceptions as a rehash of its testimony and argues that DTE Electric was asked a straightforward question regarding the importance of these backup generators and was nonresponsive. The Attorney General argues that the burden is on DTE Electric to support its case, not on intervenors to disprove elements "or do the legwork for the company." Attorney General's replies to exceptions, pp. 16-17.

Finding the ALJ's recommendation to be well-reasoned and based on substantial evidence on the record, the Commission adopts the PFD. The Commission disagrees with DTE Electric's contention in exceptions that the ALJ engaged in speculation regarding the initial design of the backup system. Rather, the ALJ pointed to a reasonable question that remained following the company's failure to adequately respond to that same question regarding the company's initial design of the system asked by the Attorney General, an adversarial party, in discovery. *See*, Exhibit A-35, Schedule Z9.

d. Monroe Fuel Supply Wastewater (Schedule B5.1, page 6, line 161)

DTE Electric projected expenditures of $1.1 million for 2022, and projected $7 million for 2023 expenditures, contending that the existing system requires upgrades to process wastewater flows effectively to sustain environmental compliance. 5 Tr 2327. The Attorney General objected to the 2023 expenditures, arguing that DTE Electric is in compliance with environmental permit regulations and that the company did not identify the severity of risk of an oil spill that it is claiming to reduce with this project. 6 Tr 3711-3712.

The ALJ agreed with the Attorney General's arguments and recommended that the Commission disallow the $7.1 million expenditure for 2023. The ALJ stated that the company may comply with its National Pollution Discharge Elimination System (NPDES) permit without this project and that the company did not justify the costs relative to alternatives to preventing coal pile runoff from contaminating the environment. PFD, p. 68.

The company takes exception, arguing that the Attorney General's recommended disallowance is based on a discovery response that omits any mention of efficiency improvements and that the upgrade remains necessary because the remaining Monroe units 1 and 2 will continue to use the common coal pile runoff system into the 2030s. DTE Electric contends that the ALJ's conclusion that the company can comply with its NPDES permit without this project makes an inference beyond the information available on this record and thus lacks the evidentiary support required by law. DTE Electric's exceptions, pp. 24-25 (relying on 5 Tr 2259, 2341, 2348, 2410-2411; 6 Tr 3712; Exhibit A-35, Schedule Z10).

The Commission finds the ALJ's recommended disallowance to be well-reasoned and based on substantial evidence on the record. The Commission agrees that the company failed to support the necessity of this project by failing to present a proper analysis of the risk of an oil spill and how this project will avoid such a risk. *See*, 6 Tr 3711-3712; Exhibit A-35, Schedule Z10. Further, the Commission disagrees with DTE Electric's exceptions that the ALJ made an unfounded inference when asked plainly in discovery if the company is pursuing this project because it is in violation of its NPDES permit and the company responded that it has maintained NPDES compliance. *See*, Exhibit A-35, Schedule Z10. The Commission is supportive of cost recovery for necessary measures to prevent environmental contamination and damage, but the Commission cannot approve cost recovery for projects which are not adequately supported and fail to include analysis of the severity of the actual risk or how the project will alleviate or reduce the risk, and a sufficient benefit/cost analysis (BCA).

e. Projects Lacking Documentation

The ALJ recounted that there is no dispute between the parties regarding the $369,000 adjustment requested by MNSC witness, Mr. Comings, but that in DTE Electric's rebuttal testimony, the company responded to MNSC's allegations that the company had not provided supporting documentation for seven other projects. DTE Electric explained that due to an administrative error, some of its witness's workpapers supporting the projects were not uploaded to the online discovery portal used by the parties but that the error was corrected on May 18, 2023, prior to the June 13, 2023 deadline for filing intervenor testimony. MNSC countered that while DTE Electric corrected the error on May 18, the company did not notify all other parties outside of

MNSC until after the deadline for direct testimony. The ALJ noted that MNSC is not pursuing adjustments for eight of the nine projects (project numbers PMP 16667, 17180, 18095, 18851, 18890, 19116, 9327, and 18041) but is only seeking the $369,000 adjustment for project number PMP 19305 (Monroe unit 4 expansion joints). PFD, p. 71, n. 229; *see also*, MNSC's initial brief, p. 2. DTE Electric agreed to the $369,000 adjustment. DTE Electric's reply brief, p. 11.

MNSC excepts to the PFD, pointing out that Appendix E to the PFD did not capture the $369,000 adjustment in an apparent oversight and requests that the Commission clarify the $369,000 disallowance. MNSC's exceptions, pp. 2-3.

The ALJ did not make an explicit recommendation on this issue. However, having no exceptions filed on the merits of this issue and finding that there is no dispute among the parties, the Commission adopts the $369,000 adjustment for project number 19305 and acknowledges that Appendix E inadvertently omitted this adjustment. As noted *supra*, this order corrected the revenue deficiency listed in Appendix A of the PFD to accurately reflect the recommendations made by the ALJ.

2. Belle River Fuel Conversion (Schedule B5.1, page 2, line 2)

The conversion of the Belle River plant was approved in DTE Electric's IRP case, Case No. U-21193. In the instant case, DTE Electric included estimated 2022, 11-month bridge period, and test year capital costs of $1.5 million, $22.1 million, and $15.1 million, respectively. 5 Tr 2270; Exhibit A-12, Schedule B5.1, p. 2, line 2. ABATE objected to the inclusion of $38.763 million for the bridge period and test year expenditures associated with this project, arguing that recovery of this amount is premature. 4 Tr 1123.

While finding the project to be reasonable based on the Commission's approval in Case No. U-21193, the ALJ found that the company's projected costs should be excluded from the revenue requirement. The ALJ explained that since the company is not seeking rate relief in this case because it proposes to include these costs in CWIP with an AFUDC offset and the test year costs are not known with certainty, exclusion is appropriate. The ALJ also recommended that:

> DTE exclude from its rate case presentation, or separately present for information purposes only, those projects that do not affect the company's revenue requirement in this case. By the time of DTE's next [rate] case, it should have signed contracts, and plans for the project to be in service during what will likely be a 2025 test year.

PFD, p. 74.

DTE Electric agrees only with the ALJ's finding that the Belle River conversion project is reasonable and otherwise excepts to the ALJ's recommendation to exclude these costs. The company contends that the ALJ's application of the "known with certainty" standard is synonymous with the "beyond a reasonable doubt" evidentiary standard applicable in criminal proceedings and thus contrary to the preponderance of the evidence standard to be applied in the instant case. The company contends that by the nature of using a projected test year, complete certainty is an impossible standard and that the company has demonstrated that the project is moving forward. DTE Electric's exceptions, pp. 26-27 (citing 5 Tr 2414-2416; Exhibit A-35, Schedule Z12). Next, DTE Electric argues that the ALJ ignored that the requested expenditures are for contract work necessary to achieve a timely fuel conversion and that the company's request is consistent with well-established accounting practices regarding CWIP with an AFUDC offset. DTE Electric's exceptions, pp. 26-28.

In replies to exceptions, ABATE disagrees with DTE Electric's characterization in its exceptions that the Belle River conversion project costs were well-supported. ABATE points to the reasoning in its initial brief to explain that recovery for this project is premature and supports the ALJ's recommended decision. ABATE's replies to exceptions, pp. 3-4.

The Attorney General supports the ALJ's decision and disagrees with DTE Electric's exceptions which contend that the ALJ suggested that costs must be known with certainty. Rather, the Attorney General agrees that the ALJ found the costs to be premature. Attorney General's replies to exceptions, p. 17.

Like the ALJ, the Commission finds this project reasonable given its approval in the company's most recent IRP; however, the Commission respectfully declines to adopt the PFD on the Belle River Fuel Conversion issue. The Commission finds it appropriate to allow the $38.7 million to be recorded in CWIP with an AFUDC offset that reduces the revenue deficiency and impact on rate base as indicated by the company. *See*, 5 Tr 1541, 1572-1573; Exhibit A-13, Schedule C1, line 14, column (e)). As pointed out by DTE Electric, such approval for funds in CWIP is consistent with approved accounting practices and does not implicate the used and useful test. 5 Tr 1541-1542, 1572-1573. The Commission further finds that approval of these funds in CWIP will allow the company to complete the work necessary to progress towards completing the conversions in 2025 and 2026 and continuing to meet project milestones, and that it is consistent with the purpose of CWIP funds. *See*, 5 Tr 2414-2416; Exhibit A-35, Schedule Z12 (describing how the company met its anticipated milestone of issuing an EPC bid in May 2023); *see also*, March 14, 1980 order in Case No. U-5281, pp. 7-8, 63-73 (discussing the Commission's application of CWIP and AFUDC accounting practices).

3. Coal Plant Decommissioning Costs

The issues discussed below involve the costs associated with the retirement and decommissioning costs of generation assets at the St. Clair, River Rouge, and Trenton Channel plants.

a. St. Clair (Schedule B5.1, page 2, line 35)

DTE Electric estimated 2022 expenditures of \$10.5 million, projected 11-month bridge period costs of \$24.68 million, and projected test year costs of \$61.55 million, for a total expenditure of \$96.73 million. Exhibit A-12, Schedule B5.1, p. 2, line 35. ABATE recommended a disallowance for the bridge and test years for St. Clair, arguing that DTE Electric's supporting documentation lacked sufficient detail to provide certainty that they will occur in the bridge and test years. 4 Tr 1111. The Attorney General asked to reduce the company's projection by \$600,000 for 2022, \$5.43 million for the 11-month bridge period, and \$55.97 million for the test year, totaling \$62,002,000. 6 Tr 3691. DTE Electric conceded that projected test year spending was reduced but that the Attorney General's calculation was in error and the amount is \$50.5 million, not \$56 million; thus revising the Attorney General's total reduction from \$62.0 million to \$56.6 million. 5 Tr 2403; Exhibit A-35, Schedule Z7.

The ALJ was persuaded by the Attorney General's and ABATE's arguments and found a reduction to 2022 spending of \$600,000 was appropriate along with the removal of the spending for the 11 month-bridge period and test year from the company's revenue requirement. The ALJ noted that DTE Electric supplemented its discovery responses referenced by the intervenors (Exhibit A-35, Schedule Z7 and Exhibit AG-1.15) on June 5, 2023, which was one month after the interrogatory was served on the company. The 8-day time frame from when the discovery responses were supplemented and the filing of intervenors' direct testimony, coupled with DTE Electric's failure to revise its own direct case or exhibits along with the discretionary timeline of the project, led the ALJ to find the company's projections lacked certainty. PFD, pp. 78-79.

The ALJ additionally found that the information DTE Electric did provide was inadequate to establish the timing or amount of spending in that the supplemental responses contained minimal descriptions of the work and no basis for the estimated costs. An additional document in the supplemental responses, dated 10 days from an accompanying capital appropriations request form (CARF), shows the $35.1 million in additional funding split between 2023 and 2024, rather than entirely in 2023 as in the first form, but provides no additional information as to when the work will be done. Turning next to the descriptions of work already completed, the ALJ noted that the company has not provided any executed contracts for the work to be completed and found that the work described on page 3 of Exhibit A-35, Schedule Z7 appears to be a place holder while the company decides what work to perform. Thus, the ALJ recognized the $9.9 million spent in 2022 ($600,000 less than its filing estimation) as removal costs and noted that removal costs may be booked to the accumulated provision for depreciation as they are incurred. The ALJ further noted that there is not a used and useful standard appliable to such demolition work. The ALJ then concluded that the expenditures for the 11-month bridge period and projected test year, $24.68 million and test year costs of $61.55 million, respectively, are unsupported and should be excluded.

DTE Electric takes exception to the ALJ's recommended disallowance arguing that, while the company did change its plans following the filing of this case, the company correspondingly reduced its recovery request. DTE Electric states that it is only seeking recovery for the first part of this project and referenced its Exhibit A-35, Schedule Z7, showing the project's internal approvals. Additionally, ABATE's concerns about the contractual bids and vendor information pertain to the second part of the project and are therefore irrelevant. The company also argues that ABATE failed to make any specific argument challenging the reasonableness and prudence of the project and that since retirement of these plants has been planned for years, there should be no argument that decommissioning the plants is the next step. DTE Electric's exceptions, pp. 28-29 (citing 5 Tr 2403-2404; Exhibit A-35, Schedule Z7).

ABATE's replies to exceptions addressed DTE Electric's exceptions to the St. Clair, River Rouge, and Trenton Channel decommissioning costs together. ABATE dismisses DTE Electric's arguments in exceptions that since it plans to retire all three plants and thus its decommissioning costs will happen after retirement, the company should therefore recover those cost projections in this case. ABATE argues that such a position does nothing to clarify the projected costs or the timelines of these projects and lacks the detail necessary to support recovery. ABATE's replies to exceptions, p. 5.

The Attorney General similarly addresses the decommissioning costs of all three plants together and supports the ALJ's reasoning and recommendation. The Attorney General states that DTE Electric merely repeated its previous arguments and testimony regarding these costs rather than formulating a proper exception. Citing the uncertainty of the company's timeframes for the project and prematurity of costs, the Attorney General calls for the Commission to adopt the PFD. Attorney General's replies to exceptions, p. 18.

Finding the PFD to be well-reasoned and based on substantial evidence on the record, the Commission adopts the PFD. The Commission agrees that this project was not properly supported such that the company's full cost recovery request is not appropriate at this time.

b. River Rouge (Schedule B5.1, p. 2, line 32)

DTE Electric included historical test year spending of $2.8 million, estimated 2022 spending of $13.35 million, projected 11-month bridge period spending of $18.57 million, and projected test year spending of $23.15 million for the River Rouge Decommission project. 5 Tr 2283; Exhibit A-12, Schedule B5.1, p. 2, line 32. ABATE objected to the projected bridge period and test year costs, arguing that DTE Electric did not demonstrate that it received all internal approvals for this project; did not provide adequate details regarding the RFP, timelines for bid submission, or vendor selection; did not explain the increase in projected cost from $32.484 million in the prior rate case to $55.072 million in this case; and that project completion is not expected until 2025, which is beyond the test year of this case. 4 Tr 1132.

The ALJ found that DTE Electric did not adequately support the projected costs in the 11-month bridge period and test year for the demolition project at River Rouge and should be excluded from the revenue requirement. The ALJ reasoned as follows:

> As DTE's revision of its planned demolition plans for St. Clair show, in the absence of any particular reason to complete demolition activities, DTE is under no significant time constraints to do so. The project description on the CARF form on page 1 of Schedule Z8 of Exhibit A-35 contains essentially the same language as the CARF in Schedule Z7 that [DTE Electric witness] Mr. Morren relied on for the St. Clair demolition project. This document does not state the basis of cost estimates, and indeed indicates that the project will include "creating the bid documents used for both developers and demolition contractors," and thus cannot reflect the costs pursuant to an actual bid. While the CARF appears to have the required approvals, those do not fully commit DTE to conducting any particular demolition activities through the test year.

PFD, pp. 84-85.

DTE Electric excepts and contends that it provided the CARFs that approved the River Rouge project and indicated in its testimony that the company issued a demolition RFP, evaluated bids, and selected a vendor in 2022, thus supporting the project. DTE Electric's exceptions, p. 29 (citing 5 Tr 2283, 2286; Exhibit A-35, Schedule Z8). The company further contended that there is no uncertainty regarding the 2022 capital expenditures since these are actual costs. DTE Electric's exceptions, p. 30. The company also disagreed with the ALJ's criticism of the CARF forms for not including additional or different information because the company argues that the forms show the internal corporate approvals for the project. Ultimately, DTE Electric argues these expenditures are necessary to commence the decommissioning of the plants. DTE Electric's exceptions, p. 31.

As noted above, ABATE and the Attorney General filed replies to exceptions regarding the River Rouge project grouped together with the St. Clair and Trenton Channel decommissioning issues. ABATE's replies to exceptions, p. 5; Attorney General's replies to exceptions, p. 18.

The Commission finds the ALJ's recommendation to be well-reasoned and based on substantial evidence on the record. Similar to the St. Clair decommissioning costs, the Commission finds that the company failed to support its contention that these costs would actually be incurred in the timeframes it asserted. Therefore, the Commission finds the disallowances recommended by the ALJ to be reasonable at this time.

c. Trenton Channel (Schedule B5.1, page 2, line 37)

DTE Electric included 2021 spending of $5.86 million, estimated 2022 costs of $9.77 million, and projected 11-month bridge and test year expenditures of $42.48 million and $32.6 million, respectively. 5 Tr 2286; Exhibit A-12, Schedule B5.1, p. 2, line 37. ABATE objected to the inclusion of the projected bridge and test year expenditures, arguing that DTE Electric did not demonstrate that it received all internal approvals for this project; did not provide adequate details regarding the RFP, timelines for bid submission, or vendor selection; did not explain the significant increase in projected costs from $50.199 million in its last rate case to $84.842 million in this case; and that project completion is not estimated to occur until 2025 which is beyond the test year in this case. 4 Tr 1130-1131.

While finding it appropriate to include the company's 2021 and 2022 expenditures in rate base as a reduction to the projected accumulated provision for depreciation, the ALJ found that DTE Electric failed to support the expenditures for the 11-month bridge period and test year and, therefore, those expenditures should be excluded from rate base. Drawing comparisons to the St. Clair and River Rouge projects, the ALJ found that DTE Electric's descriptions of its work in documents, signed mere days before it filed its application in this case, did not provide a basis for the cost estimates, did not demonstrate a compelling timeframe, and showed that the company's plans are subject to change. PFD, p. 87 (citing Exhibit A-35, Schedule Z8, pp. 3-4).

DTE Electric grouped its exceptions to the ALJ's recommendation for the Trenton Channel decommissioning plant with its exceptions regarding the River Rouge decommissioning project. Therefore, its arguments in exceptions for the Trenton Channel decommission mirror its arguments for the River Rouge decommissioning aside from the company's explanation that it provided testimony that it completed a demolition RFP and chose a vendor for the project. DTE Electric's exceptions, pp. 29-31 (citing 5 Tr 2286).

As noted above, ABATE and the Attorney General filed replies to exceptions regarding the Trenton Channel decommissioning project grouped together with the St. Clair and River Rouge decommissioning issues. ABATE's replies to exceptions, p. 5; Attorney General's replies to exceptions, p. 18.

Finding the ALJ's recommendation to be well-reasoned and supported by substantial evidence on the record, the Commission adopts the PFD. Again, the Commission finds the decommissioning costs in the bridge and test years to be inadequately supported such that recovery is not appropriate at this time.

4. Blue Water Energy Center

a. Contingency

The Staff and the Attorney General objected to the inclusion of contingency in the historical and projected capital expenditures for the BWEC construction. The Staff recommended that

$8.1 million in contingency that DTE Electric included in its 2021 historical costs be disallowed because the Commission had disallowed this amount in the company's previous rate case, Case No. U-20836. 7 Tr 4362; Exhibit S-17.0. The Staff also recommended disallowing $6.8 million and $0.6 million in contingency for the bridge and test years, respectively. 7 Tr 4650; Exhibit S-12.1. The Attorney General recommended excluding $1.3 million from the 2022 expenditure estimate and $6.8 million from the 11-month bridge period projection. 6 Tr 3640-3641. DTE Electric rebutted the Staff's position.

The ALJ found the Staff's analysis to be credible and recommended adoption of the $8.1 million disallowance for 2021, the $6.8 million disallowance for the bridge year, and $0.6 million disallowance for the test year. The ALJ stated that:

> DTE should not be including any contingency in its projections, and should not be requiring Staff to tease out contingency from its expenses. DTE needs more than a claim that Staff is confused or double-counting, when DTE should have adequate information at its disposal to establish its actual expenditures.

PFD, p. 91.

DTE Electric excepts to the ALJ's recommended disallowance, stating that the Staff double-counted the BWEC contingency amount and that the disallowance therefore should not exceed the $8.1 million of contingency funds that the Commission did not include for recovery in the company's prior rate case, Case No. U-20836. DTE Electric's exceptions, pp. 31-32 (citing 5 Tr 2423-2424). The company disagrees with the disallowance, arguing that the $6.8 million bridge year disallowance was the portion of the $8.1 million that was included in 2023 capital and the remaining $1.3 million was in 2022. DTE Electric's exceptions, p. 31 (citing Exhibit S-12.2, p. 3). Therefore, the company states that it already agreed to remove the $8.1 million as stated in its reply brief. DTE Electric's exceptions, p. 31.

In replies to exceptions, the Staff maintains its recommended disallowance and states that it can only evaluate a cost using the information provided by the company. The Staff explains that the company's audit response showed $8.1 million that was disallowed in Case No. U-20836 which was included in this case. Per the Staff:

> This cost is unresolved as it was a 2021 expense and should be realized. Staff Exhibit S-12.2 shows an audit response in which the Company states the Blue Water project contains $6.8 million in contingency in 2023. This is a forward-facing expense to be used in 2023 and 2024, if the need arises. It is Staff's understanding that these are two different expenses in two different time periods.

Staff's replies to exceptions, p. 3.

In its replies to exceptions, the Attorney General supports the ALJ's recommendation and characterize DTE Electric's exceptions as mere repetition of its previous arguments. Attorney General's replies to exceptions, p. 19.

The Commission finds the ALJ's adoption of the Staff's position to be well-reasoned and based on substantial evidence on the record and adopts the PFD. Contrary to the company's exceptions, the disallowance of contingency does not include an amount that was double-counted by the Staff but rather is comprised of two separate adjustments as explained by the Staff as follows:

> [t]he Company claims that this adjustment and a separate adjustment Staff is recommending to 2023 projected expenditures are both accounting for the same capital expenditures, essentially double counting this amount. (5 TR 2425). However, the Company's claim is incorrect, as these are two separate adjustments. While in the previous case the $8.1 million disallowance was for projected contingency, in this case these expenses are no longer projected. While these funds may have indeed been spent, the Company was unable to identify what these funds were spent on or even confirm if they were spent at all. Therefore, parties in the case and the Commission have no way to assess if they were spent in a way that is reasonable and prudent. While the Company claims that the two proposed disallowances were for identical capital funds, the Company was unable to account for the $8.1 million in 2021 expenditures Staff recommended disallowance of and has only identified the $6.8 million Staff recommended disallowance of as 2023 projected contingency. (Exhibit S-12.2, p 3).

Staff's initial brief, p. 18.

b. Blue Water Energy Center Change Orders (Non-Routine) (Schedule B5.1, page 7, line 45)

The Attorney General recommended a disallowance of $48.73 million associated with five change orders citing DTE Electric's lateness in responding to the Attorney General's discovery request regarding change orders and increased costs. 6 Tr 3691-3699. DTE Electric disagreed with the Attorney General and argued that its change orders were reasonable and prudent and were authorized, in most cases, to assign work to a specific vendor to then be executed. 5 Tr 2384. The company also argued that the Commission approved capital costs for BWEC up to $951.8 million in the company's 2017 certificate of necessity case, Case No. U-18419. 5 Tr 2384-2385.

Acknowledging the Commission's approval of the total capital cost of the BWEC project and the excluded contingency discussed in the previous section, the ALJ found DTE Electric's requested recovery for the disputed change orders reasonable. However, the ALJ found troubling DTE Electric's delayed discovery response and rejected the company's argument that since the Attorney General introduced the discovery response, she could not criticize its merits. PFD, pp. 93-94.

The Attorney General takes exception to the PFD, arguing that the ALJ did not sufficiently address the issue with thorough reasoning. The Attorney General states that the ALJ appears to have merely accepted DTE Electric's explanation for the change orders without further analysis or consideration of the record including the evidence regarding the additional warehouse and gas odorant, aside from the issues with ITC. Referencing some confidential portions of her initial brief, the Attorney General then goes on to argue that the ALJ's rationale and acceptance of DTE Electric's explanation does nothing to reveal why these costs are reasonable or why the company failed to consider the interests of its customers. Attorney General's exceptions, pp. 4-7 (citing the Attorney General's confidential initial brief, pp. 62-63).

The Commission finds that the ALJ's recommendation is well-reasoned and based on substantial evidence on the record. Examining the underlying testimony cited by the ALJ in her decision, the Commission agrees that the company sufficiently supported the reasons for these change orders and the associated expenditures and demonstrated that the costs do not exceed those previously approved. *See*, 5 Tr 2384-2385. Therefore, the Commission adopts the PFD and allows the company's recovery of these costs. However, the Commission cautions DTE Electric that failure to adequately respond in a timely manner to discovery interferes with the parties' abilities to review requests and in turn, hinders the Commission's ability to determine whether a cost recovery request is reasonable and prudent.

c. Blue Water Energy Center Conference Room (Schedule B5.1, page 7, line 234)

DTE Electric projected $4.95 million in test year expenditures for a conference room building at BWEC. 5 Tr 2359-2360; Exhibit A-12, Schedule B5.1, p. 7, line 234. The Attorney General objected to the expenditures, arguing that the company had not adequately justified the cost and that the company provided only minimal information regarding the current availability of office space at BWEC, making it difficult to assess the necessity of the new conference room building. 6 Tr 3716-3718. ABATE also objected to the capital cost, citing inadequate support and a lack of established schedule for the project such that it is questionable whether the project will occur in the test year. 4 Tr 1134.

The ALJ agreed with the Attorney General and ABATE that the company's plans for the project are insufficient at this time to warrant recovery. PFD, p. 96.

In exceptions, DTE Electric argues that the record refutes the Attorney General's claim that the company provided only minimal information. DTE Electric states that its discovery responses provided as much detail as possible and that the Attorney General failed to explain how additional information, that is often security sensitive, would have been relevant to justify the project. DTE Electric also contends that the project's commencement and expected completion date in September 2024 demonstrate certainty in the project's timeline. The company argues that each of its power plants have facilities similar to the proposed BWEC conference room project and that the ALJ relied on the Attorney General's and ABATE's unsupported conclusory assertions. DTE Electric's exceptions, pp. 32-33 (citing 5 Tr 2359-2360, 2412-2413).

In its replies to exceptions, ABATE takes note of DTE Electric's claim in exceptions that each of its power plants have facilities similar to that which the company is proposing for BWEC. ABATE contends that such a statement is unrelated to the details of the company's projected costs and does nothing to demonstrate the projects' reasonableness and prudence or the certainty of its costs and when they will be incurred. ABATE's replies to exceptions, p. 6.

The Attorney General replies to DTE Electric's assertion that its other power plants have similar facilities to that proposed for BWEC. She argues that recovery based on such a vague assertion would be "truly astonishing[.]" Attorney General's replies to exceptions, p. 19. The Attorney General repeats that the lack of detail from the company supports a disallowance. *Id*.

The Commission finds the PFD to be well-reasoned and based on substantial evidence on the record. The company failed to provide sufficient detail to justify this project and failed to respond to inquiries with sufficient detail to demonstrate the definitiveness of or need for this project. *See*, 4 Tr 1134; 6 Tr 3717; Exhibit AB-7, pp. 38-40. Moreover, DTE Electric's comparisons of this project to its other power plant facilities reinforces the obvious question raised by the Attorney

General of why the company's planned conference room not included in the original design of the BWEC site if all of the company's power plant facilities require such conference facilities. The company's response did not shed light on this reasonable question or provide enough information to discern whether the current facilities are inadequate to serve such a purpose.

5. Site Security/North American Electric Reliability Corporation Compliance Project (Schedule B5.1, page 2, lines 8-18)

DTE Electric requested recovery for expenditures related to projects required to improve power plant security, security enhancements for critical equipment, and improvements to comply with North American Electric Reliability Corporation (NERC) cyber security requirements. The company explained that limited project details were disclosed to maintain the integrity of these security measures. 5 Tr 2275-2277; Exhibit A-12, Schedule B5.1, p. 2, lines 8-18. Noting the Commission's disallowance of these projects in the company's previous rate case, ABATE objected to these expenditures in this case due to the lack of details, total project costs, and completion schedule. 4 Tr 1126-1128.

The ALJ found that the site security and NERC project expenditures for the 11-month bridge period and test year should be excluded from rate base because the company failed to provide sufficient information for the parties to evaluate the reasonableness and prudence of the projects, the basis for cost estimates, or the likelihood that the company will spend the money as projected. The ALJ included in her recommended disallowance the historical costs of $277,000 on line 8 of Schedule B5.1, the projected 23-month bridge period costs of $10,528,000, and $7,000 for the projected future test year. PFD, p. 98.

The ALJ went on to rebuke DTE Electric's rebuttal and briefing arguments that ABATE should have provided a direct analysis or reference to specific portions of the project management planning (PMP) forms and workpapers on these expenditures (provided in Exhibit AB-7, pp. 19-31). The ALJ stated that, due to redactions, there was no way to match the PMP forms to the line items in Schedule B5.1 and that none of the key phrases DTE Electric used in its testimony appeared in the PMP forms. The ALJ questioned the company's guarding of this information despite a protective order in this case, additional protections for critical energy infrastructure information (CEII), and that the nature of some these projects makes them open to public view and performance by outside contractors. PFD, p. 99. The ALJ also stated that the relationship between the dollar amounts in Schedule B5.1 and the PMP forms is attenuated and provides no explanation as to the basis of those cost estimates. The ALJ pointed to multiple examples of discrepancies between line-item spending in Schedule B5.1 and the PMP forms in Exhibit AB-7 and noted that nothing in the PMP forms indicated the basis for the company's forecast or explains changes in spending, making direct analysis by intervenors impossible. PFD, pp. 99-100.

Turning to the projects completed in the historical test year or in 2022, the ALJ found these amounts to be relatively small and actually spent as confirmed by a Staff audit. Thus, the ALJ recommended that the net historical test year capital cost for the investments on lines 9 through 13, 16, and 17 totaling $47,000, and the 2022 expenditure on line 14 totaling $15,000 (inclusive of offsetting credits) should be included in rate base. Lastly, the ALJ cautioned DTE Electric that it should not expect recovery for actual or projected expenditures for projects for which it does not provide information sufficient for meaningful review by the parties. PFD, pp. 100-101.

DTE Electric takes exception and argues that the ALJ based her decision on a faulty comparison of the annual expenditures in the company's Exhibit A-12, Schedule B5.1 that exclude calculated risks (also referred to as contingency) with the annual expenditures in the project's documents that include calculated risks. The company explains that the ALJ concluded that, because of the substantial difference between those two sets of amounts, the project was unsupported. Rather, the company asserts that when excluding contingency, the company's project documents fully support the requested capital costs and that the ALJ misinterpreted the discovery responses on this issue. DTE Electric's exceptions, pp. 34-35 (citing 5 Tr 2275-2277).

In its replies to exceptions, ABATE addressed the site security/NERC compliance projects together with the Blackstart project and contends that DTE Electric's exceptions (and ITC's arguments regarding Blackstart in its exceptions) do not overcome DTE Electric's failure to meet its evidentiary burden in this case. ABATE maintains agreement with the ALJ that the company's projections for the projects were not adequately supported. ABATE's replies to exceptions, pp. 4-5.

Addressing the site security/NERC compliance project, the Attorney General asserts that DTE Electric's exceptions merely repeat the company's previous arguments and that the ALJ arrived at the proper recommendation. Attorney General's replies to exceptions, p. 20.

The Commission finds the ALJ's recommendation to be well-reasoned and based on substantial evidence on the record. DTE Electric's lack of sufficiently supporting detail is a reoccurring theme in this case and in past rate cases, as evidenced by the Commission's rejection of cost recovery for this expenditure in the last rate case. *See*, November 18 order, p. 43 (adopting the ALJ's similar findings regarding insufficient detail to justify the project). The Commission agrees that the company has failed to support this project in the instant case as well.

6. Blackstart (Schedule B5.1, page 2, lines 47-49)

DTE Electric requested inclusion in its rate base for three projects to support NERC's Blackstart plan with capital expenditures at $155,000 for the historical period, $39.136 million for the bridge period, and $7.029 million for the test year. 5 Tr 2289-2290; Exhibit A-12, Schedule B5.1, p. 2, lines 47-49.

Citing a lack of detail regarding the projects and overestimations by the company when comparing amounts approved previously by the Commission in Case No. U-20836 with the company's actual spending, the Staff recommended the following reductions across all three time periods: $339,000 to 2022, $4.455 million for the 2023 bridge period, and $1,731,750 for the test year. 7 Tr 4363-4366. The Staff argued that these adjustments better align capital expenditure amounts with the company's projected or actual monthly capital expenditures for these projects provided in Exhibit S-17.3. 7 Tr 4366. The Attorney General contended that a full disallowance for these projects is reasonable because the company failed to provide sufficient support. 6 Tr 3699-3700. Similarly, ABATE recommended a full disallowance because of the lack of details for the project, limited information about the status of these projects and about execution of project tasks and timelines, and the lack of total project costs and completion schedule in the PMP documents included in DTE Electric's workpapers. 4 Tr 1126-1128.

The ALJ found ABATE's and the Attorney General's testimonies persuasive and recommended a full disallowance for the Blackstart projects. Recalling the site security/NERC projects, the ALJ again noted that, despite the protective order in this case, DTE Electric redacted material, inadequately responded to discovery, and provided documentation containing unexplained discrepancies such that meaningful review was not possible. The ALJ also dismissed the company's security concerns that it relied on in limiting the information provided by pointing out that the company contemplates putting these projects out for bid, thus involving outside parties in these matters it claims sensitivity over. PFD, pp. 105-107 (referencing Exhibit AB-7 to point out discrepancies between the company's Schedule B5.1 and its supporting documents responding to discovery). Speaking to the Staff's adjustments characterized as being more moderate, the ALJ reiterated that the concerns raised regarding the lack of documentation go beyond the question of whether the company will spend the money it projects, but rather the concerns go to whether that spending is reasonable and prudent. PFD, pp. 107-108.

In exceptions, DTE Electric disputed ABATE's and the Attorney General's positions, responding that the company has full management approval for this project, has completed substantial work on the project, and has complied with discovery responses in a manner consistent with the security sensitivities involved. DTE Electric's exceptions, p. 35 (citing 5 Tr 2393-2396). Incorporating its response to ABATE and the Attorney General, the company disagrees with the ALJ's conclusion that the parties were unable to adequately review the projects and reiterates that the company is unable to disclose specific location and work efforts related to the project because such information is considered by MISO to be critical infrastructure. DTE Electric then states that the ALJ used a faulty comparison between the company's Exhibit A-12, Schedule B5.1 that excludes contingency and project documents in Exhibit AB-7 that include contingency. The company contends that it adequately supported the projects with disclosable details and that the ALJ again misinterpreted its discovery responses. DTE Electric's exceptions, pp. 35-37.

ITC also takes exception, arguing that the ALJ's disallowance exposes Michigan's electric grid to significant risk. Recounting the ALJ's rationale regarding DTE Electric's confidentiality concerns, ITC noted that it explained the importance of the confidentiality of these projects and necessity to the function of the grid. ITC explains that NERC requires each transmission operator to have a system restoration plan (SRP) and that a Blackstart unit is an SRP that can start on its own power without support from the grid in the event of a major grid event, therefore, it is critical to the safety and reliance of the grid. ITC's exceptions, pp. 3-4. Explaining NERC's requirements for SRPs further, ITC states that it is necessary for it to partner with generation owners such as DTE Electric to establish Blackstart resources. ITC cautions that Blackstart resources are being lost due to conventional generation retirements and that DTE Electric's investments in the Blackstart resource will ensure a resilient SRP. ITC echoes DTE Electric in terms of the security limitations regarding the information, including the company's assertion that it provided significant detail regarding the three projects. ITC asserts that, contrary to the ALJ's recommendation, "the fact that some people outside the Company may have information regarding the Blackstart resource projects (and [are] required to safeguard such information) does not vitiate the need for confidentiality and sensitive treatment of these projects." ITC's exceptions, p. 6.

ABATE filed replies to exceptions on this issue grouped together with the Site Security/NERC compliance projects as discussed above. ABATE's replies to exceptions, pp. 4-5.

In her replies to exceptions, the Attorney General states that the company's exceptions merely repeat its previous arguments and argues that the company was evasive or wholly unresponsive in its discovery responses pertaining to the Blackstart project. Thus, the Attorney General asserts that the company cannot expect recovery when it provided "so little support." Attorney General's replies to exceptions, p. 21.

The Commission respectfully declines to adopt the PFD on this issue and finds that inclusion in rate base for three projects to support NERC's Blackstart plan is appropriate. The Commission is persuaded of the importance of these projects in maintaining grid security and that the information provided on this record is sufficient to justify recovery. Namely, the company has demonstrated that the company has full management approval for these projects and has completed substantial work on these projects. *See*, 5 Tr 2289-2290, 2393-2396. However, the Commission finds that the Staff's reductions to these expenditures are also appropriate and supported on the record. Therefore, the Commission finds the recovery of the company's expenditures included in Exhibit A-12, Schedule B5.1, p. 2, lines 47-49 is reasonable and prudent subject to the following reductions: $339,000 for 2022, $4.455 million for the 2023 bridge period, and $1,731,750 for the test year. *See*, 7 Tr 4363-4366; Exhibit S-17.3.

7. Batteries

a. Slocum Battery Pilot (Schedule B5.1, page 2, line 51)

To achieve consistency with the Slocum battery pilot discussed in Section IX of the PFD, the ALJ found the Staff's adjustment to this expenditure to be reasonable and recommended its adoption. PFD, p. 108.

DTE Electric takes exceptions to the ALJ's recommendation and maintains its disagreement with the Staff's calculation of its disallowance. The Attorney General filed replies to exceptions in response. Attorney General's replies to exceptions, pp. 49-50. These exceptions and replies to exceptions are discussed more fully in Part VIII (Other Revenue Related Items–Pilot Programs) of this order.

Consistent with the decision discussed in Part VIII (Other Revenue Related Items–Pilot Programs) of this order, the Commission adopts the PFD.

b. Trenton Channel Battery (Schedule B5.1, page 2, line 52)

DTE Electric testified that the expenditures for this project supported engineering and long lead material procurement through the end of the test year to support 46 megawatts (MW) of battery storage in 2025 and 60 MW of battery storage in 2026. For the 11-month bridge period, DTE Electric projects $24 million in spending and $57 million in spending for the test year projects. 5 Tr 2295. Explaining that the company does not have internal approvals for the project above $9 million, the Staff recommended a bridge period adjustment of $15.1 million (DTE

Electric's requested amount less the internally approved $9 million) and a full disallowance of the test year expenditures. 7 Tr 4374-4375. The Attorney General argued that the company has not justified the project as economically viable, and thus, recommended a full disallowance. 6 Tr 3708. ABATE similarly recommended a full disallowance, citing uncertainty as to internal approvals, lack of project timeline details, PMP documents supporting only $5.8 million of 2023 spending and none for 2024, and project completion outside the test year. 4 Tr 1133-1134; Exhibit AB-7, p. 32.

The ALJ found inclusion of DTE Electric's expenditures for the Trenton Channel battery project to be premature and explained as follows:

> While Staff's proposal to include $9 million in engineering costs is not unreasonable, it appears to be based on a desire to have ratepayers fund the beginning of this project, but in theory, as [DTE Electric witness] Ms. Uzenski explained it, the costs at this premature stage should be in CWIP with an AFUDC offset, since the project is clearly going to cost more than $50,000 and take more than six months. This ratemaking treatment would not actually provide DTE with funding, and ignores that DTE has a generous working capital allowance and line of credit for activities of this nature.

PFD, pp. 112-113. The ALJ noted that the project is consistent with the company's approved IRP but maintained that this does not require preliminary stage expenditures to be included in rate base. *Id*., p. 113.

DTE Electric takes exception, arguing that the company fully supported the project with sufficient project and timeline detail and demonstrated in the discovery responses in Exhibit A-35, Schedule Z6 that it bid the project early in 2023. The company contends that recovery for the project will allow it to take advantage of economies of scale during material procurement and site construction, maintain the preferred location at the Trenton Channel site, and utilize the existing transmission interconnection rights, avoiding additional future costs. Thus, DTE Electric disagreed with the ALJ's recommended disallowance and pointed out that the ALJ's reasoning that these project costs should be in CWIP, not rate base, ignores that CWIP is a part of rate base. Lastly, the company repeated that projects not in service in the test year have no net revenue requirement because of the AFUDC offset. DTE Electric's exceptions, pp. 37-38.

In its replies to exceptions, ABATE argues that DTE Electric's claims in exceptions do not demonstrate that cost recovery is reasonable and prudent at this time and agreed with the ALJ's findings and conclusions on this issue. ABATE's replies to exceptions, pp. 5-6.

The Attorney General supports the ALJ's recommendation, stating that DTE Electric's focus on CWIP funds being in rate base misses the point that the company's projected expenditures are premature for inclusion in rate base. The Attorney General calls on the Commission to "rebuff DTE's attempts to put this into rate base and therefore earn additional return on it, at the expense of ratepayers." Attorney General's replies to exceptions, p. 22.

The Commission respectfully disagrees with the ALJ's recommended full disallowance for the Trenton Channel Battery project and finds the Staff's recommended disallowance to be reasonable. The Commission approved the Trenton Channel Battery project in the company's IRP, Case No. U-21193, and the Commission finds that approval of some costs to support long-lead material procurement and engineering is appropriate as long as the company has demonstrated with certainty that it will actually make those expenditures. The Commission finds that the company's internal approval of the $9 million provides sufficient certainty that DTE Electric will spend those dollars as pointed out by the Staff. *See*, 7 Tr 4374-4375; Exhibit S-17.9. However, while DTE Electric has indicated that it has issued an EPC and developer RFP in April and May of 2023, respectively, this is not sufficient to establish certainty in the expenditures such that full recovery in this case is appropriate. As the company admits, when these contracts are complete, it will have a better understanding of the projected costs and actual timelines for work on the project. *See*, Exhibit S-17.8. Therefore, the Commission finds that DTE Electric's requests for costs beyond the $9 million is not appropriate at this time and excludes these amounts from CWIP in rate base. The Commission also notes that while this project is still in the early stages of development, for future recovery requests, costs subject to approval must be determined specific to this battery energy storage system (BESS) build rather than based on generalized national cost estimates such as those proposed using 2022 National Renewable Energy Laboratory (NREL) cost estimates.

B. Midwest Energy Resources Company/Fuel Supply (Schedule B5, line 5)

Midwest Energy Resources Company (MERC) is a wholly owned subsidiary of DTE Electric that provides coal transportation services to DTE Electric and to third parties, with third-party revenue returned to DTE Electric ratepayers as an offset to power supply costs. DTE Electric reported 2021 capital spending of $2.74 million on Schedule B5, line 5, and projected 23-month bridge period and test year capital spending of $4.56 million and $2.5 million, respectively. 5 Tr 2544; Exhibit A-12, Schedule B5, line 5; Exhibit A-12, Schedule B5.2. MNSC recommended a disallowance of the company's projected capital expenditures pending a determination of a retirement plan for the MERC facility. 6 Tr 3460-3462 (citing Exhibits MEC-3, MEC-4, MEC-5, and MEC-6).

The ALJ found that DTE Electric did not adequately evaluate the operation of MERC and its fuel supply infrastructure in planning the projected investments, including an evaluation of the necessity of the investments and their value to ratepayers in light of the significantly diminished transportation volumes. However, the ALJ found it reasonable for the company to reevaluate these investments, and that the alternative suggested by MNSC to allow DTE Electric to defer recognition of additional costs following such a reevaluation would be appropriate. Supporting her recommended deferral, the ALJ stated that because DTE Electric has not evaluated a retirement date for MERC or its related fuel supply assets, it is possible that shorter term and lower cost alternatives exist that allow the company to meet its needs. In response to DTE Electric's assertion that the decreasing levels of capital expenditures shown in Exhibit MEC-6 demonstrate that the company has taken reasonable and prudent steps to reduce capital costs, the ALJ found this assertion to be unsupported in the record. The ALJ stated that DTE Electric provided no evidence that it considered the extent to which capital investments at MERC or other fuel supply assets are avoidable. PFD, pp. 120-121.

In exceptions, DTE Electric repeats its arguments that its expenditures for 2021 through the projected test year are reasonable and prudent and insists that MNSC's recommended disallowance should be rejected because MERC's continued operation as well as the required maintenance to the associated rail cars are crucial to electric reliability through and beyond the test year. DTE Electric's exceptions, pp. 39-41 (citing 5 Tr 2544-2549, 2553-2557). While agreeing to update MERC depreciation rates in its next depreciation rates, the company disagreed with the suggestion to include coal transportation assets in that proposal. DTE Electric's exceptions, p. 41. Citing its recitation of its position on this issue, the company disagreed with the ALJ's disallowance and characterized the ALJ's finding that investment in the maintenance of the railcars would increase their salvage value as speculative. The company states that the ALJ faulted the company for not providing additional evidence while neglecting MNSC's burden of proof on the issue it raised. *Id*., pp. 41-42.

DTE Electric argues that MERC is a well-established component of the company's generation infrastructure and that the company should not have to prove its critical role in successive rate cases. The company points out that MEC's Exhibit MEC-6 shows that MERC's capital costs have decreased over the last 10 years, showing the company's commitment to reducing capital costs and supporting recovery in this case. Lastly, the company asserts that it has continuing fuel transportation needs and that the MERC expenditures requested serve safety, environmental, and reliability interests and that they are reasonable and prudent. *Id*., pp. 42-43 (citing 5 Tr 2544, 2547).

In its replies to exceptions, MNSC asserts that DTE Electric mischaracterized the ALJ's recommendation as a disallowance when she in fact recommended a deferral of the company's MERC fuel supply expenditures. MNSC's replies to exceptions, pp. 5-6. MNSC repeats the company's testimony and its own testimony before contending that there is no evidence on this record that DTE Electric's capital spending takes into consideration the decline of MERC's operations. MNSC recited the recommendations it made for MERC and the ALJ's findings. *Id*., pp. 6-9.

Turning to DTE Electric's point in exceptions that MERC is a critical transshipment source, MNSC states that DTE Electric seems to be arguing against the immediate shutdown of MERC, which was not advocated for by any party, instead of attempting to determine if any of these expenditures are avoidable. MNSC also dismisses DTE Electric's reliance on MERC's third-party revenues as an offset to power supply costs, explaining that these revenues have declined by 93% and are approaching zero. MNSC's replies to exceptions, pp. 9-10. As to the company's argument that its railcar fleet maintenance optimizes cost savings by using private equipment, MNSC argues that the company cannot reliably make this claim regarding an economic analysis it admits to not doing in this case. *Id*., p. 10. MNSC also disputes that it raised the MERC analysis issue and thus carries the burden of proof. Rather, per MNSC, DTE Electric raised the issue by requesting approval of these costs. *Id*., pp. 10-11 (citing MCL 460.6a(1)). Lastly, MNSC disagrees that the PFD required DTE Electric to reestablish MERC's fundamental nature in every case and argues that, instead, as circumstances change (i.e., the planned retirement of the company's remaining coal plants), the company must evaluate whether certain expenditures are avoidable. MNSC's replies to exceptions, pp. 11-12.

The Attorney General supports the ALJ's recommendation and states that DTE Electric's exceptions merely repeat testimony in disagreement with the ALJ and are thus unpersuasive on this issue. Attorney General's replies to exceptions, p. 23.

The Commission finds the ALJ's recommendation to be well-reasoned and based on substantial evidence on the record. The Commission agrees that pending a full evaluation of a retirement plan for the MERC facilities and assets, given the approvals of the Monroe power plant retirement and Belle River plant conversion to natural gas, it is appropriate for the company to weigh the necessity and value of these projected investments against the cost it seeks to place on ratepayers. Therefore, the Commission finds the ALJ's recommended allowance for the recovery of the $2.7 million in historical costs and removal and deferral of the projected bridge and test year costs ($4.56 million and $2.5 million, respectively) to be appropriate. Should the company seek recovery of these costs in a future rate case, it shall include the evaluation of its MERC investments and retirement plan to identify avoidable expenditures as described in this order.

C. Nuclear Production

To replace the Fermi 2 generator stator and rotor with a matched stator and rotor, DTE Electric projected capital expenditures of $21.3 million for the historical test year, $105.2 million for the projected bridge forecast period, and $58.4 million for the projected test year. 5 Tr 2463; Exhibit A-12, Schedule B5.3. The company also included in its initial filing and direct testimony expenditures to replace the Fermi 2 main generator unit but indicated in briefing and in response to a discovery interrogatory from the Staff that the date for the main generator replacement project had been postponed to beyond the test year. DTE Electric's brief, p. 44 (citing 5 Tr 2483; Exhibit A-12, Schedule B5.3, p. 1, line 11; Exhibit A-12, Schedule B5.3, p. 4, line 2 (showing the main generator replacement costs); Exhibit S-25). The company's attachment A to its initial brief showed a net capital expenditure reduction of $286.8 million with a net plant reduction of $257.6 million.

Based on the postponement of the Fermi 2 main generator replacement project, the Staff recommended the following adjustments: (1) reduce plant in service by $257,627,500; (2) increase CWIP by $257,627,500; (3) reduce accumulated depreciation by $3,054,500; (4) reduce depreciation expense by $6,109,000; and (5) increase the AFUDC by $11,079,000. The Staff's adjustments resulted in a rate base increase of $3,054,500 and decreased the revenue deficiency by approximately $20.8 million. Staff's initial brief, p. 27 (citing Exhibit S-25).

The ALJ noted that neither the Staff nor the company explained the basis for the revised timing of the main generator project, how the $257.6 million net plant adjustment was computed given that the total capital expenditures on line 2 of page 4 of Schedule B5.3 (including 2021 spending through the test year projection, totals only $184.96 million), and why it is reasonable to believe that DTE Electric will spend the total amount of its projection by the end of the test year given the delayed timing of the project. PFD, p. 123. The ALJ also pointed out that DTE Electric deleted the capital expenditures from rate base as shown in Attachment B to its initial brief, but the Staff added the originally projected expenditures to CWIP, which DTE Electric imitated in Attachment A to its reply brief. *Id.*

In her recommendation, the ALJ first noted that DTE Electric should have revised its testimony and provided a more comprehensive explanation rather than including a "cryptic" footnote in its brief. PFD, p. 123. Next, the ALJ stated that there is confusion as to how the postponement is reflected in rates. The ALJ explained that the Staff and DTE Electric agree that there is a reduction to the revenue requirement of $20.8 million but the Staff added the projected spending to CWIP, while DTE Electric only did so when the company copied the Staff at the reply brief stage. The ALJ found no basis to conclude that DTE Electric would spend the projected amounts reflected in exhibits and thus, there was no reason to include those amounts in CWIP. Lastly, the ALJ noted that the only additional issues for DTE Electric's nuclear generation arise in the Attorney General's recommended disallowance for the company's projected uprate study that is addressed as an element of working capital and adjusted net operating income (ANOI) discussed in Part VI (Adjusted Net Operating Income) of this order. PFD, p. 124.

DTE Electric takes exception to the ALJ's recommendation contending that there is no disagreement or confusion on this issue and that the ALJ's suggestion otherwise is unfounded. The company again asserts that well-established accounting practice allows the company to include CWIP in rate base with an AFUDC offset and that under the company's proposal, which the company notes is shared by the Staff, there is no impact on the revenue requirement. DTE Electric's exceptions, pp. 43-44 (citing 5 Tr 1541, 1572-1573; Exhibit S-25).

In her replies to exceptions, the Attorney General supports the ALJ's recommendation and finds nothing new or persuasive in DTE Electric's exceptions. Qualifying the company's supporting evidence on the main generator project as unclear and oft-changing, the Attorney General contends that the ALJ was right to exclude these costs from CWIP, with or without an impact on the revenue requirement. Thus, DTE Electric's argument that the costs should be included because there is no impact on revenue deficiency is unpersuasive. Attorney General's replies to exceptions, pp. 23-24.

The Commission respectfully declines to adopt the ALJ's recommendation and instead finds that the Staff's position is reasonable. The Commission finds that the company carried its evidentiary burden to show the need for this project. *See*, 5 Tr 2463-2465. The company's movement of the project from refueling outage RF22 to RF23 beyond the test year does not convince the Commission that exclusion from rate base is warranted. Rather, the Commission finds that the inclusion of the company's projected amounts in CWIP with an AFUDC offset is appropriate and consistent with the Commission's treatment of funds for CWIP. The Commission further notes that the company and the Staff are in agreement on the inclusion and amount of these costs in CWIP and the accompanying adjustments to the revenue deficiency and no other party objected to the Staff's and the company's proposed resolution of this issue. Therefore, the Commission finds the adoption of the Staff's and DTE Electric's adjustments to be reasonable and adopts the treatment of these costs as described in the Staff's brief. Staff's initial brief, p. 27 (citing Exhibit S-25); *see also*, DTE Electric's reply brief, attachment A, p. 3.

D. Distribution Capital

DTE Electric reported 2021 distribution capital expenditures of over $1.27 billion and projected 23-month bridge period capital expenditures of $2.8 billion and test year capital expenditures of $1.56 billion, approximately $275 million above 2021 levels, not including expenditures assigned to regulatory assets. Exhibit A-12, Schedule B5.4.

The ALJ extensively addressed DTE Electric's proposed distribution capital recovery as well as the intervening parties' positions by providing a thorough history of relevant Commission orders, an overview of DTE Electric's evidentiary presentation in this case, and a discussion of the concerns raised by the parties and the company's responses thereto before turning to individual contested expenditures in this category. For brevity purposes, the Commission will not repeat the full history and overviews provided by the ALJ but will briefly summarize key points relevant to the Commission's discussions below.

1. Background

The ALJ first recounted that in the January 31, 2017 order in Case No. U-18014 (January 31 order), the Commission directed DTE Electric to file a five-year distribution investment and maintenance plan following a request from DTE Electric for recovery of substantial increases in distribution capital expenditures that was partially agreed to by the Staff. PFD, pp. 125-128 (citing January 31 order, pp. 35-41). In that order, the Commission, citing the lack of BCA and adequate support, declined to adopt the Staff's adjustment to the company's recovery of distribution capital because the record in Case No. U-18014 indicated that DTE Electric was spending in excess of the amounts allocated for distribution but, despite this spending, there was little improvement to the company's reliability metrics. *Id*., p. 39. The Commission's motivation in requiring the distribution plans (from both DTE Electric and Consumers Energy Company (Consumers)) was to remedy the lack of visibility into utilities' long-term needs and strategies for addressing aging distribution infrastructure. *See*, October 11, 2017 order in Case No. U-18014, p. 10 (October 11 order).[11] The Commission later opened a new docket, Case No. U-20147, as a repository for all five-year distribution plans. Several Commission orders and DTE Electric's second five-year distribution plan have been filed in that docket.[12]

[11] The October 11 order was double-captioned with Consumers' most recent (at that time) rate case, Case No. U-17990.

[12] Those orders include the November 21, 2018, September 11, 2019, and August 20, 2020 orders in Case No. U-20147. DTE Electric's second five-year distribution plan was filed on September 30, 2021. *See*, Case No. U-20147, filing # U-20147-0071. Following the application filed in this case, DTE Electric filed its 2023 five-year distribution plan on September 29, 2023. *See*, Case No. U-20147, filing # U-20147-0095.

On October 5, 2022, the Commission opened a new docket, Case No. U-21305, with an order (October 5 order) responding to recent storm-related outages and Michigan utilities' poor performance in terms of the frequency and duration of outages. In the October 5 order, the Commission directed an independent audit of the adequacy of the electric distribution system operated by Consumers and DTE Electric and specifically defined the scope of the audit.[13] October 5 order, pp. 14-16.

DTE Electric's last rate case, Case No. U-20836, was the first instance where the Commission had before it the company's distribution grid plan (DGP). In the November 18 order, the Commission found that the company had not adequately incorporated equity and environmental justice considerations into its global prioritization model (GPM) but noted the company's stated intention to file a distribution-related environmental justice plan based upon the MiEJScreen tool and a geographic view of its reliability data in either its next distribution plan case or rate case. November 18 order, pp. 458-459.

2. Overview of DTE Electric Company's Evidentiary Presentation

DTE Electric included its 2021 DGP in this case as Exhibit A-23, Schedule M7 and relied on it as the principal basis for its recommendations in this case. Several DTE Electric witnesses testified to the DGP in terms of its core infrastructure elements: system performance with reference to the System Average Interruption Frequency Index (SAIFI) and the System Average Interruption Duration Index (SAIDI); capital spending forecasts; and distribution system spending, planning and performance. The company also testified to its underlying GPM, which was used to prioritize the company's investments by ranking projects and programs, which considered the

[13] The Commission opened Case No. U-21305 for the third-party distribution system audit. As of the date of this order, the audit is ongoing.

following objectives: (1) safety, (2) reliability and resilience, and (3) affordability. DTE Electric explained that these three objectives are expressed as the following impact dimensions in the company's GPM: safety, load relief, regulatory compliance, and major event risk reflecting the safety objective; reliability reflecting the reliability objective; and O&M cost avoidance and reactive capital avoidance reflecting the affordability objective. The company then showed how each of its investment programs tied to an applicable impact dimension and explained how each program's benefit/cost ratios are scored and ranked with the highest scoring investments being selected for the company distribution infrastructure strategic investment plan. 3 Tr 385-390.

The ALJ noted that DTE Electric did not actually provide the benefit/cost scores that it calculated for any particular program and that there was some confusion among the parties regarding the project scores of some programs that exceeded the maximum score, indicating that some individual impact dimensions could be multiples of 100. PFD, p. 139.

DTE Electric also testified to the other considerations outside of the GPM ranking that the company utilizes including: the impact of workforce needs, system operational constraints such as load growth requiring a project to be advanced, regulatory requirements or guidance such as NERC requirements, safety issues, the award of grant money, and environmental justice. 3 Tr 394-419.

3. General Concerns and Recommendations

The ALJ summarized the parties' concerns regarding DTE Electric's DGP, which generally focused on reliability, safety, affordability, equity, transparency, and regulatory accountability, and summarized the company's rebuttal thereto. PFD, pp. 141-187. Again, for brevity purposes, the Commission will not repeat the summaries provided by the ALJ but will note key arguments or recommendations as they are relevant to the Commission's discussion below.

a. Michigan Municipal Association for Utility Issues and City of Ann Arbor

MI-MAUI and Ann Arbor's concerns center around claims that DTE Electric's service is unacceptably unreliable and that its distribution expenditures are unnecessarily high because the company does not follow standard utility practices to improve efficiency and reduce costs. Witnesses for MI-MAUI and Ann Arbor included public officials and experts who recounted examples of communication and coordination difficulties with DTE Electric during weather- and emergency-related outage incidents resulting in serious safety risks, injuries, public health concerns, and infrastructure damage. 4 Tr 842-891, 954-957, 986-987; Exhibits A2-1, A2-18, A2-19, A2-27, and A2-28; Exhibits MAU-1 through MAU-3, MAU-7, and MAU-8.

b. Michigan Environmental Council, Natural Resources Defense Council, Inc., Sierra Club, and Citizens Utility Board of Michigan

Citing reports submitted to the U.S. Department of Energy's (DOE's) Energy Information Administration (EIA), MNSC characterized DTE Electric's reliability as among the worst in the country and further supported this claim with data regarding SAIDI, SAIFI, and customer average interruption duration index (CAIDI), reports filed by the company with the Commission showing outages and outage restoration times, comparisons with other utilities, and rate comparisons for distribution costs, demonstrating that costs in Michigan are relatively high in terms of costs when compared with other states. MNSC recommended that the Commission enforce stricter spending, require the company to file a residential affordability plan, and, in discussing tree trimming, asked the Commission to be wary of approving additional spending without a completed audit of DTE Electric's physical distribution system and system management. 6 Tr 3426-3453.

c. Michigan Environmental Council, Natural Resources Defense Council, Inc., Sierra Club, and Citizens Utility Board of Michigan and the Michigan Department of Attorney General

With jointly sponsored testimony from two witnesses, MNSC and the Attorney General examined DTE Electric's DGP; the DGP process; and the GPM from a financial, policy, and regulatory perspective; and the company's strategic capital spending from a technical and timing viewpoint. They argued that a project's inclusion in the DGP does not carry a presumption of reasonableness and prudence and called the company's DGP unaffordable and largely unjustified with several criticisms of the GPM's development. MNSC and the Attorney General recited the company's capital spending, its lack of analysis regarding the DGP's impact on the revenue requirement, and the failure of increased distribution spending to result in improved reliability. MNSC and the Attorney General recommended that the Commission institute a process for developing distribution investment plans with effective stakeholder participation and require a risk-informed BCA and risk-informed support for distribution system investments. *See*, 6 Tr 3318-3406; Exhibits MEC-18 through MEC 22.

d. Michigan Department of Attorney General

The Attorney General presented a service improvement incentive mechanism (SIIM) that would tie a financial penalty and incentive to the achievement of reliability-based performance metric and asked the Commission to approve such a mechanism. *See*, 6 Tr 3795-3804. The SIIM is addressed further in Part VIII (Other Revenue Related Items) of this order.

e. The Clean Energy Organizations

The CEOs criticized DTE Electric's GPM analysis for not considering energy justice, equity, and environmental justice (EJ) and set out the legal authority for the Commission to consider public policy factors in determining the reasonableness and prudence of utility investments. The CEOs called for the company to perform more granular analysis of its reliability data to better understand reliability impacts among EJ customers compared to other customers and asked the Commission to require full consideration of grid equity and energy justice before approving significant new investments. *See*, 6 Tr 3843-3895. Citing general EJ and equity issues, stakeholder input in Case No. U-21047, and DTE Electric's recent use of the MiEJ screening tool, the CEOs noted the company's positive progress but made suggestions to improve its EJ analysis by: "(1) adjusting its definition of vulnerable communities, (2) considering sociodemographic factors, (3) analyzing distributional equity impacts, and (4) explaining how the analysis supports action and decision making to advance equity." 6 Tr 3895. The CEOs also provided and explained in detail a regression analysis to evaluate the company's reliability metrics relative to a variety of demographic profiles. *See*, 6 Tr 3926-3935. Lastly, the CEOs made the following specific recommendations:

> 1. The Commission [should] order the Company to include in its next EJ/Reliability analysis a 75%, 80%, and 90% MiEJScreen Tool threshold analysis in its next rate case;
>
> 2. The Commission [should] order the Company to conduct more extensive [EJ] & reliability analysis in future cases including regression analyses and an examination of similar "grid topologies" as recommended by CEO Witnesses Tan and Kenworthy;
>
> 3. The Commission [should] direct the Company to identify, track, and mitigate disparity along the different categories identified by CEO Witness Pereira including: (1) affordability and energy burden reduction; (2) community reliability and resilience; and (3) access and participation to clean energy programs in its next rate case;
>
> 4. The Commission [should] order the Company to file its upcoming [DGP] in a contested case proceeding;
>
> 5. The Commission should limit investments in the distribution system to what is affordable while awaiting DTE Electric's upcoming distribution system investment plan and the Commission's audit of DTE Electric's distribution system before accelerating investments that will drive up rates;

> 6. The Commission should reiterate the importance of including equity as an impact dimension in the Company's [GPM.]

CEOs' initial brief, pp. 35-36.

f. The Detroit Area Advocacy Organizations

The DAAOs argued that DTE Electric failed to provide an adequate racial equity analysis in this case and stated that the company is focused on financial metrics, meaning that the Commission and intervening parties must protect ratepayer welfare. The DAAOs set forth and explained in further detail the following principles needed to address inequity: affordability, infrastructure quality, and technology access. The DAAOs also raised the company's efforts to harden the 4.8kV distribution system and noted the inequities for vulnerable communities in terms of more frequent outages and long restoration wait times and relied on census data to point out correlations between race and income and the restoration wait times. The DAAOs called for the Commission to perform a proper equity analysis prior to any future rate case filing. *See*, 6 Tr 3974-3978, 4025-4033,

g. Commission Staff

The Staff noted numerous instances of public comment across various Commission dockets and public meetings in which the public expressed concerns with reliability and affordability of DTE Electric's services. The Staff also highlighted safety issues and inequitable impacts resulting from outages. As to the company's DGP and underlying GPM, the Staff found that the company's prioritization process lacked transparency and provided examples of DTE Electric's refusal to provide adequate information to the Staff in discovery. The Staff also extensively addressed grid equity issues for vulnerable communities in DTE Electric's service area. Lastly, the Staff made the following recommendations:

1. To support future environmental justice and equity analyses, Staff recommends the Commission:

a. Require future environmental justice analyses provide information in community vulnerability gradations based on the MiEJScreen composite score. Staff recommends the Commission request these gradations be defined initially as 0% to <5%, 5% to <10%, in 5% gradations up to 95%-100% of the MiEJScreen composite score, where the Commission may revise these gradations at its future discretion.

b. Request the Energy Affordability and Accessibility Collaborative define vulnerable community or environmental justice community based on a threshold of MiEJScreen composite scores for use in environmental justice analyses in future [Commission] proceedings for Commission consideration and possible adoption.

2. Staff revises its GIS [geographic information system] data related recommendations in brief. Staff recommends the Commission:

a. Require the Company, in future rate cases and distribution plans, provide data on Customers Experiencing Multiple Interruptions (CEMI) with 6 or more sustained interruptions per year and Customers Experiencing Lengthy Interruption Duration (CELID) of > 16, 48, and 96 hours of interruption by zip code and census tract, identified by census tract GeoID number with census version identified. This information is recommended to be provided by month for the historic period of the rate case or the two years prior to the rate case or distribution plan filing date, whichever is greater, in one or more spreadsheets.

b. Order the Company to provide spreadsheet data in future rate cases and distribution plans that notes the zip code and census tract locations that received and are projected to receive reliability related investments by program, including, but not limited to, tree trimming, 4.8kV Hardening, 4.8kV Conversions, Customer Excellence, PTMM [pole top maintenance and modernization], and CODI [City of Detroit Infrastructure]. Staff recommends this information be provided by program and by year for:

i. Five years prior to the rate case or distribution plan filing year to adequately evaluate infrastructure investments and upgrades.

ii. All future years for which the Company provides projected investment spend.

3. Staff recommends safety should be of the utmost importance and that known public safety hazards should be promptly addressed according to adopted rules.

> 4. Staff recommends future Company reports of third-party contacts reported under [Mich Admin Code,] R 460.3804, in addition to the third party's health status and contact description, also require all the following information be provided:
>
> a. Location of contact.
>
> b. Distribution system voltage (4.8kV, 8.3kV, 13.2kV, etc.).
>
> c. Whether it involved a wire down.
>
> d. Whether it involved DPLD [City of Detroit Public Lighting Department] arc wire or distribution wire.
>
> 5. Staff recommends the Commission require the Company to provide greater transparency into why projects, programs, and deployment locations are selected in future rate cases.
>
> 6. Staff recommends the Commission require the Company include climate resiliency planning in future distribution plans, including a climate vulnerability assessment with 50- and 100-year climate forecasts at a minimum and a climate resilience plan.
>
> 7. Staff recommends the Commission require the Company to develop a clear and repeatable process that allows interested parties to request, safely obtain, and use GIS data with different levels of detail for their own analyses.
>
> 8. Staff recommends the Commission require the Company engage interested and affected customers/communities in stakeholder meetings in future distribution plans so their needs, wants, and concerns can be considered when designing and selecting distribution system programs, projects, and sites. Subsequent rate case filings should discuss how the Company addressed customer concerns in its program and project justifications, where applicable. Should the Commission adopt Staff's recommendation, Staff is willing to work with the Company to clarify expectations and process prior to the start of such stakeholder meetings.

Staff's initial brief, pp. 215-217.

4. DTE Electric Company Rebuttal

DTE Electric testified in rebuttal to the concerns raised above and presented several arguments refuting the intervening parties' and the Staff's claims regarding the company's DGP, GPM, transparency concerns, and equity concerns. *See*, 2 Tr 86, 3 Tr 424-443; 5 Tr 2228-2231, 2716-2722, 2727; Exhibit A-23, Schedule M7, p. 32-33; Exhibit A-44.

5. The Administrative Law Judge's Findings and Conclusions

As an initial matter, the ALJ noted that it is not possible to address all of the concerns raised by the parties within the confines of a rate case but noted that several recommendations for improving the process for distribution investment planning and further analysis are adopted in Section XII of the PFD (Part XI (Future Rate Cases, Further Study) of this order). The ALJ noted additional findings and recommendations with respect to affordability, equity, reliability, credibility, and the DGP process.

Speaking to affordability, the ALJ found that DTE Electric did not consider the financial burden on ratepayers that would result from the billions of dollars of distribution system investment that it included in the instant case as demonstrated by the lack of analysis on the impact to the revenue requirement associated with its proposed spending and the absence of total costs for long-duration projects. The ALJ also agreed with MNSC that while revealing what order the company should make expenditures, the company's GPM reveals nothing in terms of whether the company should pursue spending on all listed projects in the GPM or some of them, whether the company (or ratepayers) can afford them, and which projects have more value over others. PFD, pp. 187-188.

In response to analyses by the Staff, the DAAOs, and the CEOs regarding outage inequities in vulnerable communities, the ALJ stated that DTE Electric did not refute the parties' analyses but instead testified to its spending levels in those communities, which does not establish that it is addressing those inequities. The ALJ found that the company did not incorporate equity into its prioritization of projects and its statement that it would address grid equity in its next DGP favors caution in future evaluations of DTE Electric's spending proposals. *Id*., pp. 188-189.

As to reliability, the ALJ found that the company did not seek cost effective means to improve reliability but instead seeks to create programs for the wholesale replacement of infrastructure and propose projects for those programs. The ALJ cited Ann Arbor's and MI-MAUI's testimonies as examples where the company missed opportunities to coordinate construction activities and failed to prioritize communications with local emergency personnel. *Id*., p. 189.

Turning to credibility, the ALJ found that DTE Electric failed to provide the information necessary to support its proposed distribution investments and the company's assurances that its subject matter experts considered and evaluated all impact dimensions properly was unpersuasive. The ALJ then provided examples of DTE Electric's failure to explain or to provide responsive answers to parties' inquiries regarding scoring in the GPM. PFD, pp. 189-190 (citing 3 Tr 488-489 and Exhibit MEC-19).

Lastly, the ALJ addressed the DGP process and described how the parties were concerned with how the company's DGP was reviewed and called for a contested proceeding. The ALJ found that the parties' request is outside of the scope of the ALJ's role in this case but noted that the company's refusal to provide discovery despite the protective order in this case presented a significant obstacle for the parties to adequately evaluate DTE Electric's proposed investments. The ALJ recommended that the Commission caution the company that it will not approve costs that are premised on the company's representations unless the company provides the underlying analyses to the Staff and intervenors. Additionally, the ALJ stated that the company failed to support many of its projected expenditures and included many projects for which it is not seeking revenue without providing the full costs. As a result, the ALJ recommended that the Commission reject DTE Electric's IRM proposal and find that, if the company wishes to pursue an IRM, it should file a stand-alone case where the DGP can be evaluated.[14] PFD, pp. 190-191.

In exceptions, DTE Electric recites its testimony regarding the company's commitment to maintaining a safe and reliable distribution system and the need to upgrade and modernize the distribution system due to aging infrastructure. The company summarizes its total capital expenditures on distribution and explained the origins of the 2021 DGP and GPM supporting its capital expenditures in this case. DTE Electric's exceptions, pp. 44-46. The company then disagrees with a number of the ALJ's conclusions regarding the GPM beginning by stating that it disagrees with the ALJ's seeming recommendation to conduct a stand-alone DGP case. The company argues that its DGP was already considered in Case No. U-20147, subject to stakeholder feedback, and was developed through a serious of workgroups. The company also challenges the legality of any such stand-alone DGP contested proceeding contending that there is no statutory authority for the Commission to require the company to adopt a distribution plan. *Id*., pp. 46-48.

The company then refutes the ALJ's finding that DTE Electric did not properly consider affordable and reliable service in its DGP and insists that its capital distribution investments are based on identified customer needs and projects that provide customer benefits in terms of safety and reliability. *Id*., pp. 48-49 (citing 5 Tr 2693; Exhibit A-23, Schedule M7). The company then recites its 2022 strategic capital investments and how its 2023 forecasted strategic capital spending has decreased by $5 million from that projected in Case No. U-20836. The company explains that

[14] The ALJ addressed the IRM issue more thoroughly in the Section IX of the PFD. Other Revenue Related Items - Mechanisms of the PFD and set out the parties' positions as well as provided her reasoning for recommending that the Commission reject the company's proposed IRM at this time. PFD, pp. 704-743. Similarly, the IRM issue will be addressed as a standalone issue in Part VIII (Other Revenue Related Items) of this order.

the change "is driven by the increased focus on the need to expand the project portfolio in the Infrastructure Redesign and Modernization pillar, as well as increased investments in the 4.8kV Circuit Automation program, and a reduction in Infrastructure Resilience and Hardening." DTE Electric's exceptions, pp. 48-49 (citing 5 Tr 2850; Exhibit A-23, Schedule M2). DTE Electric argues that reliability is a key focus for its strategic investments and, using the SAIDI-excluding-major-event-days metric, asserts that the company's day-to-day reliability has increased. *Id*., p. 49.

DTE Electric states that the ALJ's findings on the GPM arise from the intervenors' inaccurate or overstated criticisms, and the company challenges the alternatives for risk-informed BCA set out by intervenors, namely the Attorney General and MNSC's jointly sponsored witness. DTE Electric argues that the company clearly identified the process by which projects are approved, the company already performs a risk-informed analysis as part of the GPM, and that the Attorney General and MNSC provided no evidence that their proffered equation for a risk-informed benefit/cost calculation is best practice. Pointing out that the Attorney General and MNSC's witness acknowledged that benefits are not always easy to calculate, DTE Electric argues that "attempting to provide a monetary amount for each impact dimension would create more ambiguity by introducing a new variable that is inherently subjective." DTE Electric's exceptions, p. 51. Despite its evidence supporting its risk-informed analysis, the company argues that the ALJ agreed with MNSC that the GPM ranks investments but does not say whether the value exceeds the cost or when to make these investments. DTE Electric excepts, stating that the intervenors did not propose a method for converting benefits to monetary amounts, and argues that doing so would only create ambiguity and be subjective. The company maintains that the Commission should find that the GPM properly prioritizes projects and identifies real world benefits. *Id*., pp. 51-52.

The DAAOs take exception to the extent that they argue that the company should be required to conduct an EJ analysis and contend that, while the DAAOs applaud the ALJ's finding that DTE Electric did not properly consider equity and the disparities in reliability for vulnerable communities, the ALJ's recommended approval of a rate increase will result in an immediate increase in energy service inequalities. DAAOs' exceptions, pp. 4-5. The DAAOs' exceptions regarding the EJ regression model are discussed *infra* in the Part XI (Future Rate Cases, Further Study) section of this order.

The CEOs except to the ALJ's failure to recommend that the company should be directed to work with stakeholders to revise the flawed GPM and refile it for Commission approval. The CEOs recite their positions in briefing and testimony regarding the Commission's intent for the DGP and the flaws of the company's filed GPM in this case. The CEO's exceptions, pp. 2-3. The CEOs agree with PFD's findings that the company did not adequately incorporate equity or include spending that demonstrates it is meaningfully addressing inequity, that the company is not seeking cost effective ways to improve reliability, and that it failed to support is DGP and GPM. However, the CEOs except to the ALJ's finding that ordering a robust DGP proceeding is outside the scope of this case. The CEOs contend that the ALJ's findings undercut the company's proposed aggressive spending and, therefore, the Commission must order significant revisions to this flawed model and re-evaluate the process by which the company generated a flawed DGP. Such revisions are necessary to ensure that ratepayers will realize a return on distribution grid upgrades. *Id*., pp. 3-4. The CEOs also except to the ALJ's recommendations following her finding in Section XII of the PFD that equity must have a role in the company's investment decisions; however this exception is discussed further *infra* in Part XI (Future Rate Cases, Further Study) section of this order.

The Staff takes exception to the ALJ's inclusion in her summary of party positions of MNSC's conclusion that distribution costs in Michigan are higher than in most other states and omission of the Staff's disagreement with MNSC's analysis on that point. The Staff contends that MNSC's claim should not be relied upon by the Commission because the difference between average industrial and residential rates is not a reasonable proxy for overall distribution rates. Staff's exceptions, pp. 3-4 (citing Staff's initial brief, pp. 154-155). The Staff also excepts to the ALJ's omission of its critique the CEOs' regression analysis and the ALJ's failure to recommend that the company perform a more robust and statistically sound regression analysis, which are addressed *infra* in Part XI (Future Rate Cases, Further Study) section of this order.

The Staff also filed replies to exceptions on this issue regarding the CEOs' proposed regression analysis, which are discussed further *infra* in Part XI (Future Rate Cases, Further Study) section of this order. Staff's replies to exceptions, pp. 26-27.

In their replies to exceptions, the CEOs address the company's exceptions regarding EJ, equity, and the CEOs' proposed regression analysis. These replies are discussed *infra* in Part XI (Future Rate Cases, Further Study) section of this order. CEOs' replies to exceptions, pp. 2-7. The CEOs argue that the company's exceptions present no new information or argument and simply ask the Commission to disregard the ALJ's findings. The CEOs agree with the ALJ that the company's GPM does not properly identify reliable, affordable, and equitable projects and failed to make its methodology available to intervenors. *Id*., pp. 7-8. The CEOs further respond and disagree with the company's and the ALJ's conclusion that the company's DGP should not be developed in a standalone contested proceeding. The CEOs repeat their previously made arguments in support of its position asserting that the condensed timeline of a rate case is not conducive to stakeholder collaboration and that the overlapping schedules of rate cases, IRPs, and distribution plan cases cause flaws in the DGP to go uncorrected. *Id*., pp. 9-11. In response to the company's assertion that there is no legal authority to order a contested DGP case, the CEOs point to MCL 460.6 and MCL 460.55 as sources of authority. CEOs' replies to exceptions, pp. 11-12.

The DAAOs, in their replies to exceptions, repeat their position that the company failed to adequately address EJ concerns and should be directed to perform more granular EJ analyses in its next rate case. CEOs' replies to exceptions, pp. 4-6. The DAAOs' replies to exceptions are addressed fully in Part XI (Future Rate Cases, Further Study) of this order.

In its replies to exceptions, MNSC repeats its criticisms of the company's GPM arguing that it is insufficient as evidence to support DTE Electric's distribution capital spending because:

> 1. The analyses that generate the GPM scores are not in evidence and DTE refused to produce them in discovery;
>
> 2. GPM scoring is subjective and widely variable;
>
> 3. The GPM is not a normal benefit-cost analysis – it ranks projects and programs but does not attempt to determine which ones are cost-effective[.]

MNSC's replies to exceptions, p. 16.

MNSC next repeats its arguments in testimony and briefing that the GPM did not properly consider equity and explains in more detail its reasoning behind the three flaws it found listed above. *Id*., pp. 17-20. After reciting the ALJ's findings and conclusions regarding the GPM, MNSC disputes DTE Electric's grievances with the PFD stating the company never explained why the ALJ was wrong in her findings. While DTE Electric argues a standalone DGP case is unnecessary, MNSC points out that DTE Electric failed to provide total costs for long-duration projects and was not sufficiently responsive to discovery regarding the GPM's analyses and therefore, should the company rely on the DGP in the future for an IRM, there should be a contested proceeding to fully vet the total costs and analyses of the DGP. *Id*., pp. 20-25.

MNSC then dismisses the company's reliance on its participation in workgroups to show that it considered affordability in the DGP. MNSC contends that the company provided no evidence that "it considered the total cost of these projects and programs, their revenue requirements, whether they will generate benefits that exceed their very high costs, how much they will actually improve reliability, or whether customers can afford them." *Id*., p. 25. In response to the multiple criticisms DTE Electric levied against the PFD, MNSC asserts that the company never produces evidentiary support to show the PFD was factually incorrect. As to MNSC's and the Attorney General's calls for a risk-informed BCA, MNSC states that DTE Electric's criticisms attempt to tear down MNSC's/Attorney General's recommendation but that its criticisms do not "rehabilitate the GPM." *Id*., p. 26. MNSC argues that DTE Electric's claim that the company did perform a risk-informed analysis is not true because "[i]t is impossible to say whether and to what extent the GPM is informed by judgments about risk or risk reduction because DTE has not introduced the evaluations that underlie its scoring into evidence and refuses to produce them in discovery." *Id*., p. 27. Additionally, the GPM does not compare project benefits to project costs according to MNSC. To conclude, MNSC contends that the ALJ's recommendations are detailed and well-supported and that they should be adopted by the Commission. *Id*.

As an initial matter, the Commission agrees with the ALJ that given the ever-growing substantial volume of issues raised in general rate cases, it is not possible to address every party's concerns regarding the methodology DTE Electric developed to prioritize its capital expenditures for distribution projects. The Commission's role in this rate case is to take the DGP and underlying GPM under consideration as evidence supporting the company's cost recovery requests in this case. That consideration includes weighing and evaluating the credibility of that evidence—the DGP and GPM—to determine whether it supports the spending proposed by the company and whether it is reasonable and prudent to pass those costs on to ratepayers.

Second, the Commission agrees with the ALJ that directing a contested proceeding to evaluate and develop the company's DGP is outside the scope of this proceeding and the Commission declines to adopt this recommendation in this case. However, the Commission highlights that the distribution plan docket in Case No. U-20147 is an open and ongoing docket with DTE Electric filing its most recent distribution plan on September 29, 2023. *See*, Case No. U-20147, filing #U-20147-0095. The Commission encourages the parties to provide feedback in that docket and, given the concerns expressed in this case, for the company to lend serious consideration to incorporating Staff and stakeholder feedback into its distribution plan process.

Turning to the credibility of the DGP and GPM, the Commission notes that DTE Electric presented the GPM and the DGP as the sole sources of support offered by the company for many capital expenditure programs in the distribution category. The Commission requires greater transparency into the basis for the GPM and the internal review process, as well as some explanation for the instances where the company deviated from the GPM's conclusions and sought funding for projects that were assigned a low priority. Without this additional information on how the rankings were arrived at, assessments of reasonableness and prudence are hampered and at times impossible. The Commission also expects DTE Electric to provide adequate supporting information, either in its initial rate case filing or in response to discovery, when intervenors seek basic information on the company's assertions about priority and need.

Additionally, to the extent that either the GPM or the DGP offers a facsimile of a BCA, costs are not always addressed and benefits are not quantified. As DTE Electric is well aware, that does not constitute a BCA. While the Commission recognizes that the company may seek to recover capital costs that were not approved in this case, in a future rate case with a more substantial filing, the Commission recommends that, where DTE Electric seeks capital expenditure approvals, it behooves the company to provide the intervenors and the Commission with a full understanding of how these projects were selected and why they were selected. The company clearly put significant work into both the DGP and the GPM, but as long as the company's internal review process remains a black box the Commission's review and ability to evaluate the reasonableness and prudence of the project for which the company seeks recovery is likewise obstructed.

5. Base Capital

DTE Electric divided base capital expenditures into two categories: "emergent replacements" and "customer connections, relocations & other," with a separate line item for contributions in aid of construction (CIAC). *See*, Exhibit A-12, Schedule B5.4. The Commission notes that all schedules referred to in the following discussion of distribution capital expenditures (unless otherwise stated) are contained within Exhibit A-12. For most line items, consistent with the PFD, the subheading contains the location of the relevant exhibit.

a. Classification Issues

In the November 18 order, pp. 468-469, the Commission addressed the Staff's concern that DTE Electric was assigning cost items to the "emergent" category that were not actually unplanned/reactive projects but were instead planned/proactive projects and thus belonged in the "strategic" category. The Commission directed the company to revisit and reassign cost categories and work with the Staff on this issue. November 18 order, pp. 485-486. In testimony, DTE Electric indicated that it had performed certain reassignments but could not, in all cases, separate an imminent failure from a failure that has already occurred, particularly where decisions must be made in the field. 5 Tr 2758-2759. The ALJ noted that "[n]o party took issue with the company's reclassifications, but . . . the classifications lack the degree of separation the Commission would prefer." PFD, p. 195.

In exceptions, DTE Electric responds that it has conformed to the Commission's dictates "as well as practicable." DTE Electric's exceptions, p. 53.

As the ALJ notes, no party took issue with the company's reclassifications or with its explanation for the classifications that result from decisions made in the field. The Commission adopts the findings and recommendations of the ALJ on the classifications. *See*, PFD, p. 195.

b. Emergent Replacements (Schedule B5.4, p. 1, line 7)

The emergent replacements category reflects capital costs incurred to respond to outages and is primarily divided into "storm" and "non-storm" categories based on the origin of the outage ("substation reactive" is a third category and is not at issue here). The "storm" category includes costs related to storms that generate more than 340 outage events and impact more than 125 circuits, which typically involve at least 25,000 customers without power. 5 Tr 2737. DTE Electric had 2021 capital expenditures in the emergent replacements category of $650.5 million, and the company forecasts (based on 11 months of actual expenditures) 2022 expenditures of $487.5 million, 11-month bridge period expenditures of $399.1 million, and test year expenditures of $424.4 million. Schedule B5.4, p. 1. The company explained that 2021 was an unusual year because it included five catastrophic storms and 527 circuits were strengthened prior to the 2022 storm season. 5 Tr 2739-2741. DTE Electric testified that it used a five-year 2017-2021 inflation-adjusted average to forecast 2023 and 2024 expenditures, adjusting and normalizing the historical data. 5 Tr 2738, 2849. The 2023 and 2024 forecasts were also adjusted at Schedule B5.4, p. 2, line 6, for a line-item called "emergent replacement reduction based on strategic spend." The ALJ noted that this line item was not explained by the witnesses for the company. PFD, p. 199. ABATE and the Attorney General recommended the reductions discussed below.

i. Historic Average

The Attorney General objected to DTE Electric's practice of first adjusting each year of 2017-2020 for inflation to bring it to a 2021 level using the Consumer Price Index (CPI) adjustment, and then adjusting the resulting five-year average using forecasted inflation factors for 2022-2024. The Attorney General argued that this practice compounds inflationary increases and amounts to "a brazen attempt to inflate forecasted capital expenditures by increasing the base on which forecasted costs are calculated." 6 Tr 3642. The Attorney General argued that inflation experienced in the prior years (2017-2020) is already reflected in the actual amounts. On that basis, she recommended a reduction of $18.7 million for the 11-month bridge period and $22 million for the test year. 6 Tr 3643-3644. Additionally, ABATE argued that 2021 should not be included in the five-year average in any case because it was an abnormal year with respect to storm activity. DTE Electric countered that its inflation adjustment method was approved by the Commission in the November 18 order, p. 63, and that the Commission has also approved the use of five-year averages. The company pointed out that 2023 was also an historic year with respect to weather.

The ALJ quoted the November 18 order, where the Commission found that DTE Electric should "'present further evidence in its next general rate case on the effect of the company's capital investments over recent years on productivity benefits and any continued need for inflationary adjustments to historical data in this cost category for emergent replacements in the future.'" PFD, p. 202 (quoting the November 18 order, p. 63). The ALJ found that the company presented no evidence addressing this language from the prior order. PFD, p. 203. As was discussed in the November 18 order, the ALJ found that DTE Electric has made significant capital investments in recent years in distribution system technology that may have productivity benefits that offset some or all inflationary pressures. The ALJ noted the adjustment called "emergent replacement reduction based on strategic spend," but could not conclude that this addressed the inflation offset issue since no meaningful analysis of the issue was provided by DTE Electric. On that basis, the ALJ recommended that the Attorney General's proposed reductions be approved, finding that the Attorney General's "recommendation to use a five-year average without the inflation-normalization adjustment provides a better, more reasonable estimate of what DTE's 2021 costs would have been under a variety of emergent conditions." PFD, p. 204. Having approved the full five-year average which includes 2021, the ALJ denied ABATE's request. Thus, the ALJ recommended adoption of a reduction of $18.7 million for the 11-month bridge period and $22 million for the test year.

In exceptions, ABATE argues that 2021 was an abnormal year due to the 12 storm events and will skew the average. ABATE maintains that the average should be based on four years (2017-2020) rather than five. ABATE's exceptions, p. 3.

In exceptions, DTE Electric argues that the ALJ's decision "arbitrarily drives down" the revenue requirement, and that, in any case, "prior years' expenditures must be expressed in a constant-dollar denomination (in this case, 2021 dollars)" due to the time value of money. DTE Electric's exceptions, p. 54. The company contends that its normalization practice was approved by the Commission in the May 8 order, p. 86, and in the November 18 order, p. 63.

In replies to exceptions, the Attorney General notes that DTE Electric devoted 100 pages of its exceptions to distribution issues and argues that the exceptions were unhelpful and repetitive.

Attorney General's replies to exceptions, pp. 24-25. The Attorney General contends that the use of a five-year average without the inflation normalization adjustment is appropriate.

In replies to exceptions, DTE Electric argues that "the point of using a five-year average is to normalize the variable weather data." DTE Electric's replies to exceptions, p. 5.

The Commission rejects the Attorney General's inflationary adjustment and finds that DTE Electric has computed the historic average in a manner consistent with Case Nos. U-20836 and U-20561. *See*, November 18 order, p. 63; May 8 order, p. 86. Regarding the inflationary adjustment, the Commission acknowledges that this case was filed only two months after issuance of the November 18 order. However, the directives from that order still stand and the Commission anticipates an analysis of the offsetting effects of significant distribution capital investments on inflationary pressures for this cost category in the company's next filed rate case. Additionally, in light of the fact that anomalous weather is becoming the norm, the Commission agrees with the ALJ's decision to incorporate all five years in the average. PFD, p. 204. As the company notes, 2023 was another anomalous year.

ii. Surge Savings

Relying on Exhibit A-22, Schedule L1, the Attorney General argued that the tree trimming surge program will reduce reactive capital spending in 2023 and 2024, and thus proposed reductions to DTE Electric's projections of $13.38 million for the 11-month bridge period and $28.8 million for the test year. DTE Electric countered that the savings attributable to the surge program have already been accounted for in the "emergent replacement adjustment based on strategic spend" located at Schedule B5.4, p. 1, line 6.

The ALJ recommended that the Attorney General's adjustment be approved, finding that "the confusion regarding the adjustment on line 6 is entirely of DTE's making" since the company failed to explain that figure or provide a source note on the schedule pages. PFD, p. 206. Observing that "DTE has been generally unforthcoming regarding savings in this case," the ALJ noted that the Attorney General provided the company with an opportunity to explain the adjustment in discovery but no evidence was provided in response. PFD, p. 207. The ALJ further found that the line 6 adjustment conflicts with the information provided in Schedule L1 of Exhibit A-22. Thus, the ALJ recommended approval of the reductions to DTE Electric's projections of $13.38 million for the 11-month bridge period and $28.8 million for the test year for emergent replacements.

In exceptions, citing 5 Tr 2866-2867, DTE Electric argues that it included cost avoidance in accordance with its past practice. DTE Electric's exceptions, p. 55. The company notes that the Attorney General made the same proposal for reductions in Case No. U-20836 and then withdrew the proposal later in the case. The company contends that the ALJ relies on speculation, and that she is punishing the company for causing confusion.

In reply, the Attorney General argues that DTE Electric is not being punished, but rather simply failed to produce sufficient evidence. Attorney General's replies to exceptions, p. 27.

The Commission disagrees with the ALJ and finds that DTE Electric made a convincing case that the proposed reductions have already been included in this cost category. DTE Electric provided evidence that "[a]s in past cases, the emergent replacement reduction is based on the benefits of strategic investments, which includes tree trim savings, and are already accounted for in the emergent replacement reduction included in Exhibit A-12, Schedule B5.4, pages 1 and 2, line 6." 5 Tr 2866. The Commission notes that, as stated by the company, a similar disallowance was not approved by the Commission in Case No. U-20836. *See*, November 18 order, pp. 59-63, 262-263. Schedule B5.4, p. 1 line 6, shows that the company made a reduction of $13.1 million for both the 11-month and 23-month bridge periods and a total reduction to the test year of $37.2 million, labeled "Emergent Replacement Reduction Based on Strategic Spend." The Commission finds that the Attorney General's concerns have been addressed and approves the company's request for this expenditure category.

c. Customer Connections, Relocations, & Other

These cost categories are considered non-emergent and involve connecting new customers, addressing load growth, and relocating company equipment.

i. Small Load Growth Projects (Schedule B5.4, p. 4, line 2)

DTE Electric indicated that the projections for these small load growth projects under $500,000 were based on actual expenditures for 2022, and were based on 2021 actual expenditures plus inflation for 2023 and 2024. 5 Tr 2858; *see also*, 5 Tr 2760. The Attorney General argued that a three-year average with applicable inflation should be used instead, and, on that basis, recommended a reduction to DTE Electric's projection for the 11-month bridge period of $2.96 million and $3.35 million for the test year. 6 Tr 3545-3546. DTE Electric countered that the Attorney General's argument was not consistent across cost categories.

The ALJ found that "DTE has not established that it is reasonable to use the abnormally high 2021 level as the basis for the future projections, rather than an average." PFD, p. 211. On that basis, she recommended approval of the Attorney General's proposed reductions which are based on three-year averages rather than a single year.

In exceptions, DTE Electric argues that the ALJ has recommended inconsistent treatment, because the Attorney General does not "propose the same treatment for every item in this category." DTE Electric's exceptions, p. 56. DTE Electric contends that the Attorney General has proposed use of the three-year average (and not always the same years) only for line items that would reduce the revenue requirement, and retained 2021 plus inflation for those that would not. The company contends that its proposed treatment is consistent with Case Nos. U-20162, U-20561, and U-20836 (the three prior rate cases).[15] DTE Electric maintains that customer requests have shown growth in recent years, and that it has consistently applied the prior-years-plus-inflation method for forecasting, and argues that the Attorney General's method would not allow for consistent planning. *Id*., p. 57. Finally, the company argues that if the Commission chooses this selective use of an historic average, it should also adopt the normalization adjustment approved in the May 8 order, p. 86, and as shown in Exhibit A-39, Schedule DD4.

In reply, the Attorney General argues that the use of a projected test year leads to questionable projections, and that the ALJ's conclusions are correct with respect to the customer connections issues. Attorney General's replies to exceptions, p. 28.

The Commission agrees with the ALJ that an average is superior to reliance on a single year and finds the ALJ's recommendation to be well-reasoned and supported by the record. The Commission adopts the ALJ's findings and conclusion on this issue. *See*, PFD, p. 211.

ii. Customer Connections (Schedule B5.4, p. 4, line 5)

The Attorney General argued that DTE Electric's projections for customer connections in 2023 and 2024 are overstated. Based on trends and housing start forecasts made in March 2023 by IHS Markit which reflect a decline in 2022 and 2023, the Attorney General offered revised customer connection numbers for 2022-2024, which result in a reduction of $24.63 million for the

[15] The Commission notes that DTE Electric did not provide citations to the three prior rate cases wherein the company's proposed single historical year treatment was applied to the Small Load Growth and Relocations cost categories at issue in the instant case. Additionally, the five-year average that was applied in the three prior rate cases was not proposed by the company in the instant case for use in forecasting the Small Load Growth and Relocations cost categories at issue here. 5 Tr 2858.

11-month bridge period and $20.51 million for the test year. 6 Tr 3648. The Attorney General noted that actual connections for 2022 were 9% lower than forecasted by the company. Exhibit AG-1.78, pp. 5-6. DTE Electric countered that housing start forecasts are not reliable and that adjustment of the 2021 number provides a more reliable basis for the forecasts.

The ALJ recommended that the Attorney General's proposed adjustments be approved based on the Attorney General's evidence showing that connections are declining. PFD, pp. 213-214. The ALJ noted that DTE Electric provided evidence that customer connections are "by its own admission not under its control and thus not easily forecast." *Id*., p. 214.

In exceptions, DTE Electric argues that this cost category should not be based solely on housing starts because it also covers many other customer needs. DTE Electric's exceptions, p. 59. The company states that the evidence shows a 13.7% increase in expenditure from 2021 to 2022. Exhibit A-39, Schedule DD3, line 5.

The Commission agrees that housing starts are not the only factor to be considered, but finds that the Attorney General presented convincing evidence that they are declining.[16] Thus, the Commission finds the ALJ's recommendation to be well-reasoned and supported by the record and adopts the ALJ's findings and conclusion on this issue. *See*, PFD, pp. 213-214.

iii. Relocations (Schedule B5.4, p. 4, line 18)

As with the small load growth cost category, the Attorney General argued that relocation projections should also be based on a three-year average adjusted for inflation and thus proposed an 11-month bridge period reduction of $6.66 million and a test year reduction of $3.35 million.

[16] The Commission also notes that this forecast was calculated differently from the other two cost categories within Customer Connections. 5 Tr 2877.

6 Tr 3650-3651. The Attorney General observed that expenditures from 2017-2019 ranged from $1.3 million to $4.0 million.

The ALJ recommended that the Attorney General's adjustment be approved, again finding that DTE Electric had not shown that the single year of 2021 provided a reliable basis for these projections and that the three-year average provided a more sound basis. PFD, p. 215.

In exceptions, DTE Electric argues that (as with small load growth) the Attorney General's three-year average was also selectively chosen and selectively applied, and, again, if the Commission chooses this method then it should also apply the normalization adjustment shown in Exhibit A-39, Schedule DD5. DTE Electric's exceptions, p. 60.

The Commission finds the ALJ's recommendation to be well-reasoned and supported by the record and adopts the ALJ's findings and conclusion on this issue. *See*, PFD, p. 215.

6. Strategic Capital

Strategic capital is spent on programs intended to improve safety, reliability, and operability, and on grid modernization. These investments are subcategorized into: (1) Infrastructure Resilience and Hardening; (2) Infrastructure Redesign and Modernization; and (3) Technology & Automation. Several witnesses addressed DTE Electric's GPM, as discussed above. With respect to strategic capital line items, ABATE, the Staff, the Attorney General, and MNSC proposed adjustments to Schedule B5.4, p. 1, which are each addressed below. The ALJ observed that her discussion of the following line items shows that DTE Electric "has not answered fundamental questions regarding its spending plans and prioritizations, and failed to provide intervenors with information necessary to evaluate the company's modeling and related claims regarding its modeling." PFD, p. 216.

a. Association of Businesses Advocating Tariff Equity's In-Service Date Adjustments

ABATE argued that the many projected expenditures that have in-service dates after December 31, 2024, should be excluded from rate base in this case, on grounds that rate base should include only those projects planned to be in service by the end of the test year and thus used and useful to customers during the time period covered by this case. 4 Tr 1140; *see*, Exhibit A-12, Schedule B5.4, pp. 14-20. ABATE noted that approximately $1 billion in expenditures are associated with projects that will be in service beyond the test year. ABATE also contended that these particular projects lacked detailed information for the bridge period and test year.

DTE Electric countered that there are two reasons for including these projects. First, the revenue requirement attributable to CWIP is offset by AFUDC, thus this type of disallowance will not have any impact on the revenue requirement sought by the company. 5 Tr 1573. Second, DTE Electric argued that projects that are not completed during the test year may still provide benefits to ratepayers prior to completion.

The ALJ found that ABATE's proposal should be approved and these projects should be removed from rate base along with their corresponding AFUDC offset. PFD, pp. 219-220. The ALJ found that the "enormity of the projects and dollar volume encompassed within these projects, which [ABATE's witness] measured as over $1 billion, and for which DTE's own accounting does not seek any revenue in this case, argue in favor of excluding them from rate base, including projected CWIP." *Id*., p. 220. The ALJ also agreed with ABATE that these projects lacked supporting detail, finding that "[w]hile this PFD recommends against reviewing projects for which DTE is not seeking revenue in this case, a cursory review of Exhibits M4, M5, and M6 show that for all projects with completion dates beyond calendar year 2024, DTE did not even provide the total project cost." PFD, p. 220. The ALJ found that the 10-month statutory timeline required in rate cases mandates a focus on those items which affect the revenue requirement, and that commingling such items with those which do not affect the revenue requirement causes confusion. She opined that review of the items which will not be in service for many years is not necessary to the task at hand in a rate case, that is, determining whether there is a revenue deficiency. The ALJ observed that the company could file this type of information as informational, similar to the DGP filed in this case. Finally, the ALJ noted that the Commission has provided an expedited process for utilities to acquire review of proposed pilots. PFD, p. 222 (citing the February 23, 2023 order in Case No. U-20898).

In exceptions, DTE Electric argues that the ALJ's recommendation is inconsistent with established legal and regulatory practice which allows project costs into rate base if they are reasonable and prudent, whether or not the project will be in service by the end of the test year. The company asserts that this comports with the May 10, 1976 order in Case No. U-4771 (May 10 order), which established the accounting practice of CWIP with an AFUDC offset for projects greater than $50,000 and lasting longer than six months. DTE Electric's exceptions, p. 61. DTE Electric argues that the Commission is not bound by any particular ratemaking formula and is not limited to the used and useful test, citing *ABATE v Pub Serv Comm*, 208 Mich App 248, 258-259; 527 NW2d 533 (1994) and *Detroit Edison Co v Pub Serv Comm*, 127 Mich App 499, 524; 342 NW2d 273 (1983). DTE Electric further argues that customers receive benefits from projects prior to the in-service date including reduced wire downs and improved reliability, and that "long-term projects may be included in rate cases to explain the Company's plans before large amounts of money are invested." DTE Electric's exceptions, p. 63. The company contends that the ALJ is inconsistent and attempts to decide issues in future cases.

In reply, ABATE argues that the simple fact that a long-term project may be included in rate base is not a reason to approve the project. ABATE contends that, "[g]iven the extended time periods and uncertainty regarding these projects and costs there is no reason to approve them here except to provide . . . an assurance regarding what the issues will be in future cases and a presumption in how they will be decided." ABATE's replies to exceptions, pp. 6-7.

In her reply, the Attorney General supports ABATE's arguments, and contends that there is little evidence that the relevant costs will be incurred during the test year. Attorney General's replies to exceptions, p. 29.

The Commission is not persuaded to adopt ABATE's proposed adjustments. The Commission does not find that the question of whether a project will be completed within the test year is dispositive as to whether that project belongs in rate base. Many worthwhile and necessary projects have to be implemented over time spans that well exceed the end of the test year and the decision made in the May 10 order addresses the associated accounting issue. That said, the Commission wholeheartedly agrees with the ALJ's (repeated) observation that the projected total cost must be provided for all such projects. The Commission recognizes that it is a projection, but in order to make fully informed decisions, the projected total cost of a project must be known. Nevertheless, the Commission does not find that all such projects must be excluded from rate base, despite the fact that the exclusion has no impact on the revenue requirement. The Commission finds it preferable to examine the evidentiary basis for including or excluding each program at the requested funding level (which, the Commission observes, the ALJ often examined as well). Finally, the Commission refers back to its assessment (discussed above) of the usefulness of the GPM and the DGP as the sole sources of support offered by the company for so many capital expenditure programs, and, accordingly, emphasizes the importance of providing transparency to the selection process behind the GPM scores and supporting information to develop the DGP-based recommendations.

b. The Commission Staff's Categorical Adjustment

Based on historical underspending, the Staff proposed a 10% across-the-board reduction to the test year strategic capital expenditure projections with the exception of the undergrounding pilot and the CODI project. 7 Tr 4415-4417. DTE Electric countered that in 2022 it spent more than what was projected in Case No. U-20836.

The ALJ was not persuaded by the company's 2022 argument and found "Staff's recommendation a reasonable alternative for programs the Commission finds to be otherwise reasonable and prudent." PFD, p. 224. She thus adopted the 10% reduction to the test year for programs found to be reasonable and prudent (and not outside the test year) and proceeded to address arguments that certain proposed programs are not reasonable and prudent, discussed item-by-item below.

In exceptions, DTE Electric states that it is confident that it will deliver these investments and notes that it actually exceeded the forecast in 2022. The company states that it is executing strategic investments to improve customer service and has "achieved success[,]" making the 10% cut unnecessary. DTE Electric's exceptions, p. 64.

In reply, the Attorney General states her agreement with the Staff's proposal. Attorney General's replies to exceptions, p. 30.

The Commission recognizes that, looking at prior rate cases, the Staff showed that DTE Electric spent about 72% of the amount that it projected for strategic capital spending in Case No. U-20162 (2019 and 2020) and about 82% of what it projected in Case No. U-20561 (2020 and 2021). 7 Tr 4415-4416. However, the Commission is not convinced that an across-the-board 10%

cut to all strategic capital expenditure categories (with a few exceptions) is advisable in this case. The Commission finds that an item-by-item examination is more likely to yield a fair and judicious result. Thus, based on the evidence provided by the Staff showing underspending in test years in prior rate cases, the Commission will consider the potential for application of the proposed 10% cut to the test year when considering each of the cost categories below and will adopt the cut where it finds that this produces the best result, in light of all options on the record. *See*, 7 Tr 4415-4416.

c. Substation Risk (Schedule B5.4, p. 8, lines 3-11)

DTE Electric proposed capital spending of $18.4 million for 2022, $47.8 million for the 11-month bridge period, and $13.4 million for the test year for this expenditure category. Schedule B5.4, p. 8, lines 3-11. The company did not provide direct testimony in support of this cost category but did so on rebuttal.

MNSC[17] argued that the proposed bridge and test year costs should be disallowed, as well as the associated costs proposed for inclusion in any approved IRM, because the program is not cost effective. 6 Tr 3386-3391. After attempting to understand the risk-based analysis provided by DTE Electric, MNSC provided evidence that age alone is not an efficient predictor of equipment failure, and that periodic objective testing of substation equipment should be the standard practice. 6 Tr 3389-3390. MNSC objected to the lack of detailed information forthcoming from the company. DTE Electric countered with its risk-based analysis and the DGP. DTE Electric objected to the idea that monetization alone is the only basis for prioritization.

[17] Within Strategic Capital, MNSC's witness (Mr. Stephens) also testifies on behalf of the Attorney General.

The ALJ found the company's argument to be misleading, stating that there "is no doubt on this record that MNSC was seeking to understand the analyses underlying DTE's projects and project prioritizations. There is no doubt that DTE declined to provide those." PFD, pp. 229-230. The ALJ found that DTE Electric is incorrect in assuming that the only issue to be decided is whether the company needs to quantify all benefits; rather, "a critical issue is whether DTE can rely on its GPM when it refuses to explain the details underlying its opaque scoring process." *Id*., p. 230. The ALJ noted that DTE Electric failed to provide information on its substation risk calculations when it was requested in discovery, even while stating that it had performed a risk-informed analysis. *Id*. (citing Exhibit MEC-34 and Exhibit A-42, Schedule GG2). The ALJ noted that DTE Electric objected to the discovery request and cited only to Exhibit A-23, Schedule M7, DGP pages 232-236. The ALJ found this evidence to be insufficient.

Further, the ALJ noted that the Chestnut, Apache, and McGraw projects will not be completed within the test year and thus should be excluded from rate base consistent with her prior findings. However, she also found that MNSC provided evidence showing that the whole substation risk program should be excluded from rate base. Noting that DTE Electric failed to provide the modeling inputs, the ALJ found that there is "no basis on this record to assess DTE's unsupported assertion that the program is an appropriate use of ratepayer funds." PFD, p. 231. The ALJ concluded that the company failed to justify the proposed costs of the substation risk program and should be warned that, with respect to the bridge period and test year projects that would not be completed within the test year, the company must expect to provide objective analyses such as BCAs in the future to support its decisions. After excluding costs associated with the projects that would not be completed within the test year, the ALJ concluded that several of the remaining projects with historical costs (specifically the Savage, Voyager, Port Huron, and Belleville

Switchgear Decommissioning (Belleville) projects) are almost complete and should be approved for bridge period and test year funding. *Id*., p. 232. However, based on inconsistencies in the supporting documentation, the ALJ found that the Substation Risk: Flood Defense program should not be approved for inclusion in rate base. *Id*. (citing MNSC's initial brief, p. 39, n. 157).

In exceptions, DTE Electric argues that the DGP and the GPM provide a risk-informed benefit analysis that the Commission may rely on. The company asserts that the DGP provides clear criteria, including, for example, for replacing circuit breakers, of which no criteria solely depend on age. DTE Electric maintains that MNSC's formula is flawed and fails to consider all relevant factors, and that its GPM does consider the factors of safety risk, avoided costs, load relief, and reliability improvements. DTE Electric's exceptions, pp. 68-69. The company contends that it is not premature to replace equipment that has already failed and it defends the inclusion of Substation Risk: Flood Defense because it is a separate project from the McGraw Project. *Id*., p. 72.

In reply, MNSC begins by observing that DTE Electric never provided a way for the parties or the Commission to understand how the company measured or scored safety-related projects in the GPM, thus significantly hampering the chances that the GPM could be considered authoritative. MNSC's replies to exceptions, p. 29. Regarding substation risk specifically, MNSC notes that the company provided no direct testimony on these projects but described them only in Exhibit A-23, Schedule M4, which provides a short summary with a schedule and cost estimate based on past similar projects. MNSC's replies to exceptions, p. 30. MNSC argues that the GPM barely mentions the substation risk projects and fails to explain how the Top 50 were selected, or the costs and benefits associated with the projects that made the list. MNSC notes that neither McGraw nor Flood Defense were in the Top 50 lists. *See*, Exhibits MEC-89 and MEC-90. MNSC also notes substantial variation in GPM scores over time and asserts that there is simply no way to discern whether the GPM is data-driven.

The Commission agrees with the ALJ's comments and MNSC's arguments regarding the shortcomings of the evidence and rejects the proposed funding for the Chestnut, Apache, and McGraw projects on that basis (and not because they fall outside the test year). Recognizing that weather events can precipitate changes to strategy and that certain projects are close to completion, the Commission agrees with the ALJ's recommendation to approve the four named projects for bridge and test period funding with the addition of the Flood Defense project, which the Commission finds to be timely and important. The Commission recognizes that DTE Electric provided evidence of the specific factors driving circuit breaker replacement, and it does not solely depend on age. Exhibit A-23, Schedule M4, pp. 6-41; Exhibit A-23, Schedule M7, p. 168; 3 Tr 568-578. The Commission notes that the Flood Defense program will address the need for backflow prevention, emergency dewatering pumps, and sealing conduit at six substations. Exhibit A-23, Schedule M4, p. 41. Thus, the Commission approves the requested funding for the Savage, Voyager, Port Huron, Belleville, and Flood Defense projects for inclusion in rate base. However, the Commission anticipates better support for these costs and other similar costs in the next rate case.

d. 4.8 Kilovolt Hardening (Schedule B5.4, p. 8, line 12)

For the 4.8kV hardening program, DTE Electric reported 2021 capital spending of $65.4 million, estimated 2022 spending of $151.3 million, and projected bridge period and test year capital expenditures of $73.3 million and $6.7 million, respectively. Schedule B5.4, p. 8, line 12. This program addresses improvements in areas of Detroit that have abandoned DLPD arc wire. The Staff expressed concern about the low amount of arc wire that has been removed and about the company's decision to harden entire circuits even where there is no arc wire present. 7 Tr 4751-4754. The Staff argued that the hardening program is inefficient, slow, and unaligned with the goals expressed by the Commission in the November 18 order. The Staff also explained that DTE Electric is now focusing on conversions rather than hardening, and that the current 4.8kV conversion program, which runs through 2037, will leave a substantial amount of arc wire in place for another 14 years or longer. 7 Tr 4756-4757; Exhibit S-11.10, p. 10. The Staff noted DTE Electric's duty under the Technical Standards for Electric Service and the National Electric Safety Code to correct conditions on its system that may endanger life or property and, where equipment has been permanently abandoned, to maintain that equipment in a safe condition. 7 Tr 4760. The Staff concluded that the 4.8kV system presents a unique public safety hazard. 7 Tr 4766-4770.

MNSC and the Attorney General argued that the proposed bridge and test period spending should be disallowed because the hardening program is not cost effective and that the conversion program is premature and has not been fully analyzed. The CEOs questioned the company's strategy in favoring conversion. The DAAOs presented evidence that the hardening program is racially and economically inequitable and "serves to delay and undermine the cost efficiency of 13.2kV conversion, and fails to deliver critical benefits such as increased hosting capacity for distributed generation." 6 Tr 4039-4040. DTE Electric countered that the company is focused on safety.

The ALJ noted that the Commission expressed concerns about this program in the November 18 order, p. 94, where the Commission focused on the importance of the removal of arc wire. In Case No. U-20836, DTE Electric projected capital spending of $115.9 million in 2022, but in the instant case the company provided evidence that it actually spent $151.3 million in 2022. The ALJ found this expenditure to be "significantly above the amount approved by the Commission, and heedless of the criticisms leveled at the program in Case No. U-20836[.]" PFD, p. 234. The ALJ then addressed the criticisms of the program in the instant case.

The ALJ found that DTE Electric presented no clear evidence showing when the removal of the remaining arc wire would be complete, other than to say that it expected to have half of the removal complete in 2023, assuming an estimated 1,300 miles of arc wire. *Id.*, p. 240. She found that "DTE also appears to be abandoning the program without responding to the critiques." *Id.* The ALJ noted that in the November 18 order, p. 93, the Commission "called for a full exploration of the benefits and costs of the 4.8kV hardening program relative to alternatives such as conversion or tree trimming in a forum other than a rate case" but "DTE filed this rate case before the forum called for could be held and before its next DGP, anticipated in September 2023." PFD, p. 241. The ALJ also made note of the third-party distribution system audit mandated by the Commission in the October 5, 2022 order in Case No. U-21305. She concluded as follows:

> After considering the record evidence and arguments of the parties, the anticipated third DGP, the pending audit and the additional exploration of hardening called for by the Commission in the last rate case, as well as Staff's analysis of the slow pace of arc wire removal, this PFD concludes that the projected bridge and test year spending for this program should be rejected as MNSC and the Attorney General recommend, with the additional proviso that DTE be allowed to defer its costs of arc wire removal for subsequent review and approval to remove all arc wire as efficiently and expeditiously as possible, providing regular reports to Staff on its plans. DTE should complete the consultation and analysis called for in Case No. U-20836 and review the pilot programs [Staff witness] Dr. Wang cited in determining what that expeditious removal of arc wire requires. Additionally, DTE should follow up on Dr. Wang's concerns regarding the potential hazard associated with other DPLD wire that DTE has not provided documentation regarding.

PFD, pp. 242-243.

In exceptions, citing 3 Tr 514-515, DTE Electric argues that it provided evidence showing that the circuits that were hardened had a 26% reduction in wire downs, a 46% reduction in all-weather

SAIFI, and a 73% reduction in SAIDI, in comparison to the control group. DTE Electric objects to being criticized for needing to do both more and less, contending that the Staff wants the arc wire removed more quickly, and the Attorney General and MNSC want the process slowed down. The company highlights that this is a safety program and not a reliability program and argues that it aligns with the Commission's findings in the November 18 order, p. 94. DTE Electric argues that it is not safe to remove the arc wire without doing additional work on the pole tops. The company also argues that it is not abandoning this program, but rather recently facilitated the technical conference and continues to explore ways to make the program more efficient. DTE Electric's exceptions, p. 76.

In reply, MNSC argues that this program is not cost effective and is premature because a BCA analyzing hardening versus other alternatives has not yet been provided. MNSC's replies to exceptions, p. 38. MNSC avers that DTE Electric simply ignored the dictates of the November 18 order and posits that the technical conference did not result in any consensus regarding next steps. MNSC contends that the company has twice failed to address the benefits of hardening and, because DTE Electric does not track safety incidents on the 4.8kV system, it is not possible to tell whether improvements in wire downs are actually from tree trimming. *Id*., p. 43.

In her reply, the Attorney General argues that DTE Electric's exceptions add nothing to this issue and should be rejected, and that the ALJ's analysis and discussion throughout the Strategic Capital section of the PFD is well supported. Attorney General's replies to exceptions, p. 28. With respect to all Strategic Capital investments, the Attorney General states that she "relies upon her argument and that of MNSC, with whom the [Attorney General] shares joint experts in this case, to fully rebut DTE's exceptions." *Id*., p. 30; *see also*, *id*., pp. 31-33 (which contain lists of Strategic Capital issues).

The Commission disagrees with the ALJ and approves the requested funding. The Commission recognizes that, due to the timing, the results of the technical conference could not be incorporated into this record. The 4.8kV hardening program presents a complex set of challenging issues and the Commission, like the intervenors, is disappointed in the dollars per mile. However, completing this work is crucial to the residents and businesses located in areas that contain abandoned arc wire and the Commission agrees with the Staff that the removal of the arc wire should be going faster. While the work is expensive (in part because hardening means going back to the same pole twice), comprehensively addressing the safety and equity concerns is a priority and the Commission recognizes that conversion takes much longer than hardening. The Commission acknowledges that DTE Electric filed a new DGP on September 30, 2023, but any analysis of this issue in that plan is not before the Commission here. The Commission continues to seek a comprehensive, detailed, and longer-term plan for this work, with benchmarks for performance, and with an analysis of the equity aspects of this work which are embedded in the safety aspects. As discussed in later sections and as recommended by the Staff, future equity analyses must include, at a minimum, EJ analyses that provide information in community vulnerability gradations based on the MiEJScreen composite score for the circuits. The Staff recommends, and the Commission agrees, that these gradations should be defined initially as 0% to <5%, 5% to <10%, in 5% gradations up to 95%-100% of the MiEJScreen composite score, where the Commission may revise these gradations at its future discretion. Staff's initial brief, p. 184; *see also*, 7 Tr 4734-4738, 4788. The equity analyses must also identify and qualify the potential hazard associated with other DPLD wire for which DTE Electric has not provided documentation to date. The Commission further seeks to better understand how equity has informed, and continues to inform, the company's actions with respect to the 4.8kV hardening and arc wire removal efforts. Finding this work to be imperative, however, the Commission approves the requested bridge period and test year funding and expects to see results in DTE Electric's next rate case, including an accelerated removal of the arc wire as discussed by the Staff. *See*, 7 Tr 4751-4770.

e. Pole and Pole Top Maintenance and Modernization (Schedule B5.4, p. 8, line 13)

DTE Electric reported historic 2021 spending of $31.6 million, estimated 2022 spending of $70.2 million, and projected 11-month bridge period and test year spending of $58.2 million and $115.8 million, respectively, for this cost category. DTE Electric explained that it has enhanced the pole and pole top specifications and replacement requirements that are implemented by this program, and that, in 2022, the company experienced increased pole and pole top work per circuit mile due to hardening activities. The company explained that it inspects poles on a 10-12 year cycle and stated that its procedures align with industry best practices.

Noting that, in the November 18 order, the Commission limited DTE Electric's expenditures on this program to its 2021 spend, MNSC argued that DTE Electric failed to support the need for this increased spending for 2022-2024. MNSC argued that the company's justifications for the expenditure in the instant case are nearly identical to the justifications rejected by the Commission in the November 18 order, and provided testimony that the program is mismanaged. 6 Tr 3545-3547. MNSC contended that there is no evidence showing that outages have increased as a result of the failure of this equipment, and that there is no reason to double the replacement rate for poles and pole top equipment relative to the pace that was implemented in the 2018-2021 period.

MNSC also presented evidence showing that replacement is not as cost effective as reinforcement and that the company's shift towards replacement is inefficient. MNSC argued that replacement should be reserved for equipment that is experiencing actual or incipient failure.

6 Tr 3548-3554. Noting that the regulatory structure that governs the revenue requirement incentivizes over-investment, MNSC provided evidence that the capital infusion called for in this cost category is not justified by the actual need for replacement equipment for poles and pole tops, and the capital expenditures should be limited to the projected 2023 level of $63.45 million per year. 6 Tr 3560. MNSC also argued that the program should be converted to a risk-based program focused on circuits where the risk is highest, with variable cycle times, and accountability through annual reporting of metrics related to inspections and testing.

The ALJ found that DTE Electric failed to support its projected expenditures and failed to explain why it ignored the Commission's mandate regarding spending in the November 18 order. PFD, p. 251. The ALJ concluded that MNSC presented convincing evidence that reasonable and prudent standards are not being applied in the remediation of poles and pole top equipment and a disallowance is appropriate. Noting that in the November 18 order, pp. 99-100, the Commission found that the company had failed to explain the basis for its cost projections or its remediation standards for this program, the ALJ found that this continued to be true in the instant case. The ALJ recommended adoption of the spending level ($63.45 million per year) and the reporting requirements proposed by MNSC. PFD, pp. 251-252.

In exceptions, DTE Electric argues that the disallowance is arbitrary, and that improved reliability and safety are valid reasons for the program investments. The company states that its efforts were slowed by the COVID-19 pandemic, and that it began a new inspection cycle in 2022 which identified increased defects per mile. DTE Electric argues that the "program only replaces poles and pole top equipment that fail inspections or are known to have manufacturing defects that lead to elevated failure rates" and the current standards provide for more resilient equipment. DTE Electric's exceptions, p. 81. The company objects to moving to a risk-based program because the current program already accounts for risk. DTE Electric does not object to the proposed reporting but states that it is redundant because it is already provided in the annual pole inspection report.

In reply, MNSC argues that it is not clear whether the enhanced pole and pole top requirements are actually resulting in benefits to ratepayers and the significant projected increases to spending have not been justified. MNSC notes that the Commission capped spending in the November 18 order, pp. 96, 100, and recommends that the Commission do so again. MNSC's replies to exceptions, pp. 44-45. MNSC posits that the shift from reinforcement to replacement (modernization) is likely not cost effective, and that the alleged need for increased funding is linked to redefining the program rather than to need. Finally, MNSC contends that the current pole inspection reports that are filed with the Commission provide very little information. *Id*., p. 54.

The Commission finds the ALJ's recommendation to be well-reasoned and supported by the record, and the Commission adopts the ALJ's findings and conclusion on this issue. *See*, PFD, pp. 251-252. The company ignored the directives in the November 18 order including the cap on spending and once again failed to establish the basis for these significant cost increases. While the Commission does not always find that historical spending provides a basis for determining future spending (particularly where the utility's strategy has changed), the Commission accepts MNSC's proposed adjustment and cap of $63.45 million in this case as the most reasonable choice on this record, especially since the deviation from historical amounts is so great and the program has not been shown to be cost effective. 6 Tr 3550-3554. The Commission also approves the reporting requirements (agreed to by the company) detailed by MNSC's witness. This will include reporting annual metrics with respect to pole and pole top inspections and testing, similar to the annual tree trimming reporting. *See*, 6 Tr 3559-3560.

f. Cable Replacement Programs (Schedule B5.4, p. 8, lines 14, 18, 19)

These programs target the replacement of at-risk system cable (before it fails), and include: (1) a cable replacement program for replacing underground system cable, (2) an underground residential distribution (URD) replacement program for replacing underground residential cable, and (3) a URD program focused on Detroit (Detroit URD). DTE Electric reported spending $14.9 million on the program in 2021, estimated total 2022 spending of $27.5 million, and projected bridge period and test year spending of $22.8 million and $25 million, respectively, for the cable replacement program. Schedule B5.4, p. 8, line 14. As reflected in line 18 of Schedule B5.4, p. 8, DTE Electric spent $4.7 million on the URD program in 2021, estimated 2022 spending of $6.3 million, and projected bridge period spending of $13.7 million and no test year spending. For the URD Detroit program shown on line 19 of Schedule B5.4, p. 8, DTE Electric had historical spending of $1.6 million in 2021, and estimates 2022 spending of $1.1 million. DTE Electric presented evidence that at least 57% of its system cable is beyond the typical life expectancy. The company noted that the GPM ranks the system cable program as No. 28 and the URD program as No. 19, and that the programs meet industry standards. 3 Tr 531-539. DTE Electric is targeting 17 miles of cable for replacement in 2023 and 19 miles in 2024 for the cable replacement program, and 80 miles in 2023 and 87 miles in 2024 for the URD program, with the prioritization based on factors including age, vintage, numbers of failures, and numbers of affected customers.

MNSC argued that these programs are not cost effective, do not target the problem cable, and do not improve reliability. MNSC noted that DTE Electric provided no BCA in support of these proposed expenditures and argued that data showed that both customer counts and minutes interrupted actually increased after underground cable segments had been replaced in 2020.

6 Tr 3393; Exhibit MEC-35. MNSC questioned the usefulness of the GPM, showing inconsistencies between the GPM and the DGP in terms of ranking this activity, and argued that the company should have presented a risk-based BCA. DTE Electric countered that it uses risk-informed decision-making as part of the GPM, and uses reasonable criteria to select replacements.

The ALJ found that the proposed expenditures are not reasonable and prudent and recommended their exclusion from rate base, stating that:

> [a]s with the rest of the analysis that may underlie its GPM, [DTE Electric] has failed to provide that analysis for review in this case. DTE did not establish that it is reasonable and prudent for it [to] replace all cable on a circuit based on fault, age, and/or type of cable on a part of a circuit, and did not respond to [MNSC witness] Mr. Stephens' straightforward testimony that many types of cable are found on an entire circuit, or to his analysis showing increased outages following the 2020 cable replacements. Because DTE's analyses have not been provided, and because the prioritizations in its model have not been able to be validated, this PFD finds the projected bridge and test year costs should be excluded from rate base.

PFD, pp. 258-259. The ALJ further recommended that the Commission require the company to separate its expenditures by project to facilitate individual project review.

In exceptions, DTE Electric argues that the ALJ simply repeats her criticisms of the GPM and does not consider the prioritization criteria identified by the company. DTE Electric contends that the GPM already offers risk-informed evidence and that the alternative method offered by MNSC is flawed because it does not consider all of the relevant criteria. DTE Electric's exceptions, pp. 84-85. The company asserts that if an area experiences multiple failures, then it is likely that adjacent areas are at risk for the same. Regarding the separation of expenditures by project, DTE Electric maintains that this would require "costly and impractical changes to accounting, project management and tracking processes, [and] it would result in an extensive expansion of data incorporated into rate case exhibits which are unlikely to lend themselves to meaningful review." *Id*., p. 86.

In reply, MNSC argues that the Detroit URD is not supported in testimony and is not identifiable in the DGP. MNSC's replies to exceptions, p. 55. MNSC advocates the use of a risk-informed BCA in determining the need for equipment replacements including cable replacement, noting that the company's current policy calls for replacement upon failure but also replacement at the cadence at which similar cable is replaced under similar soil and loading conditions. MNSC argues that much of this latter category is unnecessary. MNSC also points to the data showing that both customer numbers and minutes of outage increased after these replacements. MNSC again avers that the Top 50 list in the GPM appears to be arbitrary because no useful information is provided about how the scoring was done.

The Commission finds that the company's requested funding should be approved for inclusion in rate base with the Staff's proposed 10% reduction to protect against over-projections. The Commission recognizes that regular maintenance is necessary and that faulty cables should be replaced, and DTE Electric provided evidence that multiple factors are considered in determining where replacements are necessary including vintage, number of failures, and number of affected customers, as well as safety improvements. 3 Tr 531-542, 581-582. However, the company failed to provide sufficient justification on the record for its chosen method of replacing cable in adjacent areas, and the Commission finds that 10% is an appropriate reduction to the test year proposed expenditure. Finally, the Commission disagrees with the ALJ and does not find that it is necessary to separate expenditures by project for this program.

The Commission notes that DTE Electric did not refute MNSC's evidence that outages increased after the cable segments were replaced in 2020. *See*, 6 Tr 3393. The Commission is concerned by this unrefuted evidence, and while it may be possible that these increases were caused by extreme weather or other extenuating circumstances, the Commission reinforces its expectation that such explanation should be supported on the record. The Commission remains supportive of investments that will reduce the frequency and duration of distribution outages but will need to see evidence that approved investments actually contribute to that goal, and do not inadvertently lead in the opposite direction.

DTE Electric has requested inclusion of this program in the IRM. Approval of the IRM is discussed below in Part VIII (Other Revenue-Related Items) of this order.

g. Breaker Replacement Program (Schedule B5.4, p. 8, line 16)

This program replaces circuit breakers, as well as relays and controls that enable supervisory control and data acquisition (SCADA). Noting that 60% of circuit breakers are beyond their life expectancy, DTE Electric reported 2021 spending of $17.4 million, estimated spending of $13.6 million in 2022, and projected bridge and test year spending of $13.2 million and $14 million, respectively, on this replacement program. MNSC argued that the company made no attempt to show that the proposed costs are justified, by failing to identify benefits, historic outages, historic reactive expenditures, or the number of replaced breakers, and again argued that there is no information about the source data allegedly supporting the GPM.

The ALJ found that, consistent with her prior findings, DTE Electric had not shown the reasonableness of this program, and she recommended that bridge and test period costs be disallowed. PFD, p. 260. She noted that the company chose not to present a cost justification.

In exceptions, MNSC notes that the ALJ recommended adoption of the proposed disallowance but that Appendix E to the PFD did not reflect this decision. MNSC requests that the oversight be corrected. MNSC's exceptions, pp. 3-4.[18]

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[18] As stated above, the Commission is not relying on Appendix E due to the inadvertent omission of some of the ALJ's decisions.

In exceptions, DTE Electric argues that MNSC's requests were unclear, but that, in any case, they should be dismissed because MNSC's chosen prioritization method is flawed and entitled to no weight. DTE Electric's exceptions, pp. 87-88. The company also contends that the ALJ ignored its considerable evidence, including the DGP and related testimony. *See*, 3 Tr 542-544.

In reply, MNSC argues that this program is not shown to be cost effective and is not based on a risk-informed BCA. MNSC's replies to exceptions, p. 61. MNSC notes that the company only provided two pages of testimony and three pages of similar information in the DGP. *See*, 3 Tr 542-544; Exhibit A-23, Schedule M7, pp. 167-169. MNSC faults DTE Electric for failing to provide information about measurable benefits, about historic outages related to this problem, or about actual historic reactive expenditures. MNSC again observes that the GPM scores provide little substantive information.

In reply to MNSC (regarding Appendix E), DTE Electric contends that there should be no disallowance. DTE Electric's replies to exceptions, p. 6.

The Commission finds that the replacement of obsolete circuit breakers is the type of work, like the removal of arc wire, that is necessary and lends itself to few alternatives. The Commission disagrees with the ALJ and approves DTE Electric's requested funding for inclusion in rate base but adopts the Staff's proposed 10% reduction to the company's test year request as a check on the potential for over-projections. The company provided evidence that 60% of breakers in the distribution and subtransmission systems (including substation reclosers) are beyond their life expectancy. DTE Electric provided the criteria used for selecting which breakers to replace and indicated that it plans to replace 35 breakers in 2023 and 36 in 2024. 3 Tr 543-544. While the evidentiary showing could have been more robust, the Commission believes that this is important work that needs to be done and approves the requested funding with the 10% reduction.

DTE Electric has requested that this program be included in the IRM. Approval of the IRM is discussed below in Part VIII (Other Revenue-Related Items) of this order.

h. Strategic and Service Undergrounding (Schedule B5.4, p. 11, line 109)

In 2018, DTE Electric commenced a pilot for converting overhead service to underground service, known as the Appoline pilot. In the November 18 order, pp. 111-112, the Commission declined to approve additional rate base funding for strategic undergrounding via other projects because the Appoline pilot was not yet complete, and the Commission significantly reduced bridge period and test year expenditures in that case. In the instant case, DTE Electric projects expenditures of $2.4 million in the 11-month bridge period and $1.9 million in the test year. DTE Electric indicated that 21 of the original 61 customers targeted by the Appoline pilot still have overhead service, but "there is nothing additional to learn by undergrounding the remaining customers[' service lines]" and the company considers the pilot to be complete and all lessons learned. 2 Tr 224-225. DTE Electric stated that its initial report is available in Exhibit A-23, Schedule M10. DTE Electric proposed another undergrounding pilot in this case, the Fairmount DC 1593 pilot, which focuses on two blocks in Detroit where overhead lines would be moved from rear lots to undergrounding in front lots for about 98 customers.

The Staff and the Attorney General argued that no additional funding should be approved until the Appoline pilot report is complete. The Staff noted that the report submitted in this case lacks a complete BCA because the company indicated that it would not provide a BCA until it had a full year of 2022 data. 7 Tr 4414. The Staff also noted that the report lacks discussion of such issues as health, safety, reliability, vulnerability, and distribution; and there is also no BCA for the Fairmount DC 1953 pilot. The Attorney General noted the significant estimated $41,000 cost per customer of the Fairmount DC 1953 pilot. The Staff and the Attorney General recommended exclusion of the bridge and test period projections from rate base, and MNSC supported the arguments of the Staff and the Attorney General. DTE Electric countered with further analysis at 2 Tr 281 on rebuttal, but also indicated that it could not yet make conclusions about the Appoline pilot because the sample size was too small.

The ALJ found that DTE Electric did not establish the reasonableness and prudence of this new pilot project, as it provided no BCA and failed to comply with the Commission's instructions in the November 18 order regarding completion of, and reporting back on, the results of the Appoline pilot. PFD, pp. 266-267. The ALJ thus recommended exclusion of the bridge period and test year amounts.

In exceptions, DTE Electric argues that the Appoline pilot has achieved all of its objectives and is complete, and the report is available in this docket at Exhibit A-23, Schedule M10. The company argues that the Fairmount pilot will give it a larger data set to work with for performing a BCA on undergrounding. DTE Electric's exceptions, p. 96. DTE Electric maintains that it has performed an analysis, but that analysis is inconclusive due to the small sample size. The company requests a larger sample size and more time.

The Commission finds the ALJ's recommendation to be well-reasoned and supported by the record and adopts the ALJ's findings and conclusion on this issue. *See*, PFD, pp. 266-267. The Commission acknowledges DTE Electric's rationale for failing to complete the work called for in the Appoline pilot and approves the historical spend of $16,000. However, the Commission finds that the Appoline pilot design lacked rigor if there is nothing left to learn after undergrounding only two-thirds of targeted customer service lines. The Commission also agrees with the Staff that the report lacks discussion of health, safety, reliability, vulnerability, and distribution issues. The Commission, in this instance, was looking for a pilot with an accompanying comprehensive BCA.

Undergrounding is such an expensive proposition for ratepayers, that while the Commission believes there may be instances where undergrounding is the best option, it requires a BCA to demonstrate (before that expenditure is undertaken) that undergrounding is superior to other alternatives on a quantitative basis. The Fairmount pilot is also expensive and likewise offers no BCA. The Commission adopts the ALJ's recommendation to disallow this bridge period and test year expenditure in rate base. The Commission notes that the Staff's recommendations with respect to undergrounding are addressed in Part XI (Future Rate Cases, Further Study) below.

i. Subtransmission Redesign & Rebuild (Schedule B5.4, p. 11, line 114)

DTE Electric reported 2021 spending of $21.5 million, estimated 2022 expenditures of $48.5 million, and projected 11-month bridge period and test year expenditures of $87.5 million and $102 million, respectively, for this cost category. DTE Electric indicated that the subtransmission system is over 80 years old in some areas and found that one-third of the circuits on this system need to be addressed according to the criteria selected by the company and the GPM.

MNSC argued that the bridge and test year amounts should be reduced by 50% and the whole program should be slowed down. MNSC contended that the 2020 Area Load Analysis performed by DTE Electric was not reliable, that subjective criteria were used, and that risk tolerance was not considered. MNSC found the company's capacity ratings to be artificial, but also noted that DTE Electric refused to provide the analysis supporting the claim that one-third of the circuits do not comply with the company's planning criteria and provided no BCA. 6 Tr 3381. MNSC showed that "in discovery, the Company could not provide historical safety and reliability data on the subtransmission system[.]" 6 Tr 3382; Exhibit MEC-31. DTE Electric countered that it had provided a list of the circuits that violate the planning criteria, citing Exhibit MEC-30, but noted that it objected to providing its full report and analysis on grounds that the information is CEII. ITC supported DTE Electric's proposed investments.

The ALJ began by noting that most of these projects will not be complete within the test year and she recommended that they be excluded from rate base because they "do not generate a revenue requirement in this case[.]" PFD, p. 274. The ALJ stated that "only the projects on [Schedule B5.4, p. 11,] lines 42, 44, 46-51, 56-57, 67, 70, and 78 are projects for which DTE seeks rate recovery in this case. The total 11-month bridge and test year spending associated with these projects are approximately $24.6 million and $7.3 million respectively." PFD, p. 274. The ALJ also noted that DTE Electric over-projected its 2022 expenditures in Case No. U-20836.

The ALJ found that "DTE has failed to support the reasonableness and prudence of the program, the individual projects, or the pace of spending on this program." *Id*. She noted that the total project cost was not provided for any project that would not be in-service by the end of the test year, and that the company made little attempt to justify its planning criteria and failed, in discovery, to provide the safety and reliability data on outages related to the reason for the program. The ALJ found as follows:

> Since [MNSC] does not object to spending at the level of costs DTE is actually seeking to include in this rate case, this PFD does not find that a disallowance is necessary, but notes that should DTE present these projects for approval in its next rate case, or through an IRM, it needs to provide the details underlying its analyses, of the circuit upgrades, of the prioritization of circuits for upgrade, and an explanation for the pace with which DTE proposes to make these upgrades, along with an analysis of any alternatives considered, such as prioritizing interrupting protecting devices as endorsed by ITC.

Id., p. 275. Thus, the ALJ recommended approval of 11-month bridge period and test year spending of approximately $24.6 million and $7.3 million, respectively.

In exceptions, ITC argues that the ALJ is inconsistent in her recommendations. ITC contends that DTE Electric has reasonably determined that these investments are critical to its aging subtransmission system and the Commission should approve the proposed investments in high-side interrupting protection devices. ITC's exceptions, p. 7.

In exceptions, DTE Electric argues that MNSC is misunderstanding and misusing EV-related workpapers. The company does not disagree with the ALJ's funding conclusion but objects to her discussion of the evidence. DTE Electric's exceptions, p. 93. The company contends that MNSC's criteria for determining the success of capital investments are not valid, and that evidence was provided showing that over one-third of its system violates the planning criteria.

In its reply, DTE Electric states that it agrees with ITC. DTE Electric's replies to exceptions, p. 7.

In its reply, MNSC does not appear to disagree with the ALJ's conclusion regarding disallowances, but again notes that DTE Electric refused (in discovery) to provide information that would allow the parties to evaluate the analysis used to determine that one-third of circuits are in violation of the company's planning criteria. MNSC's replies to exceptions, p. 65.

While not agreeing that the in-service dates are dispositive of the issue, the Commission finds the ALJ's recommendation to reject the proposed disallowances to be well-reasoned and supported by the record. The Commission adopts the ALJ's findings and conclusion on this issue and approves the 11-month bridge period and test year amounts. *See*, PFD, pp. 274-275. Following up on the ALJ's findings, the Commission again urges DTE Electric to respond to discovery requests in a thorough and timely manner. This is of notable concern to the Commission when considering that the requested information sought evidence of appropriate recordkeeping and monitoring of safety and reliability incidents and metrics.

DTE Electric has requested inclusion of this program in the IRM. Approval of the IRM is discussed in Part VIII (Other Revenue-Related Items), below.

j. System Loading (Schedule B5.4, p. 11, line 116)

DTE Electric reported spending $4.7 million in 2021, estimated spending of $1.9 million in 2022, and projected 11-month bridge period and test year spending of $14.3 million and $44.1 million, respectively, for 25 projects meant to address loading constraints on substations. DTE Electric used its Area Load Analysis to identify overloads on the system, and the company explained that over 30% of distribution substations have loading constraints that need to be addressed through capital investments, according to the company's decisional criteria. DTE Electric indicated that these projects would improve reliability and increase capacity for new demand, and these projects address the areas that are not addressed as part of CODI or the other conversion programs. MNSC made the same objections to this cost category as it made to the subtransmission cost category addressed immediately above, seeking a 50% reduction.

The ALJ observed that only 7 of the 25 projects will be completed within the test year, and only 2 of those 7 projects have projected costs in the bridge and test periods, referring to Schedule B5.4, p. 18, lines 122 and 127, for a combined total of $38,000. PFD pp. 277-278. Consistent with her prior findings, the ALJ recommended that the projects with in-service dates beyond the end of the test year should be excluded from rate base and found that the company failed to establish the reasonableness and prudence of its proposed spending on this program and failed to provide intervenors with the information necessary to evaluate DTE Electric's prioritization of these programs or the reasoning underlying the plan and pace of the plan. *Id.*, p. 278. While recommending approval of the requested $38,000 for inclusion in rate base, the ALJ provided the same caution to DTE Electric regarding future requests as she made with respect to the subtransmission program immediately above. *Id.*, p. 279.

In exceptions, DTE Electric maintains that it properly supported these projects. DTE Electric's exceptions, p. 106.

In reply, MNSC contends that DTE Electric's exceptions do not provide any specific arguments and should not be considered. MNSC's replies to exceptions, p. 70.

The Commission finds that addressing these loading constraints is important work, and, more particularly, that the company carried its burden in showing that the projections are reasonable and prudent. The Commission finds that DTE Electric provided sufficient evidence to justify these expenditures, explaining that system overloads can make it difficult to serve new customers and provide additional capacity for existing customers. 2 Tr 228-232, 276-279; Exhibit A-23, Schedule M7, Section 11.1. The company relies on its annual Area Load Analysis which, for 2021, showed over 30% of distribution substations with loading constraints. 2 Tr 230. The company further indicates that these projects will lessen the stress on the system and "help maintain/improve system operability by restoring jumpering capabilities and removes aged equipment from the system." *Id*. The Commission approves the projected bridge period and test year spending for these projects for inclusion in rate base. The Commission, however, agrees with the ALJ's remarks on the quality of the evidence and directs DTE Electric to evaluate all alternatives for addressing load concerns, and to provide total cost information in future rate cases.

k. 4.8kV/8.3kV Conversions (Schedule B5.4, p. 11, line 115)

DTE Electric included several circuit conversion programs in capital expenditures, including conversion from 4.8kV to 13.2kV and from 8.3kV to 13.2kV. The company reported expenditures of $59.1 million for 2021, estimated expenditures of $99.8 million for 2022, and projected 11-month bridge and test year expenditures of $198.4 million and $370.1 million, respectively.

i. City of Detroit Infrastructure (Schedule B5.4, p. 10, lines 42-51)

This program includes ten projects that involve converting circuits from 4.8kV to 13.2kV, and addresses aging infrastructure in downtown Detroit, encompassing residential, commercial, and industrial customers in an area that experiences higher than average failure rates and contains large amounts of system cable and secondary network cable. DTE Electric reported spending of $43.8 million in 2021, estimated spending of $47.2 million in 2022, and projected 11-month bridge period and test year spending of $113.4 million and $172.6 million, respectively. The Staff argued that the company provided no evidence to support the substantial increase in spending (four-fold between 2021 and 2024) and proposed instead an approximate 10% increase for each of the bridge period and test year time periods, amounting to a $56.4 million disallowance for the bridge period and a $115.9 million disallowance for the test year. 7 Tr 4696-4697. MNSC noted that DTE Electric's estimated cost per customer is $45,000, and further noted that the company provided no circuit or substation specific load growth forecasts relative to nameplate capacity ratings. MNSC recommended a 50% cut to spending. The DAAOs argued that this program of investments focuses on whiter and higher-income areas and ignores the need for grid modernization in vulnerable communities. 6 Tr 4031-4033.

The ALJ noted that almost all of the CODI projects have in-service dates beyond the test year and should be excluded from rate base consistent with her previous decisions. She found that "DTE essentially is seeking review of these projects without seeking any revenue requirement associated with them." PFD, p. 285. She went on to find that the company failed to demonstrate the reasonableness and prudence of its proposed spending on these conversions, failing to present the total cost for any of the projects scheduled from 2025 to 2030, and providing only general descriptions of the cost estimates for the remainder in Exhibit A-23, Schedule M5. *See*, PFD,

p. 285, n. 844. The ALJ found that "DTE appears to confuse the 'cost' box on its Schedule M5 project forms with 'spending' for the bridge and test year[,]" and she further noted that with respect to O&M costs that will be avoided "no estimate of those savings is included in [DTE Electric's] testimony or exhibits." *Id*., p. 286. The ALJ noted that "[b]y the time it seeks rate recovery for these projects, DTE should also have completed its next DGP, so that the equity associated with such large expenditures can be properly evaluated." *Id*. The ALJ cautioned that the company would be required to provide this information in future cost recovery proceedings. Thus, the ALJ recommended disallowance of all bridge and test period costs.

In exceptions, DTE Electric argues that downtown redevelopment has stressed this aging infrastructure, and that it needs to pursue these ten CODI projects. The company notes that the projects that will not be in service during the test year have no impact on the revenue requirement. DTE Electric characterizes MNSC's witness, Mr. Stephens (who also testifies on behalf of the Attorney General), as an independent consultant from Colorado who relies on speculation. DTE Electric's exceptions, p. 99. The company argues that its substation capacity is rated on an objective basis based on data and industry best practices, similarly to the way Mr. Stephens suggests except with the addition of contingency. *Id.*, pp. 90-91, 99-100. DTE Electric notes that the Staff's proposed disallowance uses the 8% increase in CODI spending from 2021 to 2022 as the basis for the proposed annual 10% increase and argues that the Staff agrees that the CODI program is necessary. However, the company contends, using a historical number will not capture the level of work that needs to be performed.

In reply, MNSC argues that DTE Electric has not adequately justified the speed of the conversion program or the choice of circuits, and MNSC does not believe that it is realistic to perform all of this work in 15 years. MNSC contends that the company is focusing on load growth resulting from EVs, but in fact the work should be "'done on a circuit-by-circuit, substation-by-substation basis, using load forecasts relative to substation capacities.'" MNSC's replies to exceptions, p. 73 (quoting 6 Tr 3373). MNSC asserts that the underground CODI conversions are not justified on reliability grounds because they rarely result in outages. MNSC supports the Staff's disallowances and argues that the record lacks evidence showing that EV growth is going to justify the pace and cost of these conversions. *Id*., pp. 75-79.

The Commission disagrees with the ALJ and finds that the CODI program should be included in rate base albeit at the reduced levels recommended by the Staff. The Commission is not persuaded that the in-service dates should preclude this necessary work on aging infrastructure from being included in rate base. *See*, 2 Tr 208-213. As the company notes, this work encompasses "the earliest electrical grid in southeast Michigan[,]" having been constructed in the early part of the 20th century. 2 Tr 209. Due to its location, this area has been experiencing significant load growth; but due to its age, it has also been experiencing higher failure rates, and conversion is made more complicated by the presence of significant amounts of system cable. 2 Tr 209-211. The Commission finds that the Staff's method for calculating reasonable reductions to the company's projections is well-supported, convincing, and prudent, and superior to MNSC's suggested disallowance. The Commission approves DTE Electric's proposed spend with the $56.4 million disallowance for the bridge period and $115.9 million disallowance for the test year recommended by the Staff. *See*, 7 Tr 4696-4697. Should the company ultimately spend more on this project than is included in forward-looking rates, it can seek recovery in a future rate case proceeding upon a showing that the increased spending was reasonable and prudent.

Additionally, as with other grid modernizing efforts, the Commission continues to seek results from ongoing equity analyses from the company that demonstrate how it balances its spending such that it does not disproportionately skew benefits away from more vulnerable or disadvantaged communities. The Commission acknowledges that without such analyses, the equity concerns of the DAAOs cannot be definitively addressed.

ii. Other (Schedule B5.4, p. 10, lines 52-83)

These conversion projects fall outside of the CODI program and similarly address aging infrastructure. MNSC again recommended a 50% reduction to project costs for the same reasons as are discussed above, noting that, based on this program, the cost of converting all of DTE Electric's 4.8kV circuits within 15 years (as called for by the program) will be about $27 to $33 billion which equates to $13,000 to $15,900 per customer for each DTE Electric customer. 6 Tr 3372. MNSC argued that this 15-year pace is unjustified without further analysis. The Staff did not recommend any reductions in this conversion cost category.

The ALJ again found that most of these projects have in-service dates beyond the test year and the company is not seeking any revenue related to them in the instant proceeding. She excluded them from rate base, and cautioned the company that the analysis underlying its decision making will be required in a future case as well as a description of how DTE Electric "will incorporate equity values in its analysis." PFD, p. 290. Thus, the ALJ recommended disallowance of all bridge and test period costs in this category.

In exceptions, DTE Electric argues that it is necessary to build new substations and upgrade circuits in order to add capacity, increase reliability, and address safety concerns on the 4.8kV system. The company notes that these are near-term investments that address loading constraints, and the projects that are not in service in the test year have no impact on the revenue requirement. DTE Electric's exceptions, pp. 102-103. Similar to the arguments immediately above, DTE Electric states that the 50% reduction is arbitrary and is based on a misunderstanding of EV-related workpapers; and that the company rates substation capacity in a manner similar to Mr. Stephens' proposed method.

In reply, MNSC makes the same arguments that it makes regarding the CODI projects, above. MNSC's replies to exceptions, pp. 71-79.

The Commission finds that the company showed that these expenditures are reasonable and prudent and approves them for inclusion in rate base. *See*, 2 Tr 196-216. The Commission is not persuaded that these projections should be cut by 50% or that the work should be excluded simply on the basis of its in-service dates. The Commission notes that MNSC testified that it does "not oppose these programs generally. All infrastructure must be replaced over time . . . ." 6 Tr 3370. The Commission agrees and finds that this replacement work should proceed apace due to the age, safety, and reliability issues presented by this equipment and the need to reduce wire downs. *See*, 2 Tr 213-214. As stated above, the Commission anticipates additional analysis of, and information on, DTE Electric's incorporation of equity considerations in its 4.8kV conversion work in future rate cases.

DTE Electric has requested the inclusion of certain conversion work in the IRM. Approval of the IRM is discussed below in Other Revenue-Related Items.

l. Advanced Distribution Management System: Distribution Management System/Outage Management System (Schedule B5.4, p. 12, line 2)

DTE Electric acknowledged that the Advanced Distribution Management System (ADMS), Distribution Management System (DMS), and Outage Management System (OMS) raised concerns for the Commission in the November 18 order, p. 125, regarding expense and timing. 5 Tr 2920. The company explained its selection of a system administrator, and further explained that the OMS is not compatible with DTE Electric's legacy mobile tool, thus requiring the development of the mobile Compass tool; and the company described the new tool's benefits (though it had not yet been delivered at the time). 5 Tr 2928-2929. The Attorney General argued against DTE Electric's decision to be an early adopter of the Compass system, citing delays and cost overruns associated with this cost category. 6 Tr 3653-3656. The Attorney General recommended that costs be limited to the amount approved in the November 18 order ($78.9 million), thus proposing a reduction of $3.6 million to 2022 expenditures, $9.9 million to proposed bridge period expenditures, and $0.9 million to test year expenditures based on the lack of any quantification of benefits from the increased spending. 6 Tr 3657; Exhibit AG-1.95. DTE Electric countered that the OMS is at the end of its life.

The ALJ agreed with the Attorney General's recommendation consistent with the determinations in the November 18 order and found that DTE Electric provided no information supporting full recovery. PFD, p. 296.

In exceptions, DTE Electric argues that DMS/OMS were affected by the delay in the delivery of the Compass mobile tool, which was in turn affected by pandemic-related delays. The company also explains that it initially went without a system integrator but has worked with OSI as the vendor, and explains its reasoning. DTE Electric's exceptions, pp. 128-129. The company asserts that "OSI considers DTE's overall implementation to be a benchmark for utilities implementing the platform." *Id*., p. 131 (citing 5 Tr 2941). DTE Electric argues that the ADMS: DMS/OMS investment will improve outage restoration responses and provide a foundation for a modernized grid.

Outage restoration response is a critical area and the Commission is not persuaded to adopt the Attorney General's disallowance. The Commission finds that the company took reasonable steps to address the problems with the DMS/OMS in light of the available options and approves DTE Electric's requested expenditure for inclusion in rate base. *See*, 5 Tr 2921-2925.

m. Advanced Distribution Management System: Network Management System (Schedule B5.4, p. 12, line 3)

DTE Electric acknowledged that, in the November 18 order, pp. 128-129, the Commission denied recovery of the Network Management System (NMS) component of the ADMS project, but seeks inclusion of $6.5 million in rate base in this case for improvements to the system. 5 Tr 2911-2918. The Attorney General noted that the Commission already denied this $6.3 million to implement the same functionalities based on the same justification offered on the instant record. The Attorney General argued that the functionalities now sought should have been identified in the original scope of work and noted that no BCA was provided. The Attorney General recommended disallowance of all of the reported costs of $8.2 million, which includes reported spending for 2021 of $1,292,000, estimated spending of $1,328,000 for 2022, projected spending of $2,658,000 for the 11-month bridge period, and projected spending of $2,900,000 for the test year. 6 Tr 3660.

The ALJ provided no recommendation on this issue. PFD, p. 299.

In exceptions, the Attorney General notes the lack of a decision on this issue in the PFD. The Attorney General argues that, in light of the ALJ's recommended adoption of the proposed disallowance for the DMS/OMS expenditure and the fact that the Attorney General's arguments for both programs are the same, the ALJ likely meant to draw the same conclusion. Attorney General's exceptions, p. 7. The Attorney General further contends that no BCA was provided and the company failed to show that the program is economically justified. *Id*., p. 8.

In exceptions, DTE Electric notes that the ALJ did not make a recommendation but she disallowed NMS expenditure in Appendix E to the PFD. DTE Electric's exceptions, p. 125. The company maintains that it has incorporated the Commission's feedback from the November 18 order, and that grid modernization is necessarily a multi-year endeavor. DTE Electric notes that additional investments were identified in the DGP and the costs are reasonable and prudent. The company contends that timing should not be the basis for disallowing all costs and that it is reasonable that the data requirements for the program would evolve. The company states that grid controls are geo-location based, and that:

> NMS must adapt to meet the Company's changing needs and customers' expectations. The additional investment includes technology to better align field conditions and maps to the digital representation of the grid, integration between asset systems, new data models to support planning and operations topology and characteristics, and advanced analytics to leverage sensor data to continuously improve the Network Model. These are reasonable and prudent investments that bring essential, real-world value to the Company and its customers. Therefore, the Company's requested cost recovery should be approved (Reterstorf, 5T 2909-18, 2945-46).

DTE Electric's exceptions, p. 127.

In its reply, DTE Electric contends that its request should be approved. DTE Electric's replies to exceptions, p. 12.

As with the DMS/OMS, the Commission finds that this cost category should be funded at the level sought by DTE Electric. The company showed that manually performing the functionality provided by the NMS would require 20 additional full-time employees to carry out O&M tasks. 5 Tr 2912. Additionally, as the company points out, the Attorney General does not object to the amounts but rather to the fact that the expenditure was not identified in the original scope of work. The Commission agrees with DTE Electric that "[g]rid needs are dynamic, and the tools to support reliability and grid modernization also need to adapt and develop to support these emerging grid needs." 5 Tr 2945. The Commission is not persuaded to eliminate this funding simply because it was not included in the original scope of work. The Commission approves the requested amounts for inclusion in rate base.

n. System Operations Center: Electric Systems Operations Center (Schedule B5.4, p. 12, line 4)

DTE Electric reported expenditures of $428,000 for 2021, estimated expenditures of $1.42 million for 2022, and projected expenditures of $200,000 for 2023 for the Electric Systems Operations Center (ESOC), to support the development of the IT systems for the ESOC. DTE Electric reported that the ESOC construction is complete and personnel have moved into the building. The Attorney General argued that the Commission set a firm limit of $98.5 million for the ESOC project in the November 18 order, pp. 137-138, and these additional amounts represent a cost overrun that should not be included in rate base since no benefits from the costs have been shown. 6 Tr 3660-3662. The company countered that it did not identify these IT needs until after the project had been scoped.

The ALJ recommended adoption of the Attorney General's reduction. The ALJ noted the language of the November 18 order, pp. 137-138, discouraging additional investment requests and she found that the requested amounts are for items that belong in "the initial project costs that would have been anticipated at the design stage" such as the video wall. PFD, p. 303 (citing Exhibit A-23, Schedule M7, pp. 371-372).

In exceptions, DTE Electric states that the Alternate System Operating Center (ASOC) and ESOC have been included in its last three rate cases and are almost complete. DTE Electric states that ESOC construction is complete and personnel have moved into the facility, and the company requires "incremental investments to maintain and evolve to meet future needs[.]" DTE Electric's exceptions, pp. 132-133 (citation omitted). DTE Electric contends that it cannot properly operate the ESOC without these additional IT investments. DTE Electric asserts that the Attorney General's disallowance is unfounded and the PFD arrives at an unlawful result. *Id*., p. 136. (The company addresses both the ASOC and the ESOC in some of these arguments.)

In the November 18 order, p. 137, the Commission directed DTE Electric "to ensure it can continue to operate the ESOC without seeking additional investment tied to IT or other cost categories from customers." The Commission finds the ALJ's recommendation to be well-reasoned and supported by the record and notes her advice to the company with regard to its inconsistent testimony that "credibility is a valuable asset." PFD, p. 303. The Commission adopts the ALJ's findings and conclusion on this issue. *See*, *id*., pp. 302-303.

o. System Operations Center: Alternate System Operations Center (Schedule B5.4, p. 12, 5)

DTE Electric reported that construction has begun on the ASOC, and presented evidence of a total cost of $38.1 million, acknowledging that the Commission denied cost recovery for the ASOC in Case No. U-20836. The Attorney General argued that this represents a cost increase from the projections of $33.2 million provided in Case No. U-20561 and $34.5 million in Case No. U-20836. The Attorney General asserted that these are cost overruns, with no supporting explanation or evidence showing any benefits, and she proposed a disallowance of the additional amounts above the $34.5 million approved in the last rate case order, which includes $1.64 million for the 11-month bridge period and $3.26 million for the test year, as well as the contingency amount of $2.84 million. 6 Tr 3664. DTE Electric countered that it was not actually requesting these amounts.

The ALJ noted some confusion in the briefs, and recommended adoption of the Attorney General's reduction, while finding that she had already addressed the issue of contingency in the PFD. PFD, p. 305. She found DTE Electric's rebuttal argument to be unintelligible, stating that:

> DTE does not recover its capital costs through a single rate case, but by including them in rate base and recovering a return on the investment through the cost of capital and a return of the investment through depreciation in each successive case. The company's claim that the additional amount is "something that the Company is not actually requesting" either completely misunderstands the ratemaking process

> or is a waiver of recovery for that additional amount. DTE's failure to acknowledge the true cost of the project renders it unable to explain the apparent cost increase.

Id., pp. 305-306.

In exceptions, DTE Electric argues that the ASOC acts as a necessary backup to the ESOC and construction will be complete in 2024. DTE Electric's exceptions, p. 133. While the company's briefs requested a total of $35.6 million (which contradicted the testimony of its rebuttal witness), DTE Electric now states that it is requesting $32.76 million in total funding, which equates to $35.6 million minus $2.84 million in contingency spending. *Id*., p. 135.

In reply, the Attorney General argues that the company's exceptions fail to clear up the confusion and do not justify the proposed capital expenditure. Attorney General's replies to exceptions, pp. 34-35.

In the November 18 order, pp. 137-138, the Commission found the ASOC funding request to be premature. In the instant case, DTE Electric has provided evidence that construction is underway, that the facility fulfills an important backup purpose, and that the facility should begin operation in 2024. 3 Tr 557-560. The Commission finds that the proposed ASOC spending is reasonable and prudent and approves a total of $32.76 million in ASOC expenditures for inclusion in rate base. Since the company's request is lower than the cap suggested by the Attorney General, the Commission finds that the company's request should be approved. The Commission agrees that the ASOC is a necessary backup to the ESOC, and notes that the amount requested in this case is less than what was requested in the last two rate cases.

p. Grid Automation Telecommunications (Schedule B5.4, p. 12, line 6)

DTE Electric reported spending of $10.2 million in 2021, estimated spending for 2022 of $14.2 million, and projected 11-month bridge period and test year spending of $17.7 million and

$17.0 million, respectively. This project is intended to address the problems presented by current devices that are not connected for remote monitoring or control or are connected through a communication network that is not fully integrated, as well as the replacement of obsolete equipment. The company stated that it needs to lay the foundation through automation for DERs and EVs. MNSC again argued that the company failed to provide a comparative analysis and did not evaluate alternatives and these amounts should be disallowed. MNSC noted that the company failed to issue RFPs and argued that the company relies on information from trade group publications. DTE Electric countered that broadband is not available in all parts of its service territory and that wireless service is subject to dead zones, and thus the company prefers to support its own fiber ring.

The ALJ found that DTE Electric failed to support the reasonableness and prudence of these investments and recommended adoption of MNSC's reduction. The ALJ noted that DTE Electric expanded the scope of the program from the 500 miles of fiber and 230 substations proposed in Case No. U-20836 to the present proposal for 630 miles and 400 substations in the test year. She found that the company's reference to section 3 of the DGP for support was not useful. *See*, Exhibit A-23, Schedule M7, pp. 374-377. The ALJ noted that DTE Electric made no mention of O&M savings, and recommended that, since the project was approved by the Commission for the 500-mile scope, the company should be allowed to "continue the project through the bridge period to complete the scope of the undertaking presented in Case No. U-20836" but that test year spending should be denied inclusion in rate base. PFD, p. 311. She further found that the company should be required to provide an analysis of alternatives when requesting further extensions of the fiber network.

In exceptions, MNSC notes that the proposed disallowance was adopted but was not reflected in Appendix E of the PFD. MNSC asks that this correction be made. MNSC's exceptions, p. 5.[19]

In exceptions, DTE Electric argues that the DGP discusses the need to anticipate and address growth in usage resulting from DERs and EVs. The company agrees with funding bridge period spending but seeks full approval for the test year. DTE Electric refers to its analysis of the use of fiber optics, noting the disadvantages of using wireless carriers with respect to coverage, service quality, cost, reception, data loss, and security. The company contends that SCADA requires second-by-second communication for data transfers. DTE Electric's exceptions, pp. 108-110.

In reply, MNSC argues that the company has a tendency to dismiss third-party solutions in favor of retaining utility-owned communications systems, charging the company with an "outdated understanding of technology and economics[.]" MNSC's replies to exceptions, p. 80. MNSC contends that DTE Electric failed to adequately analyze the alternatives to fiber, and notes that the Commission limited spending on this cost category in Case No. U-20836.

In reply to MNSC, DTE Electric agrees with MNSC that Appendix E reflects an incorrect disallowance for the bridge period but argues that the test year should be fully funded because the investment is reasonable and prudent. DTE Electric's replies to exceptions, p. 7.

The Commission agrees with the ALJ's observations regarding the shortcomings of the evidence in support of this proposed expenditure. The Commission finds the ALJ's recommendation to fund the bridge period but not the test year to be well-reasoned and supported by the record and adopts the ALJ's findings and conclusion on this issue. *See*, PFD, pp. 309-311.

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[19] As stated above, the Commission is not relying on Appendix E.

The Commission notes that the utility may seek this funding in future rate cases with adequate evidentiary support.

q. Automation: Substation (Schedule B5.4, p. 12, lines 9-10)

DTE Electric reported 2021 spending of $111,000, estimated 2022 spending of $490,000, and projected bridge and test year expenditures of $4.6 million and $23.3 million, respectively, for this substation relay work. The company reported that its substations currently have limited SCADA capabilities. The Attorney General recommended disallowance of the bridge and test period amounts because the company failed to connect the amounts with the work to be performed in that timeframe and failed to present evidence showing how the work would solve issues related to automation, citing the generality of the information contained in Exhibit A-23, Schedule M6, pp. 31-34. The Attorney General also asserted that DTE Electric failed to quantify potential reliability benefits in Exhibit AG-1.76, p. 1.

The ALJ found that DTE Electric failed to show the reasonableness and prudence of the program and recommended that the Attorney General's reduction be adopted, finding that the evidence did not adequately support the proposed expenditures. PFD, p. 314. She noted, for example, that there "is no explanation why the first 6 substation positions will cost approximately $833,333 each while the remaining 46 will cost $543,478 each. And it is troubling that DTE could not provide any quantification of reliability increases[.]" *Id*. She further noted that no analysis was provided and the company simply assumed that remote operation would save time. The ALJ recommended disallowance of the bridge and test year amounts.

In exceptions, DTE Electric argues that it provided a scope of work and a construction schedule in Exhibit A-23, Schedule M6, pp. 19-22, 34, that shows clearly how the investment will be spent, and that the program will allow system operators to remotely troubleshoot a grid disturbance. DTE Electric's exceptions, p. 111.

Again, the Commission agrees with the ALJ's remarks on the poor quality of the supporting evidence. DTE Electric could not provide information on how the company's response would be benefitted in terms of speed (how much quicker could an operator be dispatched) as a result of the proposed capital spend. 5 Tr 2774-2777, 2808-2809; DTE Electric's exceptions, pp. 111-112. However, the Commission finds that this substation automation work, which involves the installation of upgraded relays and Remote Terminal Units (RTUs), and the incorporation of the RTUs and automation controls into the substation network with links to the ADMS, is critical to the efforts to improve the utility's response to outages. *See*, 5 Tr 2774-2777. The Commission approves the company's requested funding for inclusion in rate base, reduced by the Staff's proposed 10% cut to protect against over-projections. However, the Commission expresses its deep concerns over the company evidentiary presentation relating to a $28 million investment, particularly given the ongoing focus on improving DTE Electric's reliability performance. The company simply asserts that deploying the proposed technology "solves this problem." *Id*., p. 112. It is not acceptable to offer such conclusions in the total absence of any quantified data in support. While the Commission fully supports this type of effort to improve the company's response time and ability, DTE Electric must do a better job of making the case for such important investments, including through both its initial filing and its discovery responses. Assessing the proposed investment in the absence of supporting quantitative data makes the Staff's job difficult and impedes the Commission's ability to determine the reasonableness and prudence of these investments.

r. Non-Wires Alternative Pilots (Schedule B5.4, p. 12, lines 12-19)

DTE Electric explained that the August 20, 2020 order in Case No. U-20147, pp. 43-44, was the impetus for proposing nine non-wires alternative (NWA) pilot programs in this case, along with the Commission's feedback in the November 18 order which is summarized in Schedule B5.4.9. 5 Tr 2778-2779. The nine pilots are known by the following names: (1) O'Shea Battery Energy Storage System (O'Shea); (2) Mobile Battery Trailer (MBT); (3) Omega Load Relief (Omega); (4) Hancock, which is completed and not discussed in this case (and not mentioned in the PFD or exceptions); (5) Fisher Load Relief (Fisher); (6) Port Austin Load Relief (Port Austin); (7) Veridian Development (Veridian); (8) EV Charging Demonstration at the American Center for Mobility (ACM) (EV ACM); and (9) Adaptive Network Microgrids, which is under evaluation and is not discussed in this case (and not mentioned in the PFD or exceptions). 5 Tr 2781; Schedules 5.4.1 through B5.4.7. The Staff made certain recommendations regarding the proposed pilots, proposing that the company engage in ongoing consultation with the Staff and making other recommendations for the battery technology pilots and for ongoing updates that could ease the burden of litigating these pilots in rate cases. *See*, 7 Tr 4568-4570. The Attorney General argued that several of the pilots fail to meet the Commission's standards for pilot programs and funding should be disallowed.

The ALJ noted that several of these projects will not be completed within the test year and she recommended exclusion from rate base for MBT, Fisher, Port Austin, Veridian, and EV ACM. PFD, p. 317. She also noted that the Commission provided a path for parties to seek review of pilots outside of rate cases in Case No. U-20898.[20] The ALJ recommended that the Commission adopt the Staff's proposals addressing the pilot consultation process, noting also that DTE Electric's Schedules B5.4.1 through B5.4.7 appear to align with this goal where they state that the company will partner with the Staff while seeking stakeholder engagement throughout. PFD, p. 317. The ALJ did not adopt any other disallowances but included only two of the projects in rate base (of the seven at issue). She proceeded to separately address those two specific pilots, below.

In exceptions, DTE Electric argues that these NWA pilots will form a foundation for the future development of NWA projects, and that projects not in service in the test year have no impact on the revenue requirement. DTE Electric's exceptions, p. 113. The company states that it is receptive to the Staff's recommendations and will meet with the Staff prior to implementing future NWA pilots and during each pilot's term. The company describes the benefits of the pilots, and contends that its proposals respond to the Commission's orders in Case Nos. U-20836 and U-20147. *Id.*, pp. 114-119. Noting that the Attorney General objected to several pilots, the company contends that it presented alternatives for each pilot along with updated analyses, that the NWA pilot program responds to the directives in Case No. U-20147 and meets the pilot guidelines, and that some of the NWA options may be very cost effective. *Id.*, p. 114.

[20] Case No. U-20898 is a docket opened on the Commission's own motion to commence a collaborative to consider issues related to implementation of effective new technologies and business models. *See*, October 29, 2020 order in Case No. U-20898. This docket remains open with the Commission recently launching a collaborative for the purpose of developing a spreadsheet-based or similar open source tool which will establish a new platform as a model for the required BCA that accompanies requests for pilots, to be ready for use in 2024. *See*, October 12, 2023 order in Case No. U-20898, p. 30.

The Commission does not find that the majority of the proposed pilots should be excluded from rate base on the basis of their dates of completion. Instead, the Commission will assess the merits of each of the remaining seven pilots, below, beginning with the two that were recommended for funding by the ALJ.

i. O'Shea Battery Energy Storage System

DTE Electric reported that a 1 MW battery energy storage system (BESS) is being interconnected at the O'Shea solar park, which is a company-owned 2 MW solar array. 5 Tr 2782; Schedule B5.4.1, p. 2. The Attorney General argued that the total $2.5 million cost should be disallowed because the company presented no analysis of alternatives and no BCA, and was not adequately responsive to discovery regarding the economic justification of the proposal.

The ALJ found that this pilot program had "adequate documentation in Schedule B5.4.1, and is reasonable based on Staff's review and involvement; the coordination of solar and storage is an important element of the company's future plans, making some learnings necessary." PFD, p. 319.

In exceptions, the Attorney General argues that the ALJ reached the wrong conclusion. She contends that the mere fact of the Staff's involvement does not provide proof that a project is reasonable, and the company provided no analysis of alternative methods or a BCA. The Attorney General maintains that "it is improper for utilities to engage in pilots to explore *possible* benefits." Attorney General's exceptions, p. 9 (emphasis in original).

In reply, DTE Electric argues that it has provided more detailed support than was provided in Case No. U-20836 and the project is supported by the record. DTE Electric's replies to exceptions, p. 9.

The Commission finds the ALJ's recommendation to be well-reasoned and supported by the record and adopts the ALJ's findings and conclusion on this issue. *See*, PFD, p. 319.

ii. Omega Load Relief

DTE Electric reported that this project involves relieving, through the use of mobile storage equipment, two subtransmission lines that feed the Omega substation which are overloaded. 5 Tr 2784-2785. The Attorney General objected to the $8.4 million project cost, arguing that the company failed to provide any BCA or cost effectiveness analysis, and that the pilot does not meet the Commission's guidelines for pilots.

The ALJ found that DTE Electric presented adequate documentation supporting the Omega Load Relief pilot in Schedule B5.4.3, and that the pilot is reasonable "based on Staff's review and involvement." PFD, p. 321. She noted that no party disputed the fact that global supply chain disruptions had caused cost increases, and that the mobile battery should be available for future use.

In exceptions, the Attorney General argues that the Staff's involvement does not prove reasonableness and that the ALJ failed to question the lack of a BCA or the issue of whether DTE Electric should "undertake research responsibility on nascent technology." Attorney General's exceptions, p. 10.

In reply, DTE Electric argues that the Omega substation is fed by two subtransmission lines that are overloaded and that this project will address that condition. DTE Electric's replies to exceptions, pp. 10-11. The company notes that the ALJ found the project to be supported by the record and that alternatives were analyzed by the company. DTE Electric asserts that use of this technology at peak load times will be critical to preventing overloads that result in outages.

The Commission finds the ALJ's recommendation to be well-reasoned and supported by the record and adopts the ALJ's findings and conclusion on this issue, including the Staff's recommendations. *See*, PFD, p. 321.

iii. Mobile Battery Trailer

The MBT pilot consists of three trailers that will be used to support customer restorations. 5 Tr 2783. In exceptions, DTE Electric explains that it "has provided detailed information and an update on progress that has been made on the pilot. (Hill, 5T 2783-84; Exhibit A-12, Schedule B5.4.2; Exhibit A-12, Schedule B5.4.9, p 1)." DTE Electric's exceptions, p. 115. In response to the Attorney General's proposed $3.8 million disallowance, the company argues that the MBT will assess whether mobile battery technology is cost effective in restoration scenarios and whether it can be made easily available for supporting system emergencies and planned maintenance.

No replies to exceptions were filed.

The Commission finds that the pilot has merit and should be funded, and adopts the conditions recommended by the Staff regarding the mobile battery pilots and the requirement of regular meetings with the utility, which DTE Electric appears to accede to. *See*, 5 Tr 2783-2784; 7 Tr 4568-4570. Having approved funding for this and some of the remaining pilots, the Commission reminds DTE Electric of the continuing need to show justification for each pilot in future rate cases, and notes that the company will continue to be required to show sufficient support for the requested funding. For all of the pilots, the Commission will continue to monitor costs and to require additional details as they become available.

iv. Fisher Load Relief

This pilot involves geo-targeted deployment of demand response and energy waste reduction to relieve load concerns at the Fisher substation. 5 Tr 2786-2787; Schedule B5.4.4. In its exceptions, DTE Electric notes that no party proposed a disallowance for this pilot. DTE Electric's exceptions, p. 116. The company seeks \$77,000 for 2022 and \$1.35 million for 2023. Schedule B5.4.4, p. 4. (The Commission is not considering any funding beyond the test year.)

No replies to exceptions were filed.

The Commission finds that this pilot has merit and should be funded, again subject to the condition of regular consultation with (and ongoing updates for) the Staff, and the Staff's other recommendations for this proposal at 7 Tr 4569. *See*, 5 Tr 2786-2787.

v. Port Austin Load Relief

The Port Austin substation is exceeding its firm rating, and this pilot is intended to use solar and storage to address these concerns. 5 Tr 2789-2790; Schedule B5.4.5. The pilot will look at whether it is possible to isolate storm damage and continue to serve customers with a microgrid. In its exceptions, DTE Electric notes that it is exploring the possibility of obtaining federal funding through the federal Infrastructure Investment and Jobs Act of 2021 (IIJA), PL 117–58, 135 Stat 429, for both O'Shea and Port Austin. DTE Electric's exceptions, p. 116. The company is seeking project costs of \$598,884 for 2022 and \$4.3 million for 2023. Schedule B5.4.5, p. 3.

No replies to exceptions were filed.

The Commission finds that this pilot has merit and should be funded, again subject to the condition of regular consultation with (and ongoing updates for) the Staff. *See*, 5 Tr 2789-2790; 7 Tr 4568-4570.

vi. Veridian Development

The Veridian pilot is a planned all-electric residential development in Ann Arbor which will involve customer-owned solar and storage, in an area where the existing circuits cannot accommodate the required load growth. 5 Tr 2790-2791; Schedule B5.4.6. It will involve the installation of a URD loop, with associated system upgrades and a microgrid. During the proceeding, the Attorney General proposed disallowance, arguing that the system upgrades were not necessary. In its exceptions, DTE Electric contends that the upgrade is needed because the existing circuits feeding the development cannot support the requested service, and the company must be able to provide service if the solar or storage generation is not available. In response to the Attorney General's critique, DTE Electric explains that "the utility battery provides additional storage for solar energy and is not duplicative. The utility battery also serves as the grid-forming inverter for the microgrid that the rest of the customer-owned resources can synchronize to, so it is necessary for this pilot (Hill, 5T 2819)." DTE Electric's exceptions, p. 118. The company states that infrastructure is under construction. The company is seeking $387,000 for 2022 and $3.3 million for 2023. Schedule B5.4.6, p. 2.

No replies to exceptions were filed.

The Commission finds that this pilot has merit and should be funded, again subject to the condition of regular consultation with (and ongoing updates for) the Staff. *See*, 5 Tr 2790-2791; 7 Tr 4568-4570.

vii. Electric Vehicle Charging Demonstration at the American Center for Mobility

The EV ACM involves "support for implementing the Delta Power Electronics DC Xtreme 400kV fast charger and understanding the impacts of high-powered charging on power quality. The Company has provided detailed information and an update on progress that has been made on the pilot, (Hill, 5T 2792-94; Exhibit A-12, Schedule B5.4.7)." DTE Electric's exceptions, p. 118. The Attorney General proposed disallowance on grounds that the company had failed to clarify what the funding will be spent on, in light of the fact that other participants in the piloted project (including ACM) will be providing the technology that will be tested, and the technology remains experimental. 6 Tr 3680-3681. In its exceptions, DTE Electric argues that "[b]enefits of the investment include learning about the technology that will be needed in the future for electrification" and "include the development of the delta charging hardware that provides extreme fast charging capabilities, and a solid-state transformer technology that allows direct connection of these high-power chargers to distribution lines. (Hill, 5T 2821)." DTE Electric's exceptions, p. 119. The company is seeking approximately $5.5 million but does not specify a time period. Schedule B5.4.7, p. 2.

No replies to exceptions were filed.

The Commission notes that in the November 18 order, pp. 159-161, the Commission approved only 10% of the requested funding for this pilot. Based on the record in the instant case, the Commission is not persuaded to approve additional funding at this time. The Commission agrees with the Attorney General's assessment of the technology as currently so experimental as to be premature for funding by ratepayers. *See*, 6 Tr 3680-3681. Further, it is unclear what benefits—if any—would be available to DTE Electric's customers other than ACM, making it difficult to justify the reasonableness and prudence of having all customers pay for this pilot.

s. Distributed Energy Resources Management System (Schedule B5.4, p. 12, line 21)

DTE Electric estimated spending in the 11-month bridge period of $4.25 million and in the test year of $2.7 million for the distributed energy resources management system (DERMS). The Attorney General argued that the company provided no justification for these expenditures, rather only vague project descriptions. The Attorney General argued that it is premature to include this project in rate base. The company relied on the DGP.

The ALJ found DTE Electric's presentation to be inadequate, stating:

> This PFD notes that this project is yet another project that has an in-service date beyond the test year, in this case, 2035 as shown on line 170 of Schedule 5.4, page

> 20, and has been assigned to CWIP. As discussed in section a above [in the PFD], this project should be excluded from rate base and not approved because DTE is not seeking any revenue in this case for that project. Why DTE argues that it is "ready to execute" this project on the schedule in M6, when that schedule on page 82 states only that DTE is going to "conduct an evaluation" in 2023, and "conduct RFP vendor selection and *initial* design of system for pilot deployment" in 2024, is a mystery.

PFD, p. 323 (emphasis in original).

In exceptions, DTE Electric argues that projects outside the test year have no impact on the revenue requirement, and that the DGP and GPM support the near-term need for these DERMS projects. DTE Electric's exceptions, p. 120. The company asserts that DERMS functionality is necessary to address the growing number of DERs.

The Commission does not reject the DERMS program funding simply because it is a long-term program. But the Commission does find that the ALJ's recommendation is well-reasoned and supported by the record. DTE Electric failed to offer sufficient detail to allow for a finding of reasonableness and prudence. For an investment of $7.2 million the Commission expects a more robust evidentiary presentation. DERMS can be a valuable tool and the Commission appreciates the company's overall strategy with regard to linking this information to the DGP, but the record (which includes the DGP references) does not contain sufficient justification for the investment. Accordingly, the Commission adopts the ALJ's findings and conclusion on this issue. *See*, PFD, p. 323.

t. Work Management & Scheduling (Schedule B5.4, p. 12, line 24)

DTE Electric reported spending of $6.2 million for 2022, $6.7 million for the 11-month bridge period, and $3.38 million for the test year for this cost category. The Attorney General argued that no company witness had provided a justification for this program, other than brief descriptions in

Exhibit A-23, Schedule M6. The Attorney General asserted that the projects appear to be vague IT solutions, but that it is impossible to determine whether they are justified.

The ALJ noted that this program will not be completed until 2035 and that it remains in CWIP through the test year, and thus she recommended that the program be excluded from rate base. PFD, p. 324. She further noted that the company provided "no cost estimate for this project over the next dozen years" and she agreed with the Attorney General that "the project description is vague, looking more like the IT project descriptions that read like to do lists compiled on an annual basis." *Id*.

In exceptions, DTE Electric argues that projects outside the test year have no impact on the revenue requirement, and complains that:

> we also find evidence of the PFD presenting an irreconcilable conundrum through various suggestions that the Company provides too much information concerning its future plans, criticisms of the Company for transparently explaining its longer-term intentions and justifications (as frequently requested by others), or complaining that a project description is too "vague."

DTE Electric's exceptions, p. 121. The company also argues that the Attorney General's criticisms are inconsistent, and that both the parties and the PFD provide contradictory messages. The company contends that it appropriately supported the need for this program.

The Commission approves the requested historical funding for this project through 2022, but finds that the 11-month bridge period and test year amounts should be excluded from rate base. As with DERMS, DTE Electric again failed to make its case. The ALJ's description is apt in that the project description is vague, and the company relied on the DGP for its business case and offered a modicum of substantive testimony on the program only on rebuttal as a result of the Attorney General's objections. *See*, 5 Tr 2825-2827; Exhibit A-23 Schedule M7, p. 426;

Exhibit A-23, Schedule M6, p. 94. There is simply not enough support in the evidentiary record for the Commission to approve the investment.

u. Load Forecasting & Analysis (Schedule B5.4, p. 12, line 27)

DTE Electric reported spending of $1.95 million for 2021, estimated spending of $2.5 million for 2022, and projected spending of $5 million for the 11-month bridge period and $4.4 million for the test year. The Attorney General again noted that no witness was offered to support this program and that the documentary evidence provided only brief and general descriptions of the proposed work.

The ALJ found that the program should be excluded from rate base, stating that:

> Schedule B5.4, page 20, line 176 shows that this project will not be completed until 2027; Schedule M6, page 106 confirms that the project will not be completed by the end of 2024. . . . This PFD also notes that Schedule M6 only provides spending totals through 2024; it does not contain an estimate of the total cost of the project through December 2027. Similarly, the cited pages of the DGP do not provide a project cost; moreover, as shown on page 437 of Schedule M7, the DGP discussion is discussing expenditures totaling $7.5 million over the period 2021-2025; DTE's Schedule B5.4 has 2021 through 2024 expenditures totaling over $14 million.

PFD, p. 326.

In exceptions, DTE Electric argues that under Commission rules it may provide evidence in exhibit form "in order to keep testimony volume reasonable and for ease of reference. In this case, each line item in Exhibit A-12 B5.4 is supported in Exhibit A-23 Schedules M3-M6 including precisely the information [the Attorney General] inaccurately alleges the Company failed to provide." DTE Electric's exceptions, p. 123 (citing Mich Admin Code, R 792.10429(1)). The company again states that projects outside the test year have no impact on the revenue requirement and asserts that its current load forecasting system cannot handle the new forecasting methods that are called for.

As with the prior two expenditure categories, the Commission finds the ALJ's recommendation to be well-reasoned and supported by the record, not due to timing but due to the dearth of evidence. The Commission notes that the proposed expenditure appears to be primarily for labor, which indicates that this may belong in O&M rather than in Capital Expenditures. Accordingly, the Commission adopts the ALJ's findings and conclusion on this issue. *See*, PFD, pp. 326.

E. Community Lighting (Schedule B5.5)

DTE Electric reported community lighting capital expenditures of $14.8 million in 2021, estimated spending of $17.3 million in 2022, and projected spending of $15.4 million for the 11-month bridge period and $16.7 million for the test year. 5 Tr 2632-2633. In the November 18 order, pp. 183 and 483, in response to disputes in that case about the process by which high pressure sodium (HPS) or high-intensity discharge (HID) luminaires are being replaced by light emitting diode (LED) luminaires, the Commission directed that "[i]n its next general rate case, DTE Electric Company shall provide an updated analysis of its streetlight re-lamping policy and wattage selection." Thus, the company provided testimony indicating that the intent of the re-lamping program is to maintain HPS lighting levels at or above 70% of the original lamp lumen level throughout the life of the luminaire. DTE Electric's witness indicated that the company performs its own evaluation to determine whether that standard is being met and, if not, what LED lamp and what wattage should be selected as a replacement. At the same time, DTE Electric provided testimony that it relies on the standards for roadway lighting set by the American National Standards Institute (ANSI) in conjunction with the Illuminating Engineering Society (IES) known as the ANSI/IES RP-8 standards. 5 Tr 2634-2635. DTE Electric further explained that its primary roadway luminaire vendor is Leotek, and that the company sometimes deviates from Leotek's recommendations in the selection of a luminaire because Leotek's recommendations (contained in a crossover chart located at Exhibit A-25, Schedule O3) focus on replacing the current lumen output rather than replacing the original lumen output. DTE Electric considers the current lumen output to be degraded and thus the company chooses to install an LED lamp that offers wattage on the same level as the wattage offered by the original HPS lamp.

MI-MAUI argued that the total proposed capital expenditures should be reduced by $5.8 million based on the fact that DTE Electric overspends by installing brighter and more expensive LED lamps than are called for by the ANSI/IES RP-8 standards. MI-MAUI contended that DTE Electric simply assumes that the current lights (being replaced) comply with the ANSI/IES RP-8 standards without actually evaluating the site for the lamp to determine what is required, and fails to recognize that LEDs deliver the same lighting with fewer lumens. 4 Tr 916-919. MI-MAUI argued that the company should rely on the crossover chart provided by Leotek, its luminaire vendor, because the chart relies on up-to-date information regarding the amount of light delivered by LEDs and would result in lower costs to the municipalities (and ratepayers) that are funding this work. MI-MAUI relied on Exhibit MAU-18, which illustrates the difference in cost between the LED that would be selected by Leotek and the LED that is selected by DTE Electric. MI-MAUI argued that this cost difference results in overspending of approximately $5.8 million.

DTE Electric countered that its objective is to restore the lumen output offered by the original streetlighting system and that the crossover chart is simply a marketing tool. DTE Electric also noted that customers may select any light they choose.

The ALJ began her analysis of this issue by finding that DTE Electric failed to comply with the Commission's direction to provide an updated analysis of its re-lamping policy and wattage selection, in that the company failed to address how it selects luminaire types and what the cost differences are. PFD, p. 336. After noting some confusion in the testimony and discovery responses, the ALJ highlighted the fact that DTE Electric's witness testified that the company "'does not seek to meet ANSI/IES RP-8 standards for streetlights on existing infrastructure.'" PFD, p. 337 (quoting 5 Tr 2659); *see also*, Exhibit MAU-15. The ALJ concluded that the testimony offered by DTE Electric was contradictory because it revealed that the company does not analyze the original lighting output for compliance with the standards, but rather makes the assumption that it does. Moreover, she found that DTE Electric does not deny that its lamp choices exceed what Leotek recommends as a high-level choice. The ALJ further found that "DTE has not established that it has any meaningful discussion with customers currently regarding the choice of lighting" and that "since DTE does not conduct any analysis of the appropriate lighting for the roadway at issue, it is difficult to credit that DTE meaningfully consults with its municipal customers." PFD, p. 340. Absent convincing evidence to the contrary, the ALJ found that the crossover recommendations are reasonable. The ALJ found that DTE Electric failed to establish that it has a reasonable and prudent streetlighting replacement program and recommended adoption of MI-MAUI's proposed disallowance, stating as follows:

> The Commission provided DTE with the opportunity to justify its choices in this case, and DTE provided at best a confusing explanation of its process as discussed above, with no meaningful consideration of cost built into its discussion. This PFD finds that [MI-MAUI's witness] Mr. Bunch has reasonably estimated an amount by which DTE's replacement choices exceed what appears to be a prudent and less costly alternative, and therefore this PFD concludes that DTE's LED plant balances should be reduced by $5.8 million.

Id., p. 341. Finally, the ALJ noted that DTE Electric did not dispute the accuracy of the $5.8 million calculation but only MI-MAUI's reliance on the crossover chart, and failed to support its more expensive choices by referring either to the ANSI/IES RP-8 standards or to manufacturer's recommendations. *Id*., p. 342.

In exceptions, MI-MAUI notes that during the case it argued that the Commission should direct DTE Electric to stop charging CIAC for converting HID luminaires to LED luminaires, and the ALJ failed to address this issue in the PFD. *See*, 4 Tr 912-914. MI-MAUI notes that DTE Electric argues that ending the practice of charging CIAC for conversions will penalize municipalities that have already converted to LEDs. MI-MAUI contends that "if rates are brought into line with cost of service [COS] principles . . . customers who paid CIAC for past conversion will be able to recover their investment." MI-MAUI's exceptions, p. 4.

In exceptions, DTE Electric reiterates that its policy is to maintain HPS lighting levels at or above 70% of the original lumens and argues that proactive re-lamping saves money. The company contends that the ALJ confuses new lighting and converted lighting selections. Regarding its wattage selection, DTE Electric refers to its in-depth photometric evaluation, and maintains that it complies with ANSI/IES RP-8 standards in its selection of new roadway lighting. The company argues that the crossover chart is not intended to be used as a specification sheet and is really a conversion table that "is closer to a marketing and sales tool than authoritative guidance or a technical standard[.]" DTE Electric's exceptions, p. 140. DTE Electric asserts that it is not overspending on overly bright LEDs but rather is ensuring that converted lights maintain their original lumen output.

In reply, MI-MAUI states that it has "made it clear that it agrees with DTE that the Leotek chart is a marketing and sales tool and that the proper standard is ANSI/IES RP-8." MI-MAUI's replies to exceptions, p. 1. MI-MAUI contends that the chart simply supports its position that the default LEDs chosen by DTE Electric are brighter and more expensive that what the standards call for. MI-MAUI contends that comparisons of HIDs and LEDs are not apples-to-apples, because LEDs require significantly less energy, are better at delivering lumens, and waste fewer lumens. *See*, 4 Tr 918.

In replies to exceptions, on the CIAC issue, DTE Electric argues that if MI-MAUI's proposal is approved, the municipalities that already converted their lighting systems to LEDs will be penalized by having subsidized other municipalities' conversion work. DTE Electric's replies to exceptions, p. 12.

The Commission finds that the evidence does contain an explanation of DTE Electric's re-lamping policy (as requested by the Commission in the November 18 order), but the policy was not shown to be reasonable and prudent. The Commission finds the ALJ's recommendation to be well-reasoned and supported by the record and adopts her findings and conclusion on this issue. *See*, PFD, pp. 335-342; 4 Tr 918. As the ALJ points out, it is telling that the company fails to support its more expensive LED choices by referring either to compliance with the ANSI/IES RP-8 standards or to compliance with a manufacturer's specifications. Rather, the company is simply guided by the original lumen output, which does not equate to compliance with the relevant standards and is based on an outdated technology that is undergoing replacement. The Commission approves MI-MAUI's recommended disallowance.

In the Rate Design and Tariff Issues discussion of CIAC below, the Commission agrees with the ALJ and declines to adopt new calculation methods for CIAC. Here too (and as discussed in the Cost of Service section of this order, below), the Commission is not persuaded to adopt MI-MAUI's proposal to end the CIAC charge. The Commission finds that the CIAC charge remains applicable to this conversion work.

F. Demand Response

DTE Electric included capital expenditures for four categories of demand response (DR) programs: (1) interruptible space conditioning (CoolCurrents program), (2) programmable controllable thermostats (SmartCurrents), (3) other DR programs and pilots, and (4) DTE Insight. Exhibit A-12, Schedule B5.6. No party objected to the projected expenditures for CoolCurrents and SmartCurrents, two ongoing company programs, and the Commission approves the proposed funding for these programs.

1. Other Demand Response Programs and Pilots (Exhibit A-12, Schedule B5.6, Page 1, Line 3)

Other DR programs and pilots include DTE Electric's DR behind-the-meter battery storage pilot program and the company's DR residential generator pilot program.[21] Exhibit A-12, Schedules B5.6.1 and B5.6.2.

Based on findings and conclusions discussed later in her PFD, the ALJ recommended that capital expenditures for the company's battery energy storage pilot program be adjusted by half as recommended by the Staff due to the company's lack of securing further participation in the program, resulting in a disallowance of $1,990,360. PFD, pp. 343, 583-584; 7 Tr 4564-4565, Staff's initial brief, pp. 39-41.

In exceptions, DTE Electric maintains that full cost recovery is appropriate and should be approved.[22] The company states that it:

> disagrees with the proposed disallowance that simply splits the pilot's costs in half as that is not how the costs are incurred. The overall cost for both batteries was

[21] Although mentioned here, the company's DR residential generator pilot program is discussed in further detail in Part VIII (Other Revenue Related Items) of this order.

[22] The company's exceptions on this issue are discussed in further detail in Part VIII (Other Revenue Related Items) of this order.

> divided into milestone payments based on the project's key milestones, with the payment schedule for both batteries appropriately structured to avoid long lead time delays for equipment. A majority, 75%, of those milestone payments were already fulfilled in 2022. The remaining milestone payments for both batteries are planned for 2023 and 2024, covering the bridge and test year. The Company is confident that a second participant will be identified, and that the second battery will be installed shortly after the first. It is beneficial for the Company to fully complete the first installation so that the Company can use any learnings from that full installation to inform the process and installation for the second customer. The Company plans for both batteries to be operational by the end of 2024. Therefore, the Commission should approve full cost recovery for the pilot (Farrell, 5T 1330-31).

DTE Electric's exceptions, p. 209.

In replies to exceptions, the Attorney General asserts that DTE Electric's exceptions on this issue merely repeat testimony and briefing and are thus simply a disagreement with the ALJ's conclusion and not an actual exception to the PFD. The Attorney General asserts that the ALJ adequately considered the evidence on this issue and that the Commission should adopt the ALJ's recommendation. Attorney General's replies to exceptions, p. 50.

Consistent with the Commission's decision on this issue below in Part VIII (Other Revenue Related Items) of this order, the Commission adopts the ALJ's recommended disallowance of $1,990,360.

2. DTE Insight Application (Exhibit A-12, Schedule B5.6, Page 1, Line 5)

DTE Electric included capital expenditures of approximately $7.5 million for its DTE Insight program, which the company explained as centered on a mobile application integrated with advanced metering infrastructure (AMI) to help residential customers monitor and manage their energy use. With the DTE Insight app in combination with an Energy Bridge (EB) device, the company stated that customers can obtain real-time energy information and manage connected smart devices. 5 Tr 1271-1272. Per the company, the Commission has approved capital expenditures for this program in Case Nos. U-18255, U-20162, U-20561, and U-20836.

The Staff argued that capital expenditures for this program should be fully disallowed based on low engagement and participation in a nine-year-old program that the company began investing in in 2014. In this regard, the Staff averred that DTE Electric should boost engagement and participation in the application and in the use of EB devices before investing more money into the program. 7 Tr 4664-4665; Staff's initial brief, pp. 42-45.

Agreeing with the Staff, the ALJ found that DTE Electric failed to support its expenditures for this program. The ALJ reasoned that:

> DTE's data presented in rebuttal showing an uptick after the introduction of time of use rates does not establish sufficient or sustained interest to warrant a different conclusion. DTE's view that the Commission should authorize DTE to include in rate base in this case the EB device costs for devices that remain in inventory is unsupported by persuasive evidence that the devices will be in use in the test period.

PFD, p. 347.

In exceptions, DTE Electric states that the presentation in the Staff's testimony could be misinterpreted and thus clarifies that:

> [t]he numbers show that customers are twice as likely to use the DTE Insight app to view their usage information ("Unique User Views" column) than going online to do so ("Customer Data Downloads" column). Therefore, the mobile application has shown to be a useful and necessary tool for customer information and engagement. Also, Insight's weekly authentication rose significantly after the Company introduced time-of-day (TOD) rates in March of 2023 (from 646 per week in the nine weeks prior to TOD rates, to 2,702 per week in the nine weeks after TOD rates). This significant increase in use is likely to continue, and addresses Staff's indicated concern about a lack of customer engagement (Nguyen, 5T 1280- 81).

DTE Electric's exceptions, pp. 142-143. The company also argues that the Staff's proposal to disallow the $4.8 million in historic spend for 2021 should be rejected as this expenditure was to acquire 30,000 EB devices currently in inventory and was approved for cost recovery by the Commission in Case No. U-20836. While acknowledging that it anticipated a greater initial pace of customer participation and that requests for EB devices have been slower than initially anticipated, DTE Electric nevertheless expects to use all EB devices in inventory and asserts cost recovery to be appropriate. The company further asserts that "a full disallowance would be a disservice to those already participating in the program and those continuing to enroll." DTE Electric's exceptions, p. 143.

In replies to exceptions, the Staff states that it already addressed, in briefing, DTE Electric's restated arguments about TOD rates and the company's historic spend and maintains its position on this issue. The Staff further disagrees with DTE Electric's statement about a full disallowance being a disservice to those already participating and those continuing to enroll. The Staff states:

> The disallowance of this investment will not prohibit or effect the way participants interact with this program. While the recommended disapproval of the requested expenses may not allow enhancements to be made to the DTE Insight program, the program is not losing functionality, therefore customers will be able to participate in the same way they currently do.

Staff's replies to exceptions, p. 4. The Staff recommends that the Commission adopt the ALJ's decision.

The Commission finds the ALJ's recommendation well-reasoned and supported by the record. Accordingly, the Commission adopts the ALJ's findings and conclusion on this issue.

G. Information Technology

DTE Electric's projected information technology (IT) capital expenditures are set forth in Exhibit A, Schedules B5.7 and B5.7.1-B5.7.9, and are broken down into the following categories: (1) corporate applications, (2) customer service (sustainment and return to health), (3) customer service (strategic, enhancements and compliance), (4) plant and field, (5) IT for IT, (6) information protection security, (7) infrastructure operations, (8) enterprise data analytics, and (9) innovations. The company stated that these expenditures span the major IT investment categories of regulatory/compliance, sustainment, return-to-health, IT enhancements, strategic, and IT projects less than $250,000. 5 Tr 1828; Exhibit A-12, Schedule B5.7.

In exceptions, DTE Electric generally notes the Commission's "ever-increasing evidentiary requests" with regard to the company's IT investment spending and emphasizes "that it has made significant efforts to address feedback from Staff and the Commission by providing exhibits with additional project details," pointing to Exhibit A-12, Schedules B5.7 and B5.7.1 through B5.7.9 and Exhibit A-24, Schedules N1 and N3. DTE Electric's exceptions, p. 144.[23]

In replies to exceptions, the Attorney General echoes support for the IT disallowances supported by the Staff and intervenors and recommended by the ALJ. The Attorney General states:

> A review of the record shows that, as Staff and others point out, many of the projects are years away from being executed, do not contain sufficient detail to support necessary cost-benefit analyses, and are not fully supported as to their necessity within the suite of projects DTE is seeking approval for. The [Attorney General] argues that the ALJ's analysis and discussion in this area is substantial and well supported and that her conclusions and recommendations should be adopted.

Attorney General's replies to exceptions, p. 36.

Contested issues within IT are addressed directly below.

1. Commission Staff Recommendations

a. Level 2 Cost Estimates (Exhibit S-12.3)

The Staff recommended a 20% disallowance of costs ($54.23 million disallowance) for projects with Level 2 cost estimates due to associated uncertainty with the costs, similar to the

[23] As noted in this order, new rate case filing requirements were recently approved by the Commission in Case No. U-18238. While some of these filing requirements were approved with immediate effect, others (including IT capital and O&M filing requirements set forth in Attachment 14) become effective May 18, 2024, and are applicable to all rate-regulated utilities, including DTE Electric. *See*, May 18 order and Case No. U-18238, filing #U-18238-0094.

Commission's decision in Case No. U-20836. 7 Tr 4651-4656; Exhibits S-12.3, S-12.4, S-12.5; November 18 order, p. 192.

The ALJ agreed with the Staff's recommendation, consistent with the Commission's decision in the company's last rate case. The ALJ found DTE Electric's evidence, albeit voluminous, to be insufficient to show how any of the cost estimates were prepared, noting that the company's workpapers are not in the record. The ALJ also expressed concern over the variances with the company's 2021 and 2022 expenditure estimates versus what was actually spent. PFD, pp. 360-361.

In exceptions, DTE Electric objects to the ALJ's recommendation, arguing that its Level 2 projects have obtained comprehensive review as outlined by testimony, exhibits, and workpapers. More specifically:

> The projects have secured approval in the financial base plan from the Technology Investment Committee. The Level 2 cost estimates are also comprehensive by cost type and phase (where applicable to the project) and have been supported by the IT architecture team. IT business case costs are estimated as part of a rigorous [Annual] Planning Cycle (APC) process where detailed estimates (Level 2) are developed, which include labor, software, hardware, and vendor/consulting costs. At project execution, the Level 2 estimates are further vetted and refined before transitioning to Level 3 estimates (5T 1822, 2049-50).

DTE Electric's exceptions, p. 145. DTE Electric further takes issue with the Staff's reliance on American Association of Cost Engineering (AACE) Class 3 estimates to arrive at the 20% disallowance, highlighting that this is just one method of cost estimation notably with an upper bound of +30%. While the company does not agree with any disallowance, DTE Electric contends that "it would be more accurate to compare Level 2 estimates to AACE class 2 estimates with a -15% to +20% range." *Id*., p. 146. The company also contends that the Staff's focus on comparison of Level 2 statistics from Case No. U-20836 with a Level 3 cost estimate in this case "does not account for the complete picture," as "[a]pproximately 61% of projects had less than

10% variation in the estimates when moving from Level 2 to Level 3." *Id*. (citing 5 Tr 2050).

DTE Electric argues:

> Here again we find evidence of the [ALJ] presenting an irreconcilable conundrum through various suggestions that the Company did not admit enough evidence into the record concerning its future plans (even though it also disclosed additional information through the decades-old convention of submitting "workpapers" in a rate case) or complaining that a project description is voluminous but does not have enough detail. MCL 24.285 relevantly states: "A decision or order shall not be made except upon consideration of the record as a whole or a portion of the record as may be cited by any party to the proceeding and as supported by and in accordance with the competent, material, and substantial evidence." The record as a whole demonstrates that the [ALJ] (and several parties) demand contradictory standards. In a nutshell, the [ALJ] tries to do too much and, in doing so, perpetuates an inaccurate view of the purpose for this proceeding.

DTE Electric's exceptions, p. 146. In this regard, the company references *Union Carbide v Pub Serv Comm*, 431 Mich 135, 146; 428 NW2d 322 (1988) as to the bounds of utility regulation with which the Commission is allowed to fix and regulate rates, and for all the reasons discussed above, DTE Electric asserts that the proposed 20% disallowance should be rejected as contrary to the company's evidence in this case.

In replies to exceptions, the Staff states that it already addressed, in briefing, DTE Electric's restated arguments set forth in exceptions and maintains its position on this issue. Further responding, the Staff states that it agrees with the ALJ that DTE Electric's evidence is insufficient to show how any of the cost estimates were prepared. Per the Staff, "[t]hrough testimony and exhibits, the Company provided hundreds of pages of IT project descriptions, yet none explain the methodology for cost estimation. Staff has no way to determine the accuracy of the Company's cost estimation practices. The information Staff can quantify demonstrates concerning imprecision." Staff's replies to exceptions, p. 6. The Staff recommends that the Commission adopt the ALJ's decision.

The Commission agrees with the ALJ and the Staff and adopts the findings and recommendations of the ALJ. The Commission further agrees with the Staff that "Level 2 cost estimates are incomplete and indefinite in nature." Staff's initial brief, p. 59. The Commission also finds persuasive the Staff's rationale for using the AACE Class 3 Estimate to derive its 20% disallowance here, and as acknowledged by the Staff, "[i]f the Company spends more than 80% of the projected cost, it can include the updated information in the next electric rate case to be reviewed for reasonableness and prudency." *Id*., p. 60. In future rate case filings prior to the May 18, 2024 effective date, the Commission encourages DTE Electric to adhere to the rate case filing requirements that will become mandatory after that date, including project details and proposed expenditures for all IT projects, to avoid confronting ongoing uncertainty in reviewing voluminous company filings that, despite their volume and length, still do not provide sufficient or relevant information to support projected costs. *See*, May 18 order, p. 26, and Case No. U-18238, filing #U-18238-0094, Attachment 14.

b. Oracle Forecasting Tool (Exhibit A-12, Schedule B5.7.1, Line 17)

According to DTE Electric, this project (with an updated project name since Case No. U-20836) is to procure and implement the Oracle EPM solution for the controller's organization—to manage the company's financial planning processes and to allow resources to be redirected towards other critical work. 5 Tr 1855; DTE Electric's initial brief, pp. 148-149.

The Staff recommended a total disallowance of $3.8 million based on a lack of justification of benefits relative to costs. 7 Tr 4657-4658.

The ALJ found that DTE Electric failed to support the reasonableness and prudence of its proposed expenditures for this project and found the Staff's disallowance to be reasonable. The ALJ noted that the company did not provide an actual BCA for this project and was unpersuaded by the company's project prioritization score as support. The ALJ further noted that the company did not provide an analysis of other alternatives considered for this project, that the company did not explain how spending on this project would meaningfully reduce errors to the company's current financial reports, and that the company did not identify any critical work that its controller should be undertaking but is not. PFD, pp. 363-364.

DTE Electric disagrees. The company argues that the reasoning about cost savings being the only benefit or reason for the project fails to consider improvements in productivity and increased efficiency in both the short term and long term. DTE Electric further underscores that it "completed a comprehensive review of financial planning solutions available in the market and found that the Oracle EPM provides a viable solution at the lowest cost to achieve replacement of the current unsustainable process." DTE Electric's exceptions, p. 148. Based on testimony provided, the company asserts that it has demonstrated that this investment is "justified, prudent, and necessary." *Id*. (citing 5 Tr 1854-1856, 2053).

In replies to exceptions, the Staff states that the company restates arguments from testimony and brief for approval of this investment. The Staff maintains its position that the cost for this project far exceeds the benefit DTE Electric will receive and recommends that the Commission adopt the findings of the ALJ. Staff's replies to exceptions, pp. 6-7.

The Commission finds the ALJ's recommendation well-reasoned and supported by the record. Accordingly, the Commission adopts the ALJ's findings and conclusion on this issue. The Commission recommends the company adhere to rate case filing requirements prescribed in the May 18 order to provide appropriate and thorough explanations of benefits relative to costs in future filings.

c. Infrastructure Automation Maturity (Exhibit A-12, Schedule B5.7.1, Line 25)

DTE Electric included capital expenditures for this project to automate the patching of established deployments, to alleviate human errors and free up resources for the company to focus on strategic initiatives and operational improvements. 5 Tr 1973-1974, 2054.

The Staff averred that the project, while "'nice to have,'" is unnecessary and imprudent. 7 Tr 4659. The Staff thus recommended a full disallowance of costs ($0.41 million in the projected test year). The Staff stated that the company provided no evidence as to how this project will increase safety or reliability, nor the monetary benefits it will deliver to ratepayers. Further, per the Staff, the tasks will still be completed manually without the project, and DTE Electric's own prioritization score for the project indicates that the project will not have a large or substantial impact on any category of benefits identified by the company. 7 Tr 4659; *see also*, Staff's initial brief, pp. 56-57.

The ALJ found that DTE Electric failed to justify the reasonableness and prudence of this project. The ALJ further found that the Staff's disallowance recommendation is reasonable and should be adopted, reasoning that the company failed to provide a BCA and failed to describe the project with any sufficient or meaningful specificity to allow proper evaluation of the project on a quantifiable basis. PFD, pp. 366-368.

DTE Electric disagrees and maintains that this project is a prudent investment as "the current manual process will be automated, which will help reduce the consumption of resources at the Company, as well as reduce errors and save costs." DTE Electric's exceptions, p. 148.

In replies to exceptions, the Staff states that it maintains its position that the company did not provide any evidence of quantitative benefits for cost savings, safety, or reliability. The Staff recommends that the Commission adopt the ALJ's decision. Staff's replies to exceptions, p. 7.

The Commission finds the ALJ's recommendation well-reasoned and supported by the record. In the future, the Commission expects more on the record in terms of a BCA to support this investment on a quantifiable basis. Accordingly, the Commission adopts the ALJ's findings and conclusion on this issue.

d. Infrastructure Operations Center Automation (Exhibit A-12, Schedule B5.7.1, Line 26)

DTE Electric described this project as "continu[ing] to deploy preventative environmental monitoring which will enhance the capabilities of the Data Centers and Network / Telecom closets which maintain [the company's] Transport Network, Field Communication Network, and Network Security infrastructure." 5 Tr 1974. Per DTE Electric, investment in this project "will improve the empirical data quality leading to the reduction of the number and duration of incidents." 5 Tr 1974; *see also*, 5 Tr 1975, 2054-2055; DTE Electric's initial brief, p. 149.

Similar to above, the Staff recommended a full disallowance of costs for this project ($0.41 million in the projected test year), reasoning that this project is also a "'nice to have'" investment but unnecessary and unjustified. 7 Tr 4660. The Staff stated that the company provided no evidence of monetary benefits and that the project is an extension of tools currently used—thus without implementation tasks will still be completed. Further, "[i]f this project was indeed necessary to prevent 'fire due to high heat, or other damage in these rooms - resulting in long period [sic] of communications loss and potential catastrophic damage', it surely would have a higher [prioritization] score, indicating a significant value/impact." 7 Tr 4661 (footnote omitted) (citing 5 Tr 1975); *see also*, Staff's initial brief, pp. 57-58.

The ALJ found that DTE Electric failed to support the reasonableness and prudence of this project. The ALJ noted the company's low prioritization score and the lack of an actual BCA to review for the project. The ALJ further found persuasive the Staff's skepticism over the company's catastrophic claims regarding the project. PFD, pp. 370-371.

DTE Electric disagrees and maintains that this project is a prudent investment as "it is an extension of monitoring capabilities for critical remote locations that are unmonitored today." DTE Electric's exceptions, p. 149. The company further reiterates that cost benefit is not the only driver of this investment, noting that the investment is focused on operational reliability improvements.

In replies to exceptions, the Staff states that DTE Electric's exceptions restate arguments from the company's brief and do not refute points made by the Staff and the ALJ in any way. The Staff maintains its position and recommends that the Commission adopt the ALJ's decision. Staff's replies to exceptions, p. 8.

The Commission finds the ALJ's recommendation well-reasoned and supported by the record. Accordingly, the Commission adopts the ALJ's findings and conclusion on this issue.

e. Changing Bill Size (Exhibit A-12, Schedule B5.7.3, Line 29)

DTE Electric included capital expenditures for this project to standardize the size of paper on which the company's customer bills are printed. Per DTE Electric, the current paper on which it prints its bills is custom size with only one supplier available. "By changing the bill size, [the company] will be able to mitigate any future risks in the paper supply used to print customer bills and better able to take advantage of purchasing discounts among competing vendors." 5 Tr 1681; *see also*, 5 Tr 1783.

The Staff recommended full disallowance for the project ($900,000 between the bridge period and test year). The Staff argued that this is a company-created issue that the company should resolve itself, without passing costs along to ratepayers. The Staff further asserted that DTE

Electric failed to provide any quantifiable benefits of this project, which should be present considering testimony on behalf of the company about being able to take advantage of purchasing discounts with competing vendors by changing the bill size. In the event the Commission disagrees, however, the Staff recommended at least a 20% discount consistent with the Staff's adjustments for Level 2 projects. 7 Tr 4548-4549; Staff's initial brief, pp. 53-54.

The ALJ agreed with the Staff and found that the Staff's full $900,000 adjustment should be adopted. The ALJ raised concerns about savings with the project and found that DTE Electric failed to respond to the Staff's contention that ratepayers should not pay for the company's poor previous choice here. PFD, p. 373.

Disagreeing with the ALJ, DTE Electric states that quantified customer benefits for this project were provided in rebuttal testimony, which is permissible and should not be disregarded. With savings of $300,000, the company contends that the investment is justified and would be paid back within three years. DTE Electric further disagrees with the Staff about there being no customer advantages with this investment, as printing bills is a cost of business and reducing these costs do provide an advantage to customers. The company also asserts that "[t]he circumstances under which the Company had decided to print the bills on non-standardized paper in the distant past should not preclude this project from being considered on the merits presented." DTE Electric's exceptions, p. 150. DTE Electric thus contends that the Staff's flawed conclusion and proposed disallowance recommended for adoption by the ALJ should be rejected and the company's investment in this project should be deemed reasonable and prudent based on customer benefits.

The Commission finds the ALJ's recommendation well-reasoned and supported by the record. Accordingly, the Commission adopts the ALJ's findings and conclusion on this issue.

f. Customer Sales and Service (Exhibit A-12, Schedule B5.7.3, Line 34)

DTE Electric included capital expenditures for this project to provide "the ability to run campaigns and to segment customers who would be most interested and benefit from the Company's products and services" along with "functionality [that] provides a ticket and order creation and tracking capability that the Company does not have today." 5 Tr 1719.

The Staff recommended that all capital costs for this project be disallowed (i.e., $7,326,000). The Staff averred this "very expensive" project to essentially be "another opportunity for the Company to market its programs and services to ratepayers," which the Staff does not support. 7 Tr 4550; *see also*, Staff's initial brief, pp. 54-55.

The ALJ found that the Staff's adjustment is reasonable and should be adopted. The ALJ found that DTE Electric did not respond to Staff's recommendation and failed to establish that the projected expenditures for the project are reasonable and prudent. PFD, p. 375.

No exceptions were filed on this issue.

The Commission finds the ALJ's recommendation well-reasoned and supported by the record. Accordingly, the Commission adopts the ALJ's findings and conclusion on this issue.

g. Pre-Pay Pilots (Exhibit A-12, Schedule B5.7.3, Lines 51 and 52)

DTE Electric included capital expenditures for the company's proposed voluntary prepaid billing pilot program (PrePay and PrePay Phase II). Per the company, these capital expenditures include capital invested for its PrePay program, described in Case No. U-21087, as deployed solutions for that program can be used to implement this similar pilot, with some configuration changes. 5 Tr 1743.

Based on the Commission's decisions in Case Nos. U-20836 and U-21087, the Staff recommended full disallowance of historic costs for PrePay and projected costs for PrePay Phase II. More specifically:

> In its November 18, 2022 Case No. U-20836 Order, the Commission disallowed recovery of the DTE PrePay program capital expenditures. In that order, the Commission did not base their disallowance on the merits of the PrePay program, but rather on the fact that it had not yet rendered a decision regarding approval of the program and the associated Billing Rule waivers, both of which were requested in DTE Electric's PrePay Case No. U-21087. In its December 21, 2022 Case No. U-21087 Order, the Commission denied DTE's request to implement a DTE PrePay program, as it was described by the Company in Case No. U-21087.

7 Tr 4552-4553. The Staff further argued that the costs are excessive, that the company has not persuasively demonstrated a customer desire for a prepay billing program, and that only a small subset of the company's customers would be eligible for the program. In the alternative, the Staff recommended a 20% disallowance for costs, consistent with its recommended adjustments for Level 2 projects. 7 Tr 4557. During briefing, DTE Electric withdrew its request to recover the $2.6 million of capital costs requested for the projected test year. DTE Electric's initial brief, pp. 254-255.

The ALJ agreed with the Staff, considering the high cost of the first proposed and rejected prepay pilot and for consistency with the Commission's decision in Case No. U-20836 (to base cost recovery on program approval). The ALJ also recommended rejection of the company's second pilot proposal in this case and thus recommended that associated costs with this project be excluded from rates. If the Commission however approves the currently proposed prepay pilot, the ALJ recommended that the Staff's 20% Level 2 adjustment be adopted. PFD, pp. 376-377; *see also*, PFD, pp. 611-615.

DTE Electric objects to the ALJ's recommendation and, relevant to this portion of the order on cost recovery, maintains that its requested $6.7 million recovery is justified.[24] The company clarifies that it:

> already invested the $6.7 million to build Phase 1 of its PrePay Program. This solution was deployed into the production CR&B system in December of 2021. The deployed solution includes all of the core functionality required to support a prepaid billing program, and can be used, with some configuration changes, to implement the proposed PrePay Pilot (5T 1743). Additionally, as presented in [DTE Electric] witness Hatsios rebuttal testimony, since the Pre-Pay Program solution was deployed in December 2021, the cost to ratepayers for the PrePay Pilot would not be the full capital recovery of $6.7 million due to the reduction from already realized depreciation of approximately $4.4 million, the cost of which is being borne by DTE shareholders. As provided for in Exhibit A-45 Schedule JJ3, the projected net book value of the project in November 2023 will be approximately $2.3 million, and by November 2024, it will be approximately $93,000. Therefore, the net average rate base included in the calculation of the revenue requirement would be approximately $1.2 million, and the cost to ratepayers through revenue recovery would be approximately $2.3 million. (5T 1786).

DTE Electric's exceptions, p. 212.

In replies to exceptions, the Staff disagrees with the company's assertions about the $6.7 million already spent is justified for cost recovery. The Staff states:

> Staff disagrees with the Company's way of thinking about this and would remind the Company that though the Commission stated in its Order for Case No. U-21087 that a prepay program "could provide beneficial innovations for managing energy costs and consumption for certain customers if properly designed and vetted," nowhere in that order did the Commission approve the recovery of Pre-Pay expenditures from ratepayers, especially at a cost of nearly $7 million. ([ ] Case No. U-21087, 12/21/2022, p 17.) The Company chose to pursue this program and should bear the costs stemming from it until such a time that it is able to create a pre-pay program that garners Commission approval.

Staff's replies to exceptions, pp. 21-22.

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[24] DTE Electric's exceptions on its Pre-Pay Pilot are further detailed below in Part VIII (Other Revenue Related Items) of this order, where the substance of this pilot is fully discussed and addressed.

The Attorney General asserts that the Commission should adopt the ALJ's recommendation with regard to this pilot and the funding requests associated with it. Attorney General's replies to exceptions, pp. 50-53.

The DAAOs assert that the Commission should not approve expenditures on this pilot absent sufficient evidence of ratepayer benefits. DAAOs' replies to exceptions, pp. 1-3.[25]

Given the Commission's decision on the company's pilot proposal in Part VIII (Other Revenue Related Items) of this order, the Commission agrees with the ALJ and finds that the $6.7 million in historic capital costs should be disallowed.

h. DTE Electric Utility Network Project (Exhibit A-12, Schedule B5.7.4, Line 7)

DTE Electric described its utility network (UN) project as necessary to pursue a needed transition with the current geographic information system platform that the company utilizes for geospatial data and analysis. 5 Tr 1902-1905.

The Staff recommended a 50% reduction of costs for this project in this case ($359,375 disallowance), based on capital expenditures for the project for 2023 and 2024 being identical, likely making them preliminary projections, and also considering that there is no historic spending associated with the project. 7 Tr 4417-4420.

The ALJ agreed with the Staff and found that DTE Electric had not established the basis for its cost estimate. More specifically, the ALJ stated that exhibits relied upon by the company either did not explain the basis for costs or were not in the record. PFD, p. 379.

DTE Electric disagrees and argues that detailed scoping including robust requirements documentation was provided, thus establishing the basis of the company's cost estimate for this

[25] Further details on the DAAOs' exceptions on this issue are addressed below in Part VIII (Other Revenue Related Items) of this order.

project. The company mentions the annual cost breakdown reflecting internal and external labor by resource group and states that the consistency in annual costs is reflective of a planned schedule of spending with the allocated resources. DTE Electric argues that the Staff's contentions about projections being preliminary are pure speculation, which the Commission cannot lawfully rely upon in rendering its decision. DTE Electric's exceptions, p. 151.

The Commission finds the ALJ's recommendation well-reasoned and supported by the record. Accordingly, the Commission adopts the ALJ's findings and conclusion on this issue.

i. Supervisory Control and Data Acquisition System Improvement (Exhibit A-12, Schedule B5.7.4, Line 13)

DTE Electric explained its investments in the company's SCADA system improvement project as needed for adhering to regulatory and security standards and providing updates to ensure uninterrupted functionality. 5 Tr 1911-1912; *see also*, 5 Tr 2056-2057 and Exhibit A-43, Schedule HH2.

Based on projected costs for 2022, 2023, and 2024 being identical, likely indicating that the projections are preliminary and that actual expenditure amounts could be different, the Staff recommended a reduction of costs of $282,072 for this project (for the bridge period and test year). 7 Tr 4418-4419.

The ALJ agreed with the Staff and found that DTE Electric had not established the basis for its cost estimate. More specifically, the ALJ stated that exhibits relied upon by the company either did not explain the basis for costs or were not in the record. The ALJ was further unpersuaded that 2019 historic spending represented an anomaly for the company given the lack of details about work performed in any given year. PFD, pp. 380-381. The ALJ stated that "[t]he generic description of the work to be performed clearly raises the question of how DTE knows in advance what will be capital and what will be O&M expenditures. The record supports Staff's conclusion that DTE's cost estimate is preliminary and not definitive." *Id*., p. 381.

DTE Electric disagrees. The company argues that the Staff's use of historic spending in 2019 was inappropriate because that year was an anomaly, in that the company mandated a freeze that eliminated any development for its old EMS system in preparation for implementation of the new system that would be launched as part of ADMS. Per DTE Electric, the company returned to full spending the following year, with the company being transparent with the Commission about its investment plans. DTE Electric also argues that its annual costs reflect required labor by resource group, and the similarity of such costs "simply reflects a planned level of spending with finite resource allocation to deliver the project." DTE Electric's exceptions, p. 152.

The Commission finds the ALJ's recommendation well-reasoned and supported by the record. Accordingly, the Commission adopts the ALJ's findings and conclusion on this issue.

j. ESRI Application Health (Exhibit A-12, Schedule B5.7.4, Line 18)

DTE Electric described this project as supporting enhancements for GPS mapping data through upgrades, deployment of additional features and capabilities, and improving the management and sharing of data via workflow automation. 5 Tr 1917-1918; *see also*, 5 Tr 2057-2058 and Exhibit A-43, Schedule HH3.

Considering historical spending and identical projected spend amounts for 2023 and 2024, the Staff recommended downward adjustments of $194,766 in capital expenditures for this project (for the bridge period and test year). The Staff averred that by virtue of the amounts being identical, the amounts are likely preliminary and actual expenditure amounts could be different. 7 Tr 4419.

The ALJ agreed with the Staff and found that DTE Electric had not established the basis for its cost estimate for this project. The ALJ found that the exhibits that the company relied upon lacked sufficient explanation and that the company's workpaper on this was not in the record. The ALJ further raised concern over details provided for this project which overlap with the company's DTE Electric UN project discussed above. PFD, pp. 384-385.

DTE Electric disagrees. The company argues that the Staff's use of historic spending is inappropriate because the company put investments in this asset on hold while supporting the overall ERSI upgrade project, thereby allowing it to maximize efficiencies and complete this support under forecast in 2021. DTE Electric also argues that its annual costs reflect required labor by resource group, and the similarity of such costs "simply reflects a planned level of spending with finite resource allocation to deliver the project." DTE Electric's exceptions, p. 153.

The Commission finds the ALJ's recommendation well-reasoned and supported by the record. Accordingly, the Commission adopts the ALJ's findings and conclusion on this issue.

2. Recommendations by the Detroit Area Advocacy Organizations

The DAAOs raised several overall objections and concerns over DTE Electric's IT capital expenditures, including objections and concerns involving inadequate customer service, poor communication and coordination, vulnerable customers and affordable rates, and the company's profit maximization principle of continually seeking efficiencies through interest-bearing capital investments. The DAAOs also called for the Commission to "open an inquiry into the standards for treating IT investments as capital and for applying performance-based measures to the Company's rate of profit on approved IT capital investments." 6 Tr 4018. Per the DAAOs, "[i]t is important that the Commission take a critical eye to the Company's apparent focus on developing profitable IT capital proposals with marginal and unguaranteed benefits to the entire customer base while LMI [low-to-moderate income] customers continue to struggle under a crisis of unaffordability." 6 Tr 4019; *see also*, the DAAOs' initial brief, pp. 20-22. The DAAOs' specific objections are addressed directly below, with their request for an IT audit addressed in Part XI of this order.

a. Advanced Analytics Use Cases (Exhibit A-12, Schedule B5.7.3, Line 14)

DTE Electric described this project as addressing inefficiencies in the energy assistance application process by simplifying the process for customers and proactively matching the right customers with the right agency/program for assistance. This project is broken down into three different use cases for 2022, 2023, and 2024. 5 Tr 1725-1727.

The DAAOs objected to the $4.3 million in capital expenditures associated with this project (for the bridge period and test year), arguing that this project as presented is not reasonable and prudent and is rather consistent with the company's project maximization principle to reduce O&M spending to instead increase capital spending to earn a profit. 6 Tr 4015.

The ALJ found that DTE Electric failed to adequately support the use cases for this project and that the remaining costs not already covered by the Staff's Level 2 adjustment discussed above should be excluded from rate base. The ALJ discussed the lack of project timelines provided, the lack of a BCA or quantification of benefits, the company's low prioritization score, and planned other activities and spending by the company to further similar objectives. With this project, the ALJ also noted DTE Electric's debt-marketing practices and the Staff's concerns over such practices. PFD, pp. 391-397.

DTE Electric disagrees. The company recalls testimony in support of its assertion that the DAAOs' arguments with regard to this project are wrong, notably that the DAAOs created unnecessary confusion by comingling the 2023 and 2024 use cases in making their arguments. DTE Electric's exceptions, pp. 153-154 (citing 5 Tr 1725-1726, 1798-1799). DTE Electric also notes that neither the Staff nor the Attorney General raised any concerns about the reasonableness and prudency of this project, aside from the Staff's 20% blanket disallowance for Level 2 cost estimates. The company contends that the basis of the DAAOs' objection to this project are more to do with their "views on the current state of energy affordability and what type of IT investments would be helpful in advancing a unified affordability program." DTE Electric's exceptions, p. 154. DTE Electric asserts it clear that the $40,000 reduction in collection agency fees associated with this project can hardly be proof that the company is acting in a manner to maximize profits.

As to the PFD, DTE Electric addresses the ALJ's suggestions about inconsistencies and omissions in the company's evidence as follows:

> The [ALJ] points out differences in the scope of the 2022 and 2024 use cases in the business cases vs. witness Hatsios testimony and costs shown in Exhibit A-12 Schedule B5.7.3, Line 14. As previously mentioned, the executive summaries of IT capital projects provided in Exhibit A-24, Schedule N1 are "point-in-time" documents reflecting what the scope and estimated costs are as of the date of developing the business case. During implementation, the 2022 project scope was reduced to two use cases, the NPS Phase 2 and Reactive Collection Cycle (or propensity-to-pay model), and hence, only two use cases were described in witness Hatsios testimony and accordingly, the cost of the 2022 investment was reduced from the estimated cost of $2.2 million to the projected cost of $1.4 million in capital expense. (T5 1725-1726, Exhibit A-24 Schedule N1 page 288-289). Since the 2023-2025 Advanced Analytics Use Cases project is a single multi-year project with different use cases in each year (2023 – 2025), there is no separate breakdown of costs by use case. Given the rate case periods in the instant case, the $4.3 million of capital requested for recovery only pertains to the 2022-2024 project costs and does not include the estimated cost of approximately $3 million in capital expense for the 2025 use cases. (Exhibit A-24 Schedule N1 page 293).

DTE Electric's exceptions, pp. 155-156.

Further responding to the PFD, the company clarifies that its 2024 use case and its contact center enablement project are "two distinctly different projects." *Id*., p. 156 (citing 5 Tr 1669; Exhibit A-24, Schedule N1, p. 342; PFD, p. 395). Additionally, according to the company, the methodology questioned by the ALJ for measuring the expected value of the 2024 use case for energy assistance eligibility is "commonly used statistical method for evaluating project benefit and would include setting up a test and a control group of customers. Measurement would be isolated from and controlled for the benefits provided by other IT projects or changes in collection processes or policies to exclude the effects of these other projects or changes." DTE Electric's exceptions, pp. 156-157. And lastly, as to the ALJ's concern about alleged potential double recovery of selling uncollectible accounts to third parties for collection, DTE Electric states:

> To the contrary, when the debt is sold, the proceeds reduce historical net write-offs that are used to set the bad debt expense that the Company is requesting to recover in rates, which eliminates any risk of double recovery. The Company also has a responsibility, on behalf of its ratepayers, to attempt to recover uncollectibles through available collection processes including debt sales.

Id., p. 157 (footnote omitted).

In replies to exceptions, the DAAOs argue that the Commission "should reject DTE's proposed Advanced Analytics spending because it is an ineffective band-aid on a larger affordability problem that DTE has otherwise not attempted to address." DAAOs' replies to exceptions, p. 11. In greater detail, the DAAOs state that:

> the Company reiterates its argument about the potential comingling of various data in Witness Koeppel's testimony and then asserts that its proposed spending in each year planned will support ratepayer affordability programs. But DTE misses the point of Witness Koeppel's argument: even if DTE's proposed AA spending allowed it to distribute assistance "incredibly efficient[ly]," this proposal is primarily an opportunity for DTE to make additional profit from capital expenditures and distracts from the kind of support that DTE could otherwise provide to actually address the root of the affordability crisis. For example, it would be more reasonable for DTE to spend less on capital expenditures in order to make energy bills more affordable for LMI ratepayers from the start, rather than ramp up capital expenditures and attempt to connect LMI ratepayers to a hodgepodge of bill assistance programs after the fact, especially given that these assistance programs often have too limited enrollment and provide insufficient assistance to ratepayers. "Rather than propose actual solutions to the affordability crisis," DTE's AA proposal is just one example of DTE's attempts to use a quick band-aid solution to "appl[y] for profitable capital" from which it seeks a return on investment.

DAAOs' replies to exceptions, pp. 14-15 (footnotes omitted).

For the reasons outlined by the ALJ, the Commission is not persuaded that this project, as presented, is reasonable and prudent. The Commission thus adopts the ALJ's recommended $4.3 million disallowance.

b. Self-Service Projects

DTE Electric described its self-service projects as projects that reduce call volumes and contact center costs. These projects include: (1) MIMO digital self-service, (2) outage digital self-service, (3) billing digital self-service, (4) collection digital self-service, and (5) payment digital service. 5 Tr 1604-1665.

The DAAOs questioned the net benefits of this portfolio of investments compared to its total capital cost, noted again the company's incentive in seeking efficiencies on the operational side by achieving interest-bearing investments on the capital side, and asserted the need for more direct support for vulnerable ratepayers, not less. 6 Tr 4016-4019. The DAAOs thus recommended that the company's proposed investments of $51.3 million be rejected as unsupported. DAAOs' initial brief, pp. 20-22.

The ALJ agreed with the DAAOs and found that they "correctly understood that for customers to realize the savings, DTE must achieve the projected call reduction targets." PFD, p. 402. The ALJ further found that DTE Electric:

> has not justified its benefit cost analysis results because it has not established the basis for its projected call volume decreases, it has not established that the expenditures it proposes are necessary to obtain that level of call volume decrease, and given the magnitude of the capital expenditures it is asking ratepayers to pay, it has not established what the risk or likelihood is that those savings will not materialize.

Id., pp. 402-403. The ALJ also raised concern about the costs of advanced analytics use case projects discussed above "swallow[ing] up" the NPV savings the company has calculated for this portfolio of investments. PFD, p. 404. The ALJ further noted that the DAAOs' request for an inquiry regarding the company's IT capital expenditures is addressed later in her PFD. *Id*.; *see also*, PFD, p. 854.

DTE Electric disagrees. The company argues that the ALJ's suggestion that it should be required to guarantee future savings neglects that the future is inherently uncertain and is contrary to the preponderance of evidence standard applicable to this case. Nevertheless, DTE Electric asserts that there are several pieces of evidence in the case that support its commitment to reducing contact center call volume. Specifically:

> In Exhibit A-24 Schedule N5 on page 1, the Company summarizes the 2021-2024 Net Call Reductions and associated Net O&M Savings and 2023-2027 Net Call Reductions and associated Net O&M Savings from investments in the Reduced Call Volume Projects. These projected call volume reductions are based on realized reductions from the Company's investment in digital self-service capabilities starting in 2013 through 2022, which enabled a net reduction of 1.87 million calls over a 10-year period, and projected reductions in calls as more transactions such as for collections which generated approximately 1 million calls in 2022, and sub-transactions are added. (5T 1611-1613).
>
> Also, on page 1 of Exhibit A-24 Schedule N5, the Company provided the Digital Engagement Rate (DER) by transaction in 2022 and the projected increases in DER for each transaction by 2027. DER is one of two ways the Company measures customers' interests in, and adoption of, self-service channels to complete their transactions with DTE, the other metric is Self-Service Rate. The growth in the Self-Service Rate since 2016 and DER since 2020 substantiates the decrease in live calls. (5T 1613-1615). Witness Hatsios describes in great detail the self-service capabilities that have been, and will be, enabled for each of the five key customer transactions (MIMO, Outage, Collection, Billing and Payment) in 2021 through 2024 that will result in increasing levels of DER by 2026 or 2027 and correspondingly, reduced call volume to the Contact Center, providing customers the benefit of lower Contact Center O&M costs. Higher DER and projected call volume reductions are further referenced and provided for each transaction in Exhibit A-24 Schedule N5 and modeled using NPV analysis in Exhibit A-24 Schedule N6. (5T p 1604- 1665). Finally, the Company has already passed on the O&M savings from the projected call volume reductions to customers for the period 2021-2024, removing 100% of the risk to customers realizing the benefit, shown on page 1 Line 16 and page 2 Line 23 of Exhibit A-24 Schedule N5, modeled in the NPV model in Exhibit A-24 Schedule N6 Line 27, and the adjustment made to reduce O&M costs from the Digital Investments in Exhibit A-13 Schedule C5.7

> Line 5 and footnote 3. Together, reduced call volume based on realized and projected reductions, higher projected DER, and the downward adjustment to O&M expenses from the digital investments should more than adequately support the reasonableness and prudence of the self-service digital investments.

DTE Electric's exceptions, pp. 158-159.

With this, the company notes that neither the Staff nor the Attorney General commented on the reasonableness and prudence of these self-service projects despite concern in prior rate cases. DTE Electric also argues that the ALJ arbitrarily added capital expenditures from an unrelated program without considering that project's scope, making claim that such projects offset benefits provided to customers. Per DTE Electric, "[a]s described in witness Hatsios testimony, projects that are included in the $51.3 million investment are those that provide the technical capability of enabling customers to complete their transaction in a digital channel (e.g., Web, Mobile, IVR, VA, or Chat) versus utilizing the call channel by calling a CR to complete their transaction." *Id*., pp. 159-160.

In replies to exceptions, the DAAOs argue that the Commission "should reject DTE's proposed self-service IT expenditures because they are not cost-justified." DAAOs' replies to exceptions, p. 11. In greater detail, the DAAOs maintain that DTE Electric has not provided sufficient evidence to show that its proposed expenditures are likely to result in the call volume reductions that the company claims. The DAAOs argue that the company's reliance on reduced call volumes of about 1.87 million calls between 2013 and 2022 is misleading as company testimony suggested that approximately 1 million of those calls were the likely result of COVID-19 and customers' increased familiarity and reliance on existing digital tools, not because of any new investment by the company. The DAAOs further highlight no sufficient support for the company's projections in the first place, as explained in the PFD and as further illustrated by DTE Electric's evidence showing a call reduction of 70,000 in 2021 but an increase of 153,000 in

2022. Lastly, the DAAOs state that the company is incorrect in continuing to argue in exceptions that the DAAOs misunderstood the NPV analysis of the company's self-service projections, which the ALJ explained in the PFD. Per the DAAOs:

> As explained above, DTE merely assumed that its projections were accurate—with little to no explanation—and that the Company would as a result meet those projections. That is not a sufficient basis, especially for a large program like this where DTE is requesting to recover $51.3 million from ratepayers without any reasonable assurance that the Company will achieve the call reductions needed to result in the potential savings calculated.

DAAOs' replies to exceptions, pp. 13-14. The DAAOs thus maintain that the Commission should disallow DTE Electric's proposed costs, as recommended by the ALJ.

The Commission finds the ALJ's recommendation well-reasoned and supported by the record. Accordingly, the Commission adopts the ALJ's findings and conclusion on this issue.

H. Corporate Staff Group

1. Waterford Service Center Contingency (Exhibit A-12, Schedule B5, Line 11; Schedule B5.8, Page 3, Line 13)

The Staff identified $4.4 million in contingency within DTE Electric's capital expenditure projections for the company's Waterford Service Center project and recommended that it be disallowed. 7 Tr 4649; Staff's initial brief, p. 65. The ALJ noted that the company neither rebutted this nor addressed it in briefing and by way of Appendix E to the PFD recommended that the disallowance be adopted. PFD, p. 404, Appendix E, p. 2, line 70.

The Commission has repeatedly disallowed contingency in past rate cases. *See*, December 9, 2021 order in Case No. U-20940 (December 9 order), pp. 9-10. Accordingly, the Commission adopts the ALJ's findings and conclusion on this issue.

2. "Other Miscellaneous" (Exhibit A-12, Schedule B5.8, Line 6)

Within its miscellaneous category, DTE Electric included projected costs for physical and cyber security enhancements to comply with NERC's critical infrastructure program (CIP) in 2023 and 2024. 5 Tr 1533.

The Staff recommended a $1.34 million reduction to these costs in this case based on insufficient justification considering historical spending and the company's acknowledgment that it has no specific projects planned for 2023 or 2024. 7 Tr 4334-4335; Exhibit S-18.0; Staff's initial brief, pp. 62-63. The Staff also noted in briefing that the company did not file rebuttal testimony with regard to the Staff's recommended adjustments. *Id*., p. 63.

The ALJ found the Staff's adjustment to be reasonable. The ALJ stated that DTE Electric did not specifically address the Staff's recommended adjustment and found that the company failed to support its projection as "anything other than a placeholder." PFD, p. 405.

No exceptions were filed on this issue.

The Commission finds the ALJ's recommendation well-reasoned and supported by the record. Accordingly, the Commission adopts the ALJ's findings and conclusion on this issue.

I. Charging Forward

Consistent with discussion from Section IX of her PFD, the ALJ recommended that the Commission adopt the Staff's recommended adjustments of $4.93 million to the company's Charging Forward capital cost projections. PFD, p. 406; *see also*, Staff's initial brief, pp. 63-65.

Consistent with the Commission's agreement with the ALJ, as set forth below, the Commission adopts the ALJ's recommended adjustments of $4.93 million to the company's Charging Forward capital cost projections.

J. Accumulated Provision for Depreciation

Considering recommendations within the PFD, the ALJ indicated a projected depreciation reserve of $7.95 billion. PFD, p. 406, Appendix B.

The decisions in this order result in an accumulated provision for depreciation of $7,944,289,000.

K. Working Capital (Exhibit A-12, Schedule B4)

DTE Electric included $1.26 billion of working capital in this case. The Staff recommended four adjustments, reducing the company's working capital amount to $1.249 billion. 7 Tr 4447; Exhibit S-2, Schedule B4. The Attorney General recommended six adjustments, reducing the company's working capital amount to $1.174 billion. 6 Tr 3761-3767; Exhibit AG-1.44. These adjustments are discussed below.

1. 13-Month Average Balances

The Staff recommended an adjustment to move the company's working capital projection to 13-month balances, resulting in a $1.68 million reduction. 7 Tr 4447-4448; Exhibit S-2, Schedule B4, Line 15, Column (d); Staff's initial brief, p. 7. The Attorney General took issue with the company's forecasted fuel inventory balances, arguing for a $20.0 million reduction due to the company's improper use of the average of two monthly balances in determining its projected test year balance. 6 Tr 3762-3764; Exhibits AG-1.45, AG-1.47; Attorney General's initial brief, pp. 93-94. DTE Electric agreed with the Staff's recommendation and in doing so noted that the Attorney General's reduction is thus duplicative to the Staff's overall adjustment to working capital and should be rejected. 5 Tr 1575; DTE Electric's initial brief, pp. 20-21.

The ALJ found that the Staff's correction should be adopted, which the ALJ stated then resolves the Attorney General's fuel inventory adjustment by moving the company's working capital projections to a 13-month-average balance. PFD, p. 407.

In exceptions, DTE Electric affirmed its agreement with the Staff on this issue. DTE Electric's exceptions, p. 162.

The Commission finds agreement between the parties on this issue and thus no further discussion is necessary.

2. Other Accounts Receivable (Exhibit A-12, Schedule B4, Line 11)

The Staff recommended an adjustment to remove an embedded balance of $7,257,579 related to non-utility items, which the Staff averred should be considered non-recoverable. 7 Tr 4447-4448; Exhibit S-7.0; Staff's initial brief, pp. 6-7. DTE Electric accepted this adjustment. DTE Electric's initial brief, p. 21.

The ALJ concluded that the Staff's adjustment should be adopted. PFD, p. 407.

In exceptions, DTE Electric affirmed its agreement with the Staff on this issue. DTE Electric's exceptions, p. 162.

The Commission finds agreement between the parties on this issue and thus no further discussion is necessary.

3. Reg Asset—Delivered Fuels Electrification Pilot (Exhibit A-12, Schedule B4, Line 37)

As a result of its recommendation that the Commission reject the company's proposed delivered fuels electrification pilot (DFEP) in its current form, the Staff correspondingly recommended a downward adjustment to the company's regulatory asset-delivered fuel electrification pilot projection in the amount of $658,000. 7 Tr 4448, 4614-4616; Exhibit S-2, Schedule B4, Column (e); Staff's initial brief, pp. 8-12.

Consistent with her discussion in Section IX of her PFD recommending that the pilot not be approved at this time, the ALJ recommended that these projected deferred costs also be excluded from working capital. PFD, p. 408.

In exceptions, DTE Electric objects to the ALJ's recommendation and argues that the pilot should be approved. DTE Electric's exceptions, p. 162, n. 105 and pp. 218-222.[26]

Consistent with the Commission's decision below, the Commission agrees with the ALJ and adopts her findings and recommendations.

4. Reg Asset—Charging Forward (Schedule B4, Line 33)

Consistent with her recommendation that the Commission remove deferred costs of the EV program from the projected test year, the Attorney General correspondingly recommended that 50% of the deferred amount of $12.4 million (or $6.2 million) representing the average balance in the regulatory asset account be removed from working capital. 6 Tr 3766; Exhibit AG-1.44; Attorney General's initial brief, p. 94. In harmony with its disallowance recommendation regarding the company's emerging technology fund (ETF) becoming a permanent program, the Staff correspondingly recommended a $900,000 reduction to the company's regulatory asset—charging forward projection. 7 Tr 4428-4429, 4448; Staff's initial brief, pp. 7-8.

Given her recommendation later in the PFD that the Staff's proposed disallowance be adopted, the ALJ recommended that the Staff's $900,000 proposed reduction in working capital be correspondingly adopted. PFD, p. 408.

In exceptions, DTE Electric objects to the ALJ's recommendation. The company indicates agreement with extending its ETF as a pilot for five years, versus making the program permanent

[26] See Part VIII (Other Revenue Related Items) below for further discussion on this issue.

as originally proposed, but asserts that corresponding funding should then be provided. DTE Electric acknowledges the removal of $1.0 million in O&M by the ALJ via Appendix C to the PFD but argues that the $900,000 reduction in working capital then produces an incorrect result. The company states that the $900,000 relates to the bridge period and contends that, if the Commission extends the pilot as recommended by the ALJ, $1.0 million in funding as a regulatory asset would be appropriate for a pilot. DTE Electric's exceptions, p. 162, n. 105 and pp. 224-226; *see also*, DTE Electric's replies to exceptions, p. 29, n. 23.[27]

In replies to exceptions, the Attorney General asserts that Commission should reject DTE Electric's request to further extend this pilot and for additional associated funding. Attorney General's replies to exceptions, p. 54.

Given the Commission's approval of extending DTE Electric's ETF as a pilot for an additional five years, as recommended by the ALJ and as discussed by the Commission in further detail below, the Commission agrees with the company and finds funding here of $900,000 in the bridge period and $1 million in the test year appropriate.

5. Property Insurance Fund Balance (Exhibit A-12, Schedule B4, Line 3)

The Attorney General recommended removal of the $38.9 million balance for a special investment fund with assets being held by Energy Insurance Services because gains related to changes in market value are excluded from rates. 6 Tr 3761-3762; Exhibits AG-1.44, AG-1.46. DTE Electric disagreed and asserted that the company's investment for funding insurance supports utility operations and is properly included in rate base. In lieu of removing the asset from rate base, the company proposed including in future rate cases "a forecast of the income impact from

[27] See Part VIII (Other Revenue Related Items) of this order below for further discussion on this issue.

the fund in projected operating income based on a five-year average in lieu of removing the asset from rate base," consistent with how gains and losses on DTE Gas Company's (DTE Gas's) grantor trust fund are treated for ratemaking purposes. 5 Tr 1575; *see also*, 5 Tr 1565, 1574; DTE Electric's initial brief, p. 20.

The ALJ noted agreement between DTE Electric and the Attorney General as to how this issue should be addressed and thus recommended that the agreed-upon ratemaking treatment should be adopted in this case. In the absence of this agreement, however, the ALJ found that:

> the record would be inadequate for a determination of the appropriate treatment of this fund, and recommends that the Commission direct DTE to provide additional information in its next rate case, explaining in particular how the fund is managed, i.e. who has control over the investments in the fund and what degree of control does DTE have or exercise.

PFD, p. 410.

DTE Electric disagrees with the ALJ and asserts that a disagreement between the company and the Attorney General remains. Comparing the Attorney General's initial brief to the company's rebuttal testimony, DTE Electric states that it "did not, and does not agree to remove the EIS asset balance from working capital." DTE Electric's exceptions, p. 161 (citing Attorney General's initial brief, p. 93; 5 Tr 1574-1575). The company reiterates testimony that the investment for funding insurance supports utility operations and is properly included in rate base, along with its proposal for it to include a projection for gains and losses on the investment in future rate cases, in lieu of removing the asset from rate base. DTE Electric's exceptions, p. 161 (citing 5 Tr 1565, 1574-1575; Exhibit A-36, Schedule AA3).

In replies to exceptions, the Attorney General states:

> To the extent a disagreement remains that was missed or misunderstood by the ALJ, the [Attorney General] re-reviewed the issue and agrees with DTE that the [Attorney General] misunderstood the company's position in Ms. Uzenski's rebuttal testimony. The [Attorney General]'s understanding, as she also put in

> briefing, was that the Company was willing to remove the EIS working capital balance in lieu of including the gains and losses. Based on DTE's exceptions, the [Attorney General]'s new understanding is that the Company's position was to leave the EIS balance in working capital and include the average five-year gains or losses in the fund as an offset. After reviewing this matter further and based on the [Attorney General]'s current understanding, she agrees with DTE's position and withdraws her original proposal to remove the $38.9 million from working capital for this fund with EIS.

Attorney General's replies to exceptions, p. 37.

The Commission, considering the record and the party's exceptions and replies to exceptions, finds no further dispute on this issue. The Commission agrees with DTE Electric that its investment for funding insurance supports utility operations and is properly included in rate base. Further, given this decision, the company agrees to include in future rate cases "a forecast of the income impact from the fund in projected operating income based on a five-year average in lieu of removing the asset from rate base," consistent with how gains and losses on DTE Gas's grantor trust fund are treated for ratemaking. 5 Tr 1575; *see also*, 5 Tr 1565, 1574; DTE Electric's initial brief, p. 20.

6. Deferred Incentive Compensation (Exhibit A-12, Schedule B5.4, Line 40)

The Attorney General averred that DTE Electric's decision to establish a deferred regulatory asset for incentive compensation for 2023 is premature and thus recommended that the Commission remove the $5.6 million deferred regulatory asset balance from the company's projected working capital. 6 Tr 3765; Attorney General's initial brief, p. 93. DTE Electric disagreed, arguing that accrual accounting allows it to recover a regulatory asset when recovery is probable and because the Commission approved such treatment in Case No. U-20836. 5 Tr 1565, 1575-1576; DTE Electric's initial brief, p. 21

The ALJ agreed with the Attorney General and recommended that this working capital adjustment be adopted. The ALJ stated:

> [I]n allowing DTE the possibility of recovering additional EICP [employee incentive compensation plan] [expense] associated with operational measures, the Commission in Case No. U-20836 did not intend to require ratepayers to provide DTE with a return on that potentially-deferred amount of incentive compensation, prior to a determination whether the operational targets for a given year actually were met.

PFD, p. 412.

DTE Electric disagrees. The company reiterates that accrual accounting allows it to record a regulatory asset when recovery is probable. DTE Electric further states that, "[a]lthough the Company is not requesting recovery of the deferred costs in amortization expense in the instant case, it is appropriate to accrue the regulatory asset on the balance sheet because the Commission approved such treatment in Case No. U-20836." DTE Electric's exceptions, p. 162 (citing 5 Tr 1565, 1575-1576).

In replies to exceptions, the Attorney General responds to the company's argument in exceptions and argues that "it is clear that is *not* what the Commission intended in [Case No.] U-20836, and such a finding would work an unjust windfall to the utility at the expense of customers." Attorney General's replies to exceptions, pp. 37-38 (emphasis in original). The Attorney General asserts that the Commission should adopt the ALJ's analysis and conclusion on this issue.

The Commission finds the ALJ's recommendation well-reasoned and supported by the record. The Commission indeed did not intend to require customers to provide the company a return on incentive compensation prior to knowing whether the targets for the company to pay this incentive compensation were even met. Accordingly, the Commission adopts the ALJ's findings and conclusion on this issue.

7. Capitalized Software Obligations (Exhibit A-12, Schedule B4, Line 67)

The Attorney General recommended an adjustment of $12.4 million to the other deferred credits component of the company's working capital. 6 Tr 3765-3766; Exhibit AG-1.44.

The ALJ noted that DTE Electric did not address this in its brief and thus, implicitly by way of adjustments set forth in Appendix E to the PFD, adopted the Attorney General's adjustment. PFD, p. 413, Appendix E, p. 2, line 85.

In exceptions, the Attorney General states her understanding that the ALJ adopted her position but notes that the ALJ did not explicitly do so. Thus, to the extent that the ALJ did not recommend full adoption of the Attorney General's position, the Attorney General provides this exception and recommends that the Commission adopt her recommended adjustment. Attorney General's exceptions, p. 11.

In exceptions, DTE Electric objects to the ALJ's recommendation. DTE Electric's exceptions, p. 162, n. 105.

The Commission agrees with the Attorney General and finds her recommended adjustment of $12.4 million to the other deferred credits component of the company's working capital to be appropriate and supported by the record.

8. Program Evaluation and Review Committee—Nuclear Uprate Deferred Costs

Consistent with her recommendation to exclude the O&M amortized costs of the company's nuclear uprate study in this case, the Attorney General correspondingly recommended that the unamortized balance of $3.0 million also be excluded from working capital. 6 Tr 3767, 3769-3771; Exhibit AG-1.44; Attorney General's initial brief, pp. 93-94.

Given her recommendation later in the PFD that these O&M costs not be recovered from ratepayers, the ALJ recommended that the Attorney General's recommended exclusion of the unamortized balance from working capital likewise be adopted. PFD, p. 413.

In exceptions, DTE Electric objects to the ALJ's recommendation. DTE Electric's exceptions, p. 162, n. 105 and pp. 177-179.[28]

Consistent with the Commission's decision on this issue below, the Commission finds it appropriate that the unamortized balance of $3.0 million also be excluded from working capital.

L. Rate Base Summary

The decisions in the instant order result in a projected rate base of $22,150,952,000.

V. COST OF CAPITAL

A. Capital Structure

DTE Electric proposed maintaining a common equity balance of 50% debt and 50% equity, as approved in the November 18 order. 5 Tr 3263, 3266-3267, 3276; *see also*, Exhibit A-14, Schedule D1. The Staff did not dispute the company's proposal. 7 Tr 4703-4704. The Attorney General also set forth a 50/50 debt to equity structure, consistent with the company's proposal. 6 Tr 3728. There was no further dispute regarding the company's proposed common equity balance.

As described above, the ALJ noted that there was no dispute amongst the parties regarding the company's proposal to maintain a permanent common equity balance of 50% equity and 50% debt. *See*, PFD, p. 414. In addition, the ALJ found that there was "no dispute regarding the short-term debt, deferred taxes and other balances in the ratemaking capital structure" which were adopted by the ALJ. PFD, pp. 414-415; *see also*, Appendix D.

No exceptions were filed on this issue.

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[28] See Part VI (Adjusted Net Operating Income) of this order below for further discussion on this issue.

The Commission finds that the ALJ's determination on this issue is supported on the record. Therefore, the Commission adopts the company's proposal to maintain its capital structure of 50% debt and 50% equity. *See*, PFD, pp. 414-415; *see also*, November 18 order, p. 226. The Commission notes, however, the appropriate capital structure is not static and should reflect changing market conditions and opportunities. Specifically, while not in the record in this case, the Commission notes the DOE's loan programs office has up to $250 billion in loan authorization for infrastructure replacement under Section 1706 of the IIJA. Given some of the large-scale infrastructure proposals in this case, in particular those connected with the IRM, the Commission encourages DTE Electric to explore whether an application for federal lending under Section 1706 would be beneficial for customers. The fact that this low-cost loan program is available and targeted toward many of the investments DTE Electric is already planning may influence the overall capital structure of cost of debt in future cases.

B. Debt Cost Rates

1. Long-Term Debt Cost Rate

DTE Electric proposed a 4.06% cost of long-term debt. 5 Tr 3264; Exhibit A-14, Schedule D2. No party disputed the company's proposed rates. *See*, 7 Tr 4704; 6 Tr 3729.

The ALJ adopted DTE Electric's proposed weighted cost of long-term debt of 4.06%. *See*, PFD, p. 415, Appendix D.

The Commission notes that no party filed exceptions on this issue and finds the ALJ's recommendation to be well supported. Therefore, the weighted cost of long-term debt of 4.06% is adopted.

2. Short-Term Debt Cost Rate

DTE Electric projected a 4.98% cost of short-term debt. 5 Tr 3264; Exhibit A-14, Schedule D3. No party disputed the company's proposed rates. *See*, 7 Tr 4704; 6 Tr 3729.

The ALJ adopted DTE Electric's proposed short-term debt cost rate of 4.98%. PFD, p. 415, Appendix D.

The Commission notes that no party filed exceptions on this issue and finds the ALJ's recommendation to be supported. Therefore, the short-term debt cost rate of 4.98% is adopted.

C. Return on Common Equity

The criteria for establishing a fair ROE for public utilities is rooted in the language of the landmark United States Supreme Court cases *Bluefield Waterworks & Improvement Co v Pub Serv Comm of West Virginia*, 262 US 679; 43 S Ct 675; 67 L Ed 1176 (1923) and *Fed Power Comm v Hope Natural Gas Co,* 320 US 591; 64 S Ct 281; 88 L Ed 333 (1944). The Supreme Court has made clear that, in establishing a fair ROE, consideration should be given to both a utility's investors and its customers. Nevertheless, the determination of what is fair or reasonable "is not subject to mathematical computation with scientific exactitude but depends upon a comprehensive examination of all factors involved, having in mind the objective sought to be attained in its use." *Meridian Twp v City of East Lansing,* 342 Mich 734, 749; 71 NW2d 234 (1955). With these principles in mind, the Commission turns to the factors that form the basis for determining the ROE for DTE Electric.

DTE Electric, the Staff, the Attorney General, and ABATE offered analyses of the appropriate ROE. The ALJ provided a detailed summary of the parties' cost of equity analyses, arguments, and briefing in the PFD. *See*, PFD, pp. 417-487.

DTE Electric proposed an ROE of 10.25% utilizing: (1) the Capital Asset Pricing Model (CAPM) and an empirical approximation to the CAPM (ECAPM), (2) a Discounted Cash Flow (DCF) analysis, and (3) a Risk Premium analysis. 5 Tr 2999. The company averred that there was no sound basis to decrease the ROE, noting that the cost of equity has increased since the company's last rate case and that the only consideration should be how much to increase the ROE. *See*, 5 Tr 3049-3050.

The company's CAPM and ECAPM analyses were performed using "two scenarios to obtain a range of cost of equity estimates," specifically "a forecasted risk-free rate and (i) a historical MRP [market risk premium] or (ii) a forecasted MRP." 5 Tr 2987. DTE Electric indicated that this analysis resulted in a combined CAPM and ECAPM range of 9.0% to 11.50% for the electric proxy sample "before any DTE Electric risks are considered." 5 Tr 2898. For DCF, DTE Electric calculated both single-stage DCF and multi-stage DCF "using growth rates from *Value Line* and *IBES* as well as GDP [gross domestic product] forecasts from Blue Chip Economic Indicators in the case of the multi-stage DCF." 5 Tr 2991 (emphasis in original). The DCF method resulted in a range in electric utility samples from 8.9% to 10.7%; however, the company found the multi-stage results were unrepresentative "because they (1) are out of line with other results (2) may fail to capture the substantial growth needed in the electric sector to accomplish the transition to low-carbon economy." 5 Tr 2992. Therefore, the company stated the upper half of the estimation was appropriate with a reasonable range of at 9.8% to 10.7%. 5 Tr 2992. With respect to the risk premium analysis, DTE Electric applied "the calculated risk premium and a risk-free rate of 4.05%," which "results in an estimated cost of equity of 10.4% for electric utilities." 5 Tr 2994.

The Staff utilized 11 electric utility companies to create a comparable proxy group for its analysis. 7 Tr 4707. The Staff disagreed with the company's inclusion of natural gas utilities, because "they do not experience the same risks as electric utilities." 7 Tr 4708. The Staff calculated an average adjusted DCF cost of equity estimate of 9.74%. 7 Tr 4710. With respect to the CAPM model, the Staff found it to be "an obvious outlier from the rest of the ROE models" and therefore it was "heavily discounted in the determination of Staff's ROE." 7 Tr 4716. In addition, the Staff provided three risk premium estimates ranging from 8.77% to 10.10%. *See*, 7 Tr 4718-4720. The Staff concluded that "a reasonable range for DTE Electric's cost of equity to fall within is 9.30% - 10.30%. Within that range, Staff recommends a value of 9.80%, which falls in the center of Staff's range . . . ." 7 Tr 4720-4721.

The Attorney General utilized the DCF, CAPM, and utility risk premium approaches to recommend an ROE of 9.8%. 6 Tr 3731. The Attorney General started with 37 electric utilities in the proxy group and narrowed down the group to 13 utilities which she contended are comparable to DTE Electric. 6 Tr 3732. Citing Exhibit AG-1.37, the Attorney General compared approved ROEs for several utilities, and noted that the 9.9% ROE approved for DTE Electric is "considerably higher tha[n] the equity returns granted by state regulatory agencies to most other electric utilities." 6 Tr 3753; Exhibit AG-1.37. The Attorney General also averred that a reduction in ROE to 9.8% would be unlikely to affect the company's credit rating. 6 Tr 3754-3755. Further, the Attorney General summarized that the analysis results in a weighted ROE of 9.66% but that a premium adjustment of 14 basis points was added to provide "a cushion to absorb the impact of potentially higher business risk and higher interest rates not currently reflected in utility stock prices and forecasted interest rates" as well as consideration of the Commission's preference of a "more gradual reduction." 6 Tr 3758.

ABATE noted that it utilized the same electric proxy group as the company, except for MGE Energy, Inc., and that the proxy group has lower average credit ratings than DTE Electric. *See*,

4 Tr 1178. To develop its recommended ROE, ABATE utilized "(i) a constant growth Discounted Cash Flow ('DCF') model using the consensus of analysts' growth rate projections; (ii) a constant growth DCF using sustainable growth rate estimates; (iii) a multi-stage DCF model; (iv) a Risk Premium model; and (v) a Capital Asset Pricing Model ('CAPM')." ABATE's initial brief, p. 29. ABATE summarized its analyses with a range from 9.2% to 9.9%,
with a recommended ROE of 9.40%, which is the midpoint of ABATE's range. 4 Tr 1204.

As noted above, the ALJ further described the parties' positions and responses to the analyses in the record at pages 417-487 of the PFD, which will not be extensively repeated here.

The ALJ concluded that the testimony on behalf of the Attorney General and the Staff was persuasive and that the ROE should be set at 9.8%. She stated that the Attorney General's and the Staff's "two expert witnesses reached the same conclusion through different analyses, and these analyses were conventional in nature," and were generally "consistent with the analyses the Commission has relied on in past cases . . . ." PFD, p. 482. The ALJ also concluded that an ROE of 9.8% is consistent with that approved by other regulatory commissions as described by the parties.

With respect to ABATE's analysis, the ALJ found that reliance upon the revised beta value was not supported. Acknowledging that the position "that the recent high betas are unrepresentative of utility risk generally is not unreasonable, no party has actually explained the current high beta levels." *Id.*

The ALJ found that leverage adjustments "have previously been rejected by the Commission, rely on volatile market stock prices, and also require a substantial number of other assumptions, including assumed debt costs and tax rates for the proxy companies." *Id.* The ALJ noted that, while the proxy companies utilized have significantly higher market equity values relative to market debt values, they also have book value capital structures containing significantly more debt than DTE Electric's balanced capital structure. The ALJ stated that the leveraging adjustments utilized were troubling especially considering the historically high beta values.

Regarding the Attorney General's analysis, the ALJ concluded "that [DTE Electric's] approach of performing a risk premium analysis based on a regression of the returns awarded by regulatory commissions relative to the Treasury interest rate is not a compelling analysis, and should be rejected . . . ." *Id*., p. 484 (citing 6 Tr 3750). The ALJ also found the company's analysis to be troubling in that it considered only the company's risk and failed to "analyze the extent to which the proxy companies benefit from annual rate cases completed on a 10-month cadence with projected rate base investments, and dismissed the myriad mechanisms DTE benefits from as generically the same for all companies, focusing only on DTE's lack of a revenue decoupling mechanism." PFD, pp. 484-485.

While DTE Electric argued that it is not appropriate to lower its ROE, the ALJ noted that her recommended ROE of 9.8% falls within the lower range of DTE Electric's analysis and that the "the company has been making a version of this same argument in its recent rate cases, so that it is not reasonable to view the company's rate of capital investment as moderating any time soon." PFD, p. 486. The ALJ also stated that the recommended 9.8% falls within the upper range of the Staff's and the Attorney General's analyses but found that it would also be reasonable to select an ROE at the lower end of those analyses. *Id*., pp. 486-487.

In addition, the ALJ highlighted that multiple parties argued that DTE Electric's poor reliability should be considered when setting the ROE in this case. The ALJ, however, concluded that it would be premature to incorporate an ROE adjustment due to performance issues given the ongoing workgroup and straw proposal for utility incentives and disincentives. *Id*., p. 487.

DTE Electric takes exception, arguing that the ALJ erred in recommending a reduction in ROE and that the Commission should increase the ROE to 10.25% based upon its analysis. Specifically, DTE Electric states that 10.25% "is the midpoint of a reasonable range, and is conservative because DTE Electric has greater-than-average risk." DTE Electric's exceptions, p. 163 (citing 5 Tr 2954-55, 2995, 2999, 3044). The company reiterates its analyses on record from pages 166-170 of its exceptions, arguing that the ALJ's findings and conclusions were incomplete. Further, the company quotes prior Commission orders to argue that the Commission considers volatility and uncertainty in the market and to note that "[t]he Commission has also emphasized that in the present regulatory environment where rate cases are more common, proposals to radically reduce a utility's ROE are neither realistic nor helpful . . . ." *Id.*, p. 172 (citing September 13, 2018 order in Case No. U-18999).

In sum, DTE Electric argues that a conservative estimate of ROE is the company's recommended 10.25%, which is the midpoint of its expert witness's range. DTE Electric's exceptions, pp. 173-174. The company further argues that the ALJ's conclusion "to lower DTE Electric's ROE is also inappropriate in today's financial environment of high inflation, rising interest rates, and continuing business risk. ROEs have increased in recent months, as have indicators of the cost of equity." *Id.*, p. 174 (citing 5 Tr 3046-3050, 3087-3088).

In exceptions, the Attorney General contends that the ALJ's recommendation of a 9.8% ROE "is at the very top of the appropriate range in this case" and that "something lower is fully supported." Attorney General's exceptions, p. 12. Therefore, the Attorney General requests that the Commission consider a lower ROE, noting that the Attorney General's analysis demonstrates an ROE of 9.66% would be a reasonable conclusion.

The DAAOs note in exceptions that the Commission “should also set an ROE level of 8.5% or less. Such an ROE would recognize DTE’s historic[al] poor performance and align with national trends.” DAAOs’ exceptions, p. 10.

In reply, DTE Electric avers that the Attorney General and the DAAOs “neglect the Commission’s guidance that proposals to radically reduce a utility’s ROE are neither realistic nor helpful to the Commission.” DTE Electric’s replies to exceptions, p. 13 (citation omitted). DTE Electric again emphasizes that the parties offered higher ROE recommendations in the instant case than they offered in the company’s last rate case wherein the Commission maintained the ROE to argue that “they all essentially acknowledge that times have changed since the Commission set DTE Electric’s ROE at 9.9%, and that the consistently-used forms of ROE modeling indicate a *higher* cost of equity.” *Id*., p. 14 (emphasis in original). As it did in its exceptions, the company contends that the ALJ did not fully recognize the continuing changes in economic conditions. Further, DTE Electric contends that the Attorney General’s and the DAAOs’ exceptions “present nothing of merit or relevance that could even begin to carry their burden to prove that the Company’s ROE should be radically reduced as they propose, particularly in light of recent events, and their suggestions suffer from other fundamental infirmities as a matter of fact and law.” *Id*., p. 15.

The Attorney General also replies, reiterating that the ALJ’s recommendation of a 9.8% ROE is at the top of the range and that a lower ROE would be reasonable and “[f]ully supported by the data.” Attorney General’s replies to exceptions, p. 39. The Attorney General further argues that DTE Electric’s exceptions fail to raise anything new and merely reiterate the issues addressed in testimony. Therefore, the Attorney General states that she “continues to argue that the

Commission should approve an ROE of no more than 9.80% for DTE Electric in this case." *Id*., p. 39.

In reply, MNSC reiterates many record arguments in dispute of DTE Electric's requested ROE of 10.25%. *See*, MNSC's replies to exceptions, pp. 83-87. In sum, MNSC argues that "[t]he Commission should reject DTE's request to increase the authorized ROE to 10.25% and instead adopt the ALJ's recommendation to authorize [an] ROE at 9.8% or lower." *Id*., p. 87.

The CEOs also reply to DTE Electric's exceptions, noting support for the ALJ's findings and recommendations on the ROE. In addition, the CEOs "dispute the notion that sponsoring a witness to provide 'financial market data' is a prerequisite for a party to participate in a legitimate discussion of return on equity." CEOs' replies to exceptions, p. 12. The CEOs aver that Michigan law requires that the Commission "assess a fair, 'just and reasonable' rate of return for the Company in light of the significant affordability and reliability issues that plague DTE's customers." *Id*., pp. 13-14. Thus, the CEOs aver that the Commission should reject any notion that parties must bring financial market expertise to opine on a reasonable and appropriate ROE.

In reply, ABATE again reiterates its position that the ROE should be set no higher than 9.55%. ABATE further disputes the company's comparison of parties' analyses in the instant case to the prior case to support a contention that an ROE exceeding those recommended by the Staff, the Attorney General, and ABATE would be reasonable in this case. *See*, ABATE's replies to exceptions, p. 7. ABATE also notes that the ALJ indicated that an ROE on the lower end of the Staff's and Attorney General's analysis would be reasonable. Thus, ABATE concludes that its recommended ROE of 9.55% is reasonable and should be adopted. *Id*., p. 8.

To start, the Commission reiterates that, contrary to DTE Electric's exceptions, Commission guidance has referenced a significant *change* in ROE, not only a decline as implied by the company in its exceptions. *See*, November 18 order, p. 242, n. 34; *see also*, DTE Electric's exceptions, p. 172. In that regard, the Commission agrees with the ALJ's determination that DTE Electric's requested ROE of 10.25% is excessive and unsupported on this record. Once again, the Commission emphasizes that adjusting for financial risk or applying financial leverage adjustments is not appropriate.

The Commission also finds that the ALJ appropriately declined to reduce the ROE based upon reliability considerations, at this time. *See*, PFD, p. 487. The Commission notes that the cost of equity in the utility sector has generally increased over the last year, and further notes that the recommended ROEs provided by many parties, while lower than what is being adopted here, were generally higher than what those same parties proposed in previous cases. As such, the Commission finds that based on the record evidence in this case a reduction in the ROE is unwarranted at this time.

Given the above, including DTE Electric's observation of today's financial environment of high inflation and rising interest rates, the Commission finds that the most prudent course of action is to maintain the current ROE. The Commission again notes that it may revisit this determination in future cases as it gains greater insight into the issues currently affecting the financial markets and longer-term macro-economic trends, and will continue to seek opportunities to better tie DTE Electric's financial performance to the outcomes experienced by its customers through the ongoing Financial Incentives and Disincentives Workgroup. Therefore, the Commission finds that the record supports an ROE of 9.90%.

D. Overall Rate of Return

In sum, the ALJ recommended that the Commission adopt "a permanent capital structure with an equal weighting of 50% long-term debt and 50% equity, and a corresponding ratemaking capital structure with the balances and cost rates . . . resulting in an estimated overall weighted after-tax cost of capital of 5.52% . . . ." PFD, p. 487.

DTE Electric takes exception to the ALJ's recommendation of "a weighted, after-tax overall rate of return of 5.52%" and "requests a weighted, after-tax 5.7% overall rate of return . . . ." DTE Electric's exceptions, p. 162 (citations omitted).

The Attorney General replies that her recommended after-tax rate of return of 5.52% is reliable and the Commission should reject the company's request to adopt an after-tax rate of return of 5.7%. Attorney General's replies to exceptions, p. 38.

The Commission adopts a 50/50 debt to equity capital structure, a long-term debt cost rate of 4.06%, a short-term debt cost rate of 4.98%, an ROE of 9.90%, and an overall weighted cost of capital of 5.56%, as shown on the table below:

Description	**Amount ($000)**	**Ratio**	**Cost Rate**	**Weighted Cost**
Long-Term Debt	8,876,109	39.26%	4.06%	1.59%
Common Shareholders' Equity	8,876,081	39.26%	9.90%	3.89%
Short-Term Debt	330,941	1.46%	4.98%	0.07%
Investment Tax Credit – Debt	15,986	0.07%	4.06%	0.00%
Investment Tax Credit – Equity	15,986	0.07%	9.90%	0.01%
Deferred Income Taxes (Net)	4,496,126	19.88%	0.00%	0.00%
Total	22,611,230	100.00%		5.56%

VI. ADJUSTED NET OPERATING INCOME

In its application, DTE Electric projected an adjusted net operating income (NOI) of $836.8 million, which was increased to $861.1 million in the company's reply brief. *See*, Exhibit A-13, Schedules A1, C1; DTE Electric's reply brief, p. 70.

A. Operating Revenue

Two issues in the "Operating Revenue" section of the PFD were not addressed in exceptions. After review of the record and arguments by the parties, the Commission finds the ALJ's recommendations on these issues to be well-reasoned and supported by the record. Accordingly, the Commission adopts the ALJ's findings and conclusions with respect to the Residential Income Assistance credit and shared asset revenue. *See*, PFD, p. 490.

For the remaining issue in the Operating Revenue section—the community lighting sales forecast—DTE Electric asserted that "[a]nnual usage was assumed to be 4,200 hours, to reflect the hours that the lights on either the dusk to dawn or standard provision are illuminated. The energy forecast for lights on the dusk to midnight provision was based upon 2,100 hours use and the energy forecast for lights on the de-energized provision is zero." 5 Tr 2621.

MI-MAUI argued that based on the data collected during the company's night patrols, an average of 3.6% of streetlights are non-functional each night. In addition, MI-MAUI contended that "LED fixtures use no electricity when they are out of commission, [while] HID fixtures have a ballast that continues to use a small amount of energy even if the lamp is burnt out." 4 Tr 939. MI-MAUI calculated the kilowatt-hour/year for outages and recommended that the Commission reduce the company's community streetlighting sales forecast by 3.25% and, accordingly, reduce the revenue requirement.

Although the Staff agreed with MI-MAUI's proposed adjustment, the Staff recommended that "[r]ather than the Commission approve 'reduc[ing] the revenue requirement for streetlights accordingly[,]' the Commission should simply approve the change to the sales forecast. Any adjustment to the sales forecast will necessarily flow through the [COSS] and achieve the appropriate outcome on lighting revenue requirement and thus rates." 7 Tr 4502 (quoting 4 Tr 940).

In its initial brief, MI-MAUI stated that it "would not object to applying the necessary change in [Staff]'s recommended manner." MI-MAUI's initial brief, p. 11.

The ALJ noted that "[MI-MAUI] acknowledges [Staff witness] Mr. Isakson's testimony, and agrees in its brief to applying the sales forecast reduction as he explained it should be applied." PFD, pp. 493-494. The ALJ recommended that the Commission adopt MI-MAUI's proposed adjustment as explained by the Staff, stating that "[t]his is a straightforward way to ensure that the sales forecast realistically reflects a baseline level of outages." *Id*., p. 494.

DTE Electric excepts, asserting that:

> not all outages are the result of failed Company equipment, and when the Company is impeded from making a repair, these additional 1,931 "follow-up" events in 2022, added over 2.5 days (over 50%) to the Company's restoration time for a total of 7.24 days (Exhibit A-40, Schedule EE3, line 9). Also, the adjustment would theoretically account for outages for which credits are paid (and [MI-MAUI's witness] Mr. Bunch suggests further credits), resulting in double compensation (in other words, a general situation where there would be no payment to the Company for electricity, plus the Company would make payments to some customers for electricity that was not paid for in the first place). [MI-MAUI] should not be able to have it both ways by reducing the sales forecast as well as the proposed credits resulting in duplicative compensation. The most equitable solution continues to be the Company's current process of evaluating each customer-requested outage credit for reasonableness and issuing approved credits directly to the municipality.

DTE Electric's exceptions, p. 175.

In reply, MI-MAUI states that "the cause of an outage has no bearing on the result of an outage: a non-working streetlight is using no electricity (or in the case of HID luminaires, likely a very small amount of electricity). It is unreasonable to expect customers to pay for electricity that no one is using, regardless of the underlying reason for that non-use of electricity." MI-MAUI's replies to exceptions, p. 4 (internal citation omitted). In response to DTE Electric's claim that pursuant to MI-MAUI's proposal customers would be double-compensated for outages, MI-MAUI agrees and asserts that the Commission has the authority to reduce the sales forecast *and* impose a penalty for poor reliability. MI-MAUI explains that the current process is not equitable because "customers cannot receive a bill credit for outages that last fewer than 30 days – and even then, the credit is not automatic and must be submitted to DTE for approval. Requiring a customer to pay for 29 nights' worth of electricity that no one is using is not an 'equitable solution' under any definition." *Id*. Accordingly, MI-MAUI requests that the Commission adopt the ALJ's recommendation.

The Staff also replies that "[t]he PFD correctly reasoned that the lighting sales forecast should realistically reflect baseline levels of outages by incorporating MI-MAUI's proposed adjustment." Staff's replies to exceptions, p. 21.

The Commission adopts the ALJ's recommendation to approve MI-MAUI's request to adjust the community lighting sales forecast as explained by the Staff. *See*, 7 Tr 4501-4502; MI-MAUI's initial brief, p. 11. The Commission agrees with the Staff that MI-MAUI's proposed 3.25% adjustment to the community lighting sales forecast will flow through the COSS, that it properly accounts for known lighting outages, and that it prevents customers from paying for unused electricity.

B. Fuel and Purchased Power Expense

The ALJ noted that no party disputed DTE Electric's proposed fuel and purchased power expense. *See*, PFD, p. 494. No exceptions were filed on this issue and, therefore, the Commission finds that it should be approved.

C. Operations and Maintenance Expense

Several issues in the O&M Expense section of the PFD were not addressed in exceptions. After review of the record and arguments by the parties, the Commission finds the ALJ's recommendations on these issues well-reasoned and supported by the record. Accordingly, the Commission adopts the ALJ's findings and conclusions with respect to the following: (1) Trenton Channel cost removal, (2) pension costs, and (3) Employee Savings Plan (ESP) costs. *See*, PFD, pp. 501, 540, 550. The remaining contested issues are addressed *ad seriatim*.

1. Inflation

DTE Electric calculated inflation rates of 3.6% for 2022, 3.2% for 2023, and 2.66% for January 1 through November 30, 2024. *See*, Exhibit A-13, Schedule C5.15, line 15. For internal and contract labor, the company noted a 3% inflation rate, and for non-labor costs, the company used the consumer price index (CPI)-urban by S&P/IHS Markit. 5 Tr 1502.

Although the Attorney General objected to the company's use of a blended rate, i.e., the use of a separate labor inflation rate with the CPI, she noted that the company's blended rate was similar to the forecast she developed using more recent CPI information and, therefore, she did not recommend an adjustment to DTE Electric's forecasted inflationary costs. 6 Tr 3768-3769.

However, ABATE disputed DTE Electric's inflation projection. According to ABATE, the company proposed a $12.23 million increase in O&M expenses above 2021 levels. 4 Tr 1112.

ABATE reviewed DTE Electric's actual and adjusted annual O&M expenses for 2017-2022 and stated that:

> [t]he actual annual O&M expense increased by an average rate of 1.4% per year from 2017 to 2022, while the adjusted O&M expense increased by an average rate of 0.2% per year. Importantly, both sets of data (actual and adjusted) show that despite inflationary pressures in 2022, DTE's actual O&M expense decreased by 2.1% relative to 2021, and its adjusted O&M expense decreased by 3.4%.

4 Tr 1115. Additionally, after reviewing DTE Electric's response to a discovery request, ABATE noted that the company "has been able to offset inflation in prior years, [however] it has not included any specifically identifiable offsets in this case. The Company also indicated that it is using its process improvement methodologies to hold costs below the inflation rate, but then claims that cost increases above the average inflation rate for base materials and qualified contract labor are expected to put pressure on its efforts." 4 Tr 1116 (footnotes omitted). Thus, ABATE recommended that the Commission approve "adjustments of 0.2% per year relative to DTE's adjusted actual 2022 O&M expense. This is consistent with the five-year average annual increase in O&M expense actually realized by DTE, and reflects DTE's proven ability to manage costs despite inflation." 4 Tr 1117.

DTE Electric disagreed, asserting that ABATE's recommended reduction to the company's O&M expense projection does not account for year-to-year variability in O&M costs and does not reflect current inflation. 5 Tr 2219-2220.

The ALJ stated that although she found merit in ABATE's analysis, she declined to recommend an overall adjustment to DTE Electric's 2022-2024 inflation projections. Instead, the ALJ noted that "individual line items [in Exhibit A-13, Schedule C5] will be evaluated for evidence of additional adjustments that should be made." PFD, p. 497.

No exceptions were filed on this issue. Like the ALJ, the Commission declines to approve an overall inflation adjustment and, instead, addresses inflation for individual line items as set forth below.

2. Generation

a. Periodic Outage Normalization Adjustment

DTE Electric proposed O&M expense of $11.5 million for Normalized Periodic Outage costs. To calculate the projected expense, the company averaged the historical 2017-2020 outage spend for Belle River Unit 2 and Greenwood Unit 1 and applied inflation. 5 Tr 2370-2371.

The Staff noted that "[t]hrough discovery from Staff and the Attorney General . . . Staff obtained information on DTE Electric's historic [sic] periodic outage spend by unit for all Steam Generation plants for 2017 to 2022." 7 Tr 4516. After a review of the periodic outage spending, the Staff determined that DTE Electric spent less than average in 2021 at its Belle River Power Plant (BRPP) and Greenwood Power Plant (GPP) but spent more at its Monroe Power Plant (MPP). The Staff stated that when it "included the [MPP] into the 2017 to 2020 average, the periodic outage spend adjustment was reduced to $2,599,978 after inflation as shown on Exhibit S-21.6 page 6. The difference between Staff's periodic outage spend adjustment and DTE Electric's reduces Steam Power Generation O&M by ($8,946,862)." 7 Tr 4516-4517.

DTE Electric disputed the Staff's inclusion of the MPP periodic outage in the calculation of a typical periodic outage because it is a "South Area power plant" and "the Company's adjustment was strictly for North Area power plants . . . ." 5 Tr 2425. In addition, the company asserted that it is not appropriate to include the MPP periodic O&M outage because MPP did not have a major periodic outage due to COVID-19 concerns. Furthermore, DTE Electric objected to the Staff's inclusion of 2018 outage O&M expenses for BRPP and GPP in the 2017-2020 historical periodic outage average because:

> [t]he Company did not execute a periodic outage in 2018 at [BRPP] and executed a very small, planned outage at [GPP]. Typically, there is one major periodic outage per year at the North Area power plants. Therefore, 2018 actual O&M expenses would be an improper representation for a yearly periodic outage O&M spend for the North Area power plants.

5 Tr 2426.

In response, the Staff stated that it "used the same years that DTE Electric used to determine the periodic outage adjustment for its north area plants. . . . If it was not appropriate to use periodic outage spending for [MPP] in 2020, then it should also have not been appropriate to use 2020 spending for the north area plants as those plants experienced the same atypical year." Staff's initial brief, p. 82. Additionally, the Staff noted that it considered various date ranges to calculate the average but found the averages to be relatively equal and that other date ranges would not substantially change the Staff's calculation or proposed adjustment.

Although the ALJ described this issue in the PFD, she did not recommend a decision. However, the Staff's adjustment is included in Appendix C to the PFD, line 6.

In its exceptions, DTE Electric objects "to the apparently recommended (but unexplained, contrary to MCL 24.281(2)) disallowance and maintains its position." DTE Electric's exceptions, p. 176. The company reiterates the arguments set forth in testimony and briefing. *See*, *id*., pp. 175-176.

The Staff replies, reiterating the arguments in testimony and briefing, and requests that the Commission adopt the Staff's proposed $8.95 million reduction to DTE Electric's periodic outage expense. *See*, Staff's replies to exceptions, pp. 23-24.

Although the ALJ did not include a written decision for this issue in the body of the PFD, the Commission finds that the ALJ included the Staff's proposed $8.95 million reduction in Appendix C to the PFD. The Commission notes that in DTE Electric's exceptions, the company acknowledges "the unprecedented depth of the record in this case" and that "the PFD is unprecedented in length . . . ." DTE Electric's exceptions, p. 7, 16. Thus, bearing in mind the "unprecedented" voluminous amount of data, documents, and information presented by DTE Electric and the parties to this case that was reviewed, evaluated, and processed by the ALJ, the Commission finds that the ALJ's written recommendation adopting the Staff's proposed adjustment was inadvertently omitted.

The Commission has reviewed the record and the arguments by the parties and finds that the Staff's proposed adjustment should be approved. DTE Electric contends that its proposed $11.5 million periodic outage expense is for the "North Area plants" of BRPP and GPP and that it is inappropriate to include MPP, a "South Area plant," in the expense calculation. However, the Commission finds that the company states that the expense will "support additional planned periodic outages which are scheduled to occur during the 12-month projected test period ending November 30, 2024. These periodic outages will *include* two major periodic outages in the north area that are planned for Belle River Unit 2 and Greenwood Unit 1." 5 Tr 2370-2371 (emphasis added). Although the company identifies BRPP and GPP as power plants that will experience periodic outages during the test year, DTE Electric notably does not state that BRPP and GPP are the *only* power plants to have a periodic outage during the test year. In addition, DTE Electric states that "[a]s shown [in Exhibit S-21.6], in the projected test year, the Company plans to spend a total of $33.6 million O&M on periodic outages at Monroe, Belle River, and Greenwood Power

Plants." 5 Tr 2427. Thus, the Commission finds unpersuasive DTE Electric's argument that MPP should be excluded from the periodic outage expense calculation for the projected test year.

The Commission also finds that the Staff's method of averaging the periodic outage spending for all of DTE Electric's steam generation plants—BRPP, GPP, and MPP—for 2017-2020, which are the same years that DTE Electric used for its calculation, is the most appropriate method for determining the amount of periodic outage spending for the projected test year. Although the company objects to the Staff's proposed date range of 2017-2020, the Staff points out that it:

> considered the use of various averages that included actual data for 2021 and 2022, as well as an average without 2020, before deciding to use the same years of 2017-2020 that DTE Electric used for its periodic spending adjustment. Referring to Exhibit S-21.6 page 6, the simple average of the Total for [MPP], [BRPP], and [GPP] for 2017-2021 is $21,300,192, for 2017-2022 is $21,162,132, and for 2017-2022 excluding 2020 is $21,833,368. Since all of these averages are relatively close to the average for 2017 to 2020 of $21,773,952 that Staff ultimately used, DTE Electric's total periodic outage spending O&M for its three steam generating plants remains relatively constant regardless of the historical years chosen. Furthermore, the Company's argument that Staff erred by including periodic outage spending for [MPP] in 2020 with the COVID-19 pandemic holds no weight. The 2017-2022 average excluding 2020 was $21,833,368, which is very close to the 2017-2020 average that Staff used in its calculation of $21,773,952. Therefore, the inclusion of [MPP] periodic outage spending for 2020 does not materially change the calculation or Staff's resulting adjustment.

Staff's initial brief, pp. 82-83. The Commission agrees and finds that the Staff's proposed $8.95 million adjustment is approved.

3. Distribution

a. Tree-trim Surge Savings

The Attorney General acknowledged that DTE Electric's proposed O&M for tree-trimming and surge program expenses appear to align with the Commission's directives in previous orders. However, after a review of Exhibit A-22, Schedule L1, she noted that it demonstrated:

> declining costs for reactive tree trimming, storm related tree trimming, and other distribution related costs as a result of more trees being trimmed under the surge

> program compared to the cost levels in 2021. Based on this information provided by the Company, [her] analysis shows that O&M cost savings of $15.9 million should be achieved as a result of the spending on the surge program.

6 Tr 3774-3775. Accordingly, the Attorney General recommended a $15.9 million reduction to DTE Electric's distribution O&M expense projection.

In response, DTE Electric agreed with the Attorney General that $3.6 million in savings for storm related tree trimming and $2.7 million in savings for distribution operations costs should be applied as reductions to the company's O&M expense. However, the company disagreed that the reactive tree trimming savings should be included, asserting that these savings "are already realized within the proposed O&M expenses of the Tree Trim Surge" and have been accounted for. 5 Tr 2162.

The ALJ agreed with the Attorney General and recommended that the Commission adopt her proposed $15.9 million reduction. The ALJ stated that:

> [e]ach of the line items [the Attorney General] identified reflect savings in restoration and other distribution operation tree trimming costs attributable to the surge, and these are savings relative to historical cost levels that are reflected in the adjusted historical base expenditures that form the basis of DTE's projected test year O&M expense request for distribution operations. That O&M expense request is independent of the level of surge funding; those amounts have already been determined through the test year by the Commission and will be recovered as the Commission has specified.
>
> While the savings reflected on line 4 of [DTE Electric]'s Schedule L1, page 1, are by definition reflected in that schedule, those savings are not used to adjust any historical numbers. While not well explained on this record, this document, which was also presented in Case No. U-20836, instead appears to show various elements of the company's proposed tree trimming expenditures, including the surge and incremental surge funding, as well as the status quo tree trimming expenses that are separately included on Schedule C5.6, line 19. [Attorney General's witness] Mr. Coppola's testimony was filed before [DTE Electric's witness] Mr. Robinson amended his Schedule C5.6 to incorporate a portion of the savings Mr. Coppola identified. There is no evidence from DTE's schedules that the additional savings from line 4 have somehow been "realized" by ratepayers, unless the historical expense levels are adjusted as recommended by Mr. Coppola.

PFD, pp. 503-504.

DTE Electric excepts to the ALJ's recommendation, stating that "the savings are already accounted for in Exhibit A-22, Schedule L1, line 4 (the Company's tree trim budget that gets reduced year over year). Thus, the adjustment recommended by [the Attorney General] has already been made by the Company." DTE Electric's exceptions, p. 181.

The Attorney General disagrees, stating that:

> DTE's presentation in this case has failed to provide evidence to support its claim that capital expenditure reductions stemming from the surge are already baked into the Company's filing. Instead, the company points to a generic exhibit line number that does not break out costs such that they can actually be attributed to higher levels of tree trimming, as opposed to strategic capital spending.

Attorney General's replies to exceptions, pp. 41-42.

As discussed in the "Emergent Replacements" section above, the Commission finds that DTE Electric provided evidence that the tree-trim surge savings have been realized and accounted for. Specifically, for tree-trim surge O&M, the Commission finds that DTE Electric demonstrated in Exhibit A-22, Schedule L1, page 1, line 4 that the company's tree-trim budget has been reduced year over year to account for the savings. Thus, the Commission finds that the Attorney General's concerns have been addressed by the company and the Commission declines to adopt the ALJ's recommendation.

b. Restoration Operations and Maintenance Expense–Inflation

DTE Electric projected test year restoration O&M expense of $127.6 million, which is comprised of two parts: storm restoration expenses of $63.87 million, and non-storm restoration expenses of $63.71 million. Exhibit A-13, Schedule C5.6, p. 2.

MNSC objected to the inflation adjustments for these expenses. MNSC contended that the company's "massive ramp in year-over-year investments . . . to improve reliability" has not been "reflected in DTE's historical O&M Restoration costs, in the same manner that inflation through the 2024 projected test period is not fully reflected in the historical O&M data." 6 Tr 3570. MNSC asserted that DTE Electric's normalization method "for setting its requested Restoration O&M increases the level of historical O&M to reflect the most recent and expected levels of inflation," however it does not account for the company's recent and expected investments in distribution system reliability that will decrease projected outage restoration costs. 6 Tr 3570. MNSC stated that in other words, DTE Electric's calculation results in the highest possible projected cost. MNSC recommended a $17.8 million inflation adjustment.

In response, DTE Electric argued that the company's proposed inflation calculation is consistent with the Commission's determination in the November 18 order. Additionally, the company stated that it "proposes a $6.3 million reduction to emergent restoration expenses based on the reliability improvement that is a benefit of tree trimming. Whereas the company does not propose this as an offset to inflation, it acts in the same manner as requested by [MNSC's] witness Ozar when he calls for an offsetting adjustment." 5 Tr 2706.

The ALJ found that contrary to its claims, DTE Electric did not comply with the Commission's directives in the November 18 order to demonstrate, in this case, a need for inflationary adjustments to historical O&M expenses. In addition, she stated that:

> [c]onsistent with this PFD's recommendation that normalization adjustments should not be made to historical capital expenses to avoid masking productivity increases, this PFD similarly recommends that the historical normalization adjustments to 2017 through 2020 restoration O&M expense levels should be rejected. Those normalization adjustments are shown on lines 3 and 11 of Schedule C5.6 page 2 and add $3.1 million and $3.4 million respectively to the 2021 historical test year values. The impact of this adjustment exclude[s] $6.5 million from the historical test year, which carried through to the projected test year using DTE's inflation values results in a total O&M expense reduction for this category of $7.1 million.

PFD, p. 509. Although the ALJ declined to adopt additional reductions to DTE Electric's proposed inflationary increases in the company's projected test year expenses, she noted that the recommended $15.9 million reduction proposed by the Attorney General "reflect[s] at least some of the benefits of DTE's capital spending on distribution system reliability, the tree trimming surge, which was not in place during the historical years used to determine the 2021 base." *Id*.

Furthermore, the ALJ recommended that the Commission caution DTE Electric that if the company cannot "provide a credible analysis of expected productive [sic] gains looking ahead to its projected test year in future cases, the Commission will reject projected inflationary increases as well." *Id*., pp. 509-510.

MNSC excepts to the ALJ's recommendation, stating that "the Commission already required DTE to produce evidence <u>in this case</u> of productivity benefits from capital investments to justify any continued need for inflationary adjustments for emergent replacements, which DTE did not provide." MNSC's exceptions, p. 6 (emphasis in original). MNSC asserts that the ALJ acknowledged that the proposed tree-trim surge investments benefit restoration O&M; however, she also noted that there are "substantial capital investments that offer restoration benefits" that were not included in the bridge year and projected test year. *Id*., p. 7. Thus, MNSC argues that DTE Electric failed to provide evidentiary support for its inflation adjustment.

In its exceptions, DTE Electric states that "an inflation adjustment for O&M expenses is a well-established practice" and the company has "already proposed a $6.3 million reduction for tree trim surge investment avoided costs" and, therefore, the proposed reduction should be rejected. DTE Electric's exceptions, p. 180. DTE Electric also contends that it properly responded to the Commission's request in the November 18 order to provide additional evidence regarding the productivity benefits of the company's capital investments and the need for continued inflationary adjustments. Therefore, DTE Electric requests that the Commission reject the ALJ's proposed disallowance.

In its replies to exceptions, MNSC contends that:

> DTE tries to squeezes [sic] too much out of the $6.3 million reduction – the ALJ cited tree trim surge savings to explain why she declined to recommend rejecting the projected spending inflation adjustment. DTE would have its $6.3 million in tree trim savings offset both $6.5 million in historic [sic] spending inflation adjustments and also $11.3 million in projected spending inflation adjustments. The ALJ adopted a more conservative approach by recommending the Commission disallow the $6.5 [million] adjustment but accept the $11.3 million adjustment in part on the basis of DTE's $6.3 million adjustment. DTE wants double-credit for tree trim savings.

MNSC's replies to exceptions, p. 89 (footnote omitted). MNSC states that although the company has an established practice of applying an inflation adjustment to increase historical spending, DTE Electric has not justified continuation of the practice and at some point, the savings must be realized and reflected by reducing projected spending. In MNSC's opinion, "DTE failed to calculate productivity gains in projected O&M" and, therefore, the ALJ's recommended reduction should be approved. *Id*., p. 91.

DTE Electric objects to MNSC's exception, reiterating the arguments set forth in testimony, briefing, and exceptions, and requests that the Commission reject the ALJ's proposed disallowance. *See*, DTE Electric's replies to exceptions, pp. 15-17.

As discussed in the "Emergent Replacements" section above, the Commission finds that DTE Electric's proposed inflationary adjustment should be approved. The Commission notes that as stated by the company, the Commission approved a similar inflation adjustment for this expense in the November 18 order. *See*, November 18 order, p. 258. In addition, the Commission finds that in the immediate case, DTE Electric proposed a $6.3 million reduction to tree-trim surge O&M expense to account for avoided costs. However, the Commission emphasizes the directives from the November 18 order and anticipates an analysis of the offsetting effects of significant distribution capital investments on inflationary pressures for this expense in the company's next filed rate case.

c. Pole Top Inspections

DTE Electric projected $5 million for pole top inspection and testing costs for 2024. *See*, 5 Tr 1507, 2699; Exhibit A-13, Schedule C5.6.

After review of a discovery response from the company, the Attorney General noted that "[i]t is interesting that the number of inspections expected to be completed in 2024 is 87,000, which is significantly less than the 101,030 inspections completed in 2022 for $3.1 million. The Company's higher forecasted expense of $5.0 million for fewer inspections in 2024 is inconsistent and overstated." 6 Tr 3773. Using the data provided by DTE Electric, the Attorney General calculated the average cost for pole top inspections in 2022, adjusted the number for inflation, and applied the rate to the number of inspections forecasted for the test year, which resulted in a $2.7 million expense for the projected test year.

DTE Electric claimed that the Attorney General's proposal is "undefined and largely lack[s] the detail requisite to even be thoroughly considered." 5 Tr 2721. In addition, the company argued that the Attorney General inappropriately "mixes actuals and forecasts" in her calculation for the proposed reduction. 5 Tr 2723. According to DTE Electric, it provided sufficient evidence demonstrating that the company's enhanced pole top specifications and inspection process comply with industry best practices and will result in significant benefits.

The ALJ stated that because:

> DTE has the information to understand the basis for its $5 million projection, and chose not to provide it, this PFD finds [the Attorney General]'s projection is the most well-supported on this record and should be adopted. Looking at historical costs and inspections to determine a unit cost per inspection as a basis for future

> projections is a relatively standard approach in rate cases and is in no way "incorrect or problematic on [its] face," or "lack[ing] sufficient detail to be even thoroughly considered," as DTE argues in its reply brief.

PFD, p. 512 (quoting DTE Electric's reply brief, p. 38).

In its exceptions, DTE Electric objects to the ALJ's recommendation, asserting that her "acceptance of a simplistic calculation based on historical data neglects the substantial amount of evidence that the Company provided regarding the enhanced pole specifications and inspection process (which aligns with industry best practices and will produce significant benefits . . .)." DTE Electric's exceptions, p. 182. In addition, the company contends that it fully complied with the Commission's directive in the November 18 order and shifted pole top inspection costs to O&M expenses and, therefore, the proposed disallowance should be rejected.

The Attorney General replies that "calculations need not be complicated or convoluted to be accurate, and that the use of historical data is the proper starting point for forecasting future costs." Attorney General's replies to exceptions, p. 42.

The Commission finds that the ALJ's recommendation is well-reasoned, supported by the record, and should be adopted. As noted by the Attorney General, DTE Electric conducted 101,030 inspections in 2022 for $3.1 million, and the company plans to conduct 87,000 inspections in 2024 for $5 million. DTE Electric failed to explain why approximately 14,000 fewer inspections in 2024 will result in such a large cost increase. And, as noted by the ALJ, DTE Electric controls the information that would supply a basis to understand the $5 million projection, but failed to provide sufficient evidence to explain the cost increase. Although the Commission does not always find that historical spending provides a basis for determining future spending (particularly where the utility's strategy has changed), the Commission finds that the Attorney General's proposed adjustment is the most reasonable and well-explained choice on this record.

4. Community Lighting

DTE Electric's projected test year expense for community lighting is $5.7 million, which the company stated is based on historical 2021 expenses and adjusted for inflation.

MI-MAUI recommended that the Commission adopt three adjustments to the expense. First, MI-MAUI noted that DTE Electric included $167,191 for HPS relamping. However, MI-MAUI contended that the company claims that the HPS Group Relamping Program will be terminated at the end of 2023. Therefore, MI-MAUI recommended that this expense be disallowed.

Second, MI-MAUI asserted that DTE Electric requested $384,427 for washing LEDs that were installed in 2014. According to MI-MAUI, "those luminaires should have been washed in 2019 when the Company was still following a 5-year washing cycle" and, as a result, there should be no LED washing expense for the projected test year. MI-MAUI's initial brief, p. 26 (citing Exhibit MAU-22). In response to DTE Electric's claim that the company fell behind in LED washing because of the COVID-19 pandemic and severe storm seasons in 2021 and 2022, MI-MAUI stated that:

> [d]uring the years that [DTE Electric] witness Bellini claims DTE fell behind on washing (2020 through 2022), DTE was still on a 5-year cycle, which means LEDs scheduled for washing during that time period would have been installed in 2015, 2016, and 2017. Now that DTE has moved to a 10-year cycle, none of those luminaires should need washing until 2025 at the earliest; except we know that some of them have already been washed as scheduled because [DTE Electric] witness Bellini testified to that effect.

MI-MAUI's initial brief, p. 26 (citing Exhibit MAU-22). In the event there are luminaires that require washing in the projected test year, MI-MAUI asserted that ratepayers have already paid for the washing because that expense was included in previous rate cases.

Third, MI-MAUI asserted that DTE Electric's projected test year supervisory and administrative staff expense of $2.61 million is more than double the five-year average.

MI-MAUI recommended reducing the expense by half because the factors cited by the company to support the increase “do not nearly explain or justify doubling staff costs compared to the historical averages. While many organizations are increasing staff post-pandemic, an annual increase of greater than 10% is likely unrealistic and unjustified by any plans that [DTE Electric] witness Bellini has described.” 4 Tr 925.

DTE Electric objected to the proposed adjustments, reiterating that “the cost is for luminaires that are slated for washing during the projected test year, and are reflective of the number of LEDs that were originally installed in 2014. There are also LEDs that fell behind the washing cycle due to the lack of crew availability during the COVID-19 pandemic and the severe storm seasons of 2021 and 2022 . . . .” DTE Electric’s initial brief, p. 192. In addition, the company asserted that the projected expenses for supervisory and administrative staff are reasonable because DTE Electric created new positions that are necessary to provide effective management of the company’s streetlighting program, “the streetlighting team headcount has steadily declined from 2018-2023,” and an inflation factor was applied to the expenses. *Id*.

The ALJ agreed with MI-MAUI and recommended that the Commission adopt the proposed reductions. The ALJ explained that DTE Electric “failed to justify its O&M expense projection for streetlighting,” noting that the historical data provided in the company’s discovery responses undercuts the claims made by the company. PFD, p. 515. By contrast, the ALJ asserted that:

> [MI-MAUI’s witness] Mr. Bunch reasonably evaluated DTE’s historical spending. Recognizing that DTE should be spending less in the projected test year for group relamping (which Mr. Bellini did not address in his rebuttal) and for LED washing (given a 10-year schedule), Mr. Bunch’s recommended test year O&M expense level of $3,834,266 as shown at 4 Tr 927 is above DTE’s actual 2022 expense level of $3,774,876, and only approximately $225,000 less than an inflation-adjusted projection from 2022 spending levels would be, using DTE’s inflation factors.

PFD, p. 518 (footnote omitted).

DTE Electric excepts, reiterating the arguments set forth in its initial brief. The company states that MI-MAUI's "Witness Bunch's reasoning that 'an annual increase of greater than 10% is likely unrealistic and unjustified' is also speculative and arbitrary, so it cannot support a decision. Therefore, the Company's $2,608,165 request should be approved." DTE Electric's exceptions, p. 183 (footnote and internal citations omitted).

In its reply to exceptions, MI-MAUI reiterates its arguments that DTE Electric was following a five-year washing cycle until 2023 when it adopted a 10-year washing cycle. Thus, MI-MAUI asserts that there should be no LEDs that require washing in the projected test year. MI-MAUI disputes the company's claim that the requested washing expense is for LEDs that were not washed because of the COVID-19 pandemic and the severe storm season of 2021 and 2022, asserting that DTE Electric has already received compensation for those expenses in prior rate cases. MI-MAUI's reply to exceptions, pp. 6-7.

The Commission finds that the ALJ's recommendation is well-reasoned and supported by the record. Accordingly, the Commission adopts the ALJ's findings and conclusions on this issue. Specifically, the ALJ found that:

> DTE's February 2023 filing projected 2022 expenditures of $5.29 million, based on applying inflation factors to the historical 2021 spending, and projected test year spending only by continuing to apply inflation factors to 2021 spending. It turned out that 2022 actual expenditures were significantly lower—$1.4 million lower—than the 2021 expenses adjusted for inflation. As part of acknowledging the 2022 actual O&M expense for streetlighting, after DTE's rate filing, [company witness] Mr. Bellini claimed in discovery that the projected test year forecast was instead "based on the 2021 historical period plus anticipated changes through the projected test period." In this discovery response, he identified "the following considerations," including: "1) new hires for unfilled positions[;] 2) inflation impacting various costs including employee salaries [; and] 3) increased administrative costs." Mr. Bellini provided a breakdown of its historical expenditures from 2018 through 2022 into three separate categories—preventative maintenance, supervisory & administration, and outage restoration, and added what he contended are DTE's projections for each of those categories for the projected test year. None of these three categories reflect inflationary increases from either

> 2021 or 2022 levels. Instead, relative to 2021 historical levels, DTE projects: preventative maintenance expenses that are 71% above 2021 levels (150% above 2022 levels); supervisory and administrative costs that are 80% above 2021 levels (124% above 2022 levels); and outage restoration costs that are approximately 52% of 2021 levels (75% of 2022 levels). DTE's widely varied component projections presented post-filing in Exhibits MAU-[sic] somehow add up exactly to the inflation-based projection on line 23 of Schedule C5.6, which casts doubt on the credibility of the company's contentions. DTE had an opportunity through the columns in Schedule C5.6 to adjust out of the 2021 test year the lamp washing and relamping costs, and to add in projected additional administrative and supervisory costs in its filing, and instead, chose not to do so. Schedule C5.6 contains columns, columns e and j, for normalization adjustments for both the historical and projected test year, and DTE did not include any such adjustments.

PFD, pp. 515-516 (footnotes omitted).

In addition, according to DTE Electric, the proposed expense is for luminaires "that are slated for washing during the projected test year, and [is] reflective of the number of LEDs that were originally installed in 2014." *See*, DTE Electric's initial brief, p. 192. However, as pointed out by MI-MAUI, at the time these luminaires were installed in 2014, the company was on a five-year washing cycle. *See*, MI-MAUI's initial brief, p. 26 (citing Exhibit MAU-22). Thus, these luminaires should have been washed in 2019 prior to the COVID-19 pandemic and the severe storm seasons of 2021 and 2022, which DTE Electric cites as reasons that the LEDs were not washed on schedule.

Regarding DTE Electric's claim that the increased expense is necessary for acquiring additional supervisory and administrative staff, the Commission finds that the company did not sufficiently demonstrate that it will expend these costs as claimed. In Exhibit MAU-26, DTE Electric's response to MI-MAUI's discovery request, the company stated that its supervisory and administration expenses were $1.20 million for 2018, $1.14 million for 2019, $1.18 million for 2020, $1.45 million for 2021, and $1.16 million for 2022. Thus, the Commission finds that this expense remained relatively stable over the five-year period. However, the company projected test year supervisory and administration expenses of $2.61 million, which is almost twice the amount of the highest expense, $1.45 million in 2021.

When asked by MI-MAUI to explain the significant increase, DTE Electric responded that it is "primarily based on the following considerations: 1) New hires for unfilled positions[,] 2) Inflation impacting various costs including employee salaries[, and] 3) Increase in administrative costs." Exhibit MAU-27; *see*, Exhibit A-40, Schedules EE8 and EE9. The Commission finds that without more specific details demonstrating that the company can and should fill open positions, how inflation impacts various costs, and the cause for the increase in administrative costs, DTE Electric failed to demonstrate by a preponderance of evidence that the proposed expense is reasonable. Therefore, the Commission finds that the ALJ's recommendation to approve MI-MAUI's proposed adjustments to the company's streetlighting expense should be adopted.

5. Uncollectible Expense

DTE Electric stated that its uncollectible expense of $54.6 million for the projected test year was calculated "utilizing a three-year average based on actual uncollectible expense for 2019-2021 . . . ." 5 Tr 2099.

The Staff disputed the company's calculation method, asserting that "[i]t does not consider revenue as a factor in its projection. Including revenue as a factor for projecting [uncollectible expense] is necessary because as revenue increases or decreases, so does the probability for default on amounts owed to the Company." 7 Tr 4675. Instead, the Staff recommended the direct write-off method presented in Exhibit S-8.1. In addition, the Staff contended that the use of its method "applied to total present revenue encourages the Company to continually improve efforts to reduce [uncollectible expense] below the amount set in rates. Which it has done for the past three years. This can be seen on [E]xhibit S-8.1 in column (j.)." 7 Tr 4676-4777.

The Attorney General also objected to DTE Electric's method for calculating uncollectible expense. She asserted that the historical uncollectible amounts used by the company "do not reflect the actual bad debt charge-offs in those years." 6 Tr 3775. In addition, the Attorney General stated that "by utilizing this three-year average[,] the Company includes the year 2019, which is a period when uncollectible accounts expense was extraordinarily high due to its 'customer 360' issues." 6 Tr 3775. According to the Attorney General, the uncollectible expense should be calculated using "a three-year average ratio of charge-offs to revenues applied to future revenue," which results in an uncollectible expense of $45.9 million for the projected test year.

In response, DTE Electric agreed with the Staff's use of the most recent three-year historical average write-offs, however the company proposed two adjustments. First, DTE Electric recommended that "[t]he historical write-off ratio should be applied to proposed revenue instead of the present revenue." 5 Tr 2105. Second, the company stated that "Non-Energy Net Write-Offs should not be excluded from the calculation as these costs should not be treated differently and should be recoverable through the rate making process." 5 Tr 2105-2106. Accordingly, DTE Electric contended that these two adjustments result in an uncollectible expense projection of $47.86 million. The company asserted that the adjustments to the projected test year expense also appropriately include DTE Electric's matching of Low-income Home Energy Assistance Program credits.

In its initial brief, the Staff revised its position, stating that it "does not contest the inclusion of non-energy write-offs in the [uncollectibles] calculation which were found to be written off damage claims." Staff's initial brief, p. 84. However, the Staff rejected the company's proposal to apply the historical write-offs to proposed revenue and reiterated that the Staff's method "'encourages the Company to continually improve efforts to reduce [uncollectible expense] below the amount set in rates.'" *Id*., p. 85 (quoting 7 Tr 4676). As a result, the Staff recommended that the Commission adopt a projected test year uncollectible expense of $42.81 million.

The ALJ recommended that the Commission adopt the Staff's proposal as set forth in its initial brief. The ALJ found the Staff's explanation "persuasive that the direct method is preferable to reliance on the company's accrual accounting, that the tie to actual rate levels is an advantage of Staff's method, and that any effort to adjust the expense level to reflect the projected revenue requirement is iterative and should be avoided." PFD, pp. 522-523.

In its exceptions, DTE Electric disagrees with the ALJ's recommendation because:

> two changes are required for Staff's original calculation: (1) the historical write-off ratio should be applied to proposed revenue instead of present revenue, and (2) Non-Energy Net Write-Offs should not be excluded from the calculation. Both of these changes are consistent with [Attorney General] witness Coppola's calculation in Case No. U-20836, which the Commission adopted. Staff agreed with the second change, but not the first. The Company maintains that the first change should also be made, and the Company's projected amount of $47,855,000 should be adopted.

DTE Electric's exceptions, p. 184.

In its replies to exceptions, the Staff contends that "[t]he [ALJ] properly considered the record in this case and agreed with Staff's reasons for using present revenue" and, therefore, DTE Electric's exception should be rejected. Staff's replies to exceptions, pp. 24-25.

The Attorney General also replies, reiterating the arguments set forth in testimony and briefing. Attorney General's replies to exceptions, pp. 43-44.

The Commission finds that the ALJ's recommendation is well-reasoned, supported by the record, and should be adopted. The ALJ noted that according to the Staff:

> [t]he cash basis accounting of gross write-offs, less recoveries, applied to revenue is more accurate for uncollectible accounts expense projections for rate making purposes because it presents the actual write-offs and recoveries the Company receives from customers annually and includes direct expenses. Using the cash basis, direct write-off method, uncollectible accounts are written off directly to expense as they become uncollectible.

PFD, pp. 519-520 (quoting 7 Tr 4676). In addition, the Commission agrees with the Staff that using present revenue, rather than projected revenue, avoids the creation of an iterative calculation and "encourages the Company to continually improve efforts to reduce [uncollectible expense] below the amount set in rates." 7 Tr 4676-4677.

6. Regulated Marketing

The ALJ noted that the Staff recommended a $1 million reduction to regulated marketing O&M expenses related to the EV emerging technology fund. The ALJ stated that she adopted the Staff's recommendation. PFD, p. 523.

The Commission notes that this issue is addressed in the Rate Base section above.

7. Corporate Support

a. Information Technology Operations and Maintenance Adjustments

DTE Electric stated that information technology (IT) "O&M consists of expenses related to project work along with on-going and base operating expense not tied to specific projects, which includes software maintenance, software licenses, cloud computing fees, software as a service, hardware and software defect remediation, business support services, and IT administration." 5 Tr 1518-1519; *see*, Exhibit A-13, Schedule C5.10. In addition, the company explained that:

> [t]he business cases for IT projects often reflect both capital costs and O&M costs so that the full cost can be reviewed when management is evaluating projects. For rate case purposes, the capital costs are identified by project and supported by [DTE Electric] Witnesses Sharma and Hatsios. O&M costs related to projects are provided for informational purposes in Exhibit A-24, Schedule N3, as requested by the Commission, but are not specifically forecasted in the O&M projections. The forecast reflects that as work related to historical projects ceases, it is replaced with

> work on new projects. Consistent with all other [administrative and general] expense, IT expense in the projected period is based on adjusted historical costs plus inflation.

5 Tr 1519. DTE Electric asserted that costs that do not meet the criteria for capitalization are charged to expense. The company proposed $69.1 million for IT O&M expenses for the projected test year.

The Staff recommended three adjustments to DTE Electric's projected IT O&M expenses. First, the Staff proposed a $1 million O&M reduction related to individual capital IT projects proposed for disallowance as discussed in the Rate Base section above. Second, the Staff recommended a $4.2 million adjustment that is consistent with the proposed 20% disallowance of IT O&M expenses associated with Level 2 projects. The Staff stated that "these cost projections are incomplete and indefinite as they are given over a year before project implementation, and have not been through the comprehensive review process, final approval, or budget allocation." 7 Tr 4662. Third, the Staff recommended a $44.04 million reduction in projected IT O&M expenses because these remaining costs "are arbitrary and not connected to any project or investment." 7 Tr 4663.

DTE Electric disputed the Staff's characterization of its IT O&M expenses. Regarding the first and second adjustments recommended by the Staff, the company stated that:

> [i]f the specific projects proposed for disallowance are not executed, then the resources will be redeployed to other projects that were originally prioritized for a later implementation. Since the O&M included in the Company's projection adjustments was not based on specific projects, but represents the cost for an aggregate collection of projects, the Commission should reject these disallowances.

5 Tr 1567. In addition, DTE Electric asserted that if the Commission disallows the IT O&M expenses associated with disallowed capital expenditures and with the Level 2 estimate adjustment, the Commission must reduce the disallowance "by the amount not applicable to DTE

Electric. The $5.2 million O&M cited by Staff is the amount supporting all users of the assets. The actual IT O&M costs recorded at DTE Electric are based on the bill down of costs from the [limited liability company], approximately 75% of the total, or $3.9 million of the total $5.2 million." 5 Tr 1568. In response to the Staff's third proposed adjustment of $44.04 million, the company reiterated its argument that the projected expenses are based on historical costs plus inflation and not individual project cost estimates.

The ALJ stated that because she "recommended that the Commission adopt Staff's IT capital expense adjustments for the reasons discussed . . . above, the question of the reliability of the Level 2 estimates and the reasonableness and prudence of the other cost projections has been resolved." PFD, p. 528. The ALJ found unpersuasive DTE Electric's explanation of its IT O&M expense projection method and recommended that the Commission approve the Staff's first and second adjustments.

Regarding the Staff's third proposed adjustment, the ALJ asserted that DTE Electric failed to demonstrate that it will incur additional IT O&M expenses that are not reflected in Exhibit A-24, Schedules N1 and N3. Specifically, the ALJ noted that in testimony and Exhibit A-24, Schedules N1 and N3, the company identified five investment categories: (1) regulatory/compliance, (2) sustainment (expenses that are incurred to run the organization), (3) return-to-health (investments to update critical systems that are at end-of-life), (4) IT enhancements (discretionary capacity/capability performance upgrades), and (5) strategic (spending to create a new business capability). She stated that Exhibit A-24, Schedules N1 and N3 clarify that "costs including licensing, fixing bugs or defects, upgrades, and maintenance are included" in these expenses and "DTE has not identified any cost category that is clearly excluded from its Schedule N1 and N3 project lists . . . ." PFD, pp. 529-530. Therefore, the ALJ recommended that the Staff's proposed adjustment should be adopted.

In exceptions, DTE Electric reiterates the arguments set forth in testimony and briefing. *See*, DTE Electric's exceptions, p. 187; *see also*, 5 Tr 1518-1519; DTE Electric's initial brief, pp. 199-201. DTE Electric contends that "[w]ithout funding for base operating IT O&M, the Company would not be able to run and maintain existing IT systems, which would impair the Company's ability to operate effectively in delivering safe and reliable service to customers. Importantly, approximately 35% of the projected IT expense is for payroll for IT staff who support daily operations." *Id*. The company argues that the proposed expenses maintain status quo and that this is the same forecasting methodology that has been approved by the Commission in previous cases.

In its replies to exceptions, the Staff relies on its position set forth in briefing. *See*, Staff's replies to exceptions, p. 19. Responding to DTE Electric's claim that its proposed IT O&M expenses maintain status quo, the Staff states that:

> "Status quo" is not justification for an expense nor does it satisfy the burden of proof. Regardless of how long this forecasting methodology has been applied, or if it has been opposed in the past, expenses are always subject to analysis for reasonableness and prudency. The Company holds the information for that analysis and without it, Staff is unable to determine if an expense is appropriate and just.

Id., pp. 19-20.

The Commission notes that according to DTE Electric, "the O&M included in the [c]ompany's projection adjustments was not based on specific projects, but represents the cost for an aggregate collection of projects . . . ." 5 Tr 1567. In addition, DTE Electric stated that "projected IT O&M is based on historical costs plus inflation, not individual project estimates." 5 Tr 1568. The Commission finds that although the company is able to identify "an aggregate collection of [IT] projects" and can forecast costs based on *known* historical projects, DTE Electric has failed to clearly explain to the Commission why the company cannot identify specific IT projects and the associated expenses for which the forecasted O&M costs apply. Also, as noted by the Staff, the company acknowledged that several IT O&M expenses in Exhibit A-24, Schedule N3 were presented in error. However, the Staff determined that DTE Electric was able to provide support for $20.82 million of its projected IT O&M expense. *See*, Exhibit A-24, Schedules N1 and N3; Exhibits S-12.9 and S-12.10.

The Commission also notes that the Staff argued that much of the company's projected IT O&M was "arbitrary and not connected to any project or investment." 5 Tr 4663. The Commission reviewed the record and finds that according to DTE Electric:

> approximately 50% of the projected IT O&M expense supports software maintenance, including providing critical vendor support for software or hardware failures that require remediation to resume normal business operations. Software maintenance also includes providing bug fixes and upgrades to maintain smooth IT operations and the installation of security patches to address and mitigate cybersecurity threats. Additionally, approximately 35% of the projected IT O&M expense is for payroll for IT staff who support daily operations.

5 Tr 1569. Thus, the Commission finds that DTE Electric provided evidence on the record supporting 85% of its proposed test year expense of $69.1 million for IT O&M. The Commission approves these expenses, recognizing that it is important that the company continue to fund base and essential IT systems, whose cessation would otherwise impair "its ability to operate effectively in the delivery of safe and reliable service to customers." 5 Tr 1569. However, the company failed to clearly and sufficiently explain the remaining 15% of IT O&M costs and the Commission finds that those costs should be disallowed.

The Staff recommended that "any costs requested by the Company for inclusion in rates should be supported with evidence in testimony and exhibits to show they are prudently incurred." 5 Tr 4663. The Commission agrees and finds that, in its next general rate case, DTE Electric shall file a separate exhibit for IT O&M including its most recent actual annual IT O&M expense, along with its projected IT O&M expense, broken down into categories such as labor, software maintenance, software licenses, cloud computing fees, software as a service, hardware and software defect remediation, business support services, and IT administration with associated testimony that describes the number of employees on the IT payroll and number of licenses by program, as well as descriptions of each category of actual and projected expenses included in the exhibit.

b. Corporate Memberships

In Case No. U-20836, the Commission directed "DTE Electric to file in its future rate cases an exhibit containing an itemized list of projected costs associated with membership fees and justification for why these costs are in customers' interest." November 18 order, p. 308. Accordingly, in this case, DTE Electric provided Exhibit A-27, Schedule Q1 that:

> includes the costs and a description for each membership included in the Company's projected test year. The exhibit is seven pages with pages 1 - 2 displaying, in alphabetical order, the corporate memberships which are nondiscretionary. Pages 3 – 7 display, in alphabetical order, those memberships which are discretionary. The descriptions include the benefit these memberships offer. Additionally, corporate memberships which are discretionary and exceed $100,000 are further supported by other witnesses in the case representing the primary business unit that utilizes the membership.

5 Tr 2188. The company asserted that the membership expenses do not include lobbying costs and have been included in DTE Electric's revenue requirement with an inflation adjustment.

DTE Electric explained that customers receive benefits from the memberships listed in Exhibit A-27, Schedule Q1, pages 2-7, such as: (1) benchmarking, which "helps the Company understand how its performance and practices compare to its peers;" (2) best practices, which "provides insights into industry best practices and potential opportunities for implementation based on those insights;" (3) research, which "provides access to research that the Company would otherwise have to perform on its own, and leads to access to information at a lower cost than if each member organization performed the research on their own;" and (4) networking, which "helps build relationships with peers that improves the flow of communication between people and companies leading to a greater awareness of industry trends, emerging technologies, emerging issues, and resources." 5 Tr 2189-2190.

The Staff recommended a $15,000 disallowance and a $5,326 disallowance because the amounts were "inadvertently not eliminated from the Membership fees included in the revenue requirement" per the company's discovery response. 7 Tr 4580. In addition, the Staff proposed a $601,470 disallowance for the Low Carbon Resources Initiative (LCRI) because DTE Electric failed to explain the cost impact/benefit to customers.

The DAAOs objected to DTE Electric's proposed discretionary membership fees of $5.3 million, asserting that the company did not demonstrate that the fees benefit customers. However, if the Commission does not approve the disallowance as proposed, the DAAOs requested that the Commission disallow $2.7 million for Tier 1 expenses for organizations whose membership "misalign[s] with ratepayer interests," $2.5 million for Tier 2 membership expenses where it is unclear whether the agenda of the organization benefits ratepayers, and $0.09 million for membership expenses for organizations "that may have some benefit to ratepayers, but are unsupported in the record." 6 Tr 3989.

In response, DTE Electric contended that the company explained the benefits of the proposed membership fees for customers. Specifically, the company asserted that "the costs to perform even one of the EPRI [Electric Power Research Institute] projects would be greater than the cost of the membership" and that "following guidelines offered through EPRI protects power plant equipment and maintains reliable operations." 5 Tr 2428. Regarding the LCRI, DTE Electric noted that it is a partnership between EPRI and the Gas Technology Institute "where the economics of membership and customer benefits are equally applicable." 5 Tr 2428-2429. The company reiterated that membership in these organizations assists DTE Electric in learning from, and networking with, other industry partners and acquiring knowledge about emerging technologies that will advance carbon net zero goals set by the company and the MI Healthy Climate Plan.

In addition, according to DTE Electric, the membership fees paid to the Nuclear Regulatory Commission, Emergency Response Organizations, and the Institute of Nuclear Power Operations are mandatory. Further, although the membership fees for EPRI and Nuclear Energy Institute (NEI) are not mandatory, the company stated that they:

> are critical within a nuclear business model. In particular, organizations like EPRI that support research and development include sharing of products and services to ensure nuclear asset owners benefit as a whole from shared information. These products and services would be unaffordable without group participation and funding. The role provided by NEI is valuable to plant owners and operators in helping to shape important industry issues and regulation through a coordinated and solidified approach. The nuclear industry clearly recognizes that any one plant can abruptly upset the entire industry due to performance issues. As a result, this industry believes in significant group participation and knowledge sharing to help preclude such an event.

5 Tr 2488-2489.

The ALJ found that the Staff's proposed adjustments should be approved. She stated that "[r]egarding the LCRI membership, this PFD notes that Staff provided DTE with the opportunity to identify customer benefits in discovery, and DTE's response simply referred Staff to testimony that was already included in DTE's application and that did not directly answer Staff's question." PFD, p. 537. Next, the ALJ found that the DAAOs' proposed disallowance should be rejected because DTE Electric provided sufficient testimony demonstrating that the company's discretionary membership in these organizations provides benefits to customers. *See*, PFD, p. 538.

However, the ALJ acknowledged the DAAOs' concern that the company failed to consistently identify the customer benefits for the three tiers of membership fees identified by the DAAOs, and she "recommend[ed] that in DTE's next rate case, it provide information on those customer benefits, clearly denominated as such so that they can be properly evaluated." *Id*.

In its exceptions, DTE Electric reiterates the arguments set forth in testimony, asserting that the corporate memberships provide customer benefits and that the proposed expenses should be approved. Additionally, the company states that the ALJ's "suggestion that the Company provide additional information on customer benefits in its next rate case should be rejected as unfounded and unnecessary. The Company already provided additional information in the instant case, and there is no sound basis for yet another filing requirement." DTE Electric's exceptions, p. 189 (footnote and internal citation omitted).

The DAAOs also except, stating that "[i]n the instant rate case, DTE has provided only vague and broad descriptions of the benefits of its corporate memberships, which make it impossible on a practical level to evaluate the specific benefits that each membership would bring to customers. The PFD does not adequately acknowledge this fact." DAAOs' exceptions, p. 14 (footnote omitted). The DAAOs assert that if the Commission does not disallow the entire expense, "it should at least disallow recovery on the presumptively suspect 'Tier 1' expenses outlined in DAAO initial testimony and briefing." *Id*., p. 15 (footnote omitted). In the event that the Commission approves full recovery of the expense, the DAAOs recommend that the Commission "require that the information on ratepayer benefits be organized into specific, more granular activities," such as "(1) the specific achievements that each organization has accomplished that are in ratepayer interests, (2) specific information about each organization's governance structure, including whether and how its leadership is directly accountable to ratepayers, and (3) information about how each organization's interests and priorities has evolved over time." *Id*., p. 16.

In its replies to exceptions, DTE Electric reiterates that the information provided in Exhibit A-27, Schedule Q1 and its witness testimony in 5 Tr 2187-2191 comply with the Commission's directives in the November 18 order and that the DAAOs' exception should be rejected. *See*, DTE Electric's replies to exceptions, pp. 18-21.

In response to the Commission's directive in the November 18 order, DTE Electric provided a list of the company's discretionary and non-discretionary corporate memberships in Exhibit A-27, Schedule Q1. The Commission agrees with the ALJ that "DTE has provided evidence of customer benefits from memberships that are not reflected in or immediately apparent from [Exhibit A-27,] Schedule Q1 or Exhibit DAO-11 . . . ." PFD, p. 538; *see*, 5 Tr 2187-2191.

Although the evidence on the record supporting the company's membership with LCRI could have been more substantial, the Commission has previously encouraged DTE Electric to utilize studies, collaborations, and pilot projects conducted by industry associations or other external parties to efficiently acquire technological learnings while spending ratepayer money in an economical manner. Thus, the Commission finds that the company's membership with LCRI is a cost-effective subscription to a valuable collaboration "between EPRI and the Gas Technology Institute (GTI) aimed at accelerating the development and demonstration of low and zero-carbon energy technologies." 5 Tr 2369. As noted by DTE Electric, "[t]he costs for the Company to perform even one of these projects would be greater than the cost of the membership." 5 Tr 2368. Thus, the Commission finds that the company's projected test year expense for corporate memberships should be approved.

However, the Commission also agrees with the ALJ that DTE Electric could have more effectively responded to the Staff's and intervenors' requests for more information about the customer impact/benefit of these memberships. Therefore, to ensure continued recovery of these corporate membership fees, DTE Electric shall provide in its next general rate case a detailed description of how these organizations *specifically* impact/benefit customers as outlined by the DAAOs, which will convey DTE Electric's roles and responsibilities in advancing ratepayer interests through its participation in each organization.

c. Pre-pay Program Expenses

The ALJ noted that DTE Electric's proposed O&M expense for the PrePay Phase II pilot project is $344,000. She stated that this project is discussed below and "[f]or the reasons explained below, this PFD recommends that the project not be approved, and consistent with that recommendation, further recommends that the O&M costs be excluded." PFD, p. 539.

As discussed in the Rate Base section above and the Other Revenue-related Items section below, the Commission declines to approve DTE Electric's proposed capital expenditures for the PrePay Phase II pilot. Therefore, the Commission finds that the company's associated projected test year O&M expense for the PrePay Phase II pilot is also denied.

8. Pensions and Benefits

a. Other Post-employment Benefits Expense

DTE Electric stated that its other post-employment benefit (OPEB) expense includes retiree medical, dental, prescription drug, and life insurance benefits. According to the company, the components of OPEB expense include service costs, interest costs, expected return on assets, and amortization. DTE Electric asserted that its:

> OPEB costs are projected to decrease from negative $31.445 million in the historical test year to negative $36.435 million during the projected test year, which

> represents a decrease in OPEB costs of $4.990 million. The decrease in OPEB costs is primarily due to the projected reduction in the Amortization of Net (Gain)/Loss as result of investment gains in 2020 and 2021 partially offset by a projected increase in the Amortization of Prior Service Costs due to a reduction in unamortized balance.
>
> The total projected OPEB cost of negative $36.435 million is adjusted for the impact of costs transferred and capitalized, as described by [DTE Electric] witness Uzenski, which results in negative OPEB expense of $21.424 million for the projected test year.

5 Tr 1356. DTE Electric noted that the negative OPEB expense is not included in the company's revenue requirement because the company proposed continuing to defer the projected negative OPEB expense to the accumulated regulatory liability.

The Attorney General objected to DTE Electric's proposal, arguing that "it is not fair or reasonable for the Company to continue to defer the OPEB negative expense and not pass through to customers a portion of the deferred regulatory liability balance in this rate case and continuing into the future." 6 Tr 3793. She recommended that DTE Electric amortize the regulatory deferred liability account balance of $128.42 million as of December 2022 over a seven-year period and reduce the projected test year O&M expense by $18.36 million, which is the resulting amortization expense.

DTE Electric objected to the Attorney General's recommendation stating that although the company expects OPEB costs to be negative through 2029, there may be changes in asset returns and discount rates that would result in positive expense. Additionally, DTE Electric asserted that OPEB expense is a non-cash item and "the inclusion of a negative cost in the Company's revenue requirement would have a detrimental impact on the Company's future cash flow because the Company's revenue and cash receipts would be reduced without any corresponding reduction in cash outlays." 5 Tr 1577.

The Attorney General disputed the company's claim that "the OPEB negative expense is a non-cash item and will impact the Company's cash flow and also raise concerns with the rating agencies. Those concerns have been raised before and are not significant enough to continue to defer the negative expense indefinitely." 6 Tr 3793. In addition, she stated that DTE Electric does not use cash-basis accounting in rate cases; rather, the company uses accrual accounting, "which means that there is a timing difference between the time that expense and revenue are recognized and the time that cash is spent or received. Therefore, OPEB credit expenses should not be isolated for special treatment as a non-cash item." Attorney General's initial brief, pp. 30-31.

The ALJ found the Attorney General's proposal persuasive and recommended its adoption. She stated that "[g]iven DTE's record revenue request of over $600 million in this case, and the utility's high capital expenditures, it is an appropriate time to amortize this $128 million amount to offset O&M expense." PFD, p. 543. However, the ALJ agreed with DTE Electric that, consistent with the Commission's decision in the November 18 order, the company should be authorized to continue to defer OPEB expense in 2023 and into the future to alleviate some of the uncertainty associated with future expense.

DTE Electric excepts, reiterating the arguments set forth in testimony and briefing. *See*, DTE Electric's exceptions, pp. 190-191.

In reply, the Attorney General argues that DTE Electric's exception failed to address the PFD and "simply reiterates [the company's] testimony on the topic." Attorney General's replies to exceptions, p. 45 (footnote omitted).

The Commission finds that the ALJ's recommendation is well-reasoned, supported on the record, and should be adopted. Although DTE Electric stated that it expects "OPEB costs to remain negative through 2029," the company expressed concern that if the expense becomes positive again, it will negatively affect DTE Electric's cash flow. 5 Tr 1576-1577. The Commission agrees with the ALJ that the Attorney General's proposal will alleviate those concerns: "[f]irst, it provides sufficient time to reverse course or otherwise adjust the amortization process if trends change and OPEB expense becomes positive. Second, the seven-year timeframe spreads out the amortization expense over several years to lessen the impact on cashflow in any given year." PFD, p. 543. The Commission also finds persuasive the ALJ's recommendation to authorize continued deferral of OPEB expense incurred in 2023 and in future periods. This recommendation is consistent with the Commission's decision in the November 18 order and will reduce the uncertainty associated with future OPEB expense.

c. Voluntary Employee Beneficiary Association Costs

DTE Electric explained that in lieu of traditional retiree healthcare benefits, the voluntary employee benefit association (VEBA) program has been offered to new employees and that the VEBA costs were offset by avoided OPEB costs. According to the company, the "VEBA expense is projected to increase from $7.272 million in the historic [sic] test year to $13.967 million in the projected test year, which is based on annual escalations of 25%, based on the Company's recent experience." 5 Tr 1357.

The Staff argued that DTE Electric failed to support its 25% escalation rate in its exhibits. The Staff stated that it "requested the Company's calculation of the rate, and its response is presented in exhibit S-8.3. Columns 12 (m.) through (n.) show 5[-] and 4-year averages of the Company's recent experience. The 4-year average excludes year 2020 for reasons provided in audit response presented on exhibit S-8.5, page 2 . . . ." 7 Tr 4677. The Staff disagreed with DTE Electric's reasons for excluding 2020 in its four-year average, asserting that:

> it is necessary to include the actual changes in expense from year to year when methods like average annual growth rates (AAGR) are used. Also, regardless of

> the Company's reasons for exclusion, it did not use a rate resulting from it. See exhibit S-8.3, column (n.). Instead the Company plugged a 25% escalation rate into its projection. See Exhibit S-8.3, lines 17-19, col. (b.). The 4-year average AAGR presented in column (n.) for total and expensed VEBA are 23.6% and 19.2%.

7 Tr 4678. To calculate the VEBA expense, the Staff used a 16.5% AAGR, which is a five-year average of actual expense for 2017 through 2021. The Staff applied the rate to the historical test year and calculated a VEBA expense of $11.36 million for the projected test year.

The Attorney General agreed with the Staff that the company's 25% escalation rate was not supported in the record. However, she "compute[d] the annualized rate of growth from 2016 to 2021[,] which is 12.4%," and then "appl[ied] the 12.4% growth rate to the actual 2021 expense level and escalate[d] it through 2024 at this rate. The result is a forecasted expense of $8.4 million for the projected test year." 6 Tr 3782.

DTE Electric objected to the Staff's calculation method, asserting that the Staff improperly "relied upon the annual increase in the Company's New Hire VEBA expense, which is impacted by changes in the proportion of New Hire VEBA costs capitalized." 5 Tr 1421. In addition, the company explained that it excluded 2020 actual experience from the historical average because there was an "extraordinarily low increase in 2020 [expense] compared to the year before and after and the level of new hires in 2020 compared to the years before and after." 5 Tr 1422. DTE Electric prepared an alternative to the Staff's VEBA expense calculation by including an average of VEBA expense for 2017 through 2021, excluding 2020, which results in 23.1%. Using the 23.1% AAGR, the company recalculated a VEBA expense of $13.34 million for the projected test year.

DTE Electric also disputed the Attorney General's reliance on historical increases in the company's new hire VEBA expense because, according to the company, it "is an unreliable basis for determining future escalations." 5 Tr 1424. Furthermore, DTE Electric contended that the

Attorney General's use of one year's true-up to adjust 2021 expenses did not result in a representative level of new hire VEBA expense. Similar to its response to the Staff, the company prepared an alternative VEBA expense calculation using a four-year average of the annual percent change for 2017-2020, which results in 23.9%. DTE Electric stated that "[u]tilizing the unadjusted 2021 New Hire VEBA cost of $11.793 million, which excludes the non-recurring effect of forfeitures in 2021, and an annual escalation of 23.9% produces a projected New Hire VEBA costs [sic] of $22.046 million, or after reduction for the portion of costs capitalized a New Hire VEBA expense of $14.484 million." 5 Tr 1426.

The ALJ agreed with the Staff and the Attorney General that DTE Electric failed to justify the use of a 25% escalation rate. However, she stated that the company "justified the exclusion of results from the year 2020 when calculating the multi-year average. The 2020 change of 8.4% was significantly smaller than changes in other years which were all above 20%; further, DTE explained that this was likely because of the decline in new hires caused by the pandemic." PFD, pp. 547-548 (footnote omitted). Therefore, the ALJ recommended adopting DTE Electric's alternative to the Staff's calculation, which utilized an escalation rate of 23.1%, and results in a VEBA expense of $13.34 million.

In exceptions, DTE Electric notes that:

> [t]he ALJ recommended adoption of the Company's correction to Staff's proposed New Hire VEBA, which produces a projection of $13.338 million. However, Appendix C in the PFD reflects the Staff's adjustment to the New Hire VEBA expense of $2.604 million. Therefore, the ALJ's recommended revenue deficiency should be corrected by the difference between the Company's rebuttal projection, as adopted by the ALJ, of $13.338 million and the Staff's proposal of $11.363 million, or an increase of $1.976 million.

DTE Electric's exceptions, p. 191 (internal citation omitted).

The Attorney General excepts, asserting that she "continues to have concerns about the almost 100% increase in expense from the historic [sic] test year to the projected test year ($7.272 million to $13.967 million)." Attorney General's exceptions, p. 13 (footnote omitted). She reiterates that a more moderate projected test year expense of $8.4 million is supported by the record and more reasonable for customers. If the Commission does not adopt the Attorney General's proposed expense, she argues that the Staff's proposed test year expense of $11.36 million is more reasonable than the ALJ's recommendation.

In its replies to exceptions, DTE Electric disagrees with the Attorney General's recommendation, reiterating the arguments set forth in testimony and briefing. *See*, DTE Electric's replies to exceptions, pp. 21-23.

The Attorney General replies that "[a]s laid out in [my] exceptions, based on the [Attorney General]'s and Staff's testimony and briefing the [Attorney General] continues to recommend that the Commission remove $5.6 million from the Company's projected test year O&M expense and set the level at no more than $8.4 million." Attorney General's replies to exceptions, p. 45.

The Commission finds that the ALJ's recommendation is well-reasoned, supported by the record, and should be adopted. In Exhibit S-8.3, the Staff demonstrated that DTE Electric failed to sufficiently support the 25% escalation rate. The Commission finds that the Staff's proposed calculation of the escalation rate is reasonable, with one exception. The Commission agrees with the ALJ that the year 2020 should not be included in the calculation because "exclusion of a year that was a clear outlier is an appropriate adjustment when the cause for its outlier status is an identifiable nonrecurring event, in this case, the COVID-19 pandemic." PFD, p. 548. Thus, the Commission finds that DTE Electric's proposed adjustment to the Staff's calculation, which results in a 23.1% escalation rate, is reasonable and prudent and should be approved.

The Commission notes that in DTE Electric's exceptions, the company states that there was an error in Appendix C to the PFD for VEBA expense. The Commission finds that this error has been noted and corrected.

d. Active Employee Healthcare and Other Benefits

DTE Electric projected a test year active employee healthcare expense of $56.96 million, asserting that health care expense is volatile because of "variations in usage, the effect of benefit plan design, and changes in pricing." 5 Tr 1361. The company stated that the "increase reflects the normalization of the 2021 Active Healthcare costs to reflect an historical average of constant dollar costs and annual escalations for the adjusted medical plan trend of 6.0% in 2022, 5.50% in 2023, and 5.0% in 2024 . . . ." 5 Tr 1358-1359. However, DTE Electric noted that life insurance costs were expected to remain static for the projected test year.

Regarding benefit plan administration fees, the company contended that the fees are expected to increase from $6.44 million to $7.42 million in the projected test year. For other benefit/costs such as accrued vacation, supplemental severance plan costs, wellness plan, long-term disability, Affordable Care Act expenses, supplemental savings plan, deferred compensation, general benefits, and retirement administration fees, DTE Electric stated that "these costs are projected to increase from $8.820 million in the historic [sic] test year to $11.092 million in the projected test year . . . ." 5 Tr 1369.

The Staff argued that the company's "use of three different rates of inflation for this highly volatile expense unnecessarily conflate the projection method." 7 Tr 4681. Rather, the Staff asserted that DTE Electric's AAGR for active health care should be 2.31%. In its initial brief, the Staff corrected a calculation error and recommended an active health care expense of $61.85 million. *See*, Staff's initial brief, pp. 101, 103.

The Attorney General also objected to DTE Electric's proposed active health care expense. She stated that:

> [t]he problem with [the company's] analysis and calculations is that the $11,860 constant dollar adjusted cost per employee for 2021 is divorced from reality. This amount is only 5% lower than [the company's] actual cost determination for 2021 of $12,485. This approach is unreliable, especially in light of COVID-19 and its impact on cost levels in 2020 and 2021. [DTE Electric] is simply compounding inflationary increases on top of inflationary increases over the eight-year period from 2017 to 2024.

6 Tr 3778. Instead, the Attorney General calculated active health care expenses using the actual average cost of health care per employee from 2017 to 2021 without the constant dollar averaging adjustments, which resulted in 3.33%. She applied the 3.33% average rate of increase to health care costs from 2022-2024 and obtained an active health care cost of $53.7 million for the projected test year.

DTE Electric disagreed with the Staff's proposed calculation. The company asserted that "by relying on historical changes in the Company's Active Healthcare expense to determine the projected annual escalation, [the Staff's] proposal conflates changes in the Company's underlying Active Healthcare costs with changes in the proportion of those costs that are expensed." 5 Tr 1430. In addition, DTE Electric contended that the Staff's calculation does not account for the one-time refund from Blue Cross Blue Shield of Michigan that the Commission required the company to amortize back to customers in Case No. U-20162. Moreover, the company objected to the Staff's inclusion of life insurance and benefit plan administration fees in the historical average annual cost "because these costs items are not subject to the same variability as the Medical, Dental and Vision cost categories" and because "the cost of Life Insurance has been distorted by the reduction in Life Insurance costs as a result of an increase in the allocation of the portion of Life Insurance premiums related to retirees in 2019." 5 Tr 1431. Correcting the Staff's alleged errors, DTE Electric provided an alternative calculation using an approach similar to the Staff's, which resulted in an active health care expense of $68.83 million.

The company also disagreed with the Attorney General's proposed active health care expense. DTE Electric stated that the Attorney General:

> opportunistically uses the Company's actual Active Healthcare costs for 2022 to produce a lower starting point and seems to rely on a compound average growth rate (CAGR) for the years 2017 through 2022 of 3.33%, although the supporting workpapers submitted by [Attorney General's] Witness Coppola in response to the Company's discovery request doesn't provide the derivation of the 3.33%.

5 Tr 1434. The company provided an alternative calculation that uses 2016-2021 to be consistent with DTE Electric's 2021 historical year, which resulted in a 5.28% average annual increase and an active health care expense of $56.56 million.

The ALJ agreed with the Staff and the Attorney General "that the Commission should reject DTE's constant dollar adjustment to healthcare costs; this approach is consistent with the Commission's past decisions rejecting the constant dollar approach as applied to active healthcare expense." PFD, p. 558 (footnote omitted). In addition, she contended that the Commission should continue to reject DTE Electric's use of a national average rate of increase because it is higher than the actual average experienced by the company. The ALJ recommended that the Commission adopt the Staff's proposed active health care expense, as revised and set forth in its initial brief, of $61.85 million.

DTE Electric excepts, maintaining its position on this issue. The company states that its "constant dollar normalization is appropriate to establish an accurate starting point since the year-to-year volatility of actual Active Healthcare costs (which is largely driven by the Company's self-insurance of healthcare benefits, and changes in utilization) makes any historical period expense potentially unreliable as a starting point to project costs." DTE Electric's exceptions, p. 193.

According to DTE Electric, the constant dollar normalization approach eliminates the volatility associated with calculating the starting point for this expense.

Next, the company contends that the ALJ's and the Staff's "projected Active Healthcare expense is also understated because it relies on historical annual average percentage changes in the Company's Active Healthcare expense, which is distorted by changes in the proportion of the Company's Active Healthcare costs that are capitalized." *Id*., p. 194. Further, DTE Electric objects to the ALJ's recommendation that the Commission adopt an historical annual average increase for active health care expense. According to the company, "a national trend rate, as provided by [Willis Towers Watson], is preferable to the Company's historical average because the national trend is not subject to the year-to-year variability of a relatively small population of plan participants" or "extreme sensitivity of the time period selected." *Id*., pp. 196-197.

Finally, DTE Electric states that:

> [t]he use of the annual change in the Company's [ESP] and New Hire VEBA costs were also reflected in [the company's] corrections to the Staff projections for those items on Exhibits [sic] A-37, Schedules BB3 and BB4, because of the distortive impacts of the historical changes in the proportion of costs capitalized. The ALJ recommended adoption of [the company's] corrections to the [ESP] and New Hire VEBA projections (PFD, pp. 547-548, 550-551).

DTE Electric's exceptions, p. 195, n. 119.

In its replies to exceptions, the Staff disputes the company's characterization of the ALJ's recommendation. The Staff asserts that "the ALJ only recommended adoption of [DTE Electric's] corrections to Staff's adjustments for [ESP] based on exclusion of year 2020 and New Hire VEBA expenses for excluding the results of year 2021 and 2022. The ALJ did not site changes in proportional costs capitalized as reason to recommend the Company's correction to Staff's adjustments as the Company's footnote implies." Staff's replies to exceptions, p. 24.

The Attorney General replies, reiterating her arguments set forth in testimony and briefing. Attorney General's replies to exceptions, p. 46.

The Commission finds that the ALJ's recommendation is well-reasoned, supported in the record, and should be adopted. The Commission finds that DTE Electric insufficiently demonstrated that its proposed constant dollar normalization will not result in compounded inflationary increases. In addition, the Commission agrees with the ALJ that the Staff's approach of using the company's AAGR, rather than the national average of increase, is the most reasonable method for calculating the actual increase in active health care expense. As stated by the ALJ: "even after DTE made downward adjustments to the national rate increase trend of 7.5% projected by [Willis Towers Watson], DTE's proposed increases were still significantly higher than the utility's actual average rate of increase whether calculated by Staff or the Attorney General." PFD, p. 558. Therefore, the Commission finds that the Staff's proposed $61.85 million active health care expense, as explained and recommended by the ALJ, should be approved.

e. Employee Incentive Compensation

DTE Electric projected a test year employee incentive compensation plan (EICP) expense of $62.9 million for short-term and long-term compensation. *See*, 5 Tr 1383-1403.

The Staff proposed a $43.8 million reduction that is related to financial performance measures. The Staff noted that in several previous cases, the Commission has excluded EICP expense that was tied to company earnings and cash flow because they are "financial considerations that largely benefit[] shareholders and should not be paid for by ratepayers." 7 Tr 4577. In addition, the Staff recommended an adjustment of $6.5 million attributable to restricted stock because it is inappropriately tied to financial measures that do not benefit ratepayers.

The Attorney General also asserted that several of the "incentive plans are too heavily skewed toward measures that directly benefit shareholders and not customers." 6 Tr 3786. She noted that "on average over the past five years, the Company has only been able to achieve approximately 52% of performance measures at target or better. Therefore, [she] recommend[ed] the Commission only approve recovery of compensation expense for 52% of the $19[,]504,000 or $10,142,000, and disallow recovery of the remaining $9,362,000 for the operational metrics." 6 Tr 3791. In total, she requested that the Commission exclude $43.5 million for EICP expense that is tied to financial measures.

ABATE requested that the Commission adopt a $43.39 million adjustment for short-term EICP expense that is tied to financial measures, and the DAAOs recommended a full disallowance of EICP expense. *See*, 4 Tr 1119; 6 Tr 3988; DAAOs' initial brief, p. 4.

Responding to the Staff's recommended adjustment, DTE Electric stated that the Staff's "proposed exclusion of $0.422 million of Nuclear Generation operating measures is improper even under [the Staff's] proposal because these measures are unrelated to financial results and therefore meet the Commission's traditional practice of requiring quantified customer benefits through improved reliability and lower costs." 5 Tr 1408. Regarding the other long-term incentive plan (LTIP) expenses, the company asserted that the Commission should reject the Staff's proposed disallowance because "the use of DTE Energy stock to deliver awards doesn't automatically make it a financial measure." 5 Tr 1410. In addition, DTE Electric argued that its EICP helps attract and retain skilled and expert employees that can perform their job functions effectively, which benefits customers. DTE Electric claimed that restricted stock expense is not related to future financial performance and has no impact on the company's costs.

Similarly, DTE Electric asserted that the Attorney General's recommendation to disallow all EICP expense tied to financial measures "ignores the customer benefits related to the maintenance of the Company's current debt ratings and the related avoided increased interest costs, and the operating and capital cost savings enabled by an organizational emphasis on operating efficiencies that produce improved earnings and cashflow . . . ." 5 Tr 1415. The company also disputed the Attorney General's claim that including DTE Electric's average ROE in long-term incentive compensation is duplicative of measures included in the annual incentive plan (AIP) and rewarding employees plan (REP). DTE Electric stated that, "[r]ather, the inclusion of similar measures in both the long and short-term plans is designed to ensure that employees are not disproportionately focused on creating near term savings that enable short-term rewards that may have adverse long-term impacts to customers. Thus, the inclusion of these measures in both the long and short-term plans is, in fact, complementary -- not duplicative . . . ." 5 Tr 1415.

In addition, the company objected to the Attorney General's assertion that if DTE Electric continues to fail to meet target performance levels, a significant amount of the incentive compensation payments will not occur. DTE Electric contended that "it is reasonable to assume that the Company will, on an overall basis, achieve Target performance levels for both the AIP and REP, based on the experience reflected on Exhibit A-37, Schedule BB1, and include all the incentive compensation expense related to the operating measures." 5 Tr 1418.

DTE Electric disagreed with ABATE's and the DAAOs' proposals for the same reasons the company opposed the Staff's and the Attorney General's proposed adjustments. *See*, 5 Tr 1420-1421.

The ALJ found persuasive the Staff's proposed adjustment to EICP expense because it is consistent with prior Commission decisions. Next, the ALJ stated that "DTE's arguments regarding the restricted stock program ignore the 'restricted' part of the 'restricted' stock grant; the restrictions discussed in Exhibit S-9.2, page 4 show that the grants provide financial incentives consistent with those of the company's shareholders during the period of restriction." PFD, p. 564. In addition, the ALJ recommended that the Commission continue the deferral approach adopted in the November 18 order, using the percentage proposed by the Attorney General. Furthermore, the ALJ found that DTE Electric failed to demonstrate that it is reasonable to recover the costs of meeting financial targets. She asserted that "DTE's claim that ratepayers benefit, for example, from maintaining DTE's credit rating ignores that substantial amount of money ratepayers already pay to maintain DTE's credit rating, and the company's continued argument on that point is unpersuasive." *Id*., p. 565.

In its exceptions, DTE Electric maintains its position on this issue. The company emphasizes that:

> failing to approve total incentive compensation expense is inconsistent with the reasonableness of total compensation. DTE Electric's analysis of virtually all incumbent salaries as of December 31, 2021 shows that the Company's total compensation is insignificantly different from market medians. Moreover, without the Company's short-term incentive compensation programs, the Company's pay would be 11.8% less than the market medians making the Company less competitive in the employment market.

DTE Electric's exceptions, pp. 199-200.

In response to the ALJ's recommendation that the Commission disallow expense related to restricted stock, DTE Electric asserts that:

> [e]mployees benefit *after they receive stock* (assuming they keep it), depending on the Company's performance. That has nothing to do with the issue here, which concerns the *employees getting that stock in the first place*. The cost of the awards (value when paid) does not depend on the DTE Energy stock price. That is all that is relevant here because the issue is cost recovery. It is certainly true that to the extent that somebody keeps the stock (during the "period of restriction" as the [ALJ] reasons), the future value would depend on the stock price. But that future potential value is irrelevant to the Company's costs and independent of the grant

> itself. The stock price is not used to measure the awards; instead, the stock is used as the form of payment to deliver the awards (like dollars, bitcoin or other methods of payment). The number of shares used to pay the LTIP grant is simply adjusted depending on the stock price when the grant is paid. The amount of payment is the same regardless of how it is paid. The method of payment does not somehow change the payment (which remains the same in amount) into a financial measure.

DTE Electric's exceptions, pp. 201-202 (emphasis in original) (internal citation omitted).

Regarding the ALJ's acceptance of the Attorney General's proposed 48% disallowance related to financial metrics, the company argues that its average annual performance calculation method is more accurate than the Attorney General's "simplistic binary approach" and "it recognizes that actual payouts can fall within a wide spectrum of performance levels. It is not reasonable to assume that only 52% of operating performance measures will be achieved as the [Attorney General] suggests." *Id*., p. 203.

DTE Electric states that if the Commission approves less than its proposed amount of EICP expense, the company requests that: (1) "the base amount should be reset equal to the amount of incentive compensation approved for recovery in base rates in this case," (2) "the mechanism should apply to the totality of the Company's incentive compensation program, including the portion related to financial metrics, since the Company's compensation practices are reasonable and prudent," and (3) "the deferral should cover the total actual payout, including amounts above 100% of the target." *Id*., p. 204.

The Attorney General filed an exception on this issue, stating that, in general, she agrees with the ALJ's reasoning. However, the Attorney General objects to the ALJ's recommendation that the Commission approve the deferral approach set forth in the November 18 order. She argues that:

> the mechanism is [not] necessary or fair to customers because it retroactively makes the Company whole in a future rate case for costs incurred in an historical period by deferring those costs into a future period for recovery. Such a deferral undermines

> the traditional ratemaking model by removing risk for cost amounts set in rates in a rate case. The solution is not to establish a regulatory asset for unknown costs, but for the Company to improve performance and meet its goals so that there is a clear record that the Company has a reasonable chance of achieving the target performance and incurring the forecasted incentive compensation expense.

Attorney General's exceptions, p. 15. The Attorney General contends that, instead, the Commission should allow recovery of 52% of the $19.5 million and disallow recovery of the remaining $9.36 million for operational metrics.

In reply, DTE Electric asserts that the Attorney General fails to cite law or record evidence to support her exception. In addition, the company contends that the Attorney General's "discussion also indicates a misunderstanding of the tracker, which arose when the Commission adopted the [Attorney General]'s proposed 40% disallowance of operating measures (Case No. U-20836, 11/18/2022 Order, p 301)." DTE Electric's replies to exceptions, p. 23. DTE Electric requests that the Commission reject the ALJ's recommended disallowance; however, "[i]f the Commission disallows any recovery for operating measures," the company states that "the Commission should reject the [Attorney General]'s exception, and instead continue the deferral mechanism with the Company's proposed modifications." *Id*., p. 24 (footnote omitted).

The Attorney General asserts that "the evidence [DTE Electric] has presented in no way supports that its ratepayers get actual, quantifiable benefits from costs associated with financial measures." Attorney General's replies to exceptions, p. 47. She requests that the Commission reject the company's exception, adopt the ALJ's recommended 48% disallowance for operating measures, and find that a deferral tracking mechanism is unnecessary.

In its replies to exceptions, ABATE asserts that "[a]s the Company's claims do not demonstrate that it is reasonable or prudent for customers to pay incentives for the Company to improve shareholder positions the Commission should adopt the PFD's recommendation." ABATE's replies to exceptions, p. 8.

The Commission finds that the ALJ's recommendation is well-reasoned, supported by the record, and should be adopted. The Commission has consistently found that incentive compensation plans that are tied to company earnings and cash flow are financial considerations that largely benefit shareholders and should not be paid for by ratepayers. *See*, December 22, 2005 order in Case No. U-14347, p. 35; November 19, 2015 order in Case No. U-17735, p. 78; December 11, 2015 order in Case No. U-17767, pp. 76-77; November 18 order, pp. 300-302. In this case, DTE Electric stated that $43.39 million of the $62.9 million requested by the company pertains to financial metrics. *See*, 5 Tr 1396. DTE Electric also asserted that Exhibit A-21, Schedule K6 Revised demonstrates that the "calculated aggregate benefit" of the incentive compensation "exceeds the total incentive compensation expense . . . ." 5 Tr 1398. Further, the company claimed that the benefits of the measures "are computed based either on avoided costs to the Company, which results in lower future revenue requirements, or based on the value to customers of improved performance." *See*, 5 Tr 1398-1399. However, the Commission finds that the "benefits" set forth on Exhibit A-21, Schedule K6 Revised and the cursory description of the benefits in the company's testimony fail to provide sufficient detail explaining how DTE Electric calculated the benefits or, specifically, how achieving these financial targets will benefit customers. Thus, the Commission finds that the Staff's proposed disallowance of $43.82 million of EICP tied to financial performance measures is approved.

The Staff also proposes a disallowance of $6.53 million for restricted stock because it is "based on DTE Energy Company stock prices, which is a financial measure used by the Company to determine the amount of the award. Restricted Stock is considered as a reward to employees for assisting the Company in reaching its financial performance goals." 7 Tr 4579; *see*, Exhibit S-9.2, pp. 2-4. The Commission agrees and finds that the Staff's proposed disallowance should be approved.

The Commission also agrees with the ALJ that it is reasonable to continue the deferral approach approved in the November 18 order using the percentage calculated by the Attorney General. As noted by the ALJ, "[t]here has not been sufficient opportunity to evaluate whether that deferral reasonably protects ratepayers from performance on operational measures that is below target level." PFD, p. 565.

9. Nuclear Power Generation

DTE Electric proposed $4.9 million for a Fermi 2 Nuclear Extended Power Uprate (EPU) study in the projected test year, but acknowledged that the study would incur expenditures in 2025 and 2026. The company explained that "[p]erforming an EPU at the Fermi 2 Power Plant could yield an additional 172 MWe [megawatts electric] of carbon-free, resilient, baseload generation capacity for Michigan. The only variable O&M cost associated with this additional 172 MWe is the cost of nuclear fuel, which could result in significant Power Supply Cost Recovery (PSCR) savings for DTE Electric customers." 5 Tr 2495. In addition, DTE Electric contended that "the EPU Study's purpose of examining the feasibility of nuclear power generation is consistent with recently-enacted MCL 460.10hh (providing for the Commission to conduct a nuclear feasibility study) and the March 24, 2023 Order in Case No. U-21358 (reflecting the Commission's plan to comply with legislative directives)." DTE Electric's initial brief, p. 182. The company stated that the cost to implement the uprate and achieve the incremental capacity would be approximately $600 million to $1 billion.

The Attorney General objected to the proposed expenses for the EPU study because DTE Electric failed to specify the expenses for 2025 and 2026. She asserted that "[t]he Company has not made a compelling and convincing case that the study would lead to an outcome that would provide a competitive cost of adding capacity even after considering that the added capacity would be carbon free." 6 Tr 3770.

The ALJ found persuasive the Attorney General's recommendation to disallow the $4.9 million for the EPU study expenses and to reduce O&M by $1 million. She stated that "[j]ust as in the previous rate case, i.e. Case No. U-20836, DTE did not rebut or address [the Attorney General's] analysis showing that an EPU—even at the low end of DTE's preliminary cost estimate—would be exceedingly uneconomical in terms of cost per MW when compared to the cost of capacity from other sources." PFD, p. 568.

DTE Electric excepts, stating that the Attorney General "did not perform an 'analysis' as the PFD suggests. Instead, [she] just made a broad proposition based on what [she] acknowledged was a 'very preliminary estimate [that] could change significantly depending on the upgrades needed to the plant and equipment.'" DTE Electric's exceptions, p. 179 (quoting 6 Tr 3770) (internal citation omitted). The company contends that the EPU study will provide "an improved understanding of the operational considerations required to operate Fermi 2 at EPU conditions, and narrow the uncertainty of scope and expenditures associated with the work that would be required to complete an EPU, which is a reasonable and prudent approach . . . ." *Id.*, p. 178.

In reply, the Attorney General contends that "DTE has still failed to provide anything to show that an EPU will be anything *other* than extremely uneconomical." Attorney General's replies to exceptions, pp. 40-41 (emphasis in original).

The Commission finds that the ALJ's recommendation is well-reasoned, supported by the record, and should be adopted. The Commission notes that DTE Electric failed to specify the expenses for the EPU study in 2025 and 2026. Thus, the Commission finds that the Attorney General's proposed $4.9 million disallowance should be approved. The Commission also encourages the company to continue to monitor and evaluate whether tax credits may be available through the federal Inflation Reduction Act, PL 117-169, 136 Stat. 1818, to defray the cost of a potential EPU.

D. Other Expenses

The ALJ noted that there was no dispute regarding applicable taxes. *See*, PFD, p. 569.

E. Net Operating Income Summary

Based on the findings above, DTE Electric's adjusted NOI is $965,614,000.

VII. REVENUE DEFICIENCY

As noted previously, the ALJ stated that the revenue deficiency in this case is $290.4 million. PFD, p. 569; *see also*, PFD, Appendix A, line 12. However, the ALJ's stated revenue deficiency did not correctly capture all of her decisions impacting the revenue deficiency. Therefore, the stated $290.4 million revenue deficiency in the PFD is inadvertently inaccurate.

DTE Electric takes exception calling the ALJ's recommended revenue deficiency insufficient and contends that the correct revenue deficiency is $580 million or $583 million without the approval of the IRM. DTE Electric's exceptions, p. 17.

Consistent with the findings and determinations made in this order, the Commission finds that DTE Electric has a jurisdictional revenue deficiency for the test year of $368,115,000, computed as follows:

Rate Base	$22,150,952,000
Adjusted Net Operating Income	$965,614,000
Overall Rate of Return	4.36%
Required Rate of Return	5.56%
Income Requirements	$1,231,810,000
Income Deficiency	$266,196,000
Revenue Conversion Factor	1.3496
Revenue Deficiency	$359,267,000
Rev. Def. – Tree Trim Surge Program	$8,847,000
Revenue Deficiency – Total	$368,115,000

VIII. OTHER REVENUE-RELATED ITEMS

This section addresses disputes over pilot programs (Section A), accounting (Section B), ratemaking mechanisms (Section C), and CIAC (Section D). *See*, PFD, p. 569. Not all aspects of each pilot fall into the revenue-related items category and, accordingly, the Commission addresses them elsewhere in this order.

A. Pilot Programs

The Commission has defined a pilot as "a limited duration experiment or program to determine the impact of a measure, integrated solution, or new business relationship on one or more outcomes of interest." February 4, 2021 order in Case No. U-20645 (February 4 order),[29] Exhibit A, p. 1 (exhibit is numbered in natural order). Exhibit A to the February 4 order further

[29] The PFD erroneously refers to the February 4 order as the February 8 order.

specifies that a pilot proposal must specify the pilot details and will be evaluated according to six general criteria, each with its own underlying expectations and requirements: (1) pilot need and goals, (2) pilot design and evaluation plan, (3) pilot costs, (4) project timeline, (5) stakeholder engagement plan, and (6) public interest. February 4 order, Exhibit A, pp. 1-2. The Commission made clear that meeting the objective criteria set forth above is not a guarantee of funding approval. *Id*., p. 1.

1. Slocum Battery Pilot

DTE Electric noted that the Slocum Battery pilot is currently underway and that the Commission requested an update in the company's last rate case. *See*, November 18 order, p. 51.[30] The company explained that the pilot is intended to use a 14 MW, 56 MWhr lithium-ion battery to replace diesel-fueled peaker units at the Slocum plant site. According to the company's update, the project is progressing toward completion and is expected to begin commercial operation by November 2024. The company requested $9.8 million for capital expenditures for the 11 months ending November 2023, and $16.3 million for capital expenditures for the 12 months ending November 2024, with the total cost of the project being $34.7 million. 5 Tr 2291-2295.

[30] In the November 18 order, the Commission was "concerned by the inconsistency in documentation on the record" and adopted "the Staff's partial disallowance for the bridge period and full disallowance for the test year to address the company's lack of support for changing and fluid project costs." November 18 order, p. 51.

The Staff recommended a bridge period and test year partial disallowance of $3.5 million[31] because of the company's apparent spending variances[32] and because many, but not all, of the Commission's concerns over DTE Electric's lack of planning details have been resolved. 7 Tr 4367-4370. The Attorney General offered that the pilot does not meet the Commission's criteria and the Commission should disallow the following capital costs: (1) $70,000 from 2021, (2) $8,494,000 from 2022, (3) $9,752,000 from the 11 months ending November 2023, and (4) $16,327,000 from the 12 months ending November 2024, for a total disallowance of $34,643,000. 6 Tr 3703-3706. DTE Electric provided rebuttal testimony and each party discussed its position in brief. 5 Tr 2398-2399; *see also*, DTE Electric's initial brief, pp. 38-39; DTE Electric's reply brief, p. 19; Staff's initial brief, pp. 21-22; Attorney General's initial brief, pp. 66-69.

The ALJ recommended that the Commission adopt the Staff's $3.5 million downward adjustment, having been persuaded that the disallowance is an appropriate way in which to protect ratepayers from the cost of overprojections. PFD, p. 575.

DTE Electric excepts to the ALJ's recommended disallowance of $3.5 million for the Slocum Battery pilot. DTE Electric remarks that the Staff does not make an upward adjustment for overspent funds which renders the downward adjustment unjust. DTE Electric's exceptions, pp. 206-207.

[31] The Staff recommended disallowances in this case as follows: $932,000 and $975,000 in projected capital spending for the 2022 and 2023 bridge period respectively and $1,633,000 in projected capital spending in the test year. 7 Tr 4370.

[32] In Case No, U-20836, DTE Electric requested $7,233,000 in capital expenditures for the Slocum BESS project, was approved $4,487,000, but spent only $988,000. 7 Tr 4369.

In her exceptions, the Attorney General cautions the Commission to rethink spending such a great amount of ratepayers' money on untested and unproven technology such as the Slocum Battery project and thus disallow $34,643,000 as discussed in her case presentation. The Attorney General cites two main reasons for the disallowance: (1) there has not been a sufficient BCA for the project, and (2) the project benefits only those customers that tend to be higher income. Attorney General's exceptions, pp. 16-17.

The Commission finds the ALJ's analysis and recommendations on this issue in the PFD to be thorough and well-reasoned. *See*, PFD, pp. 570-575. Accordingly, the Commission approves a $3.5 million downward adjustment in DTE Electric's requested funding, finding it is an appropriate way in which to protect ratepayers from the cost of overprojections.

2. Non-Wires Alternatives Pilots

The ALJ recommended "that the pilot programs DTE is seeking rate recovery for in this case should be approved as recommended by Staff witness Mr. Matthews, with further direction to DTE to keep Staff updated regarding its progress." PFD, p. 575; *see*, Part IV (Rate Base), *supra*.

3. Strategic and Service Undergrounding Pilot

The ALJ recommended that the Commission reject DTE Electric's requested expansion of its strategic and service undergrounding pilot because the company failed to provide a completed report of its previously approved undergrounding pilot. PFD, p. 575; *see*, Part IV (Rate Base), *supra*.

4. Commercial and Industrial Battery Storage

DTE Electric again requested approval for the funding of a behind-the-meter "lithium-ion phosphate" BESS for two commercial and industrial (C&I) sites.[33] The company testified that it has received two batteries and has one customer that is interested in the pilot but is actively looking for a second participant. 5 Tr 1315-1316, 1320. The company forecasted $4 million in capital expenditures for the bridge year and $0.2 million for the test year. 5 Tr 1319.

The Staff acknowledged that DTE Electric provided more pilot details in this filing than in its prior filing but recommended that half of the projected cost of the program be disallowed because only one participant was enrolled whereas the pilot was designed for two. 7 Tr 4566; *see also*, Staff's initial brief, p. 40. Also, the Staff recommended that the cost of the battery be shared with the C&I participant, that the company should consider a method for the customer to share the energy savings from use of the battery, and that there be a minimum number of test events per year. 7 Tr 4565. On rebuttal and in brief, DTE Electric disagreed with the Staff's position. 5 Tr 1330 1332; *see also*, DTE Electric's initial brief, pp. 136-137.

The ALJ recommended that the Commission adopt the Staff's disallowance of half of DTE Electric's requested costs for the pilot ($1,990,360) because the program was designed for two participants but only one participant has been secured. PFD, pp. 583-585. She recommended that DTE Electric call a minimum number of events to test the pilot's efficacy. *Id.*, pp. 585-586.

In its exceptions, DTE Electric recounts that C&I Battery project costs cannot be neatly divided in half because the costs and expenditures are structured incrementally by key milestones for two participants. The company states it has purchased two batteries and all related equipment,

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[33] The Commission rejected DTE Electric's C&I battery pilot in its last rate case because the company's proposal did not contain sufficient details for the proposal to be properly evaluated. PFD, p. 579; *see also*, 7 Tr 4564.

and is confident that a second participant will be identified within a short period of time following the first installation. That said, DTE Electric agrees with the ALJ that it is premature, before the pilot is even underway, to charge customers for a portion of the batteries. The company also states that there should be no discussion at this time of whether customers should be charged for a portion of the batteries when and if the program becomes fully functional because, again, the program is not yet underway and the customer savings due to participation is not known. The company is open to such a discussion if the pilot is transitioned to a full program. DTE Electric's exceptions, pp. 207-210. DTE Electric also opposes the ALJ's suggestion that there should be a minimum number of events called per year to test the program and avers that the company's commitment to call no more than 30 events per year is sufficient. *Id.*, p. 210.

In reply, the Attorney General states that DTE Electric did not offer true exceptions but merely repeats its earlier arguments that the ALJ was correct in recommending that half the requested funds be disallowed, and that the Commission should reject the company's arguments. Attorney General's replies to exceptions, p. 50.

The Commission is persuaded that a disallowance of $1,990,360 is appropriate for the C&I Battery project because DTE Electric requested funds for a two-participant pilot but has only secured one participant. While DTE Electric argues that the funds cannot be neatly divided in half due to the way the program is structured, the Commission finds it would not be reasonable or prudent, in this case, to approve funding for a second participant that has not been identified.

The Commission finds that consideration of whether the cost of the battery should be shared with future C&I participants and of a method for the customer to share the energy savings from use of the battery should be conducted when and if the pilot is transitioned to a permanent program. Finally, DTE Electric has presented that it intends to conduct no more than 30 test events per year but has not stated a corresponding minimum number of events per year. As such, under the pilot parameters presented in this proceeding, the company could conceivably conduct no test events at all and still meet the conditions of the pilot. Accordingly, the Commission finds that DTE Electric and the Staff should meet to discuss an appropriate minimum number of required test events per year.

5. Voluntary Pre-Pay Pilot

DTE Electric requested $6.7 million in historical capital spending for the company's "Phase 1" investment in a proposed pre-pay pilot program in which certain customers with AMI may prepay their energy bills but would agree to a shorter timeframe for notice of shutoff of service when the customer's prepayment balance reaches zero.[34] Additionally, the company requested waivers of the Consumer Standards and Billing Practices for Electric and Natural Gas Service (billing rules), Mich Admin Code, R 460.120(3), R 460.129(4), R 460.139(1), R 460.139(6), and R 460.143(1). The company acknowledged that the Commission has failed to approve the program in three earlier applications: once because it was pending in another docket and twice because the pilot was not well-developed. 5 Tr 1740-1777, 1788; *see also*, DTE Electric's initial brief, pp. 254-260, 270, and, July 27, 2021, and December 21, 2022 orders in Case No. U-21087.

The Staff, the Attorney General, and the DAAOs opposed the program and the accompanying billing rules waivers because of the alleged lack of customer support for the program, that the claim that the company has not remedied the program's shortcomings, that alleged excessive cost paired with little benefit to customers, and that the claim that requested waivers do not enhance the

[34] DTE Electric withdrew its request for an additional $2.6 million in capital costs for the test year. 5 Tr 1742-1743.

administration of the billing rules. 5 Tr 1786-1788, 3603-3607; 6 Tr 4003, 4005-4008, 4012-4014; 7 Tr 4551-4556; *see also*, Staff's initial brief, pp. 50-53; Attorney General's initial brief, pp. 101, 103; the DAAOs' initial brief, pp. 17-19. The ALJ found that the prepay pilot, as proposed, is not reasonable and prudent, that the Commission should disallow historical costs, and the company should remove any reference to the program from its tariffs. PFD, pp. 614-615.

In its exceptions, DTE Electric repeats its arguments that it should be permitted to recover $6.7 million in historical costs because the company has already invested the funds in infrastructure to support prepaid billing and that infrastructure depreciation amounting to $4.4 million has occurred that is being borne by the company's shareholders. DTE Electric asserts that the net book value of the project will be $2.3 million by November 2023 and $93,000 by November 2024 and, consequently, "the net average rate base included in the calculation of the revenue requirement would be approximately $1.2 million, and the cost to ratepayers through revenue recovery would be approximately $2.3 million." DTE Electric's exceptions, p. 212 (citing 5 Tr 1786); *see also*, DTE Electric's exceptions, pp. 211-212.

The company also discusses lessons learned from its pay-as-you-go pilot from 2011 to 2015 and repeats its arguments that, in this pilot, it has addressed the Staff's concerns from prior proceedings, that sufficient customer interest exists, that other utilities are offering prepayment programs or pilots, and that customers would have sufficient notice of shutoffs. DTE Electric's exceptions, pp. 212-218.

The Attorney General replies that the ALJ was correct in her recommendation that the prepay pilot be rejected. The Attorney General cites the lack of customer interest in the program, that its costs are significant but benefits to customers are uncertain and ill-designed, that DTE Electric did not address the underlying flaws of the program, and that waivers of important customer protections give rise to grave concerns. Attorney General's replies to exceptions, pp. 50-53.

The Staff replies that DTE Electric is not entitled to recover nearly $7 million merely because it has already invested the funds in an unapproved program. The Staff opines that DTE Electric chose to invest in the program even though it lacked Commission authorization, and therefore, DTE Electric should bear the costs of that investment. The Staff comments further that while the Commission may have expressed a positive opinion of the potential development of a pre-pay pilot program if presented with a more thorough BCA in its December 21, 2022 order in Case No. U-21087 (December 21 order), the recovery of funds was clearly not authorized. The Staff strongly encourages the Commission to deny recovery of the $6.7 million the company invested in the unapproved program, reiterates that there appears to be a miniscule level of evidence, much of which is outdated, to indicate customer support for the program, and that the pilot should be rejected, as well. Staff's replies to exceptions, pp. 21-22; *see also*, December 21 order, p. 17.

In their exceptions, the DAAOs reiterate that the prepay proposal should not be approved because the program fails to establish that is reasonable and just. DAAOs' replies to exceptions, pp. 1-3.

As discussed *supra*, the Commission finds the ALJ's analysis and recommendations on the prepay pilot to be well-reasoned and thorough. The Commission agrees with the ALJ that the pilot should be rejected, the requests for waivers denied, and references to the prepay program should be removed from the company's tariffs for the reasons stated in the PFD. The Commission also agrees with the ALJ that the $6.7 million in historical spending should be disallowed. *See*, PFD, pp. 586-615. Should the company pursue this program and seek recovery in a future rate case, in addition to more robust support, the company shall clearly present these costs as a distinct line item not to be embedded with any other expenditure. The Commission further addresses the matter of historical spending in Part IV (Rate Base) of this order, *supra*.

Even after three submissions, the Commission remains unclear as to the expected benefits to customers that warrant the significant cost of the pilot and the waivers of important customer protections against shutoff of service. Accordingly, if a prepay pilot proposal is again submitted, DTE Electric must provide far greater evidence of benefits to all customers regardless of participation in the program and how granting of the waivers is in the public interest and will further the effective and efficient administration of the rules as required by Mich Admin Code, R 460.101a(3).

6. Residential Generator Pilot

DTE Electric forecasted to spend $200,000 in capital over the bridge period and test year, and $200,000 annually on a residential generator pilot designed to leverage use of 200 residential generators with initial plans for event windows between 8:00 a.m. and 8:00 p.m. for a maximum of 40 hours annually. Customers would be paid $100 to enroll and $250 to remain enrolled through the entirety of the pilot's two-year term. 5 Tr 1320-1324.

The DAAOs argued against the residential generator pilot, arguing that the low cost of the plan will disincentivize use of electric and solar power and may have the unintended consequence of unfair pricing, among other reasons. The DAAOs offered an alternative plan that includes a pilot to study storage for resilience and programming batteries to shift load to off-peak times. 6 Tr 4054-4056. The Staff recommended approval of the pilot and rejected the DAAOs' alternative plan, stating that the company had corrected the plan's deficits from the previous rate case. 7 Tr 4384-4385.

The ALJ recommended approval of DTE Electric's residential generator pilot but with involvement from the Staff to clarify how the pilot's success would be defined. PFD, p. 619.

The DAAOs except to the approval of the residential generator pilot and argue that the ALJ did not properly consider their and other intervenors' arguments against the pilot. The DAAOs repeat that the pilot's reliance on gas generators would be inconsistent with Michigan's energy goals and that it would be more equitable for mid- to low-income and vulnerable households to implement a pilot based on batteries, such as a storage for resilience pilot. The DAAOs also argue that a gas-reliant project will diminish electrification savings and will increase the ultimate costs of electrification. The DAAOs insist that the goals intended to be met by the residential generator pilot could be met through a battery storage pilot. DAAOs' exceptions, pp. 16-17.

DTE Electric replies that its residential generator pilot is aimed at customers who currently have whole-home gas generators and incentivizes those customers to shift their electric load to the generator during DR events. DTE Electric further argues that the DAAOs' alternative battery storage approach goes well beyond the purpose and scope of the company's pilot proposal. The program is a DR pilot and, if successful, will add value to the company's DR portfolio. DTE Electric's replies to exceptions, pp. 25-26.

The Commission finds the ALJ's analysis and recommendation on the residential generator pilot to be well-reasoned and thorough. While the DAAOs' proposed battery-based pilot is interesting, the potential of a battery-based pilot in the future does not render the immediate proposal unreasonable or unjust. As such, the Commission agrees with the ALJ that DTE Electric has addressed the majority of issues in this proceeding that the Commission requested in the company's last rate case. Accordingly, the Commission approves DTE Electric's residential generator pilot with involvement with the Staff to clarify how the pilot's success would be defined. *See*, PFD, pp. 615-619.

7. Delivered Fuels Electrification

DTE Electric requested $6.1 million over the five-year term of the proposed DFEP with $1.3 million to be spent in the projected test year to electrify residential water heaters and space heaters in homes using delivered fuels and, when capacity enrollment is achieved, install air source heat pumps, geothermal heat pumps, and heat pump water heaters.[35] 4 Tr 761, 763-764, 766, 768, 770-777, 806-811.

MNSC argued that the plan fell short on numerous counts and offered an alternative plan that included a total of 3,000 space heater conversions in the next three years, higher rebate levels, commitment to low-income households, promotion to income-qualified multi-unit dwellings (MUDs) and single-family households, limiting rebates to cold-climate heat pumps, and pairing the program with winterization. 6 Tr 3501-3515. The Staff questioned the validity of DTE Electric's BCA and the efficacy of other aspects of the plan and recommended that the pilot be rejected. The Staff further recommended that MNSC's suggestions should also be rejected, arguing that MNSC's suggestions of greater rebates and increasing participation would exacerbate elements that are already lacking in DTE Electric's proposal and that heat savings and decarbonization do not justify the cost to ratepayers. Staff's initial brief, pp. 9-12.

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[35] "DTE estimated a total NPV [net present value] gross margin benefit of $11.3 million, which, after subtracting the NPV five-year spend of $5.0 million, left an overall $6.3 million overall NPV benefit." PFD, p. 623 (citing 4 Tr 778).

The ALJ agreed with the Staff that both the pilot and MNSC's modifications should be rejected but suggested that the Staff, the company, and other stakeholders meet to develop a more viable delivered fuels electrification pilot. PFD, p. 630.

DTE Electric excepts to the ALJ's rejection of the DFEP and denies there exists a "myriad of issues or deficiencies." DTE Electric's exceptions, p. 219. The company recounts the components of the program from its case presentation and denies the deficiencies and problems posed by intervenor parties, arguing that they lack relevance and merit. DTE Electric's exceptions, pp. 218-222.

MNSC excepts and clarifies any misunderstanding that may have occurred over its nonrejection of DTE Electric's proposed pilot and asserts that DTE Electric wants to work with intervenors to modify the pilot prior to its launch. MNSC argues that the ALJ did not explain why program deficiencies could not be corrected with modifications and fine-tuning through collaboration with intervenors, and argues further that if MNSC's suggestions were included in the program, it should be approved. MNSC disagrees with the Staff's rejection of the pilot proposal, claiming that starting over would cause unnecessary delay and lost opportunities in electrification, and that time is of the essence to promote decarbonization. MNSC's exceptions, pp. 7-16.

In their exceptions, the DAAOs support rejection of the DFEP but stress that it is important that the Commission consider the needs of Black, Indigenous, and people of color (BIPOC) and LMI households by including in its order these households as essential stakeholders when and if the pilot is modified or refined. The DAAOs assert that these households and communities have unique issues to be considered such as lower levels of home ownership, among others. DAAOs' exceptions, p. 18.

In replies, the Staff disagrees with MNSC's claim that the ALJ's rejection of the DFEP does not reflect the record accurately. The Staff declares that the following arguments refute any claim of inadequacies in the ALJ's analysis and conclusion in the PFD: (1) the Staff testified and provided briefing on the deficiencies of the DFEP which support the ALJ's conclusion; (2) the issues that the ALJ believed were more or less important are not material to her decision because the Staff identified which deficiencies were serious and the record does not identify modifications that address those deficiencies; (3) the Staff's position which was that the pilot contained serious deficiencies was accurately stated by the ALJ and the Staff argues that shortcomings in the pilot must be overcome before the proposal can be approved;[36] (4) DTE Electric does not have to start over on the pilot, rather the company can begin where it now stands and work with interested parties to develop a reasonable proposal; (5) MNSC has not explained why ratepayers should be responsible for the cost of meeting climate goals or subsidizing the electrification of end uses for participating customers; and (6) the company's flawed BCA cannot be relied on to prove that nonparticipating customers' bills will be reduced because of the program. The Staff emphasizes that the ALJ properly identified the issues raised by the Staff as the reason for her rejections of the DFEP. Staff's replies to exceptions, pp. 27-30.

DTE Electric replies that MNSC's "suggested modifications are unnecessary and inappropriate . . . because the proposed pilot is appropriately sized and otherwise designed for its intended purpose as a pilot relating to electric utility service." DTE Electric's replies to

[36] The Staff asserts that MNSC incorrectly characterized the Staff's position as being that DTE Electric should not propose a pilot until the Staff has signed off on the details. Staff's replies to exceptions, p. 28 (citing MNSC's exceptions, p. 14).

exceptions, p. 27. Additionally, the company argues that while it is open to minor modifications of the pilot, the concerns raised by the Staff and MNSC are irrelevant and lack merit. *Id*.

The Commission finds the ALJ's analysis and recommendations in this matter to be thorough and well-reasoned and therefore, adopts the ALJ's recommendations for the reasons stated in the PFD. *See*, PFD, pp. 619-630. Accordingly, the funding request for the DFEP is rejected. While the Commission appreciates the intent behind this proposed pilot, the myriad issues raised by the Staff, MNSC, and the DAAOs make it impossible to fully consider the proposal within the constraints of a time-limited rate case proceeding. Instead, the Commission encourages DTE Electric to work with stakeholders to develop a complete and effective pilot program and to use the stand-alone expedited pilot process to enable the review such a proposal deserves. The Commission further notes that it is unclear why such a pilot would focus narrowly on only those customers who heat their homes with delivered fuels, as opposed to a more technology-neutral approach to electrification. As such, the Commission encourages consideration of such a technology-neutral approach, recognizing that there may well be economic considerations that limit participation of customers who heat with other fuel sources. Finally, the Commission recognizes the Staff's concerns with the potential subsidization of participating customers by those not participating in the pilot, particularly with regard to climate and other non-monetary benefits. However, given the other grounds for rejection of this pilot, the Commission finds it unnecessary to address those concerns at this time.

8. Electric Vehicle Pilots

The ALJ noted that, in addition to proposals for making certain pilots permanent, the company proposed withdrawing Rider 22, expanding Riders 14 and 21, and modifying rates C5.1, D3, and

D4. The rider and rate matters are addressed in the Rate Design and Tariff Issues section of this order. *See*, PFD, pp. 630 (citing 4 Tr 703-707).

a. Transition from Pilots to Permanent Programs

DTE Electric proposed making permanent certain pilots that appeared to be “suitably mature” as suggested by the Commission in the company’s last rate case. PFD, p. 631; *see also*, November 18 order, p. 351. The company used the following criteria to evaluate whether a program should be made permanent: “(1) was participant-funded such that it was rate neutral over time; or (2) there was a clear need for the program both in the short term and long term.” PFD, p. 631 (citing 4 Tr 710-711). On this basis, DTE Electric selected the Charging Forward Education and Outreach pilot (E&O), the Home Charger Installation pilot, eFleet Battery Support, and the emerging technology fund (ETF) to transition to permanent status. *Id*.

i. Charging Forward Education and Outreach

DTE Electric requested $1.5 million in O&M during the test year and $1.5 million annually going forward for the company’s education and outreach (E&O) pilot. DTE stated that the E&O pilot has provided over one million customers with comprehensive EV information through various electronic platforms and print materials. 4 Tr 716-717. The company believes this program promotes access to EVs in underserved communities. 4 Tr 718-720. The Staff and MNSC agreed the pilot should be made permanent, but MNSC cautioned that there may be a lesser need for E&O in the future. 4 Tr 4427; 6 Tr 3464.

The ALJ agreed that the E&O pilot should be made permanent, and the requested funding approved because there exists a long-term need for such a program, and no party opposed the proposal. PFD, p. 632.

In her exceptions, the Attorney General reemphasized her position that E&O activities should be limited to only those functions that are closely related to providing electric service. Attorney General's exceptions, p. 18 (citing 6 Tr 3725).

The Commission finds the ALJ's analysis and recommendation in the PFD to be thorough and well-reasoned. Accordingly, the Commission agrees with the ALJ that the E&O pilot should be made permanent and the requested funding approved because the record establishes that there is a long-term need for such a program. While the Attorney General filed exceptions on this matter, her comments are cautionary and indicate that the Commission should be wary of approving programs that are not self-funded. *See*, Attorney General's exceptions, p. 18 (citing 6 Tr 3725). The Commission considered the Attorney General's comments and remains persuaded that the E&O pilot should be a permanent program and its funding should be approved.

ii. Home Charger Installation Program

DTE Electric, noting that the company sought capital treatment for these amounts,[37] requested $2.3 million in the bridge period and $4.2 million in the projected test year for its home charger installation program. The program is intended to reduce the financial and physical installation barriers to home charger ownership and EV use. The program also assists with maintenance and replacement of the home charger until the customer has fully paid the cost of the charger and, as such, is participant funded. DTE Electric asserted that the program encourages off-peak charging, would require use of TOD rates, and will be needed in the long-term to promote EV use.[38] 4 Tr 720-722, 724-725.

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[37] Consistent with the November 18 order. 4 Tr 725.

[38] TOD rates affecting D1.2, D1.8, D1.9, or D1.13, to be addressed in the Rate Design and Tariff Issues section of this order. *See*, 4 Tr 722.

The Staff and MNSC supported making the home charger installation pilot permanent, but MEIU raised a number of concerns related to the Code of Conduct and the competitive charger installation market. 6 Tr 3464, 4158-4162; 7 Tr 4427. DTE Electric rebutted, stating that the company intended to convert the program to a value-added program and service (VAPS) in 2024. MEIU remained resolute that its suggested changes should be incorporated into the pilot program but reluctantly supported the conversion of the pilot to a VAPS. 4 Tr 801; *see also*, DTE Electric's initial brief, p. 242; MEIU's initial brief, pp. 9-11; MEIU's reply brief, p. 2.

The ALJ agreed that the home charger installation pilot should be ended and transitioned to a VAPS. PFD, p. 637.

The Commission finds the ALJ's analysis and recommendation to be thorough and well-reasoned. Thus, the Commission adopts the PFD and the ALJ's recommendation that the home charger installation pilot be transitioned to a VAPS in 2024 and directs the company to evaluate whether the program meets the Code of Conduct.

iii. eFleet Battery Support

DTE Electric requested \$2.0 million in the bridge period and \$3.0 million in the projected test year to fund expansion of its eFleet Battery Support program. The company also requested to make the pilot permanent. The program allows DTE Electric to purchase batteries for transit agencies in order to alleviate the initial costs of electric buses with the customer repaying the cost of the battery over time. In this case, the company is proposing to expand the program to include certain customers who meet technical requirements such as school buses, refuse trucks, and delivery vans. 4 Tr 725, 727-728, 800. The Staff and MNSC supported the expanded program. 6 Tr 3464; 7 Tr 4428. The CEOs supported the program but offered modifications such as adding more incentives, revenues received by school buses being included in savings potential for

Rider 21, marketing specifically to EJ communities, and sharing data and results with public interest groups. 6 Tr 3950-3951. The Staff did not support the CEOs' suggestion related to Rider 21 because the Staff found it to be unclear. 7 Tr 4628. MEIU argued that the program is a VAPS because it provides service to customers that could otherwise be provided by an entity other than a utility with potential competition issues arising and thus should be subject to the Code of Conduct. MEIU's initial brief, pp. 9-10.

The ALJ agreed with the Staff and recommended that the eFleet Battery Support pilot be transitioned to a permanent program because it is funded by participants, does not increase rates, and promotes advancement of large EVs. The ALJ supported DTE Electric's plan to expand the program to include other customers as stated in the company's case presentation. Also, the ALJ stated her reservations that the program is a VAPS but recommended that the Commission consider informal proceedings under MCL 460.10ee(5) to determine whether the program should meet Code of Conduct requirements. Additionally, the ALJ recommended that DTE Electric focus on EJ communities so that communities that are most harmed by pollution may benefit from electric vehicles. PFD, pp. 642-643.

DTE Electric excepts to the ALJ's suggestion that a Code of Conduct compliance proceeding be initiated because there is no basis in the record to support that the program is a VAPS as it is a tariffed program under Rider 21, funded by participants, and is rate neutral. DTE Electric's exceptions, pp. 223-224.

The Commission agrees with the ALJ that the eFleet battery support pilot should be made permanent and expanded for the reasons stated in the PFD and so adopts the PFD on this issue. *See*, PFD, pp. 637-643. The Commission also suggests that areas with the worst air pollution from public transportation, delivery vans, and school buses appear to be an appropriate focus for the eFleet project. The Commission does not find that the record is definitive that the eFleet program is a VAPS and so declines to declare it as such at this time. Finally, the Commission notes that elements of the eFleet program, including geographic focus areas, may be appropriate for further discussion as part of the forthcoming EV Technical Conference established in Case No. U-21492.

iv. Emerging Technology Fund

DTE Electric requested $0.9 million in O&M costs during the bridge period and $1.0 million during the test year to continue its ETF. The ETF was approved in DTE Electric's last rate case and is designed to assist the company in testing emerging technology related to the increased use of EVs. The company prefers that the pilot be made permanent. 4 Tr 728-730, 803.

The Staff did not oppose the company's requested funding for the ETF but opposed making the program permanent, indicating that the pilot is new and speculative such that the overall value and effectiveness cannot be evaluated yet. 7 Tr 4429. The Attorney General argued that utilities should not become involved in testing experimental technology. 6 Tr 3725-3726. MNSC argued that the program should be permanent but be operated in a manner consistent with pilot project management. 6 Tr 3464. The ALJ agreed with the Staff that the ETF was too new to evaluate properly and should not be made permanent at this time but opined that DTE Electric's suggestion that the pilot be extended for five years may be of value. PFD, pp. 645-646.

In its exceptions, DTE Electric addresses the Staff's funding recommendations related to continuing the pilot rather than making it a permanent program. DTE Electric's exceptions, pp. 224-226.

The Attorney General excepts to the continuation of the ETF and reiterates that funding should be disallowed. The Attorney General is not opposed to the pursuit of electrification policy but has concerns that cutting-edge technologies have not been subjected to an adequate BCA and that the results of the testing and experimentation may only benefit a small portion of DTE Electric's customers. Attorney General's exceptions, pp. 17-18. The Attorney General continues to support the recommendation that the company should not be a "test-bed for experimental technology" and should pursue only those ventures that are closely related to utility services. 6 Tr 3726; *see also*, Attorney General's exceptions, pp. 17-18.

The Attorney General also refers to the entirety of her testimony relative to EV Charging Forward pilots and the ETF, expressing that the Commission should reconsider supporting these pilots, should terminate rebates, subsidies, and programs that do not provide economic benefit to customers, eliminate experimental programs, require third parties to contribute significantly to EV charger and E&O programs, and limit the length of financing for purchase of batteries and chargers. Attorney General's exceptions, pp. 17-18 (citing 6 Tr 3725-3726).

In replies, the Attorney General makes general comments on DTE Electric's EV-Charging Forward group of pilots and recommends that:

> the Commission take a holistic view of DTE's proposed programs. This includes consideration of subsidization in this area across the company's ratepayers and ultimate questions of who owns the infrastructure. There is tremendous risk for ratepayers in large-scale utility ownership of this infrastructure, of overpaying and of paying for unnecessary elements.

Attorney General's replies to exceptions, p. 53.

The Commission finds the ALJ's analysis and recommendation on this matter to be thorough and well-reasoned. Thus, the Commission adopts the PFD and declines to make the pilot permanent but extends it for five years for the reasons stated in the PFD. *See,* PFD, pp. 643-646. DTE Electric's funding request for the ETF is discussed in Part IV (Rate Base) of this order, *supra*.

In addition, while the Commission is cognizant of the concerns of supporting experimental pilot programs, the Commission finds that the potential benefits and learnings gained through such pilot programs can contribute to the provision of safe, reliable, and accessible energy at reasonable rates.

v. Charging Forward Program Administration

DTE Electric requested $1.8 million in O&M for the projected test year to fund and make permanent the company's 14-person administrative team that is charged with overseeing all the Charging Forward pilots. 4 Tr 730-731; *see also*, DTE Electric's initial brief, pp. 242-243. No party other than DTE Electric provided briefing on this program.

The ALJ agreed that there was an ongoing need for the company to continue to administer the Charging Forward pilots and recommended that the Commission adopt the proposal. PFD, p. 646.

No party filed exceptions or replies to exceptions on Charging Forward program administration permanency or funding.

The Commission finds the ALJ's analysis and recommendation in this matter to be thorough and well-reasoned. Therefore, the Commission adopts the PFD and the ALJ's recommendation that the Charging Forward program administration be made permanent and the requested funding be approved for the reasons stated in the PFD. *See*, PFD, p. 646.

b. Extended Charging Forward Pilots

This section addresses DTE Electric's requests to extend certain previously approved pilots that are currently in operation. The company argued that, consistent with the Commission's goal to electrify transportation, these pilots incentivize EV access and use. The company requested $10.1 million in the bridge period and $15.8 million in the test year for the programs discussed below. 4 Tr 731-732.

i. Home Charger Rebates

DTE Electric stated that its Home Charger Rebate program paid out at least 2,274 rebates as of the end of 2022 and that approved applications are increasing. The company cites the value of the program as reducing barriers to home charger installation and increasing the use of EVs. The company intends to spend $1.0 million in the bridge period and $1.0 million in the test year on this pilot. 4 Tr 733-734.

MEIU supported the Home Charger Rebate pilot but offered a number of suggestions for covering its costs, including socialization, should the program be made permanent. 6 Tr 4162. MNSC also supported the pilot but opined that it should be made permanent in the company's next rate case. 6 Tr 3465. The Staff asserted that it is not necessarily appropriate to socialize all distribution upgrades for EV charging. Staff's initial brief, pp. 140-142. The ALJ recommended adoption of DTE Electric's proposal to extend the pilot because no party opposed it but also recommended that, should the program be made permanent, the Commission should consider the suggestions made by MEIU "that rebate amounts are consistent with contribution margins from EV charging and the costs of grid upgrades occasioned by EV charging." PFD, p. 649.

The Staff excepts, stating that the phrase "consistent with contribution margins" included by the ALJ in agreement with MEIU is vague and thus requests that the Commission clarify whether rebates and other costs should use all or only part of EV charging revenues. Staff's exceptions, p. 6 (quoting PFD, p. 649). The Staff states that it interprets MEIU's argument to be that rebates should be issued until "additional revenue from EV charging is expended on EV charging." Staff's exceptions, pp. 6-7. However, the Staff argues that rebates must be few and small so that program costs are reduced in relation to revenues and ratepayer benefits are maximized. Staff's exceptions, pp. 6-7.

The Attorney General excepts and asserts that the Commission should end all rebates in 2023. Attorney General's exceptions, p. 18 (citing 6 Tr 3725-3726).

The Commission is persuaded that the Home Charger Rebate program should be continued, and the requested funding approved for the reason stated by the ALJ. *See*, PFD, pp. 647-649.

ii. Business Charger Rebates

DTE Electric's Business Charger Rebate program provides rebates to businesses who install certain types of chargers at their businesses. The company reports the program is in high demand and reduces range anxiety, thereby complementing transportation electrification goals. DTE Electric requested $4.2 million in the bridge period and $7.5 million in the test year for this pilot. 4 Tr 735.

The Staff supported the program but pointed out that the company should be required to demonstrate a net benefit to ratepayers. 7 Tr 4430. MEIU supported extending the program but also opined that eventually the costs of home and business chargers should be paid for through the revenue gained from EV charging. 6 Tr 4162. MNSC asserted that the program should be made permanent in DTE Electric's next rate case and that the company should be required to coordinate the business charger program with the National Electric Vehicle Infrastructure (NEVI) program. 6 Tr 3465. EVgo asserted that there should be a points-based scoring rubric for the program so that applicants for rebates will know how their applications will be scored. 4 Tr 999-1000.

The ALJ recommended that DTE Electric's Business Charger Rebate Pilot be extended and its funding increased but opined that the company should be required to coordinate with the NEVI program and to work with EVgo and other stakeholders to establish a scoring rubric to improve transparency and scoring for program applicants. She further opined that, if made permanent, the rebate amounts should be aligned with contribution margins from EV charging and grid upgrade costs due to EV charging. PFD, pp. 652-653.

The Staff excepts, repeating its earlier arguments related to the Home Charger Rebate pilot. The Staff found the ALJ's suggestion unclear that rebate amounts should align with contribution margins from EV charging and EV charging grid upgrade costs and thus requests that the Commission clarify how this concept should be interpreted. The Staff recommends that rebates should maximize non-participating customer benefits and asserts that rebates should not be intended to repay all additional revenue. Staff's exceptions, pp. 6-7.

The Attorney General excepts and asserts that the Commission should end all rebates in 2023. Attorney General's exceptions, p. 18 (citing 6 Tr 3725-3726).

The Commission finds the record supports the continuation and expansion of the Business Charger Rebate program and, in agreement with the ALJ's recommendation on the matter, approves DTE Electric's funding request. *See*, PFD, pp. 652-653. Additionally, the Commission is supportive of requiring DTE Electric to work with stakeholders on a scoring rubric for program applicants as suggested by the ALJ and requiring the program be coordinated with NEVI as these are activities that may enhance the program's goals. *Id*. As such, the Commission directs the company to incorporate these elements into its program. Additionally, as with the Home Charger Rebate pilot, the Commission finds that business charger rebates should be set so that ratepayer benefits are maximized.

iii. Income-Eligible Rebates

DTE Electric requested $1.0 million in the bridge period and $1.0 million in the test year to fund its Income-Eligible Rebate pilot. The pilot is intended to provide "$1,500 rebates to customer households meeting the program's income eligibility requirements for the purchase or lease of a new or used EV costing $50,000 or less." 4 Tr 736. At a later date, the company intends to make it possible for the rebate to be paid to the purchaser at point of sale, and if possible, to integrate its rebate with the federal EV tax credits. 4 Tr 736-737, 804.

MNSC did not oppose the program, but recommended that the rebate be increased, and that point-of-sale accessibility be achieved as quickly as possible. 6 Tr 3465-3466, 3475.

The ALJ recommended extending the Income-Eligible Rebate program but did not support increasing the amount of the rebate. PFD, p. 655.

The Attorney General excepts to the approval of the rebate and opines that the Commission should end rebates in 2023 and that utilities should "avoid taking the role of car dealers by showcasing and subsidizing EV purchases with utility customer money." 6 Tr 3725; *see also*, Attorney General's exceptions, p. 18.

The Commission finds the ALJ's analysis and recommendations in the PFD to be thorough and well-reasoned and, therefore, adopts the PFD and approves the requested funding for the Income-Eligible Rebate program for the reasons stated in the PFD. The Commission is not persuaded by MNSC's arguments to increase the rebate, nor is it persuaded by the Attorney General's argument that the Commission stop all rebates and disagrees that the company is taking the role of a car dealer with the income eligible rebate. Rather, the Commission finds that the record supports that the rebate promotes greater equity in the adoption of EVs.

iv. Business Charger Installation

DTE Electric requested to increase its funding for its Business Charger Installation program from $1.2 million to $2.3 million. The program is designed to install a limited number of Level 2 chargers and direct-current fast chargers (DCFCs) in disadvantaged communities (DACs) and affordable MUDs with recovery of the cost of the chargers achieved through a monthly fee included in the owner's monthly bill. 4 Tr 738.

The Staff and MEIU supported the program, but MEIU asserted that DTE Electric should provide grid information to third-party developers. 6 Tr 4162-4163; 7 Tr 4431.

The ALJ agreed that the Business Charger Installation program should be extended for reasons stated by the Staff but noted MEIU's concerns about grid information being made available to third-party developers. PFD, pp. 656-657.

The Commission finds the ALJ's analysis and recommendations in the PFD to be thorough and well-reasoned and thus adopts the PFD for the reasons stated therein. *See*, PFD, pp.655-656. Therefore, the Commission approves extension of the Business Charger Installation pilot and approves its funding. The Commission notes that DTE Electric should develop accurate capacity mapping to provide third-party developers.

In a similar manner in which the Commission recommended that the home charger installation pilot be transitioned to a VAPS in 2024, including an evaluation of whether the program meets the Code of Conduct, the Commission also directs that DTE Electric apply the same Code of Conduct evaluation for a VAPS transition feasibility assessment for its business charger installation program for consistency across customer charger installation programs.

v. Charging Hubs

DTE Electric requested $4.0 million for the projected test year to extend its Charging Hubs pilot. The program is intended to collaborate with the state, ITC, EV and EV supply Equipment manufacturers, and operators of travel centers to maximize potential funding from other sources before finalizing buildout plans for the completion of two initial charging hubs and to start on a third. 4 Tr 738-740, 801-802.

While the Staff supported the increased spending for the two hubs that are in early development, it opposed the additional funding and the construction of a third charging hub, recommending a $1.33 million disallowance. The Staff argued that $2.66 million was sufficient to complete the two in-progress hubs and that, since the first two hubs are not completed, there has been no learning from the pilot making the third hub speculative and without a basis on which to justify the additional cost to ratepayers. 7 Tr 4431. ITC encouraged DTE Electric to seek to install more hubs in its next rate case. 6 Tr 4308-4309. MEIU argued that DTE Electric's charging hubs compete with the development of a competitive market for fleet charging hubs and that funds should be directed toward a make-ready rebate program. 6 Tr 4163-4167; *see also*, MEIU's initial brief, pp 14-15. MNSC asserted that charging hubs should be sited in ozone non-attainment areas. 6 Tr 3466. EVgo argued that DTE Electric should not build a third charging hub because the company has not met any development milestones for the first two hubs and that private companies are able to pursue government funding to build fleet charging hubs in southeast Michigan. EVgo's reply brief, p. 8.

The ALJ agreed with the Staff and other intervenors that funding for the charging hubs pilot should be limited to $2.66 million (two-thirds the amount requested in this case for three charging hubs) because the first two hubs have not yet been constructed. The ALJ recommended that, in accordance with DTE Electric's statement that it does not want to compete with third-party developers, DTE Electric should direct its attention to completing the two in-progress charging hubs, providing third-party developers with accurate capacity mapping, and facilitating the development of third-party owned charging hubs that will support fleet charging. PFD, pp. 663-664.

DTE Electric excepts to the ALJ's recommended disallowance of one-third of requested funding for its Charging Hubs pilot and argues that the first two hubs were delayed only due to the company seeking federal funding and that utility-owned hubs will speed Michigan's pace of transportation electrification. Further, the company states it has made the receipt of federal funds a precondition to hub construction but will discontinue this pursuit if ownership of additional hubs is not approved. Finally, DTE Electric argues that, since the initial two hubs have not been built it is premature and speculative for the ALJ to recommend that the company should develop a plan for its next rate case that addresses the disposition of the constructed hubs. DTE Electric's exceptions, pp. 226-227.

In its exceptions, ITC opposes the ALJ's recommendation that funding for the third charging hub be disallowed. ITC argues that the amount of disallowance is unsupported by the record and arbitrary because each project may have differing costs; that if grants cover the cost of the third hub, then the disallowance should be $0, and that construction delays for the first two hubs should not imperil the construction of the third hub. ITC opines that failing to fund the construction of the third hub may place federal funding in jeopardy. ITC's exceptions, pp. 1-3.

The Commission finds the ALJ's analysis and recommendations regarding the Charging Hubs pilot extension and funding disallowance to be thorough and well-reasoned. Accordingly, the Commission adopts the ALJ's recommendations in this matter for the reasons stated in the PFD. *See*, PFD, pp. 657-664. The Commission encourages DTE Electric to continue to pursue all available federal funding for the project, to plan for the eventual disposition of the two completed hubs to third parties, and to attend to the provision of capacity mapping to third-party developers.

c. New Charging Forward Pilots

DTE Electric proposed to add two additional pilot programs to its Charging Forward umbrella. Those two programs are discussed below.

i. Community Chargers

DTE Electric proposed that its new Community Chargers pilot will provide for the company to build, own, operate, and maintain 250 to 360 Level 2 chargers in public locations, including utility pole- and streetlight-mounted chargers, particularly in locations that would facilitate overnight charging. The company stated that it intends to commit 40% of its funding for chargers to be installed in rural areas or in DACs and to conduct two RFPs to select a vendor to identify the best locations for charger deployment and to provide the chargers. The company requested $3.6 million in capital costs for the test period. 4 Tr 742-749, 796-798. The company asserts that its proposal meets all the requirements set forth in the February 4 order which sets forth the definition of a pilot. 4 Tr 741; *see also*, February 4 order, pp. 8-10.

The Staff recommended full disallowance of the requested funding for this pilot because it shifts risk to ratepayers and inhibits innovation and competition by third parties. 7 Tr 4432-4433. MEIU recommended five modifications to the program should it be approved, including: (1) participating customers should be given the option of either working with third parties or themselves owning and operating charging stations installed on their property, (2) the utility should provide financial support to customers that choose to work with a third party in a manner equivalent to the financial support it provides to utility-owned chargers, (3) a customer that owns a charger should be permitted to set the rates/rate policies for its use, (4) customers should be able to choose the charging vendor that supplies the charger even when the charger is utility-owned, and (5) all charging stations should be certified by a nationally recognized testing laboratory (NRTL) and networked. 6 Tr 4168-4170. MNSC supported the pilot but opined that caution should be exercised when development of utility-owned charger infrastructure competes with development of nonutility-owned infrastructure. 6 Tr 3467.

The ALJ agreed with the Staff and recommended disallowing the requested funds for the Community Chargers pilot. In addition, the ALJ was concerned that, in the future, ongoing market development may reduce or eliminate the need for utility-owned charging infrastructure to address market failures in currently underserved areas. PFD, pp. 671-672.

DTE Electric opposes the rejection of the Community Chargers pilot because more chargers are needed in its service area, some locations offer more access to charging than others, and MUD residents are unable to make use of the off-peak TOD rate. The company characterized the ALJ's negative comments about the project as speculative musings and points out that it does not have issues with MEIU's recommendation that all chargers be networked and have NRTL certification (although it opposes the remaining four suggestions made by MEIU as they substantially change the proposal). Finally, DTE Electric states that it has no knowledge of a significant effort to provide chargers to underserved communities. DTE Electric's exceptions, pp. 228-229.

MEIU excepts and argues that the Commission should approve the Community Chargers pilot with the modifications suggested in MEIU's case presentation because the pilot has a limited scope, and the suggested modifications would eliminate the ALJ's concerns about utility ownership of extensive charging infrastructure. Alternatively, MEIU states that the Commission should limit DTE Electric to installation of only curbside chargers and not those installed in parking lots. MEIU's exceptions, pp. 2-3.

In its exceptions, MNSC argues that the Commission should approve the Community Chargers pilot because the program has a limited scope, addresses current critical charging infrastructure needs, addresses barriers to EV adoption, and that if speculative problems ever occur they can be addressed at that time. MNSC points out that people will not convert to EV ownership if they do not have access to affordable charging. MNSC's exceptions, pp. 16-18.

In their exceptions, the CEOs refute the Staff's statements that the pilot should not be approved absent a market failure. The CEOs assert that a market failure does exist, at least in markets where customers reside in MUDs and in disadvantaged communities. The CEOs argue that the Community Charger program is well-suited to achieve clean energy equity goals. The CEOs express doubts that there exists a risk of "large-scale utility ownership" considering the limited scope of the project and support the modifications suggested by MEIU. CEOs' exceptions, pp. 9-11.

The Staff replies to the exceptions filed by MNSC and argues that the record does not support MNSC's claim that the pilot would meet a critical need. The Staff's position remains unchanged from its initial brief. Staff's replies to exceptions, p. 25; *see also*, Staff's initial brief, pp. 64-65.

The Commission finds the ALJ's analysis and recommendation in this matter to be thorough and well-reasoned. Accordingly, the Commission adopts the ALJ's recommendation to disallow funding for the Community Chargers pilot for the reasons stated in the PFD.

ii. School Bus Chargers

DTE Electric proposed a School Bus Charger pilot[39] that intends for the company to install, own, operate, and maintain vehicle-to-grid (V2G) chargers for electric school buses when the compatible bus will be owned and operated by the participant for at least five years. The company requested $0.1 million in O&M in the bridge period and $0.3 million in O&M in the projected test

[39] Not to be confused with the eFleet Battery Support program which includes up front battery purchases for school buses with the owner of the bus repaying DTE Electric over time. *See*, sub-section 8.a.iii, *supra*.

year. 4 Tr 749-755, 799. The company asserts that its proposal meets all the requirements set forth in the February 4 order which sets forth the definition of a pilot. 4 Tr 741; *see also*, February 4 order, pp. 8-10.

The Staff supported the program because it would facilitate school bus fleet electrification and offer the opportunity for V2G testing. 7 Tr 4434. MEIU suggested changes to the School Bus Charger pilot that are similar to the changes MEIU suggested for the Community Charger pilot and stated that DTE Electric should work to develop a V2G program and tariff with stakeholders that would be appropriate for school districts and residential and business customers. 6 Tr 4170-4171. MNSC argued that the School Bus Charger program should be implemented by third parties to avoid competition between the utility and private enterprise but generally supported the pilot concept. 6 Tr 3467, 3475.

The ALJ recommended approval of the School Bus Charger pilot and that DTE Electric should commit to facilitating third-party ownership of the charging infrastructure when the third-party cooperates with the company's V2G scope of work. PFD, p. 675.

In exceptions, DTE Electric remarks that it agrees with the ALJ on this matter but notes that further cost recovery could be required if MNSC and MEIU's suggestions are approved. DTE Electric's exceptions, pp. 227-228.

The Commission finds the ALJ's analysis and recommendation on the School Bus Charger pilot to be thorough and well-reasoned and therefore, the Commission adopts the PFD and the ALJ's recommendations for the reasons stated in the PFD. *See*, PFD, pp. 672-675.

d. Benefit/Cost Analysis of Electric Vehicle Pilots and Programs

DTE Electric projected that costs for EV-related pilots and programs would be $18.6 million in the bridge period and $33.2 million in the test period. 4 Tr 755. The company estimated that the "[NPV] of gross margin generated by each EV to be in the range of $1,800 to $2,100, which offsets DTE's fixed costs and puts downward pressure on rates." 4 Tr 756. DTE Electric also forecasted the following: (1) light duty vehicle sales in the company's service territory would be 30% of total sales by 2030; (2) in its projected test year, EV sales will generate a NPV system benefit of approximately $51.3 million to $59.9 million; (3) half of total estimated EV sales in 2024 will be influenced by Charging Forward programs, for a NPV of $25.7 million to $29.5 million attributed to Charging Forward; (4) $7.2 million from participant-funded programs should be excluded from the BCA but $2.5 million in revenues from EV programs over a 10-year period should be included; and (5) NPV for the projected test period is expected to be $2.1 million to $6.4 million. 4 Tr 755-760.

The Attorney General disagreed with DTE Electric's figures, arguing that the company has spent approximately $6,100 per participating customer and stating that the company not only overestimated the NPV benefit provided by EV vehicles but that the NPV benefit would be reduced to $37–$556 per EV when properly calculated and that EV range limitations would reduce the NPV benefit even further. The Attorney General further asserted that the rebates and subsidies provided to customers through EV programs are not commensurate with the net gross margins from electricity sales to EVs and that the costs should be covered by charging fees that cover all costs. 6 Tr 3719-3725. The Attorney General made a number of suggestions and recommendations, including that the Commission should make the following disallowances for the 12-month period ending November 2024: (1) $20,715,000 in capital expenditures attributed to Charging Forward; (2) $4,552,000 in O&M; and (3) $12,376,000 in regulatory asset costs. 6 Tr 3725-3727.

MEIU argued that DTE Electric's BCA inappropriately attributed some of the company's service territory EV sales to the company's EV programs when numerous other factors influence EV sales. MEIU further argued that DTE Electric's NPV figures represent, not the benefit of EV adoption, but a transfer of wealth to non-EV drivers and shareholders from EV drivers. MEIU discussed the manner in which the true benefit of EV programs should be evaluated. 6 Tr 4171-4172. The Staff rejected the proposition that a transfer of wealth occurred, and stated the BCA did not properly include costs. 7 Tr 4624-4625.

MNSC generally supported DTE Electric's BCA but stated that it failed to include such benefits as clean air and decreased dependence on gas-powered vehicles. MNSC opposed attributing any portion of EV sales to the company's EV-related pilots and programs and offered several suggestions for approaching the BCA. 6 Tr 3469-3470. However, DTE Electric and the Staff opposed those suggestions. 4 Tr 794-795; 7 Tr 4623-4625.

The ALJ noted that the Commission does not require all pilots to be financially solvent at the initial proposal but that benefits should outweigh costs over the duration of the pilot or program. PFD, pp. 688-689 (citing November 18 order, p. 351). The ALJ also noted that quantifying costs and benefits is extremely difficult and discussed the merits and deficiencies of each party's presentation but did not specifically reject the company's present BCA. PFD, pp. 689-691. Rather, the ALJ recommended that, for future BCAs, the parties collaborate to prepare a more comprehensive BCA and that the topic should be included in Transportation Electrification Plan (TEP) stakeholder discussions. *Id.*, pp. 691-692.

In exceptions, DTE Electric argues that the ALJ's suggestions that the company meet with stakeholders at least twice, that these meetings are held as early in the TEP development process as possible, and that the BCA be included in the discussions is consistent with the plans that the company asserted during its case presentation and thus no specific directive from the Commission is needed. DTE Electric's exceptions, pp. 229-231.

In its exceptions, MNSC argues that parties should be permitted to develop their own BCAs, leaving parties "free to develop varied approaches to assessing costs and benefits, including those that consider the system-wide benefits from all EVs." MNSC's exceptions, p. 18. MNSC eschews the benefit/cost methodology that the ALJ recommended and avers that the EV market and related policies should be permitted to evolve. Consequently, MNSC disagrees with the ALJ's opinion that the development of "a more comprehensive BCA framework" should be "aligned with the Commission's guidance provided in this case." MNSC's exceptions, pp. 20-21.

The Staff excepts to MNSC's claim that "'[t]he Commission should not prescribe a one-size-fits-all benefit/cost methodology for all future transportation electrification-related investments."' Staff's replies to exceptions, p. 32 (quoting MNSC's exceptions, p. 18). The Staff asserts that parties, as they always have, may suggest any BCA method they prefer. Staff's replies to exceptions, p. 32.

The Commission finds the ALJ's analysis and recommendations in this matter to be comprehensive, thorough, and well-reasoned and thus adopts the PFD and the ALJ's recommendations for the reasons stated in the PFD. *See*, PFD, pp. 675-692. Further, the Commission clarifies that the ALJ's recommendation that DTE Electric continue to work with stakeholders to develop a more comprehensive BCA framework is not intended to be overly prescriptive or otherwise "cut the conversation short." MNSC's exceptions, p. 20. The Commission agrees that the EV market continues to evolve and believes that encouraging a forum by which the company and utilities can continue to engage in ongoing conversations around the costs and benefits of the company's EV charging programs is supportive of this continued evolution. This is also consistent with the ALJ's recommendation that "the parties collaborate to prepare a more comprehensive BCA and that the topic should be included in transportation electrification plan (TEP) stakeholder discussions." PFD, p. 691.

e. Transportation Electrification Plan

DTE Electric indicated that it is currently developing a comprehensive TEP with plans to release it no later than the fourth quarter of 2023. The company plans for the TEP to detail the company's plan for its EV-related investment plans through 2028. Additionally, the company plans to continue reporting on nonpermanent elements of its Charging Forward programs and continue to host periodic stakeholder discussions. 4 Tr 710, 713, 805-806.

MEIU, MNSC, and EVgo each made numerous suggestions for topics to be addressed in the TEP. Among them was the suggestion that stakeholders be permitted to provide input following the release of the TEP and that the TEP should support the MI Healthy Climate plan. MNSC specifically testified that "the TEP should support in DTE Electric's service area, at a minimum, the goal of the MI Healthy Climate Plan to provide charging infrastructure for two million electric vehicles in Michigan by 2030, including at least 50% of light duty vehicles and 30% of heavy and medium-duty vehicles. 4 Tr 3472; *see also*, 4 Tr 1009-1012, 6 Tr 3471-3474, 4171-4176. The Staff asserted that the responsibility for EV infrastructure demand should not fall entirely to DTE Electric, that pilots and programs should provide a net benefit to ratepayers, and that excess revenues should be cause for rate reform to align cost of service with revenue. 7 Tr 4626-4627.

The ALJ found that DTE Electric should hold at least two stakeholder meetings during the development of the TEP in which the parties to this case and other interested persons may raise their concerns and suggestions for the company's consideration as these matters may be better addressed in such a format rather than in a rate case. The ALJ also recommended that the company consider the suggestions and comments already raised in this proceeding such as streamlining charger implementation, consistency with the MI Healthy Climate Plan goals, and reducing electrification barriers and range anxiety, when crafting the TEP. The ALJ agreed that DTE Electric and its ratepayers cannot be responsible for all EV infrastructure demands. PFD, pp. 696-698.

In exceptions, DTE Electric notes that the ALJ's suggestions that the company meet with stakeholders at least twice, that these meetings are held as early in the TEP development process as possible, and that the BCA be included in the discussions are consistent with the plans that the company asserted during its case presentation and thus no specific directive from the Commission is needed. DTE Electric's exceptions, pp. 229-231.

In exceptions, MNSC argues that the ALJ mischaracterized its arguments relating to DTE Electric's role in supporting the infrastructure necessary to achieve the targets of the MI Healthy Climate Plan, and as such, the ALJ's admonishment is unwarranted. MNSC's exceptions, pp. 18-22. The Staff replies that it agrees with the ALJ's statements in the paragraph at issue and that the time to clarify one's position on a matter is in brief. Staff's replies to exceptions, p. 18.

The Commission finds the ALJ's analysis and recommendations in the PFD to be thorough and well-reasoned and thus adopts the PFD in this matter. The Commission emphasizes that development of the TEP with meaningful discussion of related concerns is best conducted through stakeholder meetings rather than in a rate case proceeding.

Further, based on the evidence in the record, as well as arguments made in exceptions and replies to exceptions, the Commission agrees with MNSC that DTE Electric's "'planning efforts'–i.e., the company's process to develop a [TEP]–should be carried out with the state's infrastructure target in mind, but not that DTE ratepayers should fund all charging costs on the customer side of the meter." MNSC's exceptions, pp. 21-22.

B. Accounting Issues

1. Surge Program (Tree-trimming)

DTE Electric requested $43.7 million for 2025[40] to complete its tree-trimming surge program. Additionally, the company requested to increase the rate of return on the program, moving it from short-term debt classification to long-term debt and equity capital. 5 Tr 2185, 2187, 3274; 6 Tr 3585-3590.

The Staff supported the $43.7 million surge funding for 2025 but argued for the continued use of the short-term debt rate of return to calculate the return on the regulatory asset. 7 Tr 4400; *see also*, PFD, p. 699. MNSC also recommended that the Commission continue to use the short-term debt rate for current surge funding. 6 Tr 3585-3590. The ALJ noted that the surge program is currently successful and recommended that the program should remain as is with interest at the short-term debt rate until the company has arranged for securitization. PFD, pp. 699-700.

The Commission agrees with the ALJ's appraisal of the surge program and finds that the program should remain as is. *See*, PFD, pp. 698-700. Cost recovery and other aspects of the tree trimming program are discussed in Part IV (Rate Base) pertaining to distribution capital, Part VI (Adjusted Net Operating Income) pertaining to the O&M surge savings, and later in this section discussing the Tree Trimming tracker.

2. Tree Trimming Capitalization

[40] Funding for 2023 and 2024 was approved in the November 18 order.

MNSC argued that tree-trimming completed in the course of restoration and other activities should be classified as O&M and that the $70 million that DTE Electric capitalized should be disallowed because it does not qualify as a first clearing.[41] 6 Tr 3561-3568; *see also*, MNSC's initial brief, pp. 115-118. DTE Electric rebutted that its accounting practices are consistent with the generally accepted accounting principles (GAAP) and the Uniform System of Accounts (USOA). 5 Tr 1578-1582. MNSC argued that the company's practice is contrary to the USOA. 6 Tr 3561-3568. The ALJ stated that it appeared the capitalization practice has been ongoing and that a decision on the matter would be better made after the audit of the company's accounting practices is complete. PFD, p. 701.

In its exceptions, MNSC recounts its position that the Commission should reject tree-trimming capitalization because, in this case, the practice does not comply with the USOA and results in unneeded cost increases for ratepayers. MNSC points out that first clearings are capitalized but not subsequent clearings and that the Commission has supported this in the past.[42] Additionally, MNSC argues that there is sufficient evidence in the record to disallow the capitalization without waiting for the audit to be completed and that DTE Electric has not provided any authority to support capitalizing costs in this instance. MNSC's exceptions, pp. 22-26.

The Commission finds the ALJ's analysis and recommendation in this matter to be thorough and well-reasoned and thus adopts the PFD.

3. Shared Assets

"[The] Staff and DTE generally agree on the treatment of shared asset revenue for disallowed capital projects for which DTE Gas is assessed a share." PFD, p. 701. No party filed exceptions

[41] *See*, Exhibit A-22, Schedule L1.

[42] MNSC cites the December 11, 2015 order in Case No. U-17767, pp. 25-27.

or replies to exceptions on the matter. Accordingly, the parties seem to be in agreement and the Commission does not make a finding on this matter.

4. Classification of Ford MIGreenPower Contract

DTE Electric sought for the Commission to remove the special contract designation from the MIGreenPower (MIGP) contract with Ford Motor Company (Ford) to supply Ford with renewable energy. DTE Electric argued that the MIGP contract's structure is very similar to the company's Rider 17, the MIGP contract does not offer a discount to any established rate, and does not flow through base rates or projected base rates.[43] 5 Tr 2193-2197.

The Staff did not support the reclassification and testified that if the terms of the MIGP contract could be achieved through Rider 17, the rider would have been used instead of the special contract. As such, the special contract designation with the additional regulatory reviews that accompany that designation are necessary in this case to prevent harm to ratepayers. The Staff argued that the Commission should retain its authority over this special contract to ensure that it has a neutral effect on rates and complies with Michigan law. 7 Tr 4477-4479.

The ALJ agreed with the Staff that the MIGP should remain classified as a special contract. PFD, p. 703.

DTE Electric argues that the MIGP contract should be reclassified and reiterates its arguments that it cannot be a special contract because it does not offer discounted tariff rates, uses similar methodology as Rider 17 to calculate required customer payment, that Rider 17 is available to all

[43] DTE Electric was granted *ex parte* approval of the MIGP special contract in the December 21, 2022 order in Case No. U-21285 (December 21 order). In the December 21 order, the Commission directed DTE Electric to "file evidence demonstrating that the special contract with Ford Motor Company complies with the Commission's previous directives regarding special contracts and Mich Admin Code, R 460.2031." December 21 order, p. 6; *see also*, 5 Tr 2191.

customers, and that revenues and costs do not flow through either projected base rates or current rates. DTE Electric's exceptions, pp. 231-232. Although DTE Electric concedes that the MIGP contract does offer some differences from Rider 17, such as MIGP's 35-year term and its termination charges that are designed to limit the chances of early termination and the subsequent impact that may have on other customers, the company argues that these features offer more, not less, protection for ratepayers than does Rider 17. DTE Electric also argues that the MIGP contract's costs and revenues are reconciled in the company's renewable energy plan filings, the same as Rider 17's costs and revenues. Additionally, DTE Electric asserts that no other customers subsidize the MIGP pursuant to the structure of subscription fees that are designed to recover revenue requirements for solar projects over the term of the contract. The company emphasizes that any difference in the terms of the MIGP contract and Rider 17 does not disadvantage or harm DTE Electric's broader customer base. DTE Electric's exceptions, pp. 231-235.

The Staff replies to DTE Electric's exceptions and reiterates its argument that the MIGP contract should not be reclassified, noting that DTE Electric seems to agree that it is a special contract but, curiously, also argues that the Staff's reasons to oppose reclassification are insufficient. Staff's replies to exceptions, p. 26; *see*, DTE Electric's exceptions, p. 233.

The Commission agrees with the Staff and finds that the MIGP contract should not be reclassified because if the terms of the MIGP contract could be achieved through Rider 17, the rider would have been used instead of the special contract. As such, the special contract designation with the additional regulatory reviews that accompany that designation are appropriate. The Commission retains its authority over this special contract to ensure that it has a neutral effect on rates and complies with Michigan law. *See*, 7 Tr 4477-4479.

C. Mechanisms

1. Investment Recovery Mechanism

DTE Electric proposed an approximately three-year distribution IRM with surcharges to be established with new rates subsequent to the Commission's order in this case. 2 Tr 61. The company identified five programs to include in the proposed IRM: (1) circuit conversions; (2) sub-transmission redesign and rebuild; (3) breaker replacement; (4) underground residential distribution replacement; and (5) 4.8 kV circuit automation. *See*, 2 Tr 64. The Staff generally supported the proposal "as it will help ensure continued investment in DTE Electric's distribution system." Staff's initial brief, pp. 148-149. However, the Staff proposed several modifications. *See*, *id*., p. 149.

The Attorney General recommended that the Commission reject or severely restrict the proposed IRM because "regulatory lag is the only remaining brake on utility spending" and if the IRM is approved "it will eliminate this only remaining brake." 6 Tr 3341. ABATE noted support for DTE Electric's goal to increase accountability and transparency but averred that this transparency and accountability should already be provided within the context of general rate cases. 4 Tr 1142. ABATE also argued that an IRM is an example of single-issue ratemaking and that the "proposed method of calculating the IRM incremental revenue requirement ignores offsetting reductions in the value of plant investment included in base rates." 4 Tr 1144. Similarly, Kroger recommended rejection of the IRM, arguing that it is single-issue ratemaking and fails to include any performance-based ratemaking (PBR) "provisions to align DTE's incentives with customer's interests." 6 Tr 4275. The CEOs argued that DTE Electric's proposal to work exclusively with the Staff "is problematic from both a procedural and a recognition justice perspective" and that approval of the IRM could lead to a lower level of scrutiny for reasonableness and prudence. 6 Tr 3865.

The DAAOs agreed with the CEOs and additionally note that it would be imprudent to approve the IRM without performance-based measures as it would increase racialized disparities in service. 6 Tr 4067-4070.

The ALJ reviewed the parties' positions regarding DTE Electric's proposed IRM at pages 704 to 741 of the PFD before recommending that the Commission reject the IRM at this time. The ALJ noted that DTE Electric "failed to establish that its DGP, with its black-box GPM, adequately paces or prioritizes investments to protect ratepayers from potentially hundreds of millions or billions of dollars in excess capital spending, to actually promote improved reliability and improved grid equity, and to retain measures of affordability." PFD, p. 741. Therefore, she concluded that the proposal was premature.

The ALJ also recommended that the Commission consider allowing the company:

> to file a separate application for a determination of what types of distribution system expenditures would be suited to an IRP; this would also give interested stakeholders the opportunity to obtain information of the nature that DTE has refused to provide in this case to substantiate its claims regarding the reasonableness and prudence of its projects and to consider grid equity not in the context of a 10-month rate case, and ideally to frame a subset of projects or programs that can achieve a reasonable consensus of worthwhileness, affordability, and legitimacy.

Id., p. 743.

In exceptions, DTE Electric argues that the ALJ's conclusion that the IRM proposal is premature is contrary to prior Commission guidance. DTE Electric's exceptions, p. 235 (quoting May 2 order and November 18 order). The company avers that its proposed distribution IRM is similar to the Commission-approved IRM for DTE Gas and that, "[b]ased on the Commission's guidance, the Company broadly looked for programs critical to customer safety, reliability, and/or resilience, and specifically identified programs supporting the ultimate conversion of the Company's distribution grid." DTE Electric's exceptions, pp. 235-236 (citing 2 Tr 50, 54, 62).

Reiterating its testimony regarding the benefits of the proposed IRM, DTE Electric avers that the IRM would not allow the company to commence projects without justification. DTE Electric's exceptions, pp. 237-239.

Responding to the ALJ's assertion that the IRM should be delayed until it incorporates PBR, DTE Electric disagrees and notes that any delay in the implication of an IRM would also delay the benefits previously discussed. DTE Electric also highlights the Staff's recommendation to approve the IRM, albeit with modifications. *Id*., pp. 239-240. Responding to the Staff's proposed modifications, the company states that "the timing of Staff's proposal is not feasible for the submission of the 2024 plan. The Company intends to meet with Staff to solicit feedback and ensure alignment prior to the final 2024 plan being submitted." *Id*., p. 240. DTE Electric also counters that the draft IRM plan be submitted three months prior to the start of the planning year as opposed to four months to sync up with the end of storm season. *Id*.

Finally, DTE Electric contends its proposed distribution IRM is well designed and fully supported and should be approved.

The Staff filed exceptions, arguing that the Commission should approve the proposed IRM with the Staff's recommended modifications. The Staff reiterates its proposed modifications as follows:

> 1) The Company should submit the IRM Investment Plan no later than four months prior to the start of each IRM Plan Year, not two months.
>
> 2) The Company should submit a copy of this plan to all intervening parties in the Company's most recently filed rate case, not just to Staff.
>
> [3]) The Company should schedule and provide a forum for Staff and the intervening parties to raise any questions or concerns that they have before execution of the plan begins. This forum should occur no later than two months before the start of the IRM Plan Year. (Staff Initial Brief, p 146, 148-149.)

Staff's exceptions, p. 8.

The DAAOs also except, thanking the ALJ for rejecting the proposed IRM. DAAOs' exceptions, p. 3.

In replies to exceptions, DTE Electric notes its appreciation for the Staff's support of the IRM, but again notes that the Staff's recommendations are not feasible for the first plan year and reiterates three months would better sync up with the end of storm season and still allow time for considering stakeholder feedback. DTE Electric's replies to exceptions, p. 36.

The Staff replies that the company requests approval of the IRM surcharges presented in Exhibit A-33, Schedule X7, but that "the actual surcharge should be updated to incorporate any and all adjustments contained in the Commission's order, rather than simply setting the surcharge solely on the Company's case. Rates and charges approved by the Commission must match all other decisions made by the Commission in its order." Staff's replies to exceptions, p. 13.

The Attorney General responds to DTE Electric's exceptions, arguing that "IRMs are a bad deal for customers, contrary to the regulatory construct, and the Commission should be reticent to ever grant IRMs, as they remove utilities' incentives to avoid spending money." Attorney General's replies to exceptions, p. 55. Further, she states that the company has failed in this case to support the levels of spending in the proposed IRM. The Attorney General also contends that the DGP and GPM are not accurate or supported, and that the company's presentation was lacking detail for the spend it is requesting. *Id*. She argues that DTE Electric failed to include a description of costs and benefits the Commission set forth as a requirement for the consideration of an IRM. Therefore, the Attorney General states that the proposal is premature as concluded by the ALJ and that the Commission made no promises to approve an IRM. *Id*., p. 56. In conclusion, the Attorney General argues that merely because the Staff supports approval, it does not make the company's proposed IRM to be reasonable and prudent. *Id*.

In its replies to exceptions, ABATE reiterates that approval of the IRM is unnecessary "to provide greater transparency, accountability, and additional opportunities for review" because the company "is more than capable of doing so in and outside its regular filings with the Commission . . . ." ABATE's exceptions, p. 9. ABATE also notes that while the Staff continues to support the approval of the IRM, the Staff did not provide an analysis indicating that the PFD is unreasonable. In conclusion, ABATE contends that, based on the opposition in the case and the ALJ's analysis, the IRM is not supported and should be rejected. *Id*., pp. 9-10.

MNSC also replies, arguing that DTE Electric's exceptions have no merit. After summarizing prior Commission orders and record positions on the IRM, MNSC states that the ALJ properly found the proposed IRM to be premature. MNSC continues, arguing that the company has not included any outcome-based performance mechanisms in its proposal, and as such, has not followed prior Commission guidance. MNSC's replies to exceptions, pp. 103-104. MNSC distinguishes the proposed IRM from the DTE Gas IRM, noting that most of the programs in DTE Gas's IRM were "ongoing, previously approved, and the Commission determined they were critically necessary because of ongoing threats to public safety in the form of explosion and leakage risks." *Id*., p. 104. With respect to the alleged benefits, MNSC states that DTE Electric failed to provide specific evidence that the programs proposed are beneficial; rather the benefits referenced are general regarding an IRM as a regulatory mechanism. *See*, *id*., pp. 104-106. MNSC also argues that it would not be premature to include a PBR framework as part of the IRM. *Id*., p. 107. In conclusion, MNSC states that DTE Electric's proposal is flawed and "does not faithfully address the guidance the Commission gave when it stated it would consider an IRM." *Id*., p. 108.

In reply, the CEOs note that other than the company and the Staff, the parties almost unanimously recommended that the IRM be rejected. CEOs' replies to exceptions, p. 9 (citing PFD, pp. 704-741). The CEOs further state that DTE Electric "has not presented any new information or argument in its Exceptions that warrant reconsideration of the ALJ's well-reasoned decision regarding the IRM" and that "[t]he Commission should reject the IRM." CEOs' replies to exceptions, p. 9.

The Commission finds that there is value in the company's proposal, with some limitations. First, the Commission adopts each of the Staff's recommendations with the understanding that, for the first plan year, the timeframe may be constrained. The filing of the IRM Investment Plan at least four months prior to the start of each plan year will allow for a more meaningful review by both the Staff and other interested stakeholders. Further, the submission of the plan to all intervening parties, along with providing a forum for interested parties to raise concerns, will allow for additional collaboration and input into the proposed investments.

In addition, the Commission finds that approval is limited to Plan Years 1 and 2. As noted on the record, there is ongoing discussion regarding PBR in Case No. U-21400 and an ongoing audit in Case No. U-21305. Therefore, the Commission finds that limiting the approval to the first two years will allow the company to move forward with the IRM without precluding the incorporation of any potential insights gained from those proceedings to better inform the potential continuation of the IRM.

With respect to the reconciliation process, the Commission notes that MNSC cited Commission precedent for formal reconciliations with respect to approval of an IRM. *See*, MNSC's initial brief, pp. 161-164. The Commission agrees that additional review is appropriate, and as such finds that the IRM reconciliation shall be filed as a contested case proceeding.[44] In addition to plan review, a contested reconciliation process will provide additional opportunities for input from interested parties. Further, developing a record in a contested proceeding will provide even greater transparency and opportunity for review of the reasonableness and prudence of the company's expenditures, as well as accept input to address equity concerns such as those raised by the DAAOs to avoid racialized disparities in service. Finally, the Commission agrees with ABATE that DTE Electric shall remove any allocation of IRM costs from transmission level customers. *See*, ABATE's initial brief, p. 53. The proposed investments are to take place on the distribution and sub-transmission systems, and transmission customers will receive no benefit from these investments.

Given the above, the Commission agrees with the Staff that an IRM surcharge is approved; however, it shall be revised as consistent with the Commission's decisions in this order. More specifically, the amount adopted for the test year is addressed in the discussion in Distribution Strategic Capital Expenditures above. For Plan Years 1 and 2, the Commission approves the following to be included in the IRM:

[44] *See*, July 31, 2017 order in Case No. U-18124; *see also*, Case Nos. U-20522 and U-20893.

CAPITAL PROGRAM	PLAN YEAR 1 13 MONTHS ENDING 12/31/2024 ($000)	PLAN YEAR 2 12 MONTHS ENDING 12/31/2025 ($000)
CONVERSIONS	1,608	185,812
SUB-TRANSMISSION REDESIGN & REBUILD	5,546	53,819
BREAKER REPLACEMENT	13,680	12,628
URD REPLACEMENT	14,625	13,500
4.8 KV CIRCUIT AUTOMATION	26,406	24,375
TOTAL IRM INVESTMENTS	**61,865**	**290,134**

2. Earnings Sharing Mechanism

ABATE proposed the adoption of an ESM "to curtail the degree to which DTE can earn over its authorized rate of ROE due to its use of a projected test year." 4 Tr 1067. Specifically, ABATE recommended that DTE Electric be required to return to customers any earnings, plus interest, that exceed 35 basis points over the authorized ROE. The Staff did not take a position on the proposal but disagreed with ABATE's proposed refund methodology. *See*, 7 Tr 4632-4634.

The ALJ acknowledged the impetus for ABATE's proposal and the Staff's alternative refund method; however, she concluded that the proposed ESM "is unlikely to restrain the rapid increase in capitalization DTE has been pursuing. No party has explained how to ensure that DTE does not just spend money to avoid having to refund the money." PFD, p. 747. The ALJ continued, indicating that the record contains many examples where the company has ignored Commission guidance regarding more cautious spending targets and that "[s]everal witnesses testified in this proceeding regarding the utility's incentives to capitalize expenses and otherwise to increase its rate base." *Id*., p. 748.

ABATE takes exception, arguing that while an ESM "is not a replacement for the rate case process of reviewing capital spend, it is . . . meant to ensure that DTE does not cut operational and maintenance cost spending just to boost revenue to shareholders." ABATE's exceptions, p. 1. ABATE claims that the potential for the company to increase capital expenditures to avoid being required to refund excess earnings should not cause the ESM to be rejected. Rather, it "would simply concede the highly excessive earnings that would otherwise be returned to customers." *Id*. Therefore, ABATE argues that the ESM should be adopted to cap DTE Electric's earnings at 35 basis points over its authorized ROE. *Id*., p. 2.

DTE Electric replies that ABATE failed to offer support for its exceptions. Further, the company states that there was not sufficient time to properly consider such a mechanism on this record and that "[t]he establishment of this one-sided mechanism or any permutation that only seeks to penalize should also be rejected, and ABATE's proposal raises legal and regulatory concerns." DTE Electric's replies to exceptions, p. 52 (citing 5 Tr 216).

The Commission agrees with the ALJ's recommendation and declines to adopt an ESM at this time.

3. Service Improvement Incentive Mechanism

The Attorney General recommended the adoption of a SIIM. *See*, 6 Tr 3796-3804. The Attorney General argued that the proposed SIIM "strikes a fair balance in holding the Company accountable for performance related to capital investments and operating costs directly related to the distribution system" and "provides for both incentive awards and penalties, within reason, and challenges the Company to improve service reliability and outage restoration time, among other goals." 6 Tr 3803. DTE Electric opposed the proposal, noting that it is premature given the Commission's ongoing consideration of PBR in Case No. U-21400. *See*, 2 Tr 97-102.

The ALJ noted appreciation for the Attorney General's recommendation but stated that in Case No. U-21400, the Commission issued an order requesting comments regarding PBR. Therefore, she concluded that "[w]ith the Commission in the middle of evaluating such comments . . . it would be inappropriate to adopt this mechanism in this case." PFD, p. 751.

The Attorney General takes exception, arguing that the Commission should consider implementing the proposed SIIM presently while Case No. U-21400 is ongoing to "provide an interim mechanism to get the ball rolling, provide some immediate accountability from DTE, and potentially provide some valuable learnings for consideration in U-21400." Attorney General's exceptions, p. 19.

DTE Electric replies that it seems premature to implement the proposed SIIM prior to the completion of the workgroup in Case No. U-21400. Further, the company reiterates concerns regarding the SIIM as proposed and argues that "a prudent path forward is to allow the Financial Incentives and Disincentives workgroup to complete its work, potentially including exploring the proposed SIIM, and for the Commission to issue guidance on what it believes is an appropriate path forward on PBR." DTE Electric's replies to exceptions, p. 51 (citing 2 Tr 97, 100-102).

The Commission appreciates the Attorney General's proposal but agrees with the ALJ that such proposals are presently being considered within Case No. U-21400. As such, the ALJ's recommendation is adopted on this issue.

4. Tree-trimming Tracker

Ann Arbor proposed a tree-trimming tracker to confirm that revenues approved for tree trimming are appropriately spent and that "the Commission should be on alert when reviewing those expenses to confirm that tree-trimming that would have been under an O&M budget if performed on schedule is not capitalized because it instead occurred as part of storm response."

4 Tr 876. DTE Electric disagreed, noting that such a tracker would be redundant given that as part of the Tree Trim Surge program the company "already submits a detailed annual report on Tree Trimming activities including a breakdown of expenditures." 5 Tr 2165.

The ALJ noted that Ann Arbor did not brief this issue and, therefore, she considered "the question resolved." PFD, p. 751.

The Commission adopts the findings of the ALJ on this issue.

IX. COST OF SERVICE

A cost-of-service study (COSS) is the systemic functionalization, classification, and allocation of a utility's fixed and variable costs to provide service to each customer class. Specifically, the three steps to developing a COSS include: (1) the separation of costs into production, transmission, and distribution (functionalization); (2) the classification of costs by customer, energy, and demand; and (3) the assignment of costs to different customer classes.

A. Electric Vehicle Program Cost Allocation

The Staff disagreed with DTE Electric's proposed cost allocation for EV program costs as distribution with the net plant allocator applied. The Staff argued that the EV program costs should be allocated on the overall revenue requirement for distribution and power supply separately and proportionate to the same. 7 Tr 4618; Exhibit S-23.0. The company disagreed with the Staff's position and argued that the allocators 400a and 401 should be used. 5 Tr 3157. In briefing, the Staff agreed with DTE Electric's recommendation to use present revenues for EV cost allocation as opposed to proposed revenues or the proposed revenue requirement, noting that the company's approach accurately reflects the benefits and costs of the EV program while avoiding the circularity problem described in testimony by the company. Staff's initial brief, pp. 153-154.

The ALJ agreed with the Staff finding that allocation of EV program costs by revenue by customer class better reflects the benefits of the program and that present revenues rather than projected revenues should be used in the calculation of the cost allocation. PFD, pp. 753-754.

Having no exceptions filed on this issue and finding the ALJ's recommendation to be well-reasoned and based on substantial evidence on the record, the Commission adopts the PFD.

B. Uncollectible Cost Allocation

MI-MAUI objected to the inclusion of more than $650,000 in uncollectible cost allocation to the E1 class and asked the Commission to disallow $651,000 and allocate it among other rate classes according to revenue. 4 Tr 926-927. The company did not take a position on MI-MAUI's proposed disallowance but corrected that the recommendation does not involve a disallowance. Rather, the previously approved allocator 402 would need to be modified so that the total amount of uncollectible costs is allocated to the remaining COS classes. 5 Tr 3157-3158. The Staff called for the Commission to reject MI-MAUI's recommendation. 7 Tr 4639.

The ALJ agreed with the Staff and its reliance on the Commission's determination in the November 18 order that uncollectible costs are a general cost of doing business and should be allocated to all customer classes based on revenue. Further, the ALJ noted that past uncollectible amounts are not germane to uncollectible cost allocations going forward. Thus, the ALJ recommended that the Commission reject MI-MAUI's request to exclude the E1 rate class from the allocation of uncollectable costs. PFD, p. 756.

MI-MAUI excepts arguing that the Commission did not consider the unique position of the streetlighting customer class when it adopted the change in the allocation method for uncollectibles in the November 18 order. MI-MAUI repeats its previous arguments that allocating uncollectibles to streetlighting customers (who are local governments required to pay their energy bills) results in streetlighting customers paying more than 10,000 times an amount actually attributable to the streetlighting class. MI-MAUI relies on a federal court case in which the court balked at a rate considered to be COS-based when it was approximately 73 times higher than the actual cost. MI-MAUI's exceptions, pp. 1-2 (citing *Mid Louisiana Gas Co v FERC*, 780 F2d 1238, 1245 (5th Cir, 1986).

In its replies to exceptions, the Staff notes that MI-MAUI's exceptions repeat its previously made arguments that were already properly considered and rejected by the ALJ. The Staff also contends that "the basis of the competing evidence was that no class causes uncollectibles, so the argument that the allocation is 'absurd' or 'orders of magnitude' higher than the caused cost is based on an incorrect interpretation of the basis for the allocation or its result." Staff's replies to exceptions, p. 27 (quoting MI-MAUI's exceptions, p. 1).

The Commission finds that MI-MAUI's proposal is contrary to the principles of ratemaking and the Commission's previous determinations that uncollectibles should be based on total revenue. The Staff is correct, as the Commission has previously reasoned, that uncollectible costs are considered a general cost of doing business. *See*, December 9 order, pp. 189-190. MI-MAUI's exceptions to the PFD do not demonstrate legal error but rather express mere disagreement with the Commission's decision in the November 18 order, to which the Commission notes that MI-MAUI did not file a petition for rehearing. The Commission in this case finds the ALJ's recommendation to be well-reasoned, supported on the record, and consistent with the Commission's decision to return to an uncollectibles allocation based on total revenue. *See*, November 18 order, pp. 383-385; December 22 order, p. 354.

C. Rider 10 Administrative Charge

In the November 18 order, the Commission agreed with the ALJ in that case to reduce the Rider 10 administrative charge and directed the company to either file a proposal to eliminate the charge or propose an administrative charge that is based on DTE Electric's cost to serve these Rider 10 customers, along with evidentiary support. November 18 order, p. 431. In the instant case, the Staff argued that DTE Electric failed to comply with that directive by opting to include a negative administrative charge for non-capacity power supply without providing any information regarding the costs that the Rider 10 charge is intended to cover. 7 Tr 4476.

DTE Electric responded to the Staff's objection stating that in response to the Commission's directive in the November 18 order, the company zeroed the Rider 10 allocation factors to eliminate the administrative charge but that zeroing those factors still resulted in a certain cost allocation to Rider 10 due to the change between present and proposed revenues. 3 Tr 3226. The company also argued that the MISO energy charge is not the appropriate place to include additional Rider 10 charges, pointed out and corrected an error in the Rider 10 rate design, and recommended an adjustment to the COSS rather than using the Staff's approach. *See*, 5 Tr 3226-3227, 3158-3160; Exhibit A-16, Schedule F1.1.

In briefing, the Staff agreed with the company's proposal on rebuttal to address the Rider 10 administrative charge, confirmed the error pointed out by DTE Electric, and recommended that the Commission approve the company's proposal "to set the administrative charge for Rider 10 to zero by reallocating the tax grossed-up income sufficiency to other customers and to correct the error in Rider 10 present revenue in its final order." Staff's initial brief, p. 129. The Staff withdrew its request for the company to present data on the actual costs to administer Rider 10 in its next rate case. In their respective briefs, Gerdau and ABATE agreed with DTE Electric's Rider 10 proposal. Gerdau's initial brief, pp. 3-6; ABATE's initial brief, pp. 53-54.

Citing the agreement of the parties on this issue, the ALJ found that the company's recommendation for the Rider 10 administrative charge presented on rebuttal and described on pages 757-759 of the PFD should be adopted. PFD, p. 760.

Having no exceptions filed and recognizing the parties' agreement on this issue, the Commission finds the recommendation of the ALJ to be well-reasoned and supported by the record. The Commission therefore adopts the PFD.

D. Distribution Cost Allocation

To begin, the ALJ noted the parties' agreement to the company's unchanged customer charges in this case, with the residential customer charge remaining at $8.50. PFD, p. 760. Having no exceptions filed on this issue, and acknowledging the parties' agreement, the Commission adopts the PFD.

Turning to the contested issues in this subsection, the Staff explained that DTE Electric currently allocates demand-related distribution plant costs for the secondary voltage level based on allocator schedule 300, which in turn is based on the forecasted sum of the individual customer maximum demands (SIMD). The Staff disagreed that SIMD is the most reasonable approach to allocate secondary distribution costs and recommended allocator 205 as the more appropriate measure. 7 Tr 4601-4602. To address the rate design component of its recommendation, which shifts approximately $70 million from residential to commercial and lighting customers, the Staff also recommended that the Commission phase in the rates based on allocator 205 over time by implementing an Interim Distribution Alignment Credit/Surcharge (IDACS) for residential and commercial secondary rates. However, the Staff suggested that the IDACS not apply to Rate E1 because only $1.45 million of the $70 million cost shift impacts the E1 class. 7 Tr 4458-4459.

MI-MAUI opposed the Staff's and the company's proposed allocators and argued that an allocator based on energy rather than demand or allocation of only primary distribution costs to the E1 class is appropriate. If the Commission adopts the Staff's approach, MI-MAUI recommended that $6.99 million be reallocated from Rate E1 to other customer classes, and, if the current 300 allocator is maintained, then $6.17 million should be reallocated from Rate E1 to other classes. 4 Tr 942-950 (citing Exhibit S-10.2, p. 1). DTE Electric did not take a position on the allocation method but expressed concern that the IDACS could cause customer confusion and would be time intensive to incorporate into the company's billing system. The company asked the Commission to reject the $70 million shift, or, in the alternative, implement 50% of the difference in this case and the remaining 50% in DTE Electric's next rate case. 5 Tr 3221-3222.

The ALJ found the Staff's proposed allocation method to be the most appropriate and agreed with the Staff that because the E1 rate class does use secondary distribution, it is reasonable to allocate some secondary distribution costs to it. Acknowledging the company's point regarding the potential for customer confusion (but dismissing the timing concerns) of the IDACS, the ALJ recommended that the Commission include half of the proposed $70 million secondary cost shift in this rate case and the remainder in DTE Electric's next rate case reasoning that this approach achieves the same result. PFD, pp. 766-767.

DTE Electric takes exception explaining that the company did not take a position on the Staff's proposed allocation but stated that it would not be able to implement the IDACs. The company agrees with the ALJ's adoption of the company's alternative suggestion but excepts to the ALJ's findings that timing or cost would not be an issue for the company in implementing the IDACs. DTE Electric's exceptions, p. 243.

MI-MAUI takes exception and repeats its previous arguments that the Commission should adopt MI-MAUI's approach where no secondary distribution costs are allocated to the streetlighting class. MI-MAUI's exceptions, pp. 2-3.

The Staff, in its replies to exceptions, states that MI-MAUI merely repeats its previously made arguments in its exceptions. The Staff maintains that the ALJ properly considered those arguments and that MI-MAUI's position should be rejected. Staff's replies to exceptions, pp. 13-14.

The Commission finds the ALJ's recommendation to be well-reasoned, based on substantial evidence on the record, and incorporates a reasonable resolution between the Staff and DTE Electric. The Commission is not persuaded by the arguments MI-MAUI presents in this case and agrees with the ALJ that E1 customers utilize the secondary distribution system and therefore, it is appropriate to include this class in the allocation.

E. State Reliability Mechanism Issues

The ALJ summarized that DTE Electric calculated a capacity charge revenue requirement of $530.2 million as shown in Exhibit A-16, Schedule F1.5. The Staff testified that it used the same method as DTE Electric but with the Staff's adjustments in this case and arrived at a capacity charge revenue requirement of $418.7 million. 7 Tr 4599-4600. Energy Michigan objected to several aspects of the company's state reliability mechanism (SRM) capacity charge.

1. Fuel Costs

Citing MCL 460.6w(3)(b), Energy Michigan recommended that the Commission eliminate DTE Electric's inclusion of non-fuel expenses that were included with fuel in setting the SRM charge and characterized by the company as fuel-related costs. 6 Tr 4082-4083. The Staff, referring to MISO Schedule 17 administrative costs, agreed that MCL 460.6w(3)(b) calls for the exclusion of fuel costs, not fuel-related costs but offered no specific endorsement of Energy Michigan's position. 7 Tr 4600. The company argued that the Commission permitted DTE Electric to include fuel-related costs in Case No. U-20561 because the costs were incurred in the production of energy. 5 Tr 2076.

The ALJ agreed with Energy Michigan that the plain language of MCL 460.6w(3)(b) refers only to "projected fuel costs" and not fuel-related costs such that including these is contrary to the statute. Thus, the ALJ recommended the exclusion of the emissions allowances and chemical costs that DTE Electric included as fuel-related costs and noted that this conclusion is consistent with the ALJ's and Commission rejection of DTE Electric's counterarguments on the same issue in Case No. U-20836.

DTE Electric excepts to the ALJ's recommendation and refers back to its testimony where it explained that the Commission allowed the company to include "Fuel-Related Costs" in its previous rate case, Case No. U-20561, as costs incurred as the result of the production of energy from the company's generation resources (e.g., emission allowance costs directly associated with the fuel and required by the EPA). DTE Electric's exceptions, pp. 241-242 (citing 5 Tr 2076). Additionally, the company states that the ALJ's reliance on Case No. U-20836 is inapt because the issue in that case was related to MISO Schedule 17 administrative costs. The company then points to the Staff's agreement with its methodology in this case. DTE Electric's exceptions, p. 242 (citing Staff's initial brief, pp. 109-112; Staff's reply brief, p. 10). The company then relies on *In re Application of Detroit Edison Co*, 483 Mich 993, 993; 764 NW2d 272 (2009) for the holding that the Commission did not err in permitting DTE Electric to recover transmission costs through its PSCR clause because "booked costs of purchased and net interchanged power transactions" had acquired a "peculiar and appropriate" meaning in the regulation of electric utilities to include transmission costs charged by third parties. DTE Electric's exceptions, p. 242 (quoting MCL 8.3a). To conclude, DTE Electric asserts that in common sense terms, "the cost of fuel is the full cost that enables the fuel to be used as fuel because otherwise it would not be fuel (e.g., the fuel that people pump into their cars at gas stations includes additives in addition to just gasoline)." DTE Electric's exceptions, pp. 242-243.

Energy Michigan, in its replies to exceptions contends that DTE Electric's two arguments criticizing the PFD are unpersuasive. Addressing DTE Electric's first argument that the ALJ's reliance on the November 18 order is inapt, Energy Michigan asserts that the issue in both Case No. U-20836 and this case center around non-fuel costs being included in the concept of "net of projected fuel costs" and therefore, whether they are MISO administration costs or emissions allowances and chemical costs is irrelevant. Energy Michigan then states that to the extent the emissions allowances and chemical costs were included in the past, the ALJ found that previous improper inclusion should not serve as precedent. Energy Michigan's replies to exceptions, pp. 2-3.

As to DTE Electric's argument that fuel costs have acquired a peculiar and appropriate meaning, Energy Michigan replies that even if fuel-related costs have been treated as fuel in PSCR proceedings, such proceedings are subject to a distinct and separate statute (MCL 460.6j) and do not supersede past Commission determinations in rate cases where fuel under MCL 460.6w(3)(b) is limited to just that, fuel. Energy Michigan's replies to exceptions, p. 3 (citing December 22 order, pp. 383-385; November 18 order, pp. 378-381). Lastly, Energy Michigan contends that nothing in the record supports DTE Electric's assertion that emissions allowances and chemicals are an intrinsic part of the fuel product. To conclude, Energy Michigan repeats its recommendations for the Commission regarding the SRM capacity charge. Energy Michigan's replies to exceptions, pp. 3-4.

The Commission finds the ALJ's recommendation on this issue to be well-reasoned, based on substantial evidence on the record, and is indeed consistent with the Commission's decision on this issue in the company's last rate case, Case No. U-20836. DTE Electric's reliance on the May 8 order is not persuasive. The company's inclusion of the fuel-rated costs in that case was not addressed by the Commission as a contested issue as the result of an oversight. In Case No. U-20561, the company asserted on the record that its calculation methodology for the capacity charge was compliant with the Commission's directive in the previous rate case, Case No. U-20162, when in fact it was not—the company had incorrectly included MISO administrative costs contrary to the Commission's May 2, 2019 order in Case No. U-20162 (May 2 order). *See*, May 2 order, pp. 132-133.

In Case No. U-20836, Energy Michigan correctly pointed this out and argued that the related fuel costs, including the emissions allowances and chemicals, should not be removed from the gross energy market sales. The ALJ in Case No. U-20836 agreed with Energy Michigan's position (and the Staff's) and the Commission likewise adopted the ALJ's recommendation. Therefore, the Commission finds that the inadvertent oversight in approving the company's calculation in Case No. U-20561 was rectified by the Commission's correct decision in Case No. U-20836 to exclude those fuel-related costs. In the instant case, the Commission finds the ALJ again reached the proper conclusion regarding the exclusion of emissions allowances and chemicals and adopts the PFD.

2. State Reliability Mechanism True-Up Mechanism

Energy Michigan took issue with the SRM true-up provision in MCL 460.6w(4) claiming that the statute's direction to use a true-up mechanism "for the difference between the projected net revenues described in [MCL 460.6w(3)] and the actual net revenues reflected in the capacity charge" is nonsensical because there are no actual net revenues in the capacity charge, only projected net revenues. 6 Tr 4084 (quoting MCL 460.6w(4)). Energy Michigan also pointed out that the statute requires the utility to apply a true-up charge or credit if no party is assessed an SRM capacity charge and is unclear as to how a party that is assessed an SRM capacity charge in one year but not the next receives the true-up charge or credit. Energy Michigan recommended that the Commission eliminate from a new SRM capacity charge any true-up of previous estimates as long as DTE Electric did not apply the previous SRM capacity charge to any party. 6 Tr 4084-4088. DTE Electric and the Staff objected to Energy Michigan's recommendation. 5 Tr 2234; 7 Tr 4607.

Pointing out that Energy Michigan has raised substantially similar arguments in DTE Electric's last rate case that were rejected, the ALJ rejected Energy Michigan's SRM arguments in this case. The ALJ reasoned that: "MCL 460.6w(4) unambiguously states that the Commission 'shall provide for a true-up mechanism[,]' and it further states that '[t]he true-up shall be reflected in the capacity in the subsequent year.'" PFD, p. 775. The ALJ found no support in the statute for Energy Michigan's proposed elimination of any true-up of previous estimates that DTE Electric included in its new SRM capacity charge. *Id*.

Energy Michigan's replies to exceptions addressed only the SRM capacity charge, discussed above, but included in its conclusion and prayer for relief a request for the Commission to eliminate the SRM capacity charge true-up. Energy Michigan's replies to exceptions, p. 4.

Finding the ALJ's recommendation to be well-reasoned and supported by substantial evidence on the record, the Commission adopts the PFD. The Commission further agrees that Energy Michigan's proposal runs contrary to the language of MCL 460.6w(4) and that Energy Michigan's failure to file an exception to PFD on this issue constitutes a waiver of its objection. *See*, Mich Admin Code, R 792.10435(2) (Rule 435(2)).

3. State Reliability Mechanism Capacity Charge Calculation Methodology

Energy Michigan contends that when the SRM capacity charge is applied it should be applied by charging parties in the same manner that the charge is calculated—the amount paid should equal a customer's individual known peak load contribution in MW multiplied by the SRM capacity charge (in dollars per MW-day). 6 Tr 4089-4091. The Staff objected to this position calling it counter to the Commission's determinations in the November 21, 2017 order in Case No. U-18239. 7 Tr 4630-4631. In briefing, DTE Electric also opposed Energy Michigan's recommendation and argued that its methodology for calculating the SRM capacity rate has been long-established and approved by the Commission. DTE Electric's reply brief, pp. 129-130.

The ALJ agreed with the Staff and the company and recommended that the Commission reject Energy Michigan's arguments regarding the SRM capacity charge calculation for the reasons set forth by the Staff and DTE Electric. PFD, p. 777.

Energy Michigan's replies to exceptions addressed only the SRM capacity charge, discussed above, but included in its conclusion and prayer for relief a request for the Commission to utilize the same methodology for administering the SRM capacity charge as is used in calculating the charge. Energy Michigan's replies to exceptions, p. 4.

Finding the ALJ's recommendation to be well-reasoned, based on substantial evidence on the record, and consistent with the Commission's previous approval of the methodology for the SRM capacity charge, the Commission adopts the PFD. The Commission finds that Energy Michigan's failure to file an exception to PFD on this issue constitutes a waiver of its objection. *See*, Rule 435(2).

4. Capacity Obligations to the Midcontinent Independent System Operator, Inc.

Energy Michigan argued in testimony that a load serving entity (LSE) that meets its capacity obligation to MISO under the MISO tariff should not be charged an SRM capacity charge but did not raise the issue in briefing. 6 Tr 4082, 4093. DTE Electric disagreed and pointed to the October 27, 2022 order in Case No. U-21250 where the Commission explained that the SRM is distinct from any MISO obligation. 5 Tr 2237.

The ALJ found that Energy Michigan abandoned this issue because it did not respond in rebuttal testimony or briefing to DTE Electric's arguments. Nonetheless, the ALJ recommended rejection of Energy Michigan's position because, as DTE Electric stated, the SRM capacity charge is a requirement distinct from any MISO requirement. PFD, p. 779.

The Commission agrees with the ALJ that Energy Michigan abandoned this issue and the ALJ's rejection of the position. Therefore, the Commission adopts the PFD. Energy Michigan's failure to file an exception to PFD on this issue further constitutes a waiver of its objection. *See*, Rule 435(2).

5. State Reliability Mechanism Capacity Charge and Midcontinent Independent System Operator, Inc. Seasonal Construct

Energy Michigan argued that the SRM capacity charge should now be determined by season because MISO has adopted a seasonal capacity construct. 6 Tr 4082, 4095. DTE Electric opposed this position citing undue burden that would result in the same costs being recovered. 5 Tr 2076-2077, 2235-2236.

The ALJ acknowledged that Energy Michigan's arguments may have merit but declined to address the issue in this case stating that the Commission has held that if a party proposes to significantly alter the SRM calculation, it should petition to reopen the case that established the SRM in the first instance. PFD, p. 781 (citing December 22 order, p. 385 (rejecting a utility's request to alter the SRM calculation in that case and finding that the proper venue to reconsider SRM calculations is in the docket that established the calculation)). Thus, the ALJ referred Energy Michigan to Case No. U-18239, the docket in which the Commission established the SRM calculation, to file a petition for reopening.

Similar to the other SRM issues, Energy Michigan also included in the prayer for relief of its replies to exceptions a request that the SRM charge be determined by season. Energy Michigan's replies to exceptions, p. 4.

The Commission finds the ALJ's recommendation to be well-reasoned and based on substantial evidence on the record, and as such, the Commission adopts the PFD. As noted by the ALJ, should Energy Michigan wish to pursue its request to determine the SRM charge by season, it may petition the Commission to reopen the case that established the SRM in the first instance. PFD, p. 781.

F. Cost of Service Issues Unaddressed in the Proposal for Decision

In its exceptions, MI-MAUI states that the ALJ failed to address its arguments that DTE Electric should not assess contributions in aid of construction (CIAC) for converting HID luminaires to LED luminaires. MI-MAUI maintains that stopping these charges would align with COS principles and would allow customers who have already paid CIAC for past conversions to be able to recover their investment. MI-MAUI's exceptions, p. 4 (citing 4 Tr 912-914; MI-MAUI's initial brief, pp. 7-8).

The Commission declines to adopt MI-MAUI's proposal. The Commission finds persuasive DTE Electric's testimony that MI-MAUI's proposal would result in future conversion costs being borne by customers that had already paid for previous conversions and that the company's proposed application of CIAC to HID conversions comports with the purpose of a CIAC assessment. *See*, 5 Tr 2657.

X. RATE DESIGN AND TARIFF ISSUES

A. Geothermal Time-of-Day (Rate Schedule D1.7)

DTE Electric described its Rate Schedule D1.7 as "a separately metered rate available for supplemental geothermal electric service with rates dependent on season and time of day." 5 Tr 3107, 3184.

The Staff raised concern that the company's proposed rate design method for this rate when applying the Staff's proposed revenue requirement and COSS would result in a negative summer off-peak capacity charge, unintentionally confusing customers and sending inaccurate price signals. The Staff thus proposed a new method to mitigate this possibility. 7 Tr 4466-4467; Staff's initial brief, pp. 116-117. Disagreeing in part with the Staff's design proposal, DTE Electric instead recommended that the rate be designed to approximate the historical ratio or, in the alternative, reflect gradualism. 5 Tr 3223-3224; DTE Electric's reply brief, p. 131.

The ALJ noted the parties' agreement on this issue and recommended that the Staff's rate design be adopted, with approximate historical price differentials maintained. PFD, p. 784.

No exceptions were filed on this issue.

The Commission finds the ALJ's recommendation well-reasoned and supported by the record. Accordingly, the Commission adopts the ALJ's findings and conclusion on this issue.

B. Low-Income Pilot Rate (Rate Schedule D1.6) and Residential Service Rate Overnight Savers (Rate Schedule D1.13)

DTE Electric proposed closing its Rate Schedule D1.6, described as "a product available to qualifying low income customers and suppl[ying] them with a $40 monthly credit," and transitioning D1.6 customers to the company's proposed new standard residential rate, Rate Schedule D1.11, and allowing the low-income assistance (LIA) credit to be expanded to all residential base rates beyond just Rate Schedule D1.6. 5 Tr 3184; *see also*, 5 Tr 3183, 3200-3203. The company also described its proposed Rate Schedule D1.13 overnight savers as being a new time-of-use (TOU) residential rate schedule, offering an accessible rate for customers seeking low overnight prices, such as EV owners. 5 Tr 3188-3198.

The Staff raised concern over DTE Electric's offering of these tariffs as "'for discussion'" in this case, along with the company's proposal to delay their implementation. 7 Tr 4481 (quoting 5 Tr 3198). The Staff recommended that:

> the Commission direct the Company to file the tariffs provided in Company Exhibit A-16, Schedule F8 as filed in the instant case before the end of the test year, which is November 30, 2024. Alternatively, the Commission may direct the Company to re-file the tariffs as presented in the case "for discussion" but with an additional provision in the tariff language that the additions will become effective at a future date to be announced by the Company no later than November 30, 2024.

7 Tr 4482 (quoting 5 Tr 3198).

The DAAOs raised equity and customer education concerns over the elimination of Rate Schedule D1.6 and the forced conversion of LMI customers onto Rate Schedule D1.11. 6 Tr 4002, 4019-4022. The DAAOs recommended that the Commission:

> reject DTE's proposal to retire the D1.6 rate until it has demonstrated that doing so will not negatively impact the low-income households served by that rate structure.
>
> At the very least, the Commission should order DTE to present a report comparing energy use and cost changes for residential ratepayers already converted to the D1.11 rate, utilizing spatial analysis of census tracts and regression analysis to

> determine if income, race, assistance program participation, and other factors are associated with costs [sic] shifts from the transition to D1.11. If DTE has such data already, they should provide it in rebuttal in the instant case.

6 Tr 4021-4022.

DTE Electric generally agreed with the Staff to file the tariffs within 30 days of the order in this case and with additional language noting the tariffs' effective dates no later than November 30, 2024. 5 Tr 3225. The company, however, disagreed with the DAAOs' recommendations. 5 Tr 3245-3248.

While the ALJ generally found the company and the Staff's agreement to retire Rate Schedule D1.6 coupled with the transition of customers to Rate Schedule D1.11 to be reasonable, her recommendation also included delaying this transition for one year to allow the analysis requested by the DAAOs. The ALJ stated:

> As [DTE Electric witness] Mr. Willis explained, the company's proposal increases the availability of rate options for low-income customers, which could mitigate any adverse impacts from the change to TOU rates. Further, the [ALJ] agrees that the potential benefits and costs of TOU rates versus a flat rate have been discussed extensively in past cases, and the Commission has determined that TOU pricing is reasonable and appropriate for residential customers. However, DAAO is not asking for a permanent ban on switching to TOU pricing, but is seeking an analysis of the potential impacts. This [ALJ] concludes that an additional one-year delay is not unreasonable, and has the potential to avoid unintended consequences. Thus, this [ALJ] recommends that the Commission require the analysis called for by DAAO and revisit this issue in DTE's next rate case.

PFD, p. 789.

In exceptions, the Staff states that the ALJ did not provide a recommendation regarding the company's proposed residential overnight savers rate, Rate Schedule D1.13. Consistent with its position in the case, the Staff recommends that the Commission approve this rate. Staff's exceptions, pp. 2-3.

DTE Electric likewise highlights no recommendation by the ALJ on Rate Schedule D1.13, which the company believes to be an oversight given no dispute about the tariff in the case. For completeness and convenience, the company details its proposal regarding this tariff in exceptions and contends that it should be approved, including its proposal to extend the senior credit to all residential rate schedules. DTE Electric's exceptions, pp. 243-246. Concerning Rate Schedule D1.6, however, the company disagrees with the ALJ's "inconsistent recommendation to not move forward." DTE Electric's exceptions, p. 247. Per DTE Electric:

> The benefits of the Company's proposal are clearly established on this record and the benefits of TOU pricing have been addressed extensively in past cases—as even the [ALJ] recognized. There is no sound basis to conduct a study to look for some potential reason to depart from the Commission's TOU direction and instead not move toward TOU rates as the [ALJ] suggests. Staff similarly disagreed with DAAO and recommended that the Commission "reject DAAO's proposals and approve the Company's elimination of Rate D1.6 and addition of the special low-income assistance credit to the remaining residential rate schedule tariffs" (Staff Initial Brief, pp 120, 133).

DTE Electric's exceptions, p. 247. The company further argues that the DAAOs' suggestion for further study is unfounded and disproven, as there is no sound basis for equity and customer education concerns with regard to the company's proposal to transition Rate Schedule D1.6 customers to Rate Schedule D1.11 and expand the availability of the LIA credit. DTE Electric states:

> A customer receiving (or who desires to receive) the credit must take service on Rate D1.6 (regardless of whether the customer wants that rate schedule) and presently has no alternative option. The Company's proposal to open the LIA credit to all base rates provides customers options and flexibility. [The DAAOs' witness] Mr. Koeppel does the opposite by essentially proposing that customers be forced to stay on (or move to) Rate D1.6 as a condition of receiving the credit (Willis, 5T 3245-47).
>
> The Company's proposal to close rate D1.6 is also appropriate because the Commission has made it clear that the Company should be oriented toward time-of-use rates for residential customers. Rate D1.6 customers are the only customers (apart from those without transmitting meters and customers on Rate Schedule D2

> which has been closed to new customers since 2015) who remain on the legacy inverted block rate. Rate D1.6 was established as the vehicle for the LIA credit simply because that rate design mimicked the default (D1) residential rate at the time. The default rate is now time-of-use, so that is the most appropriate rate design going forward (Willis, 5T 3246-47).

DTE Electric's exceptions, pp. 247-248. The company further argues that the study recommended by the ALJ would be "onerous to conduct, and provide little, if any, determinative value." *Id.*, p. 248 (citing 5 Tr 3247).

In replies to exceptions, DTE Electric notes the Staff's observation in exceptions that the ALJ did not make a recommendation on Rate Schedule D1.13 and the Staff's recommendation that the proposal be approved. The company agrees. DTE Electric's replies to exceptions, p. 40.

Responding to DTE Electric's exceptions, the DAAOs assert that:

> (1) the record provides adequate evidence that retiring the D1.6 rate may harm LMI ratepayers and that further study of the impact of retirement is necessary before retirement is ordered, and (2) requiring DTE to study the impact of the rate's retirement would not be burdensome and in fact should be a necessary step in order to ensure the Company's rate tariff is just and reasonable.

DAAOs' replies to exceptions, p. 7. In this regard, the DAAOs argue that the Commission "should err on the side of caution by requiring a study before it makes a drastic change to rates for these especially vulnerable households," reiterating the bounds of such study set forth in testimony and briefing. *Id.*, p. 8; *see also*, *id.*, pp. 8-9 (citing 6 Tr 4021-4022). Ultimately, the DAAOs assert that the Commission should reject the company's proposal to eliminate Rate Schedule D1.6 "until the Company can demonstrate that the elimination would not negatively and unreasonably harm LMI ratepayers who currently depend on the D1.6 rate as a stable and predictable rate structure." DAAOs' replies to exceptions, p. 10.

The Commission remains supportive of TOU rates; however, the Commission agrees with the DAAOs and finds it appropriate for DTE Electric to conduct an impact study comporting to the

DAAOs' recommended report outline before retiring Rate Schedule D1.6 and transitioning customers to Rate Schedule D1.11. The Commission thus finds that Rate Schedule D1.6 should continue at this time, with this issue to be revisited in the company's next rate case and with results from the company's study to help inform the appropriate path forward. The Commission further finds, based on the evidence and arguments provided, that Rate Schedule D1.13 should be approved, along with the proposal to extend the senior credit to all residential rate schedules.

C. Contribution in Aid of Construction

DTE Electric proposed updates to its CIAC standard allowance table for customers with new or expanded load greater than 1,000 kW, consistent with the method approved in Case No. U-20836 and previous Commission orders. 5 Tr 3217; Exhibit A-16, Schedule F8, Section C6.2.

MNSC raised concerns over the company's request and the need for DTE Electric to update the per-foot line extension charges within its tariff. 6 Tr 3574-3577. MNSC recommended that:

> the Commission order DTE to calculate its current costs and update its C-6 tariff accordingly. The Company should file such updated tariff in the next rate case. As it would be fundamentally inconsistent for the Commission to approve DTE's request to update the standard CIAC allowances for large industrial customers, but simultaneously reject the updating of the per-foot line extension charges in the same C-6 tariff, [MNSC is] recommending that the Commission reject the Company's request to update the C-6 tariff, Section C-6.2.

6 Tr 3577-3578; *see also*, MNSC's initial brief, pp. 120-127.

DTE Electric disagreed. 5 Tr 2723, 3229-3231; DTE Electric's initial brief, pp. 298-299; DTE Electric's reply brief, p. 143. The Staff agreed with MNSC and recommended that the per-foot extension costs be updated by the company in its next rate case. Staff's reply brief, p. 17.

The ALJ agreed with MNSC and recommended that the Commission decline to update Section C6.2 at this time and order DTE Electric "to provide detailed information on the current per-foot costs for line extensions along with updated CIAC tariffs that include the updated costs" in its next rate case. PFD, p. 793.

DTE Electric disagrees. The company argues that the per-foot costs are unrelated to the standard allowance table and that MNSC conflated two different things within CIAC. DTE Electric states:

> There are two distinct elements when determining a customer's actual CIAC: (1) the cost of the work, however determined, and (2) any allowances provided to the customer based on the margin contribution of the new or increased load. The per-foot costs are part of (1) because they are a construction cost. The Standard Allowance table is part of (2) because it is based on the margin contribution of a customer on a given rate schedule and greater than 1000 kW of load. It would be inappropriate to hold the table in limbo, and unduly impact the Company's largest customers, contingent on the outcome of an unrelated matter. The Company underscores that tariffed per foot construction costs are not an input in the standard allowance table and linking them is inappropriate. The Company also believes that the per-foot costs in its tariff remain appropriate.

DTE Electric's exceptions, pp. 249-250. The company thus asserts that the updates to the standard allowance table should be approved, consistent with prior practice and utilizing the ordered rates from this case.

In its replies to exceptions, the Staff argues that the company's claim that its per-foot construction costs remain appropriate should be rejected. The Staff states:

> Quite frankly, Staff would be shocked if the costs of such construction have remained the same for decades, which would also bring into question the increased costs of other Company construction cost, for which rate increases have been partially based on those same decades. As the [ALJ]'s recommendation on this issue amounts to a request that the Company provide in its next case the very evidence it claims is not present in the instant case, even if the Company were correct in its belief, it would not invalidate the [ALJ]'s recommendation. (See, PFD, p 793.) For this reason, the Company's apparent exception should be rejected, and the Company should be required to "provide detailed information on the current per-foot costs for line extensions along with updated [Contribution in Aid of Construction] tariffs that include the updated costs" in its next case as the [ALJ] recommends. (PFD, p 793.)

Staff's replies to exceptions, p. 14 (third alteration in original).

MNSC disagrees with DTE Electric that the two elements here are unrelated. MNSC states that:

> they both address the policy on customer contribution to new connections or load; the difference is the impacted customer class. Customer connections and new load constitute significant ratepayer investments, as noted above. DTE has been unwilling so far – through several rate cases and so far through the CIAC workgroup – to make voluntary changes to any part of the CIAC policy other than the Standard Allowance table. It is reasonable to hold updates to the Standard Allowance until there is at least one small step forward in updating CIAC policy, as [MNSC witness] Mr. Ozar recommended.

MNSC's replies to exceptions, p. 111. MSNC further notes that DTE Electric's arguments in exceptions are identical to the company's rebuttal testimony—which MNSC fully addressed in briefing and which the ALJ addressed in the PFD—with nothing new. *Id*., p. 112 (citing 5 Tr 3229-3230; MNSC's initial brief, p. 127; PFD, p. 793; DTE Electric's exceptions, p. 249). MNSC thus asserts that the Commission should reject the company's exceptions and adopt the ALJ's recommendation regarding CIAC tariff updates.

The Commission finds the ALJ's recommendation well-reasoned and supported by the record. The Commission further agrees with MNSC that these CIAC elements are related. Accordingly, the Commission adopts the ALJ's findings and conclusion on this issue.

D. Rider 14 (Vehicle-to-Grid)

DTE Electric proposed changes to Rider 14, including expanding Rider 14's applicability to include V2G and stationary batteries as allowable resource types. 5 Tr 3204-3207.

MEIU raised customer participation concerns if V2G compensation is based on the current outflow rate in Rider 14, which is "likely to result in an economic loss to the customer." 6 Tr 4156. For Rider 14 to support V2G, MEIU opined that:

> the only sound basis for tariff treatment of V2G or stationary storage is to charge the full retail rate at the time of charging for the power used to charge the vehicle or

> storage and to credit the customer at the full retail [rate] at time of discharging for the power delivered to the grid under V2G or stationary storage. Otherwise, the only rational course for the customer under Rider 14 would be to limit the use of vehicular or stationary storage to vehicle-to-building use without any outflow, or to not engage in discharge from the vehicle (thereby not employing V2G).

6 Tr 4157. MNSC agreed with MEIU. 6 Tr 3468. DTE Electric and the Staff, however, disagreed, with the Staff adding that in the near future V2G or stationary batteries would be most appropriately designed as a DR tariff. 5 Tr 3232-3234; 7 Tr 4538-4539.

The ALJ partly agreed with the Staff and MEIU and found that DTE Electric's proposal to include V2G and stationary battery outflow in Rider 14 is inappropriate. Persuaded by the Staff's testimony, the ALJ recommended that the Commission instead direct the company "to develop a DR tariff for customers with V2G or stationary batteries wishing to participate in demand response events." PFD, p. 798.

MEIU objects to the ALJ's DR-based tariff recommendation, arguing that this recommendation "is unduly restrictive" and "does not provide an adequate basis for limiting the scope of an alternative to Rider 14 use for V2G." MEIU's exceptions, p. 3. More specifically, MEIU argues that the Staff provided no evidence explaining why a DR-based tariff was the most appropriate way to treat storage outflow; thus, neither the Staff nor the ALJ "offered any basis for excluding all possible alternatives to a DR-based model for compensating V2G and other stationary storage outflow that could reasonably be considered in a stakeholder process." *Id*., p. 4. MEIU argues that the Commission's decisions must be supported by substantial evidence and because this recommendation from the ALJ "is not based on substantial evidence in the record but is based merely on an unsupported and unexplained assertion that neither considers nor evaluates reasonable alternatives, the Commission may not legitimately adopt it." *Id*., p. 5. MEIU further states that:

> [s]hould the Commission ultimately conclude that a DR-based tariff is the most appropriate path to travel, such a decision is appropriately made in the future given an adequate basis for rejecting possible alternatives. For the moment, there is no evidence aside from [Staff] witness Krause's conclusory statement that a DR-based option is optimal. There is also no harm to having a broader discussion of the alternatives, whereas harm is quite possible, to [the] detriment of DTE's customers, from the early foreclosure of non-DR-based options. The Commission should thus decline to narrow the scope of what a future V2G and stationary storage tariff could look like and follow MEIU's recommendation to direct DTE to instead explore these options as part of a stakeholder process.

Id.

DTE Electric disagrees with the ALJ and maintains that the Commission should adopt the company's proposal to amend the applicability and availability of Rider 14 as proposed, including adding storage as an eligible resource. The company further argues that the proposal for full retail credits for storage outflow should be rejected as such proposal "improperly focus[es] on certain customers making profits instead of cost-based ratemaking." DTE Electric's exceptions, p. 251 (citing 5 Tr 3234).

In replies to exceptions, the Staff states that MEIU's limiting argument about a DR-style tariff is incorrect, "as nothing about the recommendation prevents any party from making any proposal in the future." Staff's replies to exceptions, p. 17. The Staff continues:

> The only alternatives on the record were the Company's Rider 14 proposal, MEIUs full retail compensation (also supported by MNSC), and Staff's demand response-style alternative for future consideration. As supported by Staff's initial brief, using full retail is inappropriate. (Staff Initial Brief, p 147.) The [ALJ] made a reasonable choice from the options presented on the record that preserves all parties' arguments for the future. MEIU's arguments surrounding the [ALJ']s recommendation on the battery to grid tariff should be rejected and the Commission should order the Company to propose a demand response style tariff for battery exports in the next rate case.

Staff's replies to exceptions, p. 17.

MEIU maintains its disagreement with the company's characterization of its V2G position as being focused on customer profits instead of cost-based ratemaking. MEIU states:

> As MEIU explained thoroughly in testimony and briefing, however, MEIU's proposal would at best leave participating customers breaking even. The alternative would provide the Company with a double recovery for distribution revenue and leave participating customers effectively paying DTE for providing V2G and storage discharge services to the Company and its non-participating customers. Customer profit is not in view; rather, MEIU's proposal focuses on avoiding the adoption of a tariff that will be ineffective for its purported purpose—because no rational customer would participate.

MEIU's replies to exceptions, pp. 5-6 (footnote omitted) (citing MEIU's initial brief, pp. 6-9; MEIU's reply brief, pp. 8-12).

Responding to MEIU's exceptions, DTE Electric argues that there is no basis for a requirement that all possible alternatives be considered for making a decision, highlighting that MEIU also did not provide one in its exceptions. The company further maintains, as supported by the Staff, that storage outflow compensation at the full retail rate is inappropriate and should be rejected. DTE Electric maintains that its Rider 14 proposal should be adopted. DTE Electric's replies to exceptions, pp. 40-42.

The Commission agrees with the ALJ in part. The Commission agrees that a tariff is needed for V2G and storage resources; however, the Commission is not convinced that any of the options available on the record—the full retail rate proposed by MEIU, the DG outflow rate proposed by the company, or a DR tariff proposed by the Staff—represent an appropriate compensation mechanism for the outflow from energy storage systems and V2G-enabled vehicles. As such, the Commission believes that the most appropriate approach for developing appropriate tariff mechanisms for energy storage and V2G systems is through a workgroup that can better evaluate the three options proposed in this proceeding and other potential compensation frameworks. The Commission thus directs the Staff to convene a stakeholder workgroup to develop tariff options for stand-alone storage and V2G no later than May 1, 2024.

E. Demand Response Tariffs

Considering the Commission's recent orders in Case Nos. U-21099 *et al*., MEIU provided three recommendations regarding DTE Electric's DR tariffs:

> First, DTE should include language in its demand response tariffs that clearly state whether customers who participate under the tariff are eligible or ineligible to participate in Midcontinent Independent System Operator, Inc. ("MISO") demand response with an Aggregator of Retail Customers ("ARC"). Second, DTE should unbundle wholesale and retail elements of its tariff-based demand response programs in order to eliminate anticompetitive effects and allow ARC's to enroll customers who participate in DTE retail demand response programs in wholesale demand response programs. Third, DTE should adopt a tariff model that allows ARC's to sell MISO Zonal Resource Credits ("ZRC") developed by the ARC from DTE customers to DTE.

6 Tr 4257; *see also*, 6 Tr 4257-4269.

DTE Electric agreed with MEIU's first recommendation and offered the following added language to its interruptible tariffs: "'*Customers who take service on this tariff are not eligible to participate in another Demand Response program with an Aggregator of Retail Customer[s] (ARC)*.'" 5 Tr 1335-1336 (emphasis in original). The Staff, however, argued that this language should be modified to include whether this applies to all four seasons within MISO's resource adequacy construct. 7 Tr 4388-4389; Staff's initial brief, p. 144. DTE Electric and MEIU agreed with the Staff. DTE Electric's reply brief, p. 139; MEIU's reply brief, pp. 17-18.

Considering agreement among the parties, the ALJ found this issue to be resolved and recommended that the Commission direct DTE Electric "to include the language proposed above in the appropriate tariffs with the understanding that the language will also specify whether ineligibility applies to all MISO resource adequacy seasons, and if not, which seasons are eligible for participation." PFD, p. 800.

DTE Electric and the Staff disagreed with MEIU's second and third recommendations and recommended that they be rejected. 5 Tr 1337-1339; 7 Tr 4389-4391.

Agreeing with DTE Electric and the Staff, the ALJ stated:

> As Staff points out, it is difficult to establish what part of tariff D8 (the only example given) pertains to wholesale DR, versus retail DR, especially because MEIU provides no specific tariff language for accomplishing the DR unbundling that it recommends. Th[is] [ALJ] also finds persuasive Staff's and the company's arguments that a DR FIT [feed in tariff] is unnecessary given the other opportunities available to ARCs, coupled with the fact that the Commission has only recently permitted ARC participation in DR.

PFD, p. 806 (footnote omitted).

In exceptions, MEIU argues that its second recommended proposal does not require specific language to be adopted by the Commission; rather, the proposal is simply that DTE Electric be required to '"propose new tariffs, or modify existing tariffs, to unbundle the wholesale and retail benefits, products and services that may be provided by its customers under such tariffs.'" MEIU's exceptions, p. 8 (quoting MEIU's initial brief, p. 41). MEIU states that its example using Rate Schedule D8 was not intended as a specific tariff proposal but as an example of how retail- and wholesale-level DR opportunities have been blended together in the company's DR tariffs. Moreover, as explained in its initial brief:

> "[C]ustomers are given credit under the tariffs for cost savings that their participation delivers to DTE that are unrelated to the value DTE obtains from registering those customers' DR participation as an LMR with MISO." There can be no question that MEIU demonstrated this general proposition in its testimony and briefing in this case.

MEIU's exceptions, pp. 8-9 (quoting MEIU's initial brief, p. 41). In this regard, MEIU argues it carried its initial prima facie burden demonstrating that this arrangement represents "an illegitimate tying arrangement to the competitive disadvantage of [ARCs]." *Id*., p. 9. MEIU therefore contends that:

> it is entirely appropriate that the Commission require DTE to investigate its tariffs, determine which value streams stem from services compensated at the MISO level and which value streams stem from services provided directly to DTE by its DR customers, and propose tariff modifications or new tariffs that will enable the

> separation of those value streams and "untie" the retail and wholesale aspects of DTE's DR tariffs. No further specification, including any specification of tariff language modifications, should be required to order such an investigation and modifications through this docket.

Id.

MEIU further objects to the ALJ's recommendation regarding its proposed DR FIT proposal (i.e., MEIU's third recommendation). Contrary to the ALJ's reasoning that there are other opportunities available to ARCs, MEIU argues that "these alleged alternatives [discussed by the Staff] are in large part not in fact practically available to ARCs." *Id*., pp. 9-10 (referencing 7 Tr 4390-4391); *see also*, MEIU's initial brief, pp. 49-50. MEIU contends that the ALJ failed to consider its arguments on this, simply accepting without discussion the Staff's contention that there are other opportunities available to ARCs. In this regard, MEIU maintains that these other opportunities are more illusory than real and argues that the ALJ failed to explain why she concluded otherwise. MEIU recommends:

> To the extent that the Commission agrees with the [ALJ], it should do so while fully engaging with MEIU's arguments to the contrary. Preferably, however, the Commission should acknowledge the inadequacy of the alleged "other opportunities" and direct DTE to work with DR aggregators to develop a DR FIT tariff to be filed subsequently with the Commission for approval.

MEIU's exceptions, pp. 10-11.

In replies to exceptions, DTE Electric argues MEIU's exceptions lack legal authority or evidentiary support. The company states that:

> if the Company's DR customers prefer taking a DR product under an ARC, then the customers are free to switch their service to a firm service rate and enroll in an ARC DR Program, assuming they meet the appropriate requirements as laid out in the Commission's Order in Case No. U-21099. There is nothing "anti-competitive" about the way the Company offers its DR programs as the ARCs are able to gain customers from the Company's service territory. Further, the retail benefits provided by the Company's DR tariffs are made possible by the resource adequacy benefits that the Company receives from MISO. These retail benefits flow to all

> customers in the service area. Thus, there is no sound basis nor merit in MEIU's suggestions to benefit ARCs at the expense of the Company's customers.

DTE Electric's replies to exceptions, pp. 43-44. The company asserts that there are apparent fundamental issues with MEIU's proposal, which it and the Staff pointed out. DTE Electric argues that the ALJ properly rejected MEIU's recommendations and that the Commission should do the same.

The Commission finds the ALJ's recommendation regarding MEIU's first proposal to be well-reasoned and supported by the record. Accordingly, the Commission adopts the ALJ's findings and conclusions on this issue. With regard to MEIU's second and third proposals, however, the Commission finds that the concerns raised by MEIU have merit. The Commission further notes that there is overlap with DER aggregation activities at the regional transmission organization (RTO) level as the RTOs develop their Federal Energy Regulatory Commission (FERC) Order 2222[45] compliance strategies. As such, the Commission directs the Staff to convene a workgroup to consider the following issues: (1) whether tying of retail and wholesale DR programs by the retail electric provider is appropriate; (2) whether a FIT or other tariff mechanism is needed or advantageous; (3) how Michigan's approach to DR aggregation comports with the frameworks being developed by PJM Interconnection, L.L.C., and MISO for compliance with Order 2222; and (4) any other related issues that the Staff finds appropriate to consider.

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[45] Final Rule, Participation of Distributed Energy Resource Aggregations in Markets Operated by Regional Transmission Organizations and Independent System Operators, Docket No. RM18-9-000, 172 FERC ¶ 61,247 (September 17, 2020) (Order 2222).

F. Rate Schedules D4, D6.2, and D11

DTE Electric proposed limiting the change in (i.e., applying gradualism to) the ratio of demand and energy charges for power supply for these rate schedules to no more than 15% compared to current rates to address excessive volatility charges for customers. 5 Tr 3108-3113, 3120-3121.

The Staff did not support the company's proposal and recommended that the current ratio between demand and energy revenue be maintained. 7 Tr 4472-4476. ABATE likewise disagreed with the company's proposal and instead recommended a different split between demand charges and energy charges or in the alternative that the current demand/energy split be maintained. 4 Tr 1093, 1095-1096; ABATE's initial brief, pp. 55-61. Kroger and the Staff opposed ABATE's main proposal, with Kroger supporting the company's proposal. 6 Tr 4296-4297; 7 Tr 4490; Staff's initial brief, p. 123.

The ALJ recommended that ABATE's main proposal be rejected for the reasons identified by DTE Electric, the Staff, and Kroger. The ALJ also recommended that the company's proposal to impose an artificial limit on the rate of change between demand and energy charges be rejected, despite support by Kroger. The ALJ thus recommended that the Staff's proposal and ABATE's alternative proposal to maintain the current ratio between demand and energy charges for Rate Schedules D4, D6.2, and D11 be adopted. Per the ALJ:

> This course of action maintains stability and prevents unnecessary volatility. This [ALJ] views DTE's artificial limit as a well-intentioned proposal; nevertheless, it is analogous to treating a symptom rather than the cause of the problem. Like Staff, this [ALJ] is less concerned with the amount of DTE's proposed limit and is more concerned about the need for such an artificial limit in the first instance. The current methodology used [to] calculate the ratio may need to be refined or reformulated in future cases because it is apparently susceptible to an unacceptable level of volatility when the ratio of demand to energy charges should be significantly more stable.

PFD, p. 814.

In exceptions, the Staff states that the ALJ failed to include the Staff's argument about deeming costs as fixed or variable and thus clarifies its contention here that costs should not be deemed as fixed or variable for ratemaking purposes. The Staff states that "[i]t is inappropriate to consider costs as fixed for utility ratemaking because those costs can actually vary in the long run. Costs are not functionalized, classified, nor allocated based on their fixedness or variableness in the cost-of-service study, which is the actual basis for establishing cost-based rates." Staff's exceptions, p. 3; *see also*, Staff's initial brief, p. 124. In this regard, the Staff asserts that ABATE's main recommendation should be denied and the Staff's recommendation to maintain the current ratios of power supply energy and demand costs for these rates should be approved.

ABATE argues that the ALJ's rationale does not justify rejecting its proposal that for primary classes with demand charges 67% of power supply costs should be recovered through demand charges and 33% of power supply revenue should be recovered via an energy charge. Contrary to the company's and Kroger's objections to its proposal, ABATE argues that "[t]he fact that [its] proposal may deviate from historical practice is not a reasonable basis to reject that proposal, particularly when historical practice produces unreasonable outcomes." ABATE's exceptions, p. 3. Highlighting the ALJ's acknowledgment that the current methodology may need to be refined or reformulated, ABATE argues that its proposal represents such refinement and reformulation. ABATE recaps:

> As explained in [its] Initial Brief, all production facility costs are fixed costs that are not driven by energy consumption. (Andrews 4 Tr 1085-96; ABATE Initial Br at 54-60.) Correctly parsing DTE's fixed and variable power supply costs demonstrates that 67% of all of DTE's power supply costs are fixed and the remaining 33% are variable. (*Id*.) This approach to allocating these costs is a simple, replicable determination that will provide stability across rate cases and would establish rates consistent with cost of service. Thus, the approach recommended by ABATE would result in relatively constant energy and demand revenues for Rate D11 with costs allocated in accordance with their causation. (See ABATE Reply Br at 14-18.)

ABATE's exceptions, p. 4. Further responding to Kroger's objections in the case, ABATE asserts that its proposal is, in fact, to improve alignment between cost recovery and cost causation and provides stability. ABATE thus argues that the Commission should adopt its proposal "because it is both superior to the existing methodology and is intended to be used consistently in future cases." *Id*. (citing ABATE's initial brief, pp. 55-61; ABATE's reply brief, pp. 14-18). ABATE continues:

> As explained by the [ALJ], Staff's objection to ABATE's proposal was based on its assertion that "not all costs deemed fixed should necessarily be recovered with demand charges, nor should all variable costs be recovered based on energy." (PFD at 808.) Despite this assertion, the relevant issue here is the revenue split between demand charges and energy charges, not the Company's system design or power supply. (See ABATE Reply Br at 14-18.) Nothing in ABATE's proposal would change how costs are teased out to customer classes; the methodology would simply determine for the entire system which costs are fixed and which are variable before aligning demand revenue and energy revenue with the fixed and variable charges of DTE's entire test year revenue requirement. This is consistent with both cost of service principles and Staff's and the [ALJ]'s assertions that the Company's cost allocation should be less volatile. Thus, again, ABATE's proposal is a significant improvement over the volatile and inappropriate approach currently being utilized.
>
> While the [ALJ] recommended maintaining the current ratio between demand and energy charges for Rates D4, D6.2, and D11, it did so to "maintain[] stability and prevent[] unnecessary volatility." (PFD at 814.) ABATE's proposal would have the same effect and would better align cost recovery with cost causation. As such the Commission should adopt ABATE's recommendation here.

ABATE's exceptions, p. 5 (fourth and fifth alterations in original).

Kroger strongly disagrees with the ALJ's recommendation to maintain the current split between demand energy revenue collection for primary customers, arguing that this recommendation is counter to the Commission's previously approved methodology and ignores COS. Responding to the Staff's contentions about deviations from previous Commission-approved rate designs needing to be justified, Kroger avers that values of various rate components should be modified in rate cases to reflect changes in cost causation and other circumstances that are the basis for the rate case. In this regard, Kroger asserts that the Commission should approve DTE Electric's proposed rate design because it is consistent with past precedent while also employing a gradualism adjustment to prevent excessive volatility. Kroger's exceptions, pp. 1-5.

DTE Electric maintains that ABATE's main proposal should be rejected, as recommended by the ALJ, but also maintains that the company's own proposal should be adopted. DTE Electric argues that the ALJ's criticism about the company's proposal imposing an artificial limit is unfounded. The company states:

> The Company's only change from currently-approved rate design is the limit on the shift of power supply demand-based recovery to power supply energy-based recovery, which would reduce volatility and be in accordance with the principle of gradualism, as indicated above. Using Rate D11 as a further example, the current ratio using rates approved in Case No. U-20836 is 47% demand / 53% energy. Using the identical method in the instant case, the ratio would be 23% demand / 77% energy, so the Company's proposed limit is appropriate. Therefore, the Commission should adopt the Company's proposal to limit the percentage change in the ratio of demand to energy in any one case to 15% on any given rate schedule (Pollack, 5T 3120-21).

DTE Electric's exceptions, p. 253. DTE Electric also highlights Kroger's support for the company's proposal in this case. *Id*., pp. 253-254 (citing Kroger's initial brief, pp. 3-8).

In replies to exceptions, ABATE maintains that DTE Electric's and Kroger's position regarding cost allocation disregard the actual cost to serve customers and should thus be rejected. ABATE recaps:

> As explained by the [ALJ], Staff, Kroger, and ABATE, the current method for allocating these costs is prone to large swings in the apportionment of costs. (See PFD at 806-14.) These swings do not reflect cost of service, meaning the methodology recommended by DTE and Kroger is flawed. (See ABATE Initial Br at 55-61; PFD at 814.) Maintaining the current approach with arbitrarily assigned caps to limit rate shock and pursue gradualism is, as the [ALJ] noted, "analogous to treating a symptom rather than the cause of the problem." (PFD at 814.) Thus, when historical precedent produces flawed results and fails to achieve it's [sic]

> purpose, deviation to a superior method which better aligns cost recovery with cost causation is warranted, as ABATE proposed. (ABATE Initial Br at 55-61.)

ABATE's replies to exceptions, p. 10. ABATE further argues that the Staff's assertion that costs should not be deemed as either fixed or variable for ratemaking purposes in exceptions is irrelevant in this context, as "ABATE's proposal is not meant as a static assignment of costs; it is instead simply a replicable approach that can be used in each rate case to better determine the portions of DTE's relevant costs which should be classified and collected on demand and energy bases." *Id*., p. 11 (referencing ABATE's reply brief, pp. 14-18). In this regard, ABATE maintains that its proposal would produce rates closest to COS and should thus be adopted.

The Staff asserts that the ALJ correctly recommended that the current ratio between demand and energy charges be maintained for these rate schedules but also noted that this ratio may need to be reconsidered in future cases. The Staff, in this regard and in response to ABATE's exceptions, upholds its assertion that "[c]lassifying costs as 'fixed' or 'variable' ignores the cost-of-service study and the effect of load diversity" and that this assertion "is applicable to revenue collection and cost allocation because costs should not be determined to be 'fixed' or 'variable' for either purpose." Staff's replies to exceptions (citing Staff's initial brief, pp. 123-124). The Staff further states, in response to Kroger's exceptions, that "maintaining the ratio approved for present rates removes the problem of volatility because the ratio would remain unchanged," which the ALJ noted when saying that the Staff's "'course of action maintains stability and prevents unnecessary volatility.'" Staff's replies to exceptions (citing PFD, p. 814); *see also*, Staff's reply brief, pp. 18-19. The Staff also points to the reasoning set forth in the PFD in response to DTE Electric's exceptions concerning the company's proposed 15% limit and recommends that the Commission adopt the ALJ's decision on this issue. Staff's replies to exceptions, p. 12 (citing PFD, p. 814).

DTE Electric states that ABATE neglects to acknowledge, in exceptions, that the ALJ essentially adopted ABATE's alternative proposal. DTE Electric thus argues that "ABATE cannot be heard to complain about getting what it asked for." DTE Electric's replies to exceptions, p. 45. Responding to the Staff's exceptions, the company further contends that "[i]t is unclear what (if anything) Staff does not like about the PFD and what Staff would like the Commission to do about it." *Id*. DTE Electric maintains that its proposal should be adopted.

The Commission finds the ALJ's recommendations well-reasoned and supported by the record. Accordingly, the Commission adopts the ALJ's findings and conclusions on this issue, specifically finding that the current ratio between demand and energy charges for Rate Schedules D4, D6.2, and D11 should be maintained and that this issue should be revisited in the future to determine if refining or reformulating the current methodology is necessary and appropriate.

G. Time-Of-Use Rates for Commercial Secondary and Primary Rates

MEIU advocated for the establishment of broadly available and mass-market-appropriate TOU rate options for DTE Electric's commercial and industrial customers who take service at secondary and primary voltages. 6 Tr 4236. Specifically, MEIU recommended that DTE Electric:

> be directed to, within 30 days of [a Commission] order, file tariffs that establish two *optional* TOU rates for commercial and industrial customers composed of one rate for customers taking service at secondary voltage and a separate rate for customers taking service at primary voltage. These new rates should incorporate the following elements, at a minimum:
>
> 1. A volumetric TOU design based on the parameters used for Schedule D1.11, including the use of a 3 – 7 PM, Monday – Friday on-peak pricing window and moderate seasonal on-peak to off-peak rate differentials.
>
> 2. A flat volumetric distribution charge that replaces the distribution demand charges contained in Schedules D4 and D11.

> 3. A monthly customer charge equivalent to the otherwise applicable service tariff (*i.e.*, Schedules D3 and D4 and Schedule D11).

6 Tr 4236-4237 (emphasis in original); *see also*, 6 Tr 4237-4250.

DTE Electric disagreed with MEIU and explained why it would be improper to replicate residential rate design for commercial and primary customers and why filing tariffs within 30 days of this case is unreasonable. DTE Electric's initial brief, pp. 300-301. The Staff agreed with the company in part. The Staff agreed that the company's rate offerings lack a TOU rate option for primary and secondary customers but disagreed with imposing a flat energy charge for primary distribution rates. The Staff further disagreed with the filing of tariffs for these rate options within 30 days of the Commission's order in this matter. 7 Tr 4497-4500. The Staff instead recommended that DTE Electric be directed to propose in its next rate case a rate structure for an optional primary and secondary TOU rate as described by MEIU but retain the distribution demand charges for Rate Schedules D4 and D11. Staff's initial brief, p. 128. ABATE recommended that MEIU's proposal be rejected in its entirety. 5 Tr 3241-3242.

The ALJ agreed that optional TOU rates could be beneficial for DTE Electric's commercial secondary and primary customers, noting the availability of such rates for Consumers' larger customers. The ALJ thus recommended that the Commission direct the company to develop and present optional tariffs in this regard as part of a separate, contested proceeding within 30 days of this case. Per the ALJ, any concerns and the efficacy of demand charges for these rates can be addressed in this separate proceeding. PFD, pp. 819-820.

DTE Electric objects to the ALJ's recommendation on three grounds relating to substance, timing, and the proper regulatory proceeding on this issue. The company states:

> Substantively, the [ALJ] notes above that many intervenors believe TOU rates "could be beneficial" to commercial and industrial customers. The Company reiterates not only is D11 a primary, time-variant rate, but all industrial and

> commercial customers have access to a time of use rate should they avail themselves of those options (Willis, 5T 3239-40). Thus, there is no demonstrated shortcoming in the Company's rate options. Moreover, the [ALJ] suggests there is an open question about the role of demand charges in primary rate design, a point about which no intervenor provided demonstrable evidence. With respect to timing, the [ALJ] largely replicates Mr. Barnes' proposal and recommends the Company file new tariffs in a new contested case within 30 days of the Commission's order in this case. This proposed timing is unreasonable, not least because the Company would have to develop the actual rate design and tariffs (neither of which have been developed or agreed upon in the instant case) in a compressed timeline while also meeting the timeline requirements of filing all ordered rates in this case within 30 days (Willis, 5T 3241-42). With respect to the proper regulatory proceeding, the Company has general rate cases to address tariffs and rate design to ensure proper consideration of overall cost and rates. A separate proceeding would be duplicative, onerous, and susceptible to error. The issues raised by the Company, including the likelihood of cost shifting between customers and impacts to reduced cost recovery, require that this matter be handled in a general rate case to the extent the Commission deems the general concept appropriate (Willis, 5T 3238-39).

DTE Electric's exceptions, p. 256.

In replies to exceptions, the Staff states that it does not dispute DTE Electric's arguments regarding timing or the proper regulatory proceeding but does dispute the company's opposition on the basis of substance. Per the Staff:

> It is true that the Company offers a time-differentiated rate for commercial secondary customers, but that rate – D1.8 – is a critical peak pricing rate which is intended to encourage load shifting (i.e., a DR rate.) Rate D1.8 is comprised of four time period charges which includes a critical peak charge that is nearly ten times the on-peak charge. (Exhibit S-6, Schedule F3, p 15.) Therefore, the existing time-differentiated commercial secondary rate is not similar to the residential TOU rate D1.11, which MEIU recommended the Company use to develop a new commercial secondary TOU rate. (MEIU Initial Brief, p 32-33.)
>
> The Commission should not deny MEIU's recommendation to direct the Company to develop a commercial secondary TOU rate on the grounds that another comparable rate already exists, because one does not.

Staff's replies to exceptions, pp. 12-13.

The Commission agrees with the ALJ that DTE Electric should be directed to develop and present optional TOU rates for its commercial secondary and primary customers but finds it appropriate for the company to do so in its next rate case, rather than as a separate, contested proceeding.

H. Rider 3 (Standby Rates)

Consistent with Case Nos. U-20836, U-20561, and prior cases, DTE Electric explained why it is unreasonable to reduce the reservation fee for fuel cell systems, as the generation reservation fee for Rider 3 already reflects the forced outage rate (FOR) of the best performing generator, based on adoption of ABATE's proposal in Case No. U-18255. 5 Tr 3210-3213, 3250-3256; DTE Electric's initial brief, pp. 283-284.

Bloom proposed changes to Rider 3 generation reservation fees and delivery demand charges to better reflect COS. 6 Tr 4120-4138. The Staff disagreed with Bloom's proposed changes. 7 Tr 4636-4639, 4641-4642.

The ALJ recounted the Commission's decision on this issue from Case No. U-20836 and the record in this case and based on this recommended that Bloom's modification requests for Rider 3 be rejected. PFD, pp. 820-830. The ALJ stated:

> Bloom's recommendations concerning forced outages due to non-specific grid conditions, allegedly caused by the company, were again presented without support. Similarly, Bloom provided no quantification of the benefits purportedly provided by fuel cell systems to validate its claim that standby costs should be reduced for these systems. And Bloom's arguments regarding proration of distribution demand charges and contract capacity were presented and rejected in DTE's previous rate case.
>
> In response to the Commission's directive in the company's previous rate case, quoted above, DTE did not present an alternative reservation fee for fuel cell systems but instead provided a discussion of why a reduced fee would be inappropriate. DTE maintains that it "does not custom-design rate schedules or riders based on the operating characteristics of individual customers[;]" however, as Bloom points out, it is not a customer but a technology with higher availability than other generation technologies. DTE characterizes Bloom's higher availability as "incremental," which may be true, but that does not mean that the FOR for fuel cells, if or when a DTE standby customer installs such a system, should not be

> considered in setting the generation reservation fee. As such, the [ALJ] finds that if Bloom seeks to pursue the specific issue of a modified generation reservation fee for fuel cell systems, Bloom should present a detailed analysis in DTE's next rate case.

PFD, pp. 829-830 (quoting DTE Electric's initial brief, p. 284) (first alteration in original).

In exceptions, Bloom objects to the ALJ's recommendation that it should present a detailed analysis in the company's next rate case. Bloom states that it has already presented evidence in this case on the availability of characteristics of its fuel cell system and argues that if an analysis is required, as suggested by the ALJ, the analysis would need to be provided by DTE Electric, the only entity with the information necessary to do such an analysis. In this regard, Bloom states that it:

> believes that the better approach would be to order DTE to do what the Commission instructed [in Case No. U-20836] and to file a proposal to reduce the reservation fee for fuel cell systems based on their FOR. Alternatively, the Commission could require, as Bloom has requested, that DTE pro-rate Rider 3 delivery demand charges or standby service as discussed in Blooms Recommendation 6 in its Initial Brief (p. 13) and add the language to Rider 3 proposed by witness Jester and provided again in Bloom's Recommendation 7 in its Initial Brief (p. 13). Even if done on a pilot scale, making these changes would go far toward reducing regulatory barriers to this technology and would allow for proof-of-concept in the field on DTE's system, the results of which could be examined in a subsequent rate case.

Bloom's exceptions, p. 3.

In replies to exceptions, the Staff argues that Bloom's attempt to repeat its arguments should be rejected. The Staff states that the ALJ properly considered Bloom's arguments and evidence based on the record in this case. Staff's replies to exceptions, p. 15.

DTE Electric argues that Bloom's exceptions merely disagree with the ALJ and add nothing of merit. The company contends that Bloom's proposals were unsupported and disproven in both Case No. U-20836 and in the instant case. DTE Electric states:

> Although *res judicata* and collateral estoppel do not apply "in the pure sense" to [Commission] decisions, issues fully decided in earlier [Commission] proceedings need not be relitigated in later proceedings unless a party presents new evidence or shows by changed circumstances that the earlier result is unreasonable. Therefore, and in addition to the prior record and rejection of Bloom's proposals in Case No. U-20836, it would be unjust and unreasonable to reduce the reservation fee for fuel cell systems or adopt the other unsupported positions of Bloom.

DTE Electric's replies to exceptions, p. 47 (footnote omitted). The company thus asserts that the Commission should adopt the ALJ's recommendation.

The Commission agrees with the ALJ's recommendation that Bloom's modification requests for Rider 3 be rejected. While DTE Electric did not present the alternative reservation fee for fuel cell systems as directed, as noted by the ALJ, the company "instead provided a discussion of why a reduced fee would be inappropriate." PFD, p. 829; *see also*, 5 Tr 3209-3212, 3250; DTE Electric's initial brief, pp. 283-285. Having reviewed the company's basis for this conclusion, as well as the other evidence on the record, the Commission agrees.

I. Rider 18 (Distributed Generation Cap)

DTE Electric presented details about Rider 18 in its testimony and Exhibit A-16. 5 Tr 3204; Exhibit A-16, Schedule F7.

The Staff, MEIU, and the DAAOs all recommended that DTE Electric voluntarily raise or eliminate its cap on distributed generation (DG). 6 Tr 4047, 4177-4178; 7 Tr 4566-4567. The DAAOs further took issue with the current outflow credit and presented their DG incentive proposal. 6 Tr 4046-4049; DAAOs' initial brief, pp. 39-42. The company disagreed with voluntarily raising or eliminating its cap on DG and stated that the current outflow credit creates an unfair cost shift, which the current cap helps protect against. DTE Electric's initial brief, p. 290. The Staff argued that the DAAOs' claims about the current outflow credit and their DG incentive proposal lack support and are fatally flawed. 7 Tr 4634-4635; Staff's initial brief, pp. 163-164.

The ALJ noted the settlement agreement approved by the Commission in Case No. U-21193, wherein the company agreed to raise its DG cap to 6%, thus rendering DG cap concerns here moot at this time and also noting size determinations of DG programs resting solely with the utility. The ALJ further noted that DG benefits in calculating the outflow credit have already been addressed in other proceedings. The ALJ stated, in this regard, that the Commission has determined that the current outflow credit is cost-based, with the ALJ finding the DAAOs' request to modify the outflow credit in this case to be without support. The ALJ further found the DAAOs' recommendation for a $500/kW incentive to LMI customers to have been presented with limited details and no COS analysis to support its reasonableness and prudence. The ALJ thus recommended that the DAAOs' incentive proposal be rejected. PFD, pp. 832-833.

The DAAOs disagree with the ALJ and assert that the record contains sufficient detail to support their $500/kW incentive DG incentive pilot and the need for such a program. DAAOs' exceptions, pp. 9-10. The DAAOs state:

> The [ALJ] and Staff pointed out that a cost-of-service analysis would be required to support the reasonableness and prudence of the pilot, but the record shows that the benefits of the incentive would clearly outweigh the costs. Increasing the number of DG customers provides benefits to the entire rate-base, like pollution and climate benefits, as well as reliability benefits, as further explained in DAAO testimony. Higher incentives for LMI customers would help address the unique barriers facing LMI households in the adoption of solar. Furthermore, part of the purpose behind the pilot program is to gather LMI customer participation data that could later be used in a more comprehensive cost-of-service analysis. To the extent that a cost-of-service analysis is required, the [Commission] should order DTE to both propose a pilot program and conduct the cost-of-service analysis.

DAAOs' exceptions, p. 10 (footnotes omitted).

In replies to exceptions, DTE Electric responds to the DAAOs and asserts that the Commission should reject the DAAOs' exceptions on this issue. The company states:

> The fact of the matter is that the increased costs of such a proposal would have to be passed on to non-DG customers in the form of higher rates and would only work to increase the size of an already unfair cost shift. DAAO provides no support or evidence for why this is appropriate, or how incentive costs would be handled within the Company's Cost of Service framework, beyond vague references to achieving equity and continues to "pancake" its various concerns in multiple proceedings, disregarding the Commission's conclusions that such DG program tariff design issues should be addressed elsewhere. (2T 109-110) The [ALJ] also properly rejected the proposal for providing insufficient detail. (PFD pp. 832-833)

DTE Electric's replies to exceptions, p. 50.

The Commission finds the ALJ's recommendations on this issue to be well-reasoned and supported by the record. Accordingly, the Commission adopts the ALJ's findings and conclusions on this issue.

J. C5.1 Rate Book Language Modification

DTE Electric proposed a modification in its rate book language in Section C5.1 of the company's rules and regulations, to allow customers to request an additional service for EV supply equipment (EVSE). 4 Tr 713. More specifically, as set forth by the company:

> Existing language in C5.1 allows the Company to provide a second service to customers at the Company's discretion where additional services are necessary or desirable for operating reasons or safety requirements. Site hosts may want a second service dedicated to EV chargers if their charger location is far from their existing service connection location and / or if they want to put their chargers on a different pricing plan. Clarifying the language by adding *"The Company, at its discretion, may provide an additional service connection exclusively to serve electric vehicle service equipment"* will improve the customer experience for installing an EVSE-dedicated second service while maintaining the Company's authority to manage for system integrity.

4 Tr 714-715 (emphasis in original); *see also*, 5 Tr 3217; Exhibit A-16, Schedule F8; DTE Electric's initial brief, p. 241; DTE Electric's reply brief, p. 114.

MEIU supported the creation of a separate service option for EV charging at a site that already has electrical service but opined that the company's proposed language is "too narrowly drawn." 6 Tr 4152. MEIU provided an example of where a customer may prefer a third party to provide the EV charging, and because these types of situations "will be unique and case specific," MEIU thus recommended that the company's tariff read as: '"Upon customer request, the Company will provide an additional service connection to serve electric vehicle service equipment.'" 6 Tr 4153; *see also*, MEIU's initial brief, pp. 2-3. If there are cost concerns for supporting charging infrastructure, MEIU stated that DTE Electric could address this by using standard line extension practices and requiring the customer to pay CIAC. 6 Tr 4153.

Noting no rebuttal testimony on this topic, nor further argument on this issue in reply briefs, the ALJ recommended that the company be allowed to add the clarifying language that it proposed to C5.1, allowing a second service while maintaining the utility's discretion. PFD, p. 834.

In exceptions, MEIU argues that the ALJ offered no reasoned basis for choosing the company's proposal over MEIU's proposal, which would give customers greater control over the process and address cost-related concerns by way of standard line extension practices and requiring customers to pay CIAC. Per MEIU, "[e]specially given DTE's lack of rebuttal and its failure to address the issue in its Reply Brief, it is unclear why the [ALJ] reached the conclusion [she] did." MEIU's exceptions, p. 6. MEIU maintains that the Commission should adopt its proposal.

In replies to exceptions, DTE Electric argues that the Commission should reject MEIU's exceptions and adopt the ALJ's recommendation to adopt the company's proposed modification to C5.1. Per DTE Electric:

> The fundamental difference in the proposals is that the Company's proposal preserves the Company's discretion. An electric utility needs to maintain discretion

> over its electrical system. The record further reflects that the Company's proposal is designed to maintain the Company's authority to manage for system integrity, as indicated above. The PFD appropriately recognized this in recommending the Company's proposal.

DTE Electric's replies to exceptions, p. 48.

The Commission agrees with MEIU and finds that MEIU's proposal should be adopted. The Commission finds that MEIU's proposal provides flexibility for customers while still maintaining system integrity for DTE Electric.

K. Rate Schedules D3 and D4

DTE Electric proposed allowing commercial customers to select Rate Schedule D3 in addition to Rate Schedule D4 when used to serve EVSE. According to the company, "[t]his will allow commercial customers with an existing building load on D4 to select D3 for their EVSE on a second service. Enabling site hosts to select D3, a commercially available rate without demand charges, facilitates public fast charger deployment in the Company's service territory, thereby addressing the 'range anxiety' barrier to EV adoption." 4 Tr 715; *see also*, DTE Electric's initial brief, p. 241.

The Staff, MEIU, and Walmart raised concerns on this proposal, including concerns relating to the demand charge holiday ending June 1, 2024; separate metering under D3; and discussion of a separate COSS to allocate costs to fast charging and to design rates specific for this class of customer. 4 Tr 1047-1048; 6 Tr 4153-4155, 4195-4198; 7 Tr 4529, 4535-4548; Staff's initial brief, pp. 141-143; MEIU's initial brief, pp. 3-5.

The ALJ recommended the following actions on this issue:

> 1. That DTE Electric's proposal to extend Rate Schedule D3 submetering to EV charging stations for customers that are otherwise on Rate Schedule D4 be approved;

2. Agreeing with MEIU, that Rate Schedule D3 submetering to customers otherwise in Rate Schedules D6.2, D8, D11, and D12 be extended to the extent these customers desire to use Rate Schedule D3 submetering for EV charging stations;

3. That the demand charge holiday be extended until June 2026 under the terms proposed by the Staff such that charging stations energized after June 2024 are permitted to remain on Rate Schedule D3 for two years; and

4. That, agreeing with the Staff and MEIU, the company should be required to conduct a separate COSS to allocate appropriate costs to fast charging and design and propose rates for this specific class of customer.

PFD, pp. 840-841.

In exceptions, EVgo objects to the ALJ's recommendation that DTE Electric conduct a separate COSS to allocate costs to a separate fast charging customer class. EVgo raises concern that this recommendation by the ALJ "extends beyond what is necessary at this early stage of market maturity and would constitute an unprecedented departure from the status quo." EVgo's exceptions, p. 2. EVgo indicates support for the development of new rate options for commercial EV charging customers and believes a new, long-term rate should be in effect when the demand charge holiday adopted by the ALJ expires; however, per EVgo, it would be premature to order the company to conduct a separate COSS specific to an EV fast charging rate class in this proceeding considering the lack of data and analysis to support such development in this case and the nascent stage of the market at this time. EVgo thus recommends that the Commission decline this recommendation from the ALJ and instead encourage the company "to pursue the adoption of a commercial EV charging rate to be implemented upon expiration of the demand charge holiday adopted in the PFD and further investigate commercial EV charging customer rate options (and associated cost-of-service issues) during its January 2024 technical conference on EVs and EV-related infrastructure." EVgo's exceptions, pp. 2-3. EVgo also provides suggested guidance for the company and the Commission moving forward as work is done towards establishing a successor rate for commercial EV charging customers. *Id*., p. 3.

In exceptions, MEIU questions the timeline that the ALJ envisions for the COSS recommendation but reiterates and emphasizes that its proposal, as set forth in testimony and briefing, is for the long-term, not the short-term. MEIU's exceptions, p. 6 (citing 6 Tr 4155; MEIU's initial brief, pp. 5-6; MEIU's reply brief, p. 14). Thus, to the extent that the ALJ characterizes its position as supporting an immediate-term rate proposal, MEIU clarifies this to be inaccurate. MEIU states:

> Dr. Sherman's testimony was couched in terms of increased rates of EV adoption, which are simply not yet a reality but are likely to occur in coming years. As such, while MEIU do contend that, in the long term, rates designed specifically for various charging use cases—and specifically a "long-term demand charge alternative rate"—will be necessary, because EV fast charging penetration in Michigan is still relatively low, and because fast charging behavior is thus not yet well understood or established, it is premature to present and adopt a DCFC-specific rate.
>
> Rather, MEIU encourages the Commission to direct DTE's cost-of-service study and its evaluation of EV-specific rate structures to take place initially in a less formal context than a contested rate case. In light of the Commission's recent order in [Case No.] U-21492, which announce[d] an EV technical conference for January 2024 that will include in its scope, among other things, "Evaluating EV tariffs," specifically a "Framework on current tariffs," "Rate design," and "Discussion of other utilities'/states' best practices" for EV tariffs, MEIU urges the Commission to direct the issue of long-term demand charge alternative rates and EV-specific rate structures to this technical conference.

MEIU's exceptions, pp. 7-8 (footnotes omitted).

In replies to exceptions, the Staff asserts that an alternative COSS that includes DCFC as a separate class should be provided in the company's next rate case filing. Agreeing with MEIU that examining charging-specific rates is for the long-term, the Staff states:

> Availability of an alternate COSS in the next filed rate case will allow all parties to compare and comment on the cost-of-service as it applies to DC Fast Charging. The outcome of such a COSS is yet unknown, and no solid proposals may even

> result from provision of the information. Without the alternate COSS recommended by the [ALJ], however, the necessary analysis to inform future proposals would not be available to the parties. MEIU goes on to mention the EV technical conference occurring in January as a potentially better place for such an analysis to be presented. (MEIU Exceptions, p 8.) While Staff agrees that rates will be discussed at the technical conference, no decision will be made on appropriate rate structures at the conference because rates must [be] set in a contested administrative law proceeding, and the correct proceeding is a rate case. The recommendation offered in the PFD is appropriate and an alternative COSS should be filed with the next rate case in order to provide parties with further analysis and data that will help inform future proposals.

Staff's replies to exceptions, pp. 15-16. Responding to EVgo, the Staff further states that:

> no party directly advocated for a separate rate class for DC Fast Charging, and all the ALJ has recommended is an alternative COSS so that the issue can be examined in more detail. EVGo also states, "[t]ypically, utilities develop a new rate class when load data demonstrates that a certain subset of customers is particularly distinct from other customers." (*Id*.) This is precisely the data that an alternative COSS would provide so that the potential issue can be examined further. EVGo appears to object to the provision of the very data that might make the demonstration they argue is required. Examining whether some customers are distinct from each other does not represent "an unprecedented departure from the status quo" as claimed by EVGo. (*Id*.) EVGo also discusses moving the issue to the technical conference, to which Staff has replied above.
>
> The remainder of EVGo's exception should be ignored because it includes references to other jurisdictions that EVGo did not include in either direct testimony, rebuttal testimony, brief, nor reply brief. Introduction of these arguments at this point of the administrative law process is inappropriate and should not be considered. Thus, this portion of EVGo's exceptions should not be given any weight by the Commission.

Staff's replies to exceptions, pp. 16-17. The Staff thus recommends that the ALJ's recommendation for the company to file an alternative COSS be filed in its next rate case which separates fast charging into a different COS class be adopted.

DTE Electric contends that both the ALJ and MEIU's exceptions incorrectly characterize the Staff's proposal on this issue. Per the company:

> Staff states on p 139 of its Initial Brief that "if new distinct rates for EV charging are desired by the Commission that they should direct the Company to file an alternative cost-of-service study with DC fast charging included as a separate rate

> class." Staff further states on p 14 of their Reply Brief that "it does not support EV-specific rates, and in the case of fast charging, (Staff Initial Brief, p 138-139) would recommend that fast chargers be placed into a separate cost of service class to design specific rates for them. Therefore, Staff recommends that EV-specific rates be rejected." In summary, the Company believes that Staff only recommended an alternate COSS in the event that new EV-specific rates are being proposed. Since no EV rates are being proposed at this time, the recommendation by the [ALJ] and proposal by MEIU are premature. EVGo appears to agree that "it would be premature to order DTE to conduct a separate cost-of-service study specific to an EV fast charging rate class in this proceeding" (EVGo Exceptions p. 2). Further, the recommendations are not supported by the record and the Company has not had an opportunity to respond specifically to their proposals and therefore those proposals should be rejected. The Company also continues to believe its rate cases are the most appropriate avenue for evaluating COSS proposals.
>
> In regard to the LMI proposal, DAAO Exceptions p 10 states "[t]o the extent that a cost-of-service analysis is required, the [Commission] should order DTE to both propose a pilot program and conduct the cost-of-service analysis." The Company, of course, opposes the requirement to conduct an EV cost-of-service study at all, and recommends the Commission also reject DAAO's proposal to require the Company to provide an additional alternate COSS, as it is not supported by the record and the Company has not had the opportunity to properly respond. Furthermore, the [ALJ] properly concludes that "this PFD recommends that the proposed incentive pilot for LMI customers be rejected," (PFD pp. 832-833) and DAAO's proposal should therefore be rejected.

DTE Electric's replies to exceptions, pp. 53-54.[46]

The Commission finds the ALJ's recommendations well-reasoned and supported by the record. Accordingly, the Commission finds that:

1. DTE Electric's proposal to extend Rate Schedule D3 submetering to EV charging stations for customers that are otherwise on Rate Schedule D4 should be approved;

2. Rate Schedule D3 submetering to customers otherwise in Rate Schedules D6.2, D8, D11, and D12 should be extended to the extent these customers desire to use Rate Schedule D3 submetering for EV charging stations;

3. The demand charge holiday should be extended until June 2026 under the terms proposed by the Staff such that charging stations energized after June 2024 are permitted to remain on Rate Schedule D3 for two years; and

[46] The DAAOs' exceptions quoted here are addressed above under Rider 18 (Distributed Generation Cap).

4. DTE Electric should be required to conduct a separate COSS to allocate appropriate costs to fast charging and design and propose rates for this specific class of customer in its next rate case.

The Commission notes, in this regard, that extending the demand charge holiday in this case will provide the time needed to determine the appropriate path forward.

L. E1 Streetlight Tariff Language Modification

DTE Electric set forth its present and proposed rate design and corresponding revenues by rate class for its community lighting rate design. 5 Tr 2637-2646; Exhibit A-16, Schedule F3.

MI-MAUI proposed that DTE Electric be ordered to provide reporting and financial measures to create greater accountability for qualify of streetlight service and fairness to customers. 4 Tr 927-934.

DTE Electric disagreed with MI-MAUI's reporting recommendations, stating that its outage management system does not have this capability, noting that outages are by event, not capturing customer-reported outages by light, and also raised cost concerns with this proposal in that costs associated with this would likely be passed onto customers. In this regard, the company discussed its proactive implementation of a night patrol program in 2019 and cable replacement program effective in 2022 and thus averred MI-MAUI's proposal to modify the company's E1 streetlighting tariff to be impractical and unfounded. The company further stated in response to MI-MAUI that it has not denied any streetlight customer outage credit requests in 2022. 5 Tr 2628-2629, 2665-2666, 2668; Exhibit A-40, Schedule EE10.

The ALJ recommended that MI-MAUI's proposal for the addition of streetlight outage reports be adopted. The ALJ found that the proposed language provides a reasonable two-month timeframe for the company to respond to requests. The ALJ further found that the three required datapoints (the number of streetlight outage occurrence counts, the average duration thereof, and the number of outages lasting longer than 14 days) to not be overly burdensome, with streetlight outage occurrence counts meaning broader outage events that the company already tracks (not individual streetlights). The ALJ also highlighted outage information discovered by the company's night patrol that DTE Electric stated that it could accommodate, so long as it pertains to aggregate outage detail reflected in Exhibit A-40, Schedule EE3. The ALJ thus recommended "adopting the proposed changes to Tariff E1 and directing DTE to collaborate with Staff, MAUI, and other interested intervenors to develop a streamlined outage report request process, a standardized report format, data protocols, and delivery method." PFD, p. 845.

In exceptions, MI-MAUI asserts that the ALJ did not address a related but different contested issue here—namely, with regard to credits for streetlight outages. As set forth in testimony and briefing, MI-MAUI recommends that the Commission require the company "to modify the streetlighting tariff to include automatic bill credits for known outages that start 24 hours after an outage is reported and run until the streetlight is restored to working order." MI-MAUI's exceptions, pp. 4-5; *see also*, 4 Tr 934-938; MI-MAUI's initial brief, pp. 16-24. Per MI-MAUI, "the essential argument is simple. Right now, a streetlight can be out for 30 days, and the customer will have to pay the same amount as if it were working. It isn't fair or reasonable to ask local governments to pay for a month of service they aren't receiving." MI-MAUI's exceptions, p. 5. In this regard, MI-MAUI asserts that the Commission should require automatic outage credits to solve this problem, similar to its decision for Consumers in Case No. U-20963. *Id*. (citing December 22 order, p. 392).

DTE Electric insists that the proposal to modify its E1 streetlighting tariff should be rejected as impractical and unnecessary. The company states that it:

> maintains its position but acknowledges that the [ALJ]'s interpretation of "streetlight outage occurrence counts" (broader outage events) is less onerous than MAUI's apparent proposal (individual streetlight detail). The record reflects that the Company's current outage management system (OMS) does not have this capability. It currently does not capture customer-reported outages by light, but instead by event (which could be many lights) (5T 2665). The Company continues to be transparent with respect to its performance and continues to evaluate and employ solutions to improve reliability and reduce outages. For example, the Company proactively implemented a night patrol program in 2019, and proactively implemented its cable replacement program effective in 2022 (Bellini, 5T 2628-29, 2667). Interestingly, Witness Bunch in his direct testimony in Consumers case [No.] U-20697, filed in 2020, used DTE's outage performance to contrast that of Consumers when reflecting on their 2018 outage duration. Specifically, he stated "Over the last ten years, DTE has reduced average outage duration from 8.5 days to 3.5 days and has reduced the incidence of outages longer than 10 days almost 90%." ([Case No.] U-20697, Direct Testimony of Bunch, pp 55-56). He goes on to recognize these efforts as "significant improvements."

DTE Electric's exceptions, pp. 257-258 (footnote omitted).

In replies to exceptions, MI-MAUI disagrees that the company has been transparent, arguing that the company instead resists requests from local governments for night patrol data. MI-MAUI's replies to exceptions, p. 8 (citing Exhibits MAU-42 through MAU-45). MI-MAUI further objects to DTE Electric's use of company testimony from Case No. U-20697 in exceptions, as such testimony is not in the record in the instant case and thus MI-MAUI was not given an opportunity to respond. Moreover, MI-MAUI states that, "even if this evidence is considered, whether the data would show good or bad performance has no bearing on the fundamental issue -- whether streetlighting customers should have access to their outage data." MI-MAUI's replies to exceptions, pp. 8-9. MI-MAUI thus requests that the Commission adopt the ALJ's recommendation to amend the company's streetlighting tariff.

Responding to MI-MAUI's exceptions on this issue and MI-MAUI's request for automatic bill credits, DTE Electric states:

> MAUI's underlying inaccurate premises are lack of progress reducing outage events and long average duration of those events. These are simply not accurate.

> The alleged foundations for MAUI's bill credit proposal are incorrect for two key reasons. First, Witness Bunch concludes that outages have increased by 16% since the inception of the Company's night patrol program through 2022. His calculation was incorrect and in fact, outage events have *actually decreased* from the end of 2019 (when the night patrol pilot began in late 2019) through 2022 by 16%. Second, when testifying in Consumers Case No. U-20697, filed in 2020, Witness Bunch stated that over the last ten years, DTE has reduced average outage duration from 8.5 days to 3.5 days and has reduced the incidence of outages longer than 10 days almost 90%. He heralded the Company's efforts as significant improvements. The standard duration for an outage was 4.7 days in 2022, despite almost 3,000 events being "ok on arrival" or the pole and/or light was knocked down by a third party (5T 2652-53, Exhibit A-40, Schedule EE3). MAUI did not refute this information. The Company's outage performance also does not merit such onerous criteria. Lastly, the Company has not denied any streetlight customer outage credit requests in 2022, which are generally issued within the next billing cycle (5T 2668). Therefore, the Commission should reject the MAUI streetlight bill credits proposal (Bellini, 5T 2669-70).
>
> The Company also continues to be transparent with respect to its performance and continues to evaluate and employ solutions to improve reliability and reduce outages. For example, absent any proposal from MAUI, the Company proactively implemented a night patrol program in 2019 (which MAUI now has recommended Consumers to adopt), and proactively implemented its cable replacement program effective in 2022 (Bellini, 5T 2628-29, 2667).

DTE Electric's replies to exceptions, pp. 48-49 (footnote omitted; emphasis in original). Here the company also notes that "[t]o the extent that MAUI witness Bunch's proposal that the Company 'include outages discovered by night patrols in its reports' (4T 934) pertains to aggregate outage detail reflected in Exhibit A-40, Schedule EE3, the Company agrees and will do so effective 2024 (Bellini, 5T 2668)." DTE Electric's replies to exceptions, p. 49, n. 33.

The Commission finds the ALJ's recommendation regarding streetlight outage reports to be well-reasoned and supported by the record. Accordingly, the Commission adopts the ALJ's findings and conclusion on this topic. The Commission, however, is unpersuaded by MI-MAUI's streetlight outage credit proposal, based on the evidence and arguments presented in this case.

M. Generation Meters and DTE Electric Company's Green Book

In exceptions, MEIU argues that the ALJ failed to mention its arguments regarding generation meters and review of the company's Electric Installation Guide (also known as the company's "'Green Book'"). MEUI's exceptions, p. 11. MEIU states:

> MEIU argued in their Initial Brief that the Commission should recognize that the generation meter requirement in MCL 460.1177(1) and in R 460.1012 and R 460.1014, as applicable, violates the Public Utility Regulatory Policies Act of 1978 ("PURPA"), in that it imposes standards and requirements on qualifying facilities ("QFs") that have not been adopted explicitly "on the basis of system safety and reliability." MEIU further argued that the Commission should therefore grant waivers from this requirement under its interconnection rules and not enforce the generation meter requirement in MCL 460.1177(1). Relatedly, MEIU also advocated for Commission review of the Company's "Green Book."
>
> The [ALJ] intentionally or unintentionally sidestepped these issues entirely, failing to address either one even in passing. MEIU therefore renews its request that the Commission adopt its recommendations on these issues.

Id. (footnotes omitted) (citing MEIU's initial brief, pp. 25-29).

In replies to exceptions, DTE Electric argues that MEIU's exception on this issue is not a proper exception. Nevertheless, if considered, the company asserts that MEIU's proposal should be rejected. DTE Electric states that:

> the proposal is contrary to MCL 460.1177(1), which relevantly provides: "For a customer with a generation system capable of generating more than 20 kilowatts, the utility **shall install and utilize a generation meter** and a meter or meters capable of measuring the flow of energy in both directions" (Emphasis added). It is axiomatic that statutory language must be applied as written. The statute is clear, and repeatedly uses the term "shall," which denotes a mandatory duty imposed by the Legislature, and excludes the idea of administrative discretion. Therefore, the proposal should be rejected.

DTE Electric's replies to exceptions, pp. 56-57 (footnotes omitted; emphasis in original).

For completeness, DTE Electric notes that:

> Mr. Hoyle further asserted that "DTE has no system safety or reliability use for generation meters" because any necessary data is allegedly available from meters that measure power inflow, and the aggregate capacity of QFs over 20kWac [kilowatt alternating current] is allegedly inconsequential for system reliability purposes (6T 4230). To the contrary, bidirectional meters measure at a different

electrical location than generation meters, and are unable to separate out actual load from actual generation unless the customer is 100% exporting or 100% importing power, which is an unlikely occurrence for a customer with both load and generation. Generation metering also provides information about gross load, voltage, power quality, and status. This information is critical to the safe operation of the electrical system. For example, knowledge of gross load is critical to safely performing switching when there has been an interruption. Generation metering is also needed for generation system capacity planning. QFs greater than 20kWac are material to system reliability and planning at the localized circuit level (Robinson, 5T 2708-2709).

The Company acknowledges that generation meters may involve costs, and continues to work with QFs to manage potential costs; however, data about the operating status of interconnected generation is not an area where an accommodation can be made without the safety and reliability impacts outlined above. The proposed waiver focuses on reducing interconnection customer costs, but it would increase rates for others, and is inconsistent with the principle of allocating costs to cost causers. Therefore, the recommendation should be rejected (Robinson, 5T 2710).

Mr. Hoyle also inaccurately characterized Rider 3 metering requirements (6T 4223). Initial Rider 3 contract capacity determination is unrelated to generation meters, and accurate billing on Rider 3 would not be possible without a generation meter (Willis, 5T 3243-44).

MEIU witness Sherman asserted that "it seems logical to me that generation meters are likely unnecessary and duplicative" while offering no evidentiary support for the assertion (6T 4182). Again, the suggestion does not merit consideration because MCL 460.1177(1) plainly says "For a customer with a generation system capable of generating more than 20 kilowatts, the utility **shall install and utilize a generation meter <u>and</u> a meter or meters capable of measuring the flow of energy in both directions**" (Emphasis added). Also, for completeness and as indicated above, bidirectional meters do not perform the same functions as a generation meter, and generation meters provide valuable data. The costs to install Category 2 generation metering (20kWac-150kWac) are also necessary and reasonable, so the Commission should reject the suggestion to remove the requirements for Category 2 generation meters to ensure that costs are not transferred from interconnection projects to other customers (Robinson, 5T 2708-13).

MEIU witness Sherman further stated: "My understanding is that the Company's Green Book has not historically been subject to specific Commission review and approval. However, I see no reason why it should be beyond the reach of the Commission's regulatory authority" (6T 4183-84). The Company disagrees with the suggestion that the Commission should require oversight of the Green Book.

> Oversight is unnecessary and witness Sherman provided no evidence that such oversight would benefit the Company or customers (Robinson, 5T 2715).

DTE Electric's replies to exceptions, pp. 57-58 (emphasis in original).

The Commission is unpersuaded that this is the proper forum to address this issue raised by MEIU, as a complaint case appears to be more appropriate based on the arguments and evidence presented.

N. Voltage Level Discounts for Subtransmission and Transmission Customers

In exceptions, ABATE states that the company's voltage level discounts for its subtransmission and transmission customers were not addressed by the ALJ in the PFD and must be corrected. More specifically, per ABATE:

> As set out in Exhibit AB-8 [sic: Exhibit AB-4], one of the voltage level discounts for the subtransmission and transmission customers presented by DTE was calculated using the wrong loss factors. (See Andrews 4 Tr 1096-97.) Specifically, the non-capacity demand charge was calculated using loss factors that are based on energy losses. These discounts should be calculated with the same demand loss factors that are used to calculate the Capacity Demand Charge discounts. (*Id.*) This error must be corrected such that the non-capacity demand charge discounts are based on the demand loss factors. No party objected to this proposed correction.

ABATE's exceptions, p. 6; *see also*, ABATE's initial brief, p. 61.

Based on the evidence submitted in this case, the Commission is not persuaded that the company's voltage level discounts for its subtransmission and transmission customers contain an error, as alleged by ABATE. Testimony on behalf of ABATE refers to Exhibit AB-4 in support of the asserted error; however, Exhibit AB-4 (a discovery request from ABATE to DTE Electric) merely states as follows, without any acknowledgement of any error by the company:

> **Question:** Referring to DTE's rate design model, "U-21297 Rate Design Model_v2.xlsx" at tab D11 total, cells I31 and I32:

a.	Please confirm that the non-capacity voltage level discounts are being calculated using the energy loss factors.
Answer:	Confirm.

* * *

Question:	Referring to DTE's rate design model, "U-21297 Rate Design Model_v2.xlsx" at tab D11 total, cells I31 and I32:
b.	Please confirm that the non-capacity voltage level discounts should be based on the demand loss factors.
Answer:	The D11 non-capacity voltage level adjustments were calculated using the same methodology as the Commission's approved rate design in the Company's last rate case, Case No. U-20836.

Exhibit AB-4, pp. 1-2 (emphasis in original).

O. Tariff Language Regarding Cash Payment Requirements

In replies to exceptions, the Attorney General states that she maintains her position regarding recommendations related to cash payment requirements and changes to tariff language, in addition to billing rules regarding deposits and guarantees, as set forth in briefing. The Attorney General states that these issues were not addressed in the PFD but asserts that "the record on the two issues is clear and respectfully requests that the Commission issue an order adopting her positions." Attorney General's replies to exceptions, p. 57 (citing Attorney General's initial brief, pp. 104-108).

Mich Admin Code, R 792.10435(2) states:

> If a party does not file exceptions to a proposal for decision within the time permitted by this rule, any objection to the proposal for decision is waived. If a party does not object to a part of a proposal for decision, any objection by the party to that part of the proposal for decision is waived.

Thus, because these issues were not addressed in exceptions, the Commission finds any objection to the same to have been waived, and no further discussion on the issues is thus permitted or appropriate at this stage of the case.

XI. FUTURE RATE CASES, FURTHER STUDY

The parties made several recommendations on actions to be taken before or in conjunction with the company's next general rate case. These additional issues were addressed by the ALJ at pages 845 to 857 of the PFD and are similarly addressed by the Commission below:

A. Distribution System

1. The Commission Staff

a. Strategic and Service Undergrounding

In addressing strategic and service undergrounding, the Staff testified that DTE Electric did not provide a BCA as previously ordered which is why the Staff recommended a full disallowance for DTE Electric's proposed undergrounding pilot. 7 Tr 4414-4415. As noted above, the Commission agreed. *See*, Part IV (Rate Base), *supra*. Furthermore, the Staff recommended that DTE Electric "provide a cost-benefit analysis of undergrounding residential service drops in its next rate case." 7 Tr 4415; Staff's Initial Brief, p. 218.

The Commission finds this latter suggestion to be reasonable and prudent and as such, directs DTE Electric to perform a BCA for undergrounding residential service drops, using benchmarking and readily available information, and include the results of the analysis in its next rate case.

b. Grid Equity

The Staff raised several concerns regarding DTE Electric's distribution system including recommendations regarding distribution grid equity. Specifically, the Staff raised several issues that it recommended DTE Electric address, summarized as follows:

1. A requirement for future environmental analyses to provide community vulnerability gradation information based on the MiEJScreen composite score, and define vulnerable communities based on the threshold of the MiEJScreen composite score for environmental justice analyses.

2. A requirement to provide Customers Experiencing Multiple Interruptions data for customers who experience six or more sustained interruptions per year by zip code and census tract with GeoID number moving forward and for five years prior to the rate case or distribution plan.

3. A requirement to promptly address known public safety hazards.

4. A requirement to report third-party contacts under R 460.38041 along with the third party's health status and contact description to include contact location, distribution system voltage, whether a wire was down, and whether it involved an arc or distribution wire.

5. A requirement for greater transparency for projects, programs, and deployment locations in future rate cases.

6. A requirement to include climate resiliency in future distribution plans.

7. A requirement to develop a clear, repeatable process for interested parties to obtain and use GIS data for their own analyses.

8. A requirement to engage interested and affected customers and communities in stakeholder meetings.

Staff's initial brief, pp. 168-217.

The ALJ found that most of the Staff's recommendations were reasonable and should be adopted. PFD, p. 848. The ALJ's only opposition was to the Staff's recommended requirement of a regression analysis; instead, the ALJ found that DTE Electric should ensure that the Staff and other interested parties can access the necessary data to perform their own analyses. *Id*. The ALJ noted that "if DTE does not see the value in statistical analysis . . . it is unreasonable to expect the company to present a compelling statistical analysis." *Id*.

In its exceptions, the Staff disagrees with the ALJ's recommendation that DTE Electric not be required to present a regression analysis as suggested by the CEOs, stating that it is clearly shown that DTE Electric "has the capacity to perform a detailed regression analysis as described by [the] CEO[s]." Staff's exceptions, p. 5 (citing Staff's initial brief, p. 119). Furthermore, the CEOs object to the ALJ's conclusions, stating that it cannot support a distribution planning process that does not consider affordability, guarantee better reliability, fails to incorporate equity, and lacks transparency. CEOs' exceptions, p. 3.

The Commission adopts the ALJ's recommendations with the additional requirement that DTE Electric work with the Staff and other stakeholders to develop a detailed of customer demographics and reliability for vulnerable customers to be used in the company's distribution plan case, and orders DTE Electric to provide the data supporting their regression analyses that will allow interested parties to perform their own analyses.

B. Tree trimming

The Staff provided testimony in support of DTE Electric's spending for tree trimming, but it also advocated for DTE Electric to develop a proposal for a residential service drop tree trimming pilot. Staff's initial brief, pp. 222-224; 7 Tr 4401-4402; 5 Tr 2164. The Staff also supported DTE Electric's surge request explaining that there has been an increase in reliability since the company initiated its tree trim surge. *See*, 6 Tr 4400. However, to bolster DTE Electric's system reliability, the Staff recommended that DTE Electric "provide a description of how the Company audits tree-trimming work done in the field by contractors and Company personnel." 7 Tr 4401. The Staff also recommended that in its next rate case, DTE Electric provide an analysis of the feasibility of trimming trees more aggressively in zones 2 and 3. 7 Tr 4401. The Staff remarked that by performing a study on zones 2 and 3, DTE Electric may see a "decrease in tree related wire downs and better service reliability during storms." 7 Tr 4401.

The ALJ acknowledged the Staff's suggestions for tree trimming and adopted such. *See*, PFD, p. 851.

In its exceptions, DTE Electric contends that the Staff's suggestions are not reasonable and prudent. DTE Electric's exceptions, p. 264. However, the company states that it would consider a future residential service drop tree trimming pilot. *Id*. In contrast, in its replies to exceptions, MNSC states that the company has not done enough. It points to its proffered testimony that "service drop vegetation management could economically improve customer outages" such that DTE Electric should "develop an action plan to address tree-related outages along service lines." MNSC's replies to exceptions, p. 115 (citing 6 Tr 3582-3583) (internal citation omitted). In short, MNSC states that DTE Electric has the capacity to "quickly compile testimony and evidence to support significant capital distribution spending increases" and as such, can apply that capacity towards service drop tree outages. MNSC's replies to exceptions, p. 119.

The Commission notes that DTE Electric expressed a willingness to consider a future residential service drop tree trimming pilot. The Commission directs DTE Electric to work with the Staff to develop such a pilot to be considered in the company's next rate case. The Commission also finds the Staff's recommendations on tree-trimming audits and an analysis of more aggressive trimming in zones 2 and 3 to be reasonable and prudent and adopts those recommendations.

C. MISS DIG

In the PFD, the ALJ acknowledged the Staff's suggestions for DTE Electric to improve transparency and demonstrate compliance with MISS DIG requirements. *See*, PFD, pp. 849-850; Staff's initial brief, pp. 219-221. The Staff suggested that the Commission order the following:

> 1. Staff recommends the Commission order the Company to begin to track expenditures for damage caused by the Company to its own facilities.
>
> 2. Staff recommended the Commission order the Company to have future meetings with Staff to share damage reporting data including, the billing amounts for damages when a third-party causes damages and expenditures for damages, and for sharing billing amounts when the Company causes damages.
>
> 3. Staff recommends the Commission order the Company to share a breakdown of damage prevention expenditures in future rate cases under FERC account 580 including, but not limited to, internal locating and contract locating in future rate cases.
>
> 4. Staff recommends the Commission order the Company to improve damage reporting quality by 1) continuing to meet with Staff regarding damage report data and 2) committing the time and resources to submitting data into the format that aligns with [Commission]'s processes[.]

Staff's initial brief, p. 220 (internal citation omitted).

In its initial brief, DTE Electric objected to tracking expenditures for damages it caused to its own facilities, stating that it "does not currently track the expenditures due to the low number of instances, and does not have a way to separate them historically." DTE Electric's initial brief, p. 305. DTE Electric argued that because it does not currently track self-imposed damages, to do so in the future would require new processes, procedures, and additional training, and that "the additional costs and training are not justified." *Id*. (citing 5 Tr 2831-2832); *see also*, DTE Electric's reply brief, pp. 145-146.

The ALJ found that the Staff's requests pertaining to keeping records moving forward were reasonable and further found that training staff is essential to minimize risks to people and DTE Electric's own property. *Id.*

In its exceptions, DTE Electric agreed to the Staff's recommendation and stated that it will track expenditures for damage that it causes at its own facilities moving forward. DTE Electric's exceptions, p. 264.

The Commission adopts the ALJ's recommendation and is pleased to see DTE Electric agree to maintain records. *Id.*; *see*, PFD, p. 850. Thus, DTE Electric shall: (1) commence tracking and keeping records of expenditures incurred from damages caused by the company to its own facilities; (2) work with the Staff to share damage reporting data including the billing amounts for damages when a third-party causes damages and expenditures for damages, and when the company causes damages; (3) include a breakdown of damage prevention expenditures in future general rate cases under FERC account 580 including, but not limited to, internal locating and contractor locating in future general rate cases; (4) and improve the company's damage reporting quality by continuing to meet with the Staff regarding damage report data; and commit the time and resources to submitting data into the format that aligns with the Commission's processes.

D. The Ecology Center, Environmental Law & Policy Center, Union of Concerned Scientists and Vote Solar

The CEOs argued that grid equity, public health, affordability, and energy justice are essential components to just and reasonable rates. CEOs' initial brief, p. 4. The CEOs provided definitions of "environmental justice" and "energy justice" and how both encompass equity "in reliability, affordability, public health, and access to clean energy". *Id.*, p. 5 (citing 6 Tr 3886-3887; Exhibit CEO-3, p. 7). The CEOs posited that such "are central to rate cases" as the Commission approves a utility's spending and investments for cost recovery, and that "rates cannot be 'just and reasonable' if they are not designed to recover investments that are just." CEOs' initial brief, p. 6, (citing 6 Tr 3843). In their initial brief, the CEOs echoed several of the Staff's requests, namely requesting that:

> 1. The Commission order the Company to include in its next EJ/Reliability analysis a 75%, 80%, and 90% MiEJScreen Tool threshold analysis in its next rate case;
>
> 2. The Commission order the Company to conduct more extensive environmental justice & reliability analysis in future cases including regression analyses and an examination of similar "grid topologies" as recommended by CEO Witnesses Tan and Kenworthy;
>
> 3. The Commission direct the Company to identify, track, and mitigate disparity along the different categories identified by CEO Witness Pereira including: (1) affordability and energy burden reduction, (2) community reliability and resilience, and (3) access and participation to clean energy programs in its next rate case[.]

CEOs' initial brief, pp. 35-36.

In the PFD, the ALJ concluded that the CEOs' requests were "sufficiently similar" to the Staff's requests that to adopt the Staff's requests would address the CEOs' recommendations. PFD, p. 851.

In their exceptions, the CEOs acknowledge that the ALJ made the connection between their arguments and the Staff's arguments. CEOs' exceptions, p. 5. The CEOs suggest that the Commission order DTE Electric to "identify, track, and mitigate disparity . . . including: (1) affordability and energy burden reduction; (2) community reliability and resilience; and (3) access and participation to clean energy programs in its next rate case." *Id*., p. 6. In their replies to exceptions, the CEOs state that their regression analysis and reliability performance recommendation is appropriate because "the electric grid in dense urban neighborhoods is different than in rural areas . . . . Thus, a valid comparison must compare customers in similar types of grid topology." CEOs' replies to exceptions, p. 3 (citing CEOs' reply brief, pp. 7-8). Similarly, the DAAOs reiterate their argument that DTE Electric should conduct an environmental justice analysis as DTE Electric is in the best position to compile such data. DAAOs' replies to exceptions, p. 4.

The Commission appreciates the CEOs' and the DAAOs' thorough recommendations in this case. The Commission agrees with the ALJ that adopting the Staff's recommendations above will address the bulk of the issues raised, and thus declines to adopt the additional recommendations proposed by the CEOs and the DAAOs on this issue.

E. Michigan Environmental Council, Natural Resources Defense Council, Sierra Club, and Citizens Utility Board of Michigan

In its initial brief, MNSC opined that DTE Electric's poor tree management has presented "challenges in service restoration that contribute to both capital and operating costs borne by ratepayers." MNSC's initial brief, p. 152 (citing 6 Tr 3579). Despite DTE Electric's non-action, MNSC acknowledged that after the December 2013 ice storms which caused fallen trees, resulting in major outages, "the Commission directed Michigan utilities to do more . . ." regarding vegetation management pilot programs to manage trees outside of utility easements. MNSC's initial brief, p. 152 (quoting the May 2, 2014 order in Case No. U-17542, pp. 24-25). In short, MNSC maintains that DTE Electric "has known for a long time that tree maintenance along service lines presents a real reliability concern, yet . . . DTE [Electric] has made no progress to address it . . . ." *Id*., p. 155 (citing 6 Tr 3583). To resolve this issue, MNSC suggests that the Commission direct DTE Electric to develop an action plan addressing service line tree-related reliability. MNSC's initial brief, p. 156.

The ALJ acknowledged that MNSC and the Staff both recommend that DTE Electric trim trees along service lines to improve reliability and adopted the Staff's tree trimming recommendations. PFD, p. 851.

In its exceptions, DTE Electric argues that a residential service drop tree trimming pilot is not reasonable or prudent at this time. DTE Electric's exceptions, p. 264. DTE Electric notes its agreement with the Staff that currently '"tree trimming around residential service drops is the responsibility of the customer,'" but that the company "understands the underlying concerns and would consider pilots in the future." *Id*., pp. 263-264 (quoting 7 Tr 4402). However, the company argues that before initiating a pilot it would "need to conduct a study to estimate the scope, cost, resources required, and projected reliability improvement" and that undertaking this study "would be a significant task." DTE Electric's exceptions, p. 264. DTE Electric concludes that the time required for such will not provide meaningful results for the company's next rate case. *Id*.

The Commission agrees with the ALJ in recommending the Staff's tree trimming proposals as mentioned above as being both reasonable and prudent. The Commission recognizes that DTE Electric may not have all of the information available by the time it files its next general rate case, and particularly notes DTE Electric's observation that "[b]enchmarking indicates that other utilities do not perform service drop trimming, so there is little, if any, industry data available regarding service drop trimming[.]" DTE Electric's exceptions, p. 264. Nonetheless, the Commission notes the significant role that service lines play in DTE Electric's reliability metrics and thus, finds it unreasonable to delay. The Commission encourages DTE Electric to bring forth a pilot by which some of the data gaps identified by DTE Electric may be addressed to inform longer-term strategies around service drop lines to improve the company's reliability performance.

F. Soulardarity and We Want Green, Too

The DAAOs referenced the CEOs' testimony described below when it agreed to conducting regression analyses and updating the GPM to improve racial and economic equity in grid performance. DAAOs' initial brief, pp. 23-26. Of note, the CEOs defined regression analysis as "a statistical model/method used to examine the relationship between a 'dependent variable' and one or more 'independent variables.'" 6 Tr 3926. The CEOs performed regression analyses based on "population density, income, poverty, age, and race." 6 Tr 3926. By utilizing this data, the CEOs argue that DTE Electric can provide more accurate reliability data than it currently provides. 6 Tr 3927. However, the ALJ previously addressed such in discussing the Staff's recommendations and stating that "this PFD does not perceive value in a directive to DTE to conduct a regression analysis." PFD, p. 852.

DTE Electric disagrees with the ALJ's endorsement of the Staff's recommendation, stating that its current method "for evaluating reliability metrics in vulnerable communities is reasonable and prudent and demonstrates that its past and proposed investments are significant focused on vulnerable communities." DTE Electric's exceptions, pp. 258-269.

In exceptions, the Staff disagrees with the ALJ's recommendation, arguing that the record clearly shows that DTE Electric has the ability to perform detailed regression analysis and thus, should be directed to work with all interested parties to collaborate on such. Staff's exceptions, p. 5.

The CEOs remark on DTE Electric's simplistic reliability comparison, suggesting that it should be "digging into more detail," and disagreeing with the ALJ's recommendation while stating that DTE Electric "must make a better effort to understand the lived reliability experience of its customers." CEOs' exceptions, pp. 8-9.

DTE Electric discounts the CEOs' testimony, stating it is "complex and rife with errors" whereas the company argues that its own analysis is sound, relying on a publicly available tool developed and maintained by EGLE. DTE Electric's replies to exceptions, p. 55. In its replies to exceptions, the Staff remarks that the CEOs' regression modeling results were unsupported; thus, the Staff recommends that DTE Electric provide information to interested parties regarding distribution planning and EJ and equity. Staff's replies to exceptions, pp. 26-27.

As noted above, the Commission agrees with the Staff and notes that this issue was addressed above in adopting the Staff's recommendations.

G. The City of Ann Arbor and Michigan Municipal Association for Utility Issues

In its initial brief, Ann Arbor complained that DTE Electric had not reached out to local municipalities and its own affiliates to coordinate projects despite operating multiple utilities and causing damage which "results in ratepayers having to pay much higher costs for distribution work." Ann Arbor's initial brief, pp. 20-23 (citing 4 Tr 849-851, 874; Exhibit A2-2 and A2-3); *see also*, 4 Tr 848-52, 874-77, 886-90, 958. As such, Ann Arbor requests that DTE Electric coordinate its efforts not only with local governments but with its own affiliates. Ann Arbor's initial brief, p. 29.

Like Ann Arbor, MI-MAUI decried DTE Electric's failure to coordinate with local governments on infrastructure projects. MI-MAUI's initial brief, pp. 31-35; *see also*, 4 Tr 899-902, 957-58. MI-MAUI echoes Ann Arbor's argument, stating that DTE Electric's failure to coordinate has prevented cost-sharing, increased risk of costs due to third-party damages, and inhibited progress towards improving grid reliability. MI-MAUI's initial brief, p. 32; 4 Tr 901-902.

The Staff agreed with both Ann Arbor and MI-MAUI that DTE Electric should coordinate its efforts with local governments. Staff's initial brief, p. 215. The Staff's reasoning is that local infrastructure owners, "like municipalities, are key participants" within the Michigan Infrastructure Council Act.[47] *Id*.

In the PFD, the ALJ found that Ann Arbor, MI-MAUI, and the Staff's arguments had merit and that "the Commission may want to require that DTE present evidence of its efforts to coordinate construction activities with local units of government when it seeks to include construction costs in its revenue requirement." PFD, p. 853.

No party filed exceptions on this issue.

The Commission agrees with the ALJ that DTE Electric should coordinate construction activities with local units of government. As explicitly demonstrated by Ann Arbor, DTE Electric's past failure to coordinate has resulted in damage to the city's infrastructure. Ann Arbor's initial brief, p. 21 (citing 4 Tr 850; Ex. A2-3). Furthermore, coordinating with its affiliates may reduce project costs and increase reliability, both of which are concerns of the Commission. 4 Tr 901-902; Ann Arbor's initial brief, p. 23; MI-MAUI's initial brief, p. 32; Staff's initial brief, p. 215. Therefore, in its next rate case, DTE Electric shall include a demonstration of its efforts to improve communication and coordination with local governments regarding construction activities.

H. Affordability

The DAAOs contended that Michigan has "an affordability crisis" due to the high cost of energy compared to consumer income. DAAOs' initial brief, p. 9 (citing 6 Tr 3994). The DAAOs stated that DTE Electric's proposed rate increase proposal should be rejected because it "overly relies on payment assistance programs that are insufficient to solve the current affordability crisis"

[47] Public Act 323 of 2018, MCL 21.601 *et seq*.

and that such are not just and reasonable. DAAOs' initial brief, p. 9. The DAAOs accused DTE Electric of failing to improve the value of its service in an attempt to minimize costs to its investors and switching to time-of-use rates, shifting the costs to LMI households. *Id*. Furthermore, the DAAOs criticized DTE Electric's use of payment assistance programs because such programs fail to "cover all those who are economically or socially vulnerable" with limited resources and income. *Id*., pp. 10-11 (citation omitted). In fact, the DAAOs highlight not only that the Commission found that low-income assistance programs do not sufficiently address affordability concerns, but that DTE Electric also acknowledged that such are merely "temporary solutions with little long-term positive impact." *Id*., p. 11 (citing 5 Tr 2089-2090).

The ALJ ultimately decided that the DAAOs' request was a "comprehensive undertaking" that would require more analysis than what is available on the record, and as such, recommended that DTE Electric's "obligation to consider the cost to ratepayers" be emphasized. PFD, pp. 853-854.

In exceptions, the DAAOs outline several arguments presented in their initial brief. *See*, DAAOs' exceptions, pp. 6-16. The outlined topics include community solar and outage credits that are discussed below.

The Commission appreciates the emphasis on the affordability of utility services for LMI customers raised in the testimony provided by the DAAOs. However, the Commission agrees with the ALJ that the DAAOs' request requires more information than provided on the record in this case and adopts the ALJ's findings on this issue. *See*, PFD, pp. 853-854.

I. Information Technology Audit

In their initial brief, the DAAOs argued that the Commission should require an audit of DTE Electric's IT expenditures. The DAAOs argued that DTE Electric's IT program, which is funded through capital expenditures, is unjust and unreasonable because it prioritizes capital gains over customer burdens with the company's increased self-service options which serve to "secure increased profit through the investment of capital instead of achievement of outcomes." DAAOs' initial brief, pp. 2, 9-10, 20 (citing 6 Tr 4018-4019; Exhibit A-24, Schedule N6). The DAAOs cite MCL 460.6a to argue that DTE Electric must provide evidence that the IT capital investment is reasonable and prudent, but because the company failed to provide "meaningful evidence as to the demand and goals of the program[,]" the Commission should require an audit. DAAOs' initial brief, p. 20. In short, because DTE Electric could not justify its IT system as providing adequate benefits to its customers, the DAAOs argue the use of ratepayer resources was not reasonable and prudent. *Id*., pp. 19-20. Because of this, the DAAOs urge an inquiry into "treating IT investments as capital and for applying performance-based measures to the Company's rate of profit on approved IT capital investments." *Id*., p. 20 (citing 6 Tr 4018-4019).

In the PFD, the ALJ agreed that DTE Electric's presentation was not straightforward in how it estimates its costs, but notes that these challenges would make IT expenditures difficult to audit. As such, the ALJ recommends the Commission "consider some remedial action to get a better handle on the costs and benefits" of DTE Electric's projects such as the IT capital expenditure project. PFD, p. 854.

In its exceptions, DTE Electric objects to the ALJ's findings because "the PFD does not articulate any recommendations or support for a recommendation, which is contrary to requirements for a PFD." DTE Electric's exceptions, pp. 264-265 (citing MCL 24.281(2)). Furthermore, DTE Electric states that it has made "significant efforts" in providing exhibits with additional project details such that increased filing requirements are unnecessary. DTE Electric's exceptions, p. 265.

In their replies to exceptions, the DAAOs argue that DTE Electric's IT projects will not result in the "desired reductions in call volume" and that DTE Electric cannot rely upon projections for which it has failed to provide sufficient evidence as the evidence provided was in large part due to COVID-19 and DTE Electric's customers' familiarity with "existing digital tools." DAAOs' replies to exceptions, pp. 11-12.

The Commission agrees with the ALJ's concerns over the costs and benefits of DTE Electric's IT expenditures. However, the Commission finds that ordering an additional IT-specific audit while the broader distribution audit in Case No. U-21305 is underway would likely only add confusion. As such, the Commission will look to the findings of the current distribution audit to better understand the company's existing systems before requiring additional investigation on these issues.

J. Outage Credit for Vulnerable Ratepayers

The DAAOs requested that the Commission order DTE Electric to adopt at least a $2 per hour outage credit to address its service reliability issues. The DAAOs posited that the outage credit would be "more accurate compensation for individuals suffering from more frequent and longer outages" and support system-wide equity by distributing resources "to areas suffering from the worst reliability." DAAOs' initial brief, p. 31; 6 Tr 4039. Furthermore, the DAAOs argued that as an incentive to improve service reliability, DTE Electric should not be able to recover the outage credit, but instead, "the compensatory outage credits should be taken from the Company's profits" and that doing such would not cause a significant impact on the company's profits. DAAOs' initial brief, p. 31 (referencing November 18 order, pp. 363-367). The DAAOs concluded by arguing that a minimum $2 per hour outage credit "would be a just and reasonable solution to discrepancies in outage frequency." DAAOs' initial brief, p. 32; 6 Tr 4037.

The ALJ acknowledged that the Commission recently adopted revised outage credits while "currently considering performance-based measures to encourage DTE [Electric] to improve its system reliability." PFD, pp. 854-855. As the Commission has already taken action to address outage credits, the ALJ found that it was "premature" to consider the DAAOs' request for additional outage credits. *Id*., p. 855.

In their exceptions, the DAAOs acknowledge that the Commission recently revised its outage credit policies but contend that such "continue to undercompensate residents for the impact of the outages they experience." DAAOs' exceptions, p. 12; 6 Tr 4034-4035. Furthermore, the DAAOs argue that the outage credit should be adjusted to account for the "particularly heavy impacts that outages have on vulnerable households who are least able to mitigate and recovery from the impact of outages." *Id*., p. 13 (citing 6 Tr 4027, 4034-4035). Thus, the DAAOs believe that the Commission should apply an automatic, hourly outage credit to incentivize DTE Electric. DAAOs' exceptions, pp. 13-14; 6 Tr 4034-4038. In its replies to exceptions, DTE Electric argues that bill credits are provided by administrative rules and that the DAAOs' issue is with a prior order and as such, this matter is not the appropriate venue to disagree with a prior order. DTE Electric's replies to exceptions, p. 59.

The Commission agrees with the ALJ that it has already addressed outage credits through updated Service Quality rules and declines to adopt the DAAOs' request for additional credits.

K. Community Solar

The DAAOs requested that the Commission order DTE Electric to propose a detailed community solar proposal in the instant matter. The DAAOs laud community solar because it offers "opportunities for wealth creation and clean energy access for communities that would not otherwise have access." DAAOs' initial brief, p. 42. The DAAOs argued that community solar empowers communities and LMI households while moving away from the use of fossil fuels. *Id*. (citing 6 Tr 4050). The DAAOs chastise DTE Electric for failing to provide any community solar programs despite being ordered to file a straw proposal for such in Case No. U-20836. *See*, DAAOs' initial brief, p. 43.

In the PFD, the ALJ noted that while the Commission could direct the company to address community solar "in any forum it deems appropriate," given the challenges of the addressing the revenue requirements, COS considerations, and rate design issues connected with a community solar program, the ALJ does not make a recommendation to address community solar in rate cases "until such time as a formal program is created with costs that need to be addressed in a rate case." PFD, p. 855.

In their exceptions, the DAAOs argue that DTE Electric has failed to propose a "true community solar plan" as ordered in Case No. U-20836. DAAOs' exceptions, p. 12 (citing 6 Tr 4052-4053). Because DTE Electric is seen by the DAAOs as refusing to cooperate in good faith, the DAAOs feel that this instant matter is the correct forum to properly incentivize the company to act in accordance with Case No. U-20836. DAAOs' exceptions, p. 12.

DTE Electric replies to the DAAOs' exceptions, stating that the DAAOs' argument lacks merit because the Commission ordered a straw proposal for community solar in Case No. U-20836 and the company filed such as requested. DTE Electric's replies to exceptions, p. 59.

The Commission agrees with the ALJ that this instant case is not the appropriate forum to address community solar. As the Commission stated in the November 18 order, "the time constraints and voluminous issues of a general rate case do not allow for the full development of a community solar pilot program." November 18 order, p. 456. Further, the Commission notes that its directive in the November 18 order was for DTE Electric to file its straw proposal of a Rider 17 community solar project in its voluntary green pricing (VGP) docket, not in its next rate case, for the reasons articulated above. That VGP proceeding remains pending in Case No. U-21172 and as such, the Commission denies the DAAOs' request to direct DTE Electric to propose a formal community solar program in the current proceeding.

L. Behind-the-Meter Storage

The DAAOs suggested that the Commission reject DTE Electric's requested gas generator pilot which would "increase reliance on gas as a household fuel." DAAOs' initial brief, p. 45 (citing 6 Tr 4054). Instead, the DAAOs proffered that DTE Electric supply batteries to LMI households. DAAOs' initial brief, p. 46 (citing 6 Tr 4055). The DAAOs state that this "behind-the-meter storage" would provide "stacked benefits of assisting with peak demand management while also contributing to affordability and equitable access to technology", especially to vulnerable ratepayers. DAAOs' initial brief, p. 46. The DAAOs suggested that 20 kWh energy storage devices be provided to LMI customers who have health and safety concerns such as customers who need electric services "to power life-critical medical devices." *Id*., p. 47 (citing Exhibit DAO-44, p. 47; Exhibit DAO-45, pp. 92, 94).

The ALJ acknowledged that DTE Electric is working on a pilot program and as such, it was premature to adopt a battery storage system. PFD, p. 855.

In its exceptions, the DAAOs are unsatisfied that the ALJ recommended approval of DTE Electric's residential generator pilot. *See*, DAAOs' exceptions, pp. 16-17. The DAAOs reference their reply brief when discussing how their alternative of a batteries-based pilot is preferable to a residential generator pilot because it "could achieve the very same goals . . . while acknowledging the inevitable energy transition and statewide goals that prioritize this transition." *Id*., p. 17 (citing DAAOs' reply brief, pp. 25, 47). Furthermore, the DAAOs reiterate that DTE Electric's gas generator program would be contrary to the Michigan Health Climate Plan whose goal is to decarbonize Michigan by 2050. DAAOs' exceptions, p. 17 (citing DAAOs' initial brief, p. 45).

In its exceptions, DTE Electric highlights that the Commission disallowed funding for a battery energy storage pilot in Case No. U-20836, with direction to resubmit such which the company did in this instant matter. DTE Electric's exceptions, pp. 207-208. Furthermore, DTE Electric has acted upon its proposal in obtaining Hitachi as an equipment provider and pilot integrator, along with having ordered other necessary major equipment. *Id*., p. 208. In fact, DTE Electric anticipates that the first customer site installation will be in the third quarter of 2024, with both batteries being operational by the end of 2024 and as such, the company should be able to recovery its costs. *Id*. (citing 5 Tr 1318-1320, 1331).

While the Commission appreciates the DAAOs' efforts to assist DTE Electric's LMI customers, it agrees with the ALJ that because DTE Electric is already working on a pilot program, the DAAOs' suggestion to adopt a battery storage pilot is premature, though the Commission invites DTE Electric to continue proposing battery storage units and utilizing the expedited pilot process to propose these.

M. Sale of Debt

The Staff suggested that DTE Electric "discontinue sales of uncollectible accounts to third parties for collection, as the benefits to other customers are much smaller than the hardships to those whose accounts are sold." Staff's initial brief, p. 151 (citing 7 Tr 4616-4617). The Staff testified that the sale of debt resulted in uncollectible debt being recovered twice. Staff's initial brief, p. 151 (citing 7 Tr 4616-4617). In its initial brief, the Staff explained that double recovery occurs when uncollectible amounts "are recovered once through rates, and again by the party to whom the accounts are sold." Staff's initial brief, p. 152; *see also*, 5 Tr 2107. The Staff argued that by selling uncollectible debt, DTE Electric's most economically vulnerable customers are subjected to "hardship-inducing collection tactics[,]" resulting in "potential double recovery[.]" Staff's initial brief, p. 152 (citing 7 Tr 4616-4617). To prevent double recovery, the Staff recommends that DTE Electric be encouraged to discontinue selling uncollectible accounts, while recommending that the company "file, for the previous 5-years, the number of accounts sold, the proceeds from the sales, and the amount of uncollectibles associated with the sold accounts[.]" Staff's initial brief, p. 153 (citing 7 Tr 4617).

DTE Electric provided testimony that the company uses external collection agencies to collect on uncollectible accounts. 5 Tr 1454. Furthermore, DTE Electric testified that uncollectible expense includes "The Company's forgiveness match to low-income customers" that are not considered write-offs but are deemed uncollectible expense to "reduce the probability that these customers will be disconnected" as such balances are written-off. 5 Tr 2100.

The ALJ found that the Staff's concerns and suggestions were reasonable. PFD, p. 857. As a result, the ALJ suggested that the Commission require DTE Electric to provide reports to the Staff regarding the sale of debt so that the Staff can seek appropriate rate remedies. *Id*.

In its exceptions, the Staff appreciates the ALJ's finding that its concerns and suggestions were reasonable but offers additional guidance. Staff's exceptions, p. 6. The Staff further suggests that a report be required "annually and that it contain 'for the previous 5-years, the number of accounts sold, the proceeds from the sales, and the amount of uncollectibles associated with the sold accounts.'" *Id*. (citing Staff's initial brief, p. 153).

In its exceptions, DTE Electric argues against the Staff's recommendation that it discontinue the sales of uncollectible amounts to third parties for debt collection. *See*, DTE Electric's exceptions, pp. 184-185. In fact, DTE Electric argues that it acts responsibly for its ratepayers when it sells debt because "the proceeds reduce historical net write-offs that are used to set the bad debt expense . . . which eliminates any risk of double recovery." *Id*., p. 185 (citing Staff's initial brief, pp. 151-153).

The Commission agrees with the ALJ's recommendation that DTE Electric provide reports regarding its sale of debt. *Id*. The goal of these reports will be to eliminate the company's double recovery, thus lowering costs for customers experiencing hardship. Staff's initial brief, p. 152. Therefore, DTE Electric shall provide an annual report to the Staff regarding the sale of debt containing, for the previous five years, the number of accounts sold, the proceeds from such sales, and the amount of uncollectibles associated with the sold accounts.

THEREFORE, IT IS ORDERED that:

A. Based on the findings in this order adopting a December 1, 2023 through November 30, 2024 test year, a jurisdictional rate base of $22,150,952,000, an authorized rate of return on common equity of 9.90%, and an authorized required rate of return of 5.56%, DTE Electric Company is authorized to implement rates that increase its annual electric revenues by

$368,115,000, on a jurisdictional basis, over the rates approved in the November 18, 2022 order in Case No. U-20836.

B. DTE Electric Company is authorized to implement rates consistent with the revenue deficiency approved by this order on a service rendered basis for service provided on and after December 15, 2023, as reflected in Attachment A (a summary of revenue by rate class), Attachment B (tariff sheets), and Attachment C (updated calculation of the capacity charge) to this order. Within 30 days of December 1, 2023, the date of this order, DTE Electric Company shall file tariff sheets substantially similar to Attachment B. DTE Electric Company shall implement a state reliability mechanism capacity charge of $29,987 per megawatt-year, or $82.16 per megawatt-day, for customers taking capacity service, as shown on Attachment C to this order. Attachment B contains the associated capacity rates.

C. The November 8, 2023 motion to strike filed by the Michigan Environmental Council; Natural Resources Defense Council, Inc.; Sierra Club; and Citizens Utility Board of Michigan is dismissed as moot.

D. Consistent with this order, DTE Electric Company is authorized to utilize deferred accounting treatment for the projected bridge period and test year expenditures related to the Midwest Energy Resources Company. If the company seeks cost recovery of these expenditures in a future rate case, it shall include with its request an evaluation of the necessity of its proposed investments for the Midwest Energy Resources Company facilities and the associated value to ratepayers as well as an evaluation of retirement scenarios for this facility and whether these proposed investments are avoidable.

E. In its annual pole and pole top maintenance reporting, DTE Electric Company shall include the additional information approved in this order, including annual metrics on inspection and testing.

F. In future rate cases, DTE Electric Company shall include a forecast of the income impact from the company's special investment fund with Energy Insurance Services in projected operating income based on a five-year average, consistent with how gains and losses on DTE Gas Company's grantor trust fund are treated for ratemaking purposes.

G. As set forth in the order, DTE Electric Company shall conduct an impact study before retiring Rate Schedule D1.6 and transitioning customers to Rate Schedule D1.11.

H. In its next general rate case, DTE Electric Company shall provide detailed information on the current per-foot costs for line extensions along with updated contribution in aid of construction tariffs that include the updated costs.

I. As set forth in the order pertaining to Rider 14, the Commission Staff shall convene a stakeholder workgroup to develop tariff options for stand-alone storage and vehicle-to-grid resources no later than May 1, 2024.

J. As set forth in the order, DTE Electric Company shall update its demand response tariffs to include eligibility language regarding participation in another demand response program with an aggregator of retail customers and specifying which Midcontinent Independent System Operator, Inc. resource adequacy season applies.

K. The Commission Staff shall convene a demand response workgroup to address demand response issues, as set forth in this order.

L. For its next general rate case, DTE Electric Company shall develop and present optional time-of-use rates for its commercial secondary and primary customers.

M. As set forth in the order, DTE Electric Company shall update Section C5.1 of its rules and regulations to reflect the following: Upon customer request, the company will provide an additional service connection to serve electric vehicle service equipment.

N. For its next general rate case, DTE Electric Company shall conduct a separate cost of service study to allocate appropriate costs to fast charging and design and propose rates for this specific class of customer.

O. As set forth in the order, DTE Electric Company shall work with interested stakeholders to develop a streamlined streetlight outage report request process, a standardized report format, data protocols, and delivery method and shall update its E1 tariff to reflect the following: Any E1 streetlight customer may request to receive from the company a calendar-year report, to be delivered by the company on or before February 28 of the following year, providing, at a minimum, streetlight outage occurrence counts, average outage durations and counts of outages lasting longer than 14 days, covering all E1 streetlights served under all of the customer's accounts. Customers with more than 5,000 E1 streetlights may request to receive quarterly reports containing the same information, to be delivered by the company within two months of the end of each calendar quarter.

P. In the matter of the commercial and industrial battery storage pilot, DTE Electric Company shall meet with the Commission Staff to determine a minimum number of test events per year, as discussed in this order.

Q. In the matter of the residential generator pilot, DTE Electric Company shall meet with the Commission Staff to clarify how the pilot's success will be defined.

R. In the matter of the business charger rebate pilot, DTE Electric Company shall work with stakeholders to develop a points-based scoring rubric for pilot applicants, develop accurate capacity mapping to provide to third-party developers, and coordinate the pilot with the National Electric Vehicle Infrastructure program, as discussed in this order.

S. With the transition of DTE Electric Company's Home Charger Installation Program from a pilot to a permanent value-added program in 2024, the company shall evaluate whether the program meets the Commission's Code of Conduct, MCL 460.10ee and Mich Admin Code, R 460.10101 *et seq*.

T. In the matter of the business charger installation pilot, DTE Electric Company shall develop accurate capacity mapping to provide to third-party developers, as discussed in this order. DTE Electric Company shall also evaluate the feasibility of a value-added program and service transition for its business charger installation program and whether the program meets the Commission's Code of Conduct, MCL 460.10ee and Mich Admin Code, R 460.10101 *et seq*.

U. In the matter of the charging hub pilot, DTE Electric Company shall continue to pursue state and federal funding for the project as a condition of future charging hub pilot filings, develop accurate capacity mapping to provide to third-parties, and facilitate the development of third-party owned charging hubs that will support fleet charging, as discussed in this order.

V. In the matter of the benefit/cost analysis of electric vehicle pilots and programs, DTE Electric Company shall, to the extent possible, collaborate with stakeholders to develop a more comprehensive benefit/cost analysis for future filings, as discussed in this order.

W. In the matter of the transportation electrification plan, DTE Electric Company, to the extent possible, shall collaborate with stakeholders to fully develop the company's transportation electrification plan, as discussed in this order.

X. DTE Electric Company shall file in its next general rate case a separate exhibit for information technology operations and maintenance as outlined in this order.

Y. To ensure continued recovery of the corporate membership fees, DTE Electric Company shall provide in its next general rate case a detailed description of how these organizations specifically impact/benefit customers, as outlined by the Detroit Area Advocacy Organizations, and which details DTE Electric Company's roles and responsibilities in advancing ratepayer interests through its participation in each organization.

Z. As described in this order, DTE Electric Company shall submit an investment recovery mechanism plan no later than four months prior to the start of each investment recovery mechanism plan year; submit a copy of this plan to all intervening parties in the company's most recently filed general rate case, including the Commission Staff; and shall schedule and provide a forum, no later than two months before the start of the investment recovery mechanism plan year, for the Commission Staff and intervening parties to raise any questions or concerns that they have before execution of the plan begins. Regarding the time constraints for the first investment recovery mechanism plan year recognized in this order, the company shall use best efforts to provide its investment recovery mechanism plan as soon as practicable that will in turn, allow the company to schedule the forum as soon as practicable.

AA. In its next general rate case, DTE Electric Company shall demonstrate its efforts to improve communication and coordination with local governments regarding construction activities, as described in this order.

BB. DTE Electric Company shall implement the recommendations set forth by the Commission Staff pertaining to distribution grid equity and described in Part IV (Rate Base–Distribution Capital) and Part XI (Future Rate Cases, Further Study). DTE Electric Company shall also work with the Commission Staff and stakeholders to develop a detailed regression analysis of customer demographics and reliability for vulnerable communities to be used in the company's distribution plan case. DTE Electric Company shall also provide the data supporting the regression analysis to enable interested parties to perform their own analyses.

CC. DTE Electric Company shall provide a benefit/cost analysis of undergrounding residential service drops in its next general rate case, as discussed in this order.

DD. DTE Electric Company shall work with the Commission Staff to develop a proposal for a residential service drop tree trimming pilot and accompanying study of residential service drop tree trimming to be included in the company's next general electric rate case, shall provide information in its next general electric rate case as to how the company audits its tree trimming work in the field by contractors and company personnel, and shall provide an analysis of the feasibility of more aggressive tree trimming in zones 2 and 3 in its next general electric rate case.

EE. Pertaining to the MISS DIG program, DTE Electric Company shall commence tracking and keeping records of expenditures incurred from damages caused by the company to its own facilities; work with the Commission Staff to share damage reporting data including the billing amounts for damages when a third-party causes damages and expenditures for damages, and for sharing billing amounts when the company causes damages; include a breakdown of damage prevention expenditures in future general rate cases under Federal Energy Regulatory Commission account 580 including, but not limited to, internal locating and contract locating in future general rate cases; and improve the company's damage reporting quality by continuing to meet with the Commission Staff regarding damage report data and committing the time and resources to submitting data into the format that aligns with the Commission's processes.

FF. DTE Electric Company shall provide an annual report to the Commission Staff regarding the sale of debt containing, for the previous five years, the number of accounts sold, the proceeds from such sales, and the amount of uncollectibles associated with the sold accounts.

GG. As mentioned throughout this order in the context of distribution grid improvements, infrastructure investments, and other areas, DTE Electric Company shall continue to evaluate and pursue applicable federal funding opportunities available under the federal Infrastructure Investment and Jobs Act of 2021, PL 117–58, 135 Stat 429, and shall continue to detail its efforts in its biannual reports to be filed in Case No. U-21227.

The Commission reserves jurisdiction and may issue further orders as necessary.

Any party desiring to appeal this order must do so in the appropriate court within 30 days after issuance and notice of this order, pursuant to MCL 462.26. To comply with the Michigan Rules of Court's requirement to notify the Commission of an appeal, appellants shall send required notices to both the Commission's Executive Secretary and to the Commission's Legal Counsel. Electronic notifications should be sent to the Executive Secretary at mpscedockets@michigan.gov and to the Michigan Department of Attorney General - Public Service Division at pungp1@michigan.gov. In lieu of electronic submissions, paper copies of such notifications may be sent to the Executive Secretary and the Attorney General - Public Service Division at 7109 W. Saginaw Hwy., Lansing, MI 48917.

MICHIGAN PUBLIC SERVICE COMMISSION

Daniel C. Scripps, Chair

Katherine L. Peretick, Commissioner

Alessandra R. Carreon, Commissioner

By its action of December 1, 2023.

Lisa Felice

Lisa Felice, Executive Secretary

DTE Electric Company
Case No. U-21297
Present and Proposed Revenue
by Rate Schedule
FOR ORDER

Total Revenues

Line No.	(a) Residential	(b) Total Present Revenue ($000's)	(c) Total Proposed Revenue ($000's)	(d) Total Net Increase/ (Decrease) ($000's)	(e) Total Net Increase/ (Decrease) (%)
1	D1/D1.6 Residential	$41,087	$45,148	$4,061	9.9%
2	D1.1 Int. Air	$53,064	$57,516	$4,453	8.4%
3	D1.2 TOD	$27,462	$30,155	$2,694	9.8%
4	D1.7 TOD	$14,290	$15,692	$1,402	9.8%
5	D1.8 Dynamic	$33,749	$36,367	$2,618	7.8%
6	D1.9 Elec. Vehicle	$1,588	$1,721	$134	8.4%
7	D1.11 Time of Use	$2,506,139	$2,685,582	$179,443	7.2%
8	D2 Elec. Space Heat	$42,213	$46,291	$4,078	9.7%
9	D5 Res. Water Ht.	$13,200	$14,457	$1,257	9.5%
10	Total Residential	$2,732,791	$2,932,931	$200,140	7.3%
11					
12	**Secondary**				
13	D1.1 Int. Air	$636	$696	$60	9.5%
14	D1.7 TOD	$1,202	$1,421	$219	18.3%
15	D1.8 Dynamic	$166	$182	$16	9.6%
16	D 1.9 Elec Vehicle	$25	$27	$2	7.5%
17	D3 Gen. Serv.	$955,074	$1,043,428	$88,353	9.3%
18	D3.1 Unmetered	$9,424	$10,435	$1,010	10.7%
19	D3.2 Sec. Educ.	$50,387	$58,207	$7,820	15.5%
20	D3.3 Interruptible	$6,003	$6,660	$656	10.9%
21	D3.5 Charging Serv.	$174	$185	$11	6.4%
22	D4 Lg. Gen. Serv.	$232,766	$256,302	$23,536	10.1%
23	D5 Com. Wat. Ht.	$934	$1,039	$105	11.3%
24	E1.1 Eng. St. Ltg.	$1,023	$1,136	$113	11.0%
25	R7 Greenhs. Ltg.	$414	$464	$50	12.1%
26	R8 Space Cond.	$8,350	$9,170	$820	9.8%
27	Total Secondary	$1,266,579	$1,389,351	$122,772	9.7%
28					
29	**Primary**				
30	D11 Prim. Supply	$929,511	$967,511	$38,000	4.1%
31	D12 Exp. Lrg Cust	$0	$0	$0	-
32	D6.2 Pri. Educ.	$46,946	$49,960	$3,014	6.4%
33	D8 Int. Primary	$41,902	$43,819	$1,917	4.6%
34	D10 El.Schools	$2,764	$2,891	$127	4.6%
35	R1.1 Alt. Mtl. Melt.	$5,398	$5,530	$132	2.4%
36	R1.2 El. Pr. Htg.	$32,555	$34,593	$2,037	6.3%
37	R3 Standby	$11,035	$11,226	$191	1.7%
38	R10 Int. Supply	$74,497	$66,049	($8,449)	(11.3%)
39	Total Primary	$1,144,610	$1,181,579	$36,969	3.2%
40					
41	D13 XL	$8,655	$10,916	$2,262	26.1%
42					
43	**Other**				
44	D9 Protective Ltg.	$10,126	$11,692	$1,566	15.5%
45	E1 Muni Street Ltg	$59,706	$63,798	$4,092	6.9%
46	E2 Traffic Lights	$5,096	$5,411	$315	6.2%
47	Total Other	$74,929	$80,901	$5,973	8.0%
48					
49	**Total All Classes**	$5,227,563	$5,595,679	$368,116	7.0%

Michigan Public Service Commission
DTE Electric Company
Present and Proposed Revenue
by Rate Schedule
FOR ORDER

Power Supply Revenues

Line No.	(a) Residential	(b) Power Supply Sales (MWH)	(c) Present Revenue ($000's)	(d) Increase/ (Decrease) ($000's)	(e) Proposed Revenue ($000's)	(f) Capacity Revenue ($000's)	(g) Non-Capacity Revenue ($000's)
1	D1/D1.6 Residential	313,964	$28,544	$110	$28,655	$4,139	$24,516
2	D1.1 Int. Air	346,320	$24,537	$95	$24,632	$3,558	$21,074
3	D1.2 TOD	180,720	$12,678	$420	$13,098	$1,415	$11,683
4	D1.7 TOD	109,632	$5,849	$23	$5,872	$848	$5,024
5	D1.8 Dynamic	203,261	$15,713	$61	$15,773	$2,278	$13,495
6	D1.9 Elec. Vehicle	10,418	$689	$3	$692	$100	$592
7	D1.11 Time of Use	13,875,850	$1,252,833	$4,837	$1,257,669	$181,643	$1,076,026
8	D2 Elec. Space Heat	273,266	$18,394	$640	$19,033	$1,887	$17,146
9	D5 Res. Water Ht.	98,430	$4,735	$18	$4,754	$687	$4,067
10	Total Residential	15,411,861	$1,363,972	$6,205	$1,370,177	$196,555	$1,173,623
11							
12	**Secondary**						
13	D1.1 Int. Air	5,295	$359	$9	$368	$46	$322
14	D1.7 TOD	13,978	$633	$15	$648	$81	$567
15	D1.8 Dynamic	1,392	$103	$3	$106	$13	$93
16	D1.9 Elec. Vehicle	143	$13	$0	$13	$2	$11
17	D3 Gen. Serv.	7,363,235	$582,653	$14,251	$596,903	$74,376	$522,527
18	D3.1 Unmetered	85,100	$5,654	$138	$5,793	$722	$5,071
19	D3.2 Sec. Educ.	320,449	$23,297	$1,942	$25,238	$3,010	$22,228
20	D3.3 Interruptible	51,166	$3,383	$83	$3,465	$432	$3,034
21	D3.5 Charging Serv.	950	$75	$2	$77	$10	$67
22	D4 Lg. Gen. Serv.	1,818,064	$133,254	$3,843	$137,097	$15,610	$121,488
23	D5 Com. Wat. Ht.	9,731	$453	$11	$464	$58	$407
24	E1.1 Eng. St. Ltg.	10,256	$559	$14	$573	$71	$502
25	R7 Greenhs. Ltg.	4,632	$209	$5	$214	$27	$188
26	R8 Space Cond.	71,038	$4,889	$120	$5,009	$624	$4,385
27	Total Secondary	9,755,426	$755,535	$20,434	$775,969	$95,081	$680,889
28							
29	**Primary**						
30	D11 Prim. Supply	11,557,108	$735,290	$22,834	$758,124	$75,698	$682,427
31	D12 Exp. Lrg Cust	0	$0	$0	$0	$0	$0.00
32	D6.2 Pri. Educ.	373,056	$27,591	$978	$28,569	$3,491	$25,078
33	D8 Int. Primary	560,949	$31,401	$972	$32,373	$2,189	$30,184
34	D10 El.Schools	19,971	$1,598	$50	$1,648	$164	$1,484
35	R1.1 Alt. Mtl. Melt.	79,229	$4,381	$37	$4,419	$259	$4,160
36	R1.2 El. Pr. Htg.	402,347	$21,706	$595	$22,301	$1,174	$21,127
37	R3 Standby	131,065	$8,084	$209	$8,293	$612	$7,680
38	R10 Int. Supply	1,155,936	$68,610	($8,244)	$60,366	$0	$60,366
39	Total Primary	14,279,660	$898,662	$17,431	$916,093	$83,587	$832,506
40							
41	D13 XL	191,662	$7,904	$2,154	$10,058	$2,902	$7,156
42							
43	**Other**						
44	D9 Protective Ltg.	33,143	$1,452	$25	$1,477	$0	$1,477
45	E1 Muni Street Ltg	131,007	$5,738	$100	$5,838	$0	$5,838
46	E2 Traffic Lights	59,440	$3,780	$13	$3,794	$331	$3,463
47	Total Other	223,591	$10,970	$138	$11,108	$331	$10,777
48							
49	**Total All Classes**	39,862,200	$3,037,043	$46,363	$3,083,406	$378,455	$2,704,951

Michigan Public Service Commission
DTE Electric Company
Present and Proposed Revenue
by Rate Schedule
FOR ORDER

Case No.: U-21297
ATTACHMENT A

Distribution Revenues

Line No.	(a) Residential	(b) Distribution Sales (MWH)	(c) Present Revenue ($000's)	(d) Increase/ (Decrease) ($000's)	(e) Proposed Revenue ($000's)
1	D1/D1.6 Residential	313,964	$12,543	$3,951	$16,494
2	D1.1 Int. Air	346,320	$28,527	$4,358	$32,885
3	D1.2 TOD	180,720	$14,783	$2,274	$17,057
4	D1.7 TOD	109,632	$8,441	$1,380	$9,820
5	D1.8 Dynamic	203,261	$18,036	$2,558	$20,594
6	D1.9 Elec. Vehicle	10,418	$899	$131	$1,030
7	D1.11 Time of Use	13,875,850	$1,253,306	$174,606	$1,427,913
8	D2 Elec. Space Heat	273,266	$23,819	$3,439	$27,258
9	D5 Res. Water Ht.	98,430	$8,464	$1,239	$9,703
10	Total Residential	15,411,861	$1,368,818	$193,935	$1,562,753
11					
12	**Secondary**				
13	D1.1 Int. Air	5,308	$277	$51	$328
14	D1.7 TOD	14,164	$569	$204	$773
15	D1.8 Dynamic	1,392	$63	$13	$77
16	D1.9 Elec Vehicle	143	$12	$2	$14
17	D3 Gen. Serv.	7,652,457	$372,422	$74,103	$446,524
18	D3.1 Unmetered	85,100	$3,770	$872	$4,642
19	D3.2 Sec. Educ.	607,018	$27,091	$5,878	$32,969
20	D3.3 Interruptible	59,212	$2,621	$573	$3,194
21	D3.5 Charging Serv.	950	$99	$9	$108
22	D4 Lg. Gen. Serv.	2,060,788	$99,511	$19,693	$119,205
23	D5 Com. Wat. Ht.	9,736	$480	$94	$575
24	E1.1 Eng. St. Ltg.	10,256	$464	$99	$563
25	R7 Greenhs. Ltg.	4,632	$205	$45	$249
26	R8 Space Cond.	72,296	$3,461	$700	$4,161
27	Total Secondary	10,583,451	$511,044	$102,338	$613,382
28					
29	**Primary**				
30	D11 Prim. Supply	14,620,807	$194,221	$15,166	$209,387
31	D12 Exp. Lrg Cust	0	$0	$0	$0
32	D6.2 Pri. Educ.	748,365	$19,355	$2,036	$21,391
33	D8 Int. Primary	703,126	$10,502	$944	$11,446
34	D10 El.Schools	33,756	$1,166	$78	$1,243
35	R1.1 Alt. Mtl. Melt.	79,229	$1,017	$94	$1,111
36	R1.2 El. Pr. Htg.	427,125	$10,850	$1,442	$12,292
37	R3 Standby	123,406	$2,952	($18)	$2,933
38	R10 Int. Supply	1,155,936	$5,887	($205)	$5,682
39	Total Primary	17,891,749	$245,948.656	$19,538	$265,486
40					
41	D13 XL	191,662	$750	$108	$858
42					
43	**Other**				
44	D9 Protective Ltg.	33,143	$8,674	$1,541	$10,215
45	E1 Muni Street Ltg	131,007	$53,968	3,992	$57,960
46	E2 Traffic Lights	59,440	$1,316	$302	$1,618
47	Total Other	223,591	$63,958	$5,835	$69,793
48					
49	**Total All Classes**	44,302,315	$2,190,520	$321,753	$2,512,273

(Continued from Sheet No. C-21.01)

C4 APPLICATION OF RATES (Contd.)

C4.13 Extreme Weather Condition Policy

In the interest of our customers' safety, DTE Energy will adhere to the following policy as it relates to extreme weather conditions and disconnections of Electric and Natural Gas service. DTE Energy will not perform any manual (Non-AMI) or remote disconnections (AMI) when the temperatures are considered extreme. Extreme is defined as follows:

- Extreme Heat – Temperature forecasts 90 degrees and above for 2 consecutive days or more
- Extreme Cold – Temperature forecasts 15 degrees and below and/or wind chills below zero for 2 consecutive days or more

Our internal staff will review and monitor the 10-day predicted forecast temperatures Monday thru Thursday each week using The Weather Channel website- https://weather.com/. The following Cities listed below will be used as Regional Map weather check points.

- Detroit – SE Michigan (Detroit, Western Wayne, Oakland County)
- Lapeer – North & South Thumb
- Mecosta – Western Michigan
- Traverse City – Northern Michigan West
- Alpena – Northern Michigan East
- Iron Mountain – Upper Peninsula West
- Sault St. Marie – Upper Peninsula East

Depending on the weather assessment for each of the Regional Map areas, disconnections of service may be suspended or cancelled on a day by day basis for the impacted areas.

C5 CUSTOMER RESPONSIBILITY

C5.1 Service Connections

All wiring upon the customer's premises shall be brought by the customer to any suitable point of service specified by the Company. If the customer wishes a service point other than one specified by the Company, the customer shall pay for any mutually agreed upon extension of the service by a contribution in aid of construction. Only one service connection is installed to a building or group of buildings, including adjacent service areas under a single ownership except where separate service is required to prevent disturbing use of service or where, in the judgment of the Company, additional services are necessary or desirable for operatingreasons or for safety requirements. ***Upon customer request, the Company will provide an additional service connection to serve electric vehicle service equipment.*** Detailed specifications for service connections will be furnished upon request at any customer business office.

(Continued on Sheet No. C-22.00)

M.P.S.C. No. 1 - Electric ____________ Revised Sheet No. C-62.00
DTE Electric Company Cancels _____________ Revised Sheet No. C-62.00
(Final Order Case No. U-21297)

(Continued from Sheet No. C-61.00)

C8 SURCHARGES AND CREDITS APPLICABLE TO POWER SUPPLY SERVICE

C8.1 Power Supply Cost Recovery (PSCR) Clause

A This Power Supply Cost Recovery Clause permits the monthly adjustment of rates for power supply to allow recovery of the booked costs of fuel and purchased and net interchanged power transactions incurred under reasonable and prudent policies and practices in accordance with 1982 PA 304. All rates for electric service, unless otherwise provided in the applicable rate schedule, shall include a Power Supply Cost Recovery factor.

B The Power Supply Cost Recovery factor is that element of the rates to be charged for electric service to reflect power supply costs incurred by the company and made pursuant to the Power Supply Cost Recovery Clause.

C Effective ___________***, 2023*** the Power Supply Cost Recovery Factor shall consist of an increase or decrease of ***0.010746*** mills per kWh for each full .01 mill increase or decrease in the projected average booked cost of fuel burned for electric generation and purchased and net interchange power incurred above or below a base of 31.26 mills per kWh. Average booked cost of fuel burned and purchased and net interchange power shall be equal to the booked costs in that period divided by that period's net system kWh requirements. Net system kWh requirements shall be the sum of the net kWh generation and net kWh purchased and interchange power.

The following factor(s) were applied to bills rendered during the billing months as indicated below for the calendar years 2022 and 2023.

	2022		2023	
Billing Month	Maximum Authorized Factor ¢/kWh	Actual Factor Billed ¢/kWh	Maximum Authorized Factor ¢/kWh	Actual Factor Billed ¢/kWh
January	0.665	0.665	1.917	0.665
February	0.665	0.665		
March	0.665	0.665		
April	0.665	0.665		
May	0.665	0.665		
June	0.665	0.665		
July	0.665	0.665		
August	0.665	0.665		
September	0.665	0.665		
October	0.665	0.665		
November	0.665	0.665		
December	0.665	0.665		

The Company will file a revised Sheet No. C-62.00 monthly, or as necessary, to reflect the factor to be billed the following month.

(Continued on Sheet No. C-63.00)

Issued ____________, 2023
M. Bruzzano
Senior Vice President
Corporate Strategy & Regulatory Affairs

Detroit, Michigan

Effective for service rendered on
and after ______________, 2023

Issued under authority of the
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dated _______________, 2023
in Case No. U-21297

M.P.S.C. No. 1 - Electric ______________ Revised Sheet No. C-65.00
DTE Electric Company Cancels __________ Revised Sheet No. C-65.00
(Final Order Case No. U-21297)

(Continued from Sheet No. C-64.00)

C8 SURCHARGES AND CREDITS APPLICABLE TO POWER SUPPLY SERVICE (Contd.)

C8.5 SURCHARGES AND CREDITS APPLICABLE TO POWER SUPPLY SERVICE: Summary of surcharges and credits including PSCR, pursuant to sub-rules C8.1, C8.4 of this rule. (Cents per kilowatthour or percent of base bill unless otherwise noted).

	PSCR (¢/kWh)	Securitization Charge (¢/kWh)	Total Power Supply Surcharges (excludes REPS) (¢/kWh)
Residential			
D1 Non Transmitting Meter	0.665	0.0210	0.686
D1.1 Int. Space Conditioning	0.665	0.0166	0.6816
D1.2 Enhanced TOU	0.665	0.0141	0.6791
D1.6 Special Low Income Pilot	0.665	0.0210	0.686
D1.7 Geothermal Time-of-Day	0.665	0.0122	0.6772
D1.8 Dynamic Peak Pricing	0.665	0.0180	0.683
D1.9 Electric Vehicle	0.665	0.0164	0.6814
D1.11 Standard TOU	0.665	0.0210	0.686
D1.13 Overnight Savers	***0.665***	***0.0210***	***0.686***
D2 Space Heating	0.665	0.0133	0.6783
D5 Water Heating	0.665	0.0112	0.6762
D9 Outdoor Lighting	0.665	0.0032	0.6682
Commercial			
D1.1 Int. Space Conditioning	0.665	0.0145	0.6795
D1.7 Geothermal Time-of-Day	0.665	0.0096	0.6746
D1.8 Dynamic Peak Pricing	0.665	0.0169	0.6819
D1.9 Electric Vehicle	0.665	0.0177	0.6827
D3 General Service	0.665	0.0168	0.6818
D3.1 Unmetered	0.665	0.0144	0.6794
D3.2 Educ. Inst.	0.665	0.0138	0.6788
D3.3 Interruptible	0.665	0.0140	0.679
D3.5 Charging	0.665	0.0168	0.6818
D4 Large General Service	0.665	0.0149	0.6799
D5 Water Heating	0.665	0.0099	0.6749
D9 Outdoor Lighting	0.665	0.0032	0.6682
R3 Standby (Secondary)	0.665	0.0114	0.6764
R7 Greenhouse Lighting	0.665	0.0096	0.6746
R8 Space Conditioning	0.665	0.0144	0.6794
Industrial			
D6.2 Educ. Inst.	0.665	0.0166	0.6816
D8 Interruptible Primary	0.665	0.0086	0.6736
D10 Schools	0.665	0.0149	0.6799
D11 Primary Supply	0.665	0.0118	0.6768
D12 Large Low Peak	0.665	0.0118	0.6768
D13 XL	NA	0.0036	0.0036
R1.1 Metal Melting	0.665	0.0076	0.6726
R1.2 Electric Process Heating	0.665	0.0075	0.6725
R3 Standby (Primary)	0.665	0.0114	0.6764
R10 Interruptible Supply	NA	0.0036	0.0036
Governmental			
E1 Streetlighting	0.665	0.0038	0.6688
E1.1 Energy Only	0.665	0.0116	0.6766
E2 Traffic Lights	0.665	0.0109	0.6759

(Continued on Sheet No. C-66.00)

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Corporate Strategy & Regulatory Affairs

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in Case No. U-21297

(Continued from Sheet No. C-69.01)

C9.7.11 INVESTMENT RECOVERY MECHANISM

On December ___, 2023, the Michigan Public Servie Commission approved the Investment Recovery Mechanism (IRM) in Case No. U-21297. The IRM recovers costs related to certain distribution system investments. A schedule of IRM surcharges covering three IRM years was approved by the Commission and is reflected below. The IRM surcharge is applied on the same basis as the underlying rate schedule. The surcharge schedule will be updated consistent with subsequent Commission Orders.

		13mos Ending December 31, 2024	Year Ending December 31, 2025
All residential, except as noted below	(¢/kWh)	0.0139	0.0941
Commercial			
All commerical, except as noted below	(¢/Kwh)	0.0088	0.0595
Rate Schedule D4	($/kW)	0.0362	0.2454
Industrial			
Primary, except as noted below	($/kW)	0.0107	0.0727
Subtransmission, except as noted below	($/kW)	0.0046	0.0312
Transmission, except as noted below	($/kW)	0.0000	0.0000
Rate Schedule D10	(¢/Kwh)	0.0034	0.0233
Rider 1.1 / 1.2 (Distribution Voltage)	(¢/Kwh)	0.0082	0.0555
Rider 1.1 / 1.2 (Primary Voltage)	(¢/Kwh)	0.0034	0.0229
Rider 1.1 / 1.2 (Subtransmission Voltage)	(¢/Kwh)	0.0015	0.0104
Rider 1.1 / 1.2 (Transmission Voltage)	(¢/Kwh)	0.0000	0.0000
D13 (Primary Voltage)	(¢/Kwh)	0.0020	0.0133
D13 (Subtransmission Voltage)	(¢/Kwh)	0.0008	0.0057
D13 (Transmission Voltage	(¢/Kwh)	0.0000	0.0000
Other			
D9 OPL (Residential)	(¢/Kwh)	0.0778	0.5352
D9 OPL (Commercial)	(¢/Kwh)	0.0434	0.2988
E1 St Light	(¢/Kwh)	0.0819	0.5140
E2 Signals	(¢/Kwh)	0.0040	0.0275

C9.7.12 HOLD FOR FUTURE USE

C9.7.13 HOLD FOR FUTURE USE

C9.7.14 HOLD FOR FUTURE USE

Continued on Sheet No. C-70.00)

M.P.S.C. No. 1 - Electric ________________ Revised Sheet No. C-70.00
DTE Electric Company Cancels ________________ Revised Sheet No. C-70.00
(Final Order Case No. U-21297)

(Continued from Sheet No. C-69.00)

C9 SURCHARGES AND CREDITS APPLICABLE TO DELIVERY SERVICE: (Contd.)

SURCHARGES AND CREDITS APPLICABLE TO DELIVERY SERVICE: (Contd.)

C9.8 Summary of Surcharges and Credits: Summary of surcharges and credits, pursuant to sub-rules C9.1, C9.2, C9.6, C9.7.9, and C.9.7.14. Cents per kilowatthour or percent of base bill, unless otherwise noted.

.

	NS ¢/kWh	EWRS ¢/kWh	Base Securitization ¢/kWh	IRM ¢/kWh	Total Delivery Surcharges ¢/kWh	LIEAF Factor $/Billing Meter
Residential						
D1 Non Transmitting Meter	0.0882	0.5423	0.1792	0.0139	0.8236	$0.90
D1.1 Int. Space Conditioning	0.0882	0.5423	0.1677	0.0139	0.8121	N/A
D1.2 Enhanced TOU	0.0882	0.5423	0.1640	0.0139	0.8084	$0.90
D1.6 Special Low Income Pilot	0.0882	0.5423	0.1792	0.0139	0.8236	$0.90
D1.7 Geothermal Time-of-Day	0.0882	0.5423	0.1553	0.0139	0.7997	N/A
D1.8 Dynamic Peak Pricing	0.0882	0.5423	0.1798	0.0139	0.8242	$0.90
D1.9 Electric Vehicle	0.0882	0.5423	0.1763	0.0139	0.8207	N/A
D1.11 Standard TOU	0.0882	0.5423	0.1792	0.0139	0.8236	$0.90
D1.13 Overnight Savers	0.0882	***0.5423***	***0.1792***	0.0139	0.8236	***$0.90***
D2 Space Heating	0.0882	0.5423	0.1736	0.0139	0.8180	$0.90
D5 Wtr Htg	0.0882	0.5423	0.1727	0.0139	0.8171	N/A
D9 Outdoor Lighting	0.0882	0.5423	0.1375	0.0139	0.7819	N/A
Commercial						
D1.1 Int. Space Conditioning	0.0882	See C9.6	0.1053	0.0088		$0.90
D1.7 Geothermal Time–of- day	0.0882	See C9.6	0.0798	0.0088		$0.90
D1.8 Dynamic Peak Pricing	0.0882	See C9.6	0.0956	0.0088		$0.90
D1.9 Electric Vehicle	0.0882	See C9.6	0.2417	0.0088		$0.90
D3 General Service	0.0882	See C9.6	0.1129	0.0088		$0.90
D3.1 Unmetered	0.0882	See C9.6	0.1006	0.0088		N/A
D3.2 Educ. Inst.	0.0882	See C9.6	0.0924	0.0088		$0.90
D3.3 Interruptible	0.0882	See C9.6	0.0939	0.0088		$0.90
D3.5 Charging	0.0882	See C9.6	0.1129	0.0088		$0.90
D4 Large General Service	0.0882	See C9.6	0.1010	See C9.7.11		$0.90
D5 Wtr Htg	0.0882	See C9.6	0.1045	0.0088		$0.90
D9 Outdoor Lighting	0.0882	See C9.6	0.1375	0.0088		N/A
R3 Standby Secondary	0.0882	See C9.6	0.0274	0.0088		$0.90
R7 Greenhouse Lighting	0.0882	See C9.6	0.0943	0.0088		$0.90
R8 Space Conditioning	0.0882	See C9.6	0.1055	0.0088		$0.90
Industrial						
D6.2 Educ. Inst.	0.0882	See C9.6	0.0145	See C9.7.11		$0.90
D8 Interruptible Primary	0.0882	See C9.6	0.0096	See C9.7.11		$0.90
D10 Schools	0.0882	See C9.6	0.0173	See C9.7.11		$0.90
D11 Primary Supply	0.0882	See C9.6	0.0074	See C9.7.11		$0.90
D12 Large Low Peak	0.0882	See C9.6	0.0074	See C9.7.11		$0.90
D13 XL	N/A	See C9.6	0.0036	See C9.7.11		$0.90
R1.1 Metal Melting	0.0882	See C9.6	0.0085	See C9.7.11		$0.90
R1.2 Electric Process Heating	0.0882	See C9.6	0.0141	See C9.7.11		$0.90
R3 Standby Primary	0.0882	See C9.6	0.0274	See C9.7.11		$0.90
R10 Interruptible Supply	0.0882	See C9.6	0.0036	See C9.7.11		$0.90

(Continued on Sheet No. C-71.00)

Issued ____________, 2023
M. Bruzzano
Senior Vice President
Corporate Strategy & Regulatory Affairs

Detroit, Michigan

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M.P.S.C. No. 1 - Electric _____________ Revised Sheet No. C-71.00
DTE Electric Company Cancels _____________ Revised Sheet No. C-71.00
(Final Order Case No. U-21297)

(Continued from Sheet No. C-70.00)

C9 SURCHARGES AND CREDITS APPLICABLE TO DELIVERY SERVICE: (Contd.)

C9.8 Summary of Surcharges and Credits (Contd.):

	NS ¢/kWh	EWRS ¢/kWh	*Base* Securitization ¢/kWh	*IRM* ¢/kWh	LIEAF Factor $/Billing Meter
Governmental					
E1 Streetlighting Option I	***0.0882***	See C9.6	0.1897	***0.0819***	N/A
E1 Streetlighting Option II & III	***0.0882***	See C9.6	0.1897	***0.0819***	N/A
E1.1 Energy Only	***0.0882***	See C9.6	0.1063	***0.0088***	$0.90
E2 Traffic Lights	***0.0882***	See C9.6	0.0112	***0.0040***	N/A
Electric Choice					
EC2 Residential	***0.0882***	See C9.6	Note 1	***0.0139***	$0.90
EC2 Commercial	***0.0882***	See C9.6	Note 1	***See C9.7.11***	$0.90
EC2 Primary	***0.0882***	See C9.6	Note 1	***See C9.7.11***	$0.90

NOTE 1: Electric choice tariffs will be billed the Base Securitization ***and IRM*** for corresponding full service tariff.

(Continued on Sheet No. C-72.00)

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Corporate Strategy & Regulatory Affairs

Detroit, Michigan

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Issued under authority of the
Michigan Public Service Commission
dated _______________, 2023
in Case No. U-21297

RATE SCHEDULE NO. D1 **RESIDENTIAL SERVICE RATE – NON-TRANSMITTING METER**

AVAILABILITY OF SERVICE: Available to customers desiring service for all residential purposes through one meter to a single or double occupancy dwelling unit including farm dwellings. A dwelling unit consists of a kitchen, bathroom, and heating facilities connected on a permanent basis. Service to appurtenant buildings may be taken on the same meter.

This rate is not available for common areas of separately metered apartments and condominium complexes, nor to a separate meter which serves a garage, boat well or other non-dwelling applications. After the implementation of Rate Schedule D1.11 (Residential Service Rate – Standard TOU), this rate is only available for residential customers with a non-transmitting meter.

HOURS OF SERVICE: 24 hours.

CURRENT, PHASE AND VOLTAGE: Alternating current, single-phase, nominally at 120/240 volts, three-wire. Where available, and the demand justifies, three-phase four-wire, Y connected service may be had at 208Y/120 volts nominally.

In certain city districts, alternating current is supplied from a Y connected secondary network from which 120/208 volts, three-wire service may be taken.

RATE PER DAY:

Full Service Customers:

Power Supply Charges:

Capacity Energy Charges: ***1.128¢*** per kWh for the first 17 kWh per day
1.626¢ per kWh for excess over 17 kWh per day

Non-Capacity Energy Charge***: 7.809¢*** per kWh for all kWh

Delivery Charges:

Service Charge: $8.50 per month
Distribution Charge: ***8.137¢*** per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8. Applies only to actual consumption and not to the minimum charge.

Retail Access Service Customers:

Power Supply Charges for Retail Access Customers taking Utility Capacity service for DTE:

Capacity Energy Charges: ***1.128¢*** per kWh for the first 17 kWh per day
1.626¢ per kWh for excess over 17 kWh

Delivery Charges:

Service Charge: $8.50 per month
Distribution Charge: ***8.137¢*** per kWh for all kWh

(Continued on Sheet No. D-2.00)

(Continued from Sheet No. D-1.00)

RATE SCHEDULE NO. D1 (Contd.) **RESIDENTIAL SERVICE RATE – NON-TRANSMITTING METER**

Surcharges and Credits: As approved by the Commission. See Section C9.8. Applies only to actual consumption and not to the minimum charge. Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Sections C8.5.

BILLING FREQUENCY: Based on a nominal 30-day month. See Section C4.5.

MINIMUM CHARGE: The Service Charge plus any applicable per meter per month surcharges.

CONTRACT TERM: Open order, terminable on three days' notice by either party. Where special services are required, the term will be as specified in the applicable contract rider.

LATE PAYMENT CHARGE: See Section C4.8.

INTERRUPTIBLE SPACE-CONDITIONING PROVISION: Rate D1.1 is available on an optional basis.

WATER HEATING SERVICE: Water heating service is available on an optional basis. See Schedule Designation No. D5.

INCOME ASSISTANCE SERVICE PROVISION (RIA): When service is supplied to a Principal Residence Customer, where the household receives a Home Heating Credit (HHC) in the State of Michigan, a credit shall be applied during all billing months. For an income assistance customer to qualify for this credit, the Company shall require annual evidence of the HHC energy draft or warrant. The customer may also qualify for this credit upon confirmation by an authorized State or Federal agency verifying that the customer's total household income does not exceed 150% of the poverty level as published by the United States department of health and human services or if the customer receives any of the following: i) Assistance from a state emergency relief program; ii) Food stamps or iii) Medicaid.

The monthly credit for the residential Income Assistance Service Provision shall be applied as follows:

Delivery Charges: These charges are applicable to Full Service and Retail Open Access customers.
Income Assistance Credit: $(8.50) per customer per month

RESIDENTIAL SERVICE SENIOR CITIZEN PROVISION: When service is supplied to a Principal Residence Customer, who is 65 years of age or older and head of household, a credit shall be applied during all billing months. The monthly credit for the Residential Service Senior Citizen Provision shall be applied as follows:

Delivery Charges: ***The Senior Citizen Credit is $(4.25) per customer per month and is applicable*** to Full Service and Retail Open Access customers.

This credit shall not be taken in conjunction with a credit for the Income Assistance Service Provision (RIA).

(Continued on Sheet No. D-2.01)

RATE SCHEDULE NO. D1.1 INTERRUPTIBLE SPACE-CONDITIONING SERVICE RATE

AVAILABILITY OF SERVICE: Available on an optional basis to Residential and Commercial customers desiring separately metered interruptible service for central air conditioning and/or central heat pump use. Customers who have more than one heat pump and/or air-conditioning unit which serves their business or home, will not be permitted to have only a portion of their load on the rate, all units will be interrupted upon the signal from the Company. Installations must conform with the Company's specifications. This rate is not available to commercial customers being billed on a demand rate.

HOURS OF SERVICE: 24 hours.

HOURS OF INTERRUPTION: Interruptions may be called for, but not limited to, system testing and evaluation, maintaining system integrity, making an emergency purchase, economic reasons, or when available system generation is insufficient to meet anticipated system load. A System Integrity Interruption Order may be given by the Company when the failure to interrupt will contribute to the implementation of the rules for emergency electrical procedures under Section C3. The Company will limit interruptions to intervals of no longer than 30 minutes in any hour and no longer than 8 hours in any 24-hour period.

CURRENT, PHASE AND VOLTAGE: Alternating current, single-phase, nominally at 120/240 volts, three-wire. Where available, and the demand justifies, three-phase four wire, Y connected service may be had at 208Y/120 volts nominally.

In certain city districts, alternating current is supplied from a Y connected secondary network from which 120/208 volts, three-wire service may be taken.

RATE PER MONTH: For separately metered space-conditioning service.

Full Service Customers:

Residential Power Supply Charges:

Capacity Energy Charge (June through October):	***1.089¢*** per kWh for all kWh
Capacity Energy Charge (November through May):	***0.270¢*** per kWh for all kWh
Non-Capacity Energy Charge:	***6.085¢*** per kWh for all kWh

Residential Delivery Charges:

Service Charge (June through October):	$1.95 per month
Distribution Charge (Year-round):	***8.137¢*** per kWh for all kWh

Commercial Power Supply Charges:

Capacity Energy Charge (June through October):	***1.049¢*** per kWh for all kWh
Capacity Energy Charge (November through May):	***0.470¢*** per kWh for all kWh
Non-Capacity Energy Charge:	***6.077¢*** per kWh for all kWh

Commercial Delivery Charges:

Service Charge (June through October):	$1.95 per month
Distribution Charge (Year-round):	***5.288¢*** per kWh for all kWh

(Continued on Sheet No. D-5.00)

(Continued from Sheet No. D-4.00)

RATE SCHEDULE NO. D1.1 (Contd.) **INTERRUPTIBLE SPACE-CONDITIONING SERVICE RATE**

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8. Applies only to actual consumption and not to the minimum charge.

Retail Access Service Customers:

Residential Power Supply Charges for Retail Access Customers taking Utility Capacity Service from DTE***:***

Capacity Energy Charge (June through October):	***1.089¢*** per kWh for all kWh
Capacity Energy Charge (November through May***):***	***0.270¢*** per kWh for all kWh

Residential Delivery Charges:

Capacity Service Charge June through October):	$1.95 per month
Capacity Distribution Charge (Year-round):	***8.137¢*** per kWh for all kWh

Commerical Power Supply Charges for Retail Access Customers taking Utility Capacity Service from DTE:

Capacity Energy Charge (June through October):	***1.049¢*** per kWh for all kWh
Capacity Energy Charge (November through May):	***0.470¢*** per kWh for all kWh

Commercial Delivery Charges:

Service Charge June through October):	$1.95 per month
Distribution Charge (Year-round):	***5.288¢*** per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Section C9.8. Applies only to actual consumption and not to the minimum charge. Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Section C8.5.

LATE PAYMENT CHARGE: See Section C4.8.

MINIMUM CHARGE: The Service Charge plus any applicable per meter per month surcharges.

CONTRACT TERM: Open order, terminable on three days' written notice by either party. Where special services are required, the term will be as specified in the applicable contract rider.

RATE SCHEDULE NO. D1.2 **RESIDENTIAL SERVICE RATE – ENHANCED TOU**

AVAILABILITY OF SERVICE: Available on an optional basis to customers who desire time of day service for their residential dwelling. Customers who select this rate must qualify for the Residential Service Rate ***Standard TOU*** D1.***11***

HOURS OF SERVICE: 24 hours.

CURRENT, PHASE AND VOLTAGE: Alternating current, single-phase, nominally at 120/240 volts, three-wire.

RATE PER MONTH:

Full Service Customers:

Power Supply Charges:

Capacity Energy Charge (June through October):
1.690¢ per kWh for all On-peak kWh
0.569¢ per kWh for all Off-peak kWh

Capacity Energy Charge (November through May):
1.427¢ per kWh for all On-peak kWh
0.547¢ per kWh for all Off-peak kWh

Non-Capacity Energy Charge (June through October)
13.949¢ per kWh for all On-peak kWh
4.696¢ per kWh for all Off-peak kWh

Non-Capacity Energy Charge (November through May)
11.783¢ per kWh for all On-peak kWh
4.512¢ per kWh for all Off-peak kWh

On-Peak Hours: All kWh used between 1100 and 1900 hours Monday through Friday.
Off-Peak Hours: All other kWh used.

Delivery Charges:

Service Charge: $8.50 per month
Distribution Charge: ***8.137¢*** per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8.

Retail Access Service Customers:

Power Supply Charges for Retail Access Customers taking Utility Capacity Service from DTE:

Capacity Energy Charge (June through October):
1.690¢ per kWh for all On-peak kWh
0.569¢ per kWh for all Off-peak kWh

Capacity Energy Charge (November through May):
1.427¢ per kWh for all On-peak kWh
0.547¢ per kWh for all Off-peak kWh

On-Peak Hours: all kWh used between 1100 and 1900 hours Monday through Friday.
Off-Peak Hours: all other kWh used.

(Continued on Sheet No. D-7.00)

(Continued from Sheet No. D-6.00)

RATE SCHEDULE NO. D1.2 (Contd.) **RESIDENTIAL SERVICE RATE– ENHANCED TOU**

Delivery Charges:

Service Charge: $8.50 per month
Distribution Charge: ***8.137¢*** per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Section C9.8. Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Section C5.8.

LATE PAYMENT CHARGE: See Section C4.8.

MINIMUM CHARGE: The Service Charge plus any applicable per meter per month surcharges.

CONTRACT TERM: Commencing upon installation of the Time-of-Day meter, service will be provided for twelve continuous months thereafter, with termination upon mutual consent of the Company and the customer.

WATER HEATING SERVICE: Water heating service is available on an optional basis.

INTERRUPTIBLE SPACE CONDITIONING PROVISION: Rate D1.1 is available on an optional basis.

INCOME ASSISTANCE SERVICE PROVISION (RIA): When service is supplied to a Principal Residence Customer, where the household receives a Home Heating Credit (HHC) in the State of Michigan, a credit shall be applied during all billing months. For an income assistance customer to qualify for this credit, the Company shall require annual evidence of the HHC energy draft or warrant. The customer may also qualify for this credit upon confirmation by an authorized State or Federal agency verifying that the customer's total household income does not exceed 150% of the poverty level as published by the United States department of health and human services or if the customer receives any of the following: i) Assistance from a state emergency relief program; ii) Food stamps or iii) Medicaid.

The monthly credit for the residential Income Assistance Service Provision shall be applied as follows:

Delivery Charges: These charges are applicable to Full Service and Retail Open Access customers.

Income Assistance Credit: $**(**8.50**)** per customer per month

RESIDENTIAL SERVICE SENIOR CITIZEN PROVISION: When service is supplied to a Principal Residence Customer, who is 65 years of age or older and head of household, a credit shall be applied during all billing months. The monthly credit for the Residential Service Senior Citizen Provision shall be applied as follows:

Delivery Charges: The Senior Citizen Credit is $(4.25) per customer per month and is applicable to Full Service and Retail Open Access customers.

This credit shall not be taken in conjunction with a credit for the Income Assistance Service Provision (RIA).

RATE SCHEDULE NO. D1.6 RESIDENTIAL SERVICE RATE - SPECIAL LOW INCOME PILOT

AVAILABILITY OF SERVICE: Customers who select this pilot rate must qualify for the Residential Service rate D1. To qualify for this pilot rate a customer must also provide annual evidence of receiving a Home Heating Credit (HHC) energy draft or warrant, or must provide confirmation by an authorized State or Federal agency verifying that the customer's total household income does not exceed 150% of the poverty level as published by the United States department of health and human services or if the customer receives any of the following: i) Assistance from a state emergency relief program; ii) Food stamps or iii) Medicaid. Service under this rate shall be limited to an annual average of 32,000 customers.

HOURS OF SERVICE: 24 hours.

CURRENT, PHASE AND VOLTAGE: Alternating current, single-phase, nominally at 120/240 volts, three-wire. Where available, and the demand justifies, three-phase four-wire, Y connected service may be had at 208Y/120 volts nominally.

In certain city districts, alternating current is supplied from a Y connected secondary network from which 120/208 volts, three-wire service may be taken.

RATE PER DAY:

Full Service Customers:

Power Supply Charges:

Capacity Energy Charges: ***1.128¢*** per kWh for the first 17 kWh per day
1.626¢ per kWh for excess over 17 kWh per day

Non-Capacity Energy Charge***:*** ***7.809¢*** per kWh for all kWh per day

Delivery Charges:

Service Charge: $8.50 per month
Distribution Charge: ***8.137¢*** per kWh for all kWh
Special Low Income Discount: ($40.00) per month

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8. Applies only to actual consumption and not to the minimum charge.

Retail Access Service Customers:

Residential Power Supply Charges for Retail access Customers taking Utility Capacity Service from DTE:

Capacity Energy Charges***:*** ***1.128¢*** per kWh for first 17 kWh per day
1.626¢ per kWh for excess over 17 kWh per day

(Continued on Sheet No. D-12.02)

(Continued from Sheet No. D-12.01)

RATE SCHEDULE NO. D1.6 (Contd.)RESIDENTIAL SERVICE *RATE* - SPECIAL LOW INCOME PILOT

Delivery Charges:

Service Charge:	$8.50 per month
Distribution Charge:	***8.137¢*** per kWh for all kWh
Special Low Income Discount:	($40.00) per month

Surcharges and Credits: As approved by the Commission. See Section C9.8. Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Section C8.5.

BILLING FREQUENCY: Based on a nominal 30-day month. See Section C4.5.

CONTRACT TERM: Open order, terminable on three days' notice by either party. If a customer fails to make the required payment on time for three consecutive billing periods that customer shall automatically be removed from this rate. Where special services are required, the term will be as specified in the applicable contract rider.

LATE PAYMENT CHARGE: See Section C4.8.

INTERRUPTIBLE SPACE-CONDITIONING PROVISION: Rate D1.1 is available on an optional basis.

WATER HEATING SERVICE: Water heating service is available on an optional basis. See Schedule Designation No. D5.

RATE SCHEDULE NO. D1.7 **GEOTHERMAL TIME-OF-DAY RATE**

AVAILABILITY OF SERVICE: Available on an optional basis to residential customers desiring separately metered service for approved geothermal space conditioning and/or water heating. To qualify for the rate the water heater must be for sanitary purposes with the tank size, design and method of installation approved by the company. The space conditioning equipment must be permanently installed.

HOURS OF SERVICE: 24 Hours

CURRENT, PHASE AND VOLTAGE: Same as D1 and D3 Rates

CONTRACT TERM: The customer shall contract to remain on this rate for at least 12 months terminable on three days notice after the initial 12 months by either party. Where special services are required, the term will be specified on the applicable contract rider.

INSULATION STANDARDS FOR ELECTRIC HEATING: See Section C4.9.

MINIMUM CHARGE: The Service Charge plus any applicable per meter per month surcharges.

LATE PAYMENT CHARGE: See Section C4.8.

RATE PER DAY:

Full Service Customers:

Residential Power Supply Charges:

Capacit***y*** Energy Charge (June through September):
4.248¢ per kWh for all On-peak kWh
0.001¢ per kWh for all Off-peak kWh

Capacity Energy Charge (October through May):
1.717¢ per kWh for all On-peak kWh
0.369¢ per kWh for all Off-peak kWh

On-Peak Hours: All kWh used between 1100 and 1900 hours Monday through Friday.
Off-Peak Hours: All other kWh used.

Non-Capacity Energy Charge***:*** ***4.582¢*** per kWh for all kWh

Residential Delivery Charges:

Service Charge: 6.70¢ per day
Distribution Charge: ***8.137¢*** per kWh for all kWh

(Continued on Sheet No. D-13.01)

(Continued from Sheet No. D-13.00)

RATE SCHEDULE NO. D1.7 (Contd.) **GEOTHERMAL TIME-OF-DAY RATE**

Commercial Power Supply Charges:

Capacity Energy Charge (June through September):
0.893¢ per kWh for all On-peak kWh
0.464¢ per kWh for all Off-peak kWh

Capacity Energy Charge (October through May):
0.572¢ per kWh for all On-peak kWh
0.572¢ per kWh for all Off-peak kWh

On-Peak Hours: All kWh used between 1100 and 1900 hours Monday through Friday.
Off-Peak Hours: All other kWh used.

Non-Capacity energy Charge: ***4.059¢*** per kWh for all kWh

Commercial Delivery Charges:

Service Charge: 6.70¢ per day
Distribution Charge: ***5.288¢*** per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8.

Retail Access Service Customers:

Residential Power Supply Charges for Retail Access Customers taking Utility Capacity Service from DTE:

Capacity Energy Charge (June through September):
4.248¢ per kWh for all On-peak kWh
0.001¢ per kWh for all Off-peak kWh

Capacity Energy Charge (October through May):
1.717¢ per kWh for all On-peak kWh
0.369¢ per kWh for all Off-peak kWh

On-Peak Hours: All kWh used between 1100 and 1900 hours Monday through Friday.
Off-Peak Hours: All other kWh used.

Residential Delivery Charges:

Service Charge: 6.70¢ per day
Distribution Charge: ***8.137¢*** per kWh for all kWh

Commerical Power Supply Charges for Retail Access Customers taking Utility Capacity Service from DTE:

Capacity Energy Charge (June through September***):***
0.893¢ per kWh for all On-peak kWh
0.464¢ per kWh for all Off-peak kWh

(Continued on Sheet No. D-13.02)

(Continued from Sheet No. D-13.01)

RATE SCHEDULE NO. D1.7 (Contd.) **GEOTHERMAL TIME-OF-DAY RATE**

Capacity Energy Charge (October through May):
0.572¢ per kWh for all On-peak kWh
0.572¢ per kWh for all Off-peak kWh

Commercial Delivery Charges:
Service Charge: 6.70¢ per day
Distribution Charge: ***5.288¢*** per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Section C9.8. Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the commission. See Section C5.8.

(Continued from Sheet No. D-14.00)

RATE SCHEDULE NO. D1.8 (Contd.)**RESIDENTIAL SERVICE RATE - DYNAMIC PEAK PRICING RATE GENERAL SERVICE RATE – DYNAMIC PEAK PRICING**

CHARGES:

Full Service Residential Customers:

Power Supply Charges:

Capacity Energy Charges:	***2.067¢*** per kWh for all On-Peak kWh
	1.144¢ per kWh for all Mid-Peak kWh
	0.590¢ per kWh for all Off-Peak kWh
	$0.80253per kWh for all kWh during Critical Peak Hours
Non-Capacity Energy Charge***:***	***14.747¢ per kWh for all On-Peak kWh***
	7.635¢ per kWh for all Mid-Peak kWh
	3.940¢ per kWh for all Off-Peak kWh
	$0.14747 per kWh for all kWh during Critical Peak Hours

Delivery Charges:

Service Charge:	$8.50 per month
Distribution Charge:	***8.137¢*** per kWh for all kWh

Full Service Secondary Commercial and Industrial Customers:

Power Supply Charges:

Capacity Energy Charges:	***2.062¢*** per kWh for all On-Peak kWh
	1.119¢ per kWh for all Mid-Peak kWh
	0.570¢ per kWh for all Off-Peak kWh
	$***0.80517*** per kWh for all kWh during Critical Peak Hours
Non-Capacity Energy Charge**:**	***14.483¢ per kWh for all On-Peak kWh***
	7.863¢ per kWh for all Mid-Peak kWh
	4.002¢ per kWh for all Off-Peak kWh
	$0.14483 per kWh for all kWh during Critical Peak Hours

Delivery Charges:

Service Charge:	$11.25 per month
Distribution Charge:	***5.288¢*** per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8.

MINIMUM CHARGE: The Service Charge plus any applicable per meter per month surcharges.

SCHEDULE OF HOLIDAYS: See Section C11

CONTRACT TERM: The customer shall contract to remain on this rate for at least 12 months terminable on three days' notice after the initial 12 months by either party.

LATE PAYMENT CHARGE: See Section C4.8.

INCOME ASSISTANCE SERVICE PROVISION (RIA): When service is supplied to a Principal Residence Customer, where the household receives a Home Heating Credit (HHC) in the State of Michigan, a credit shall be applied during all billing months. For an income assistance customer to qualify for this credit, the Company shall require annual evidence of the HHC energy draft or warrant. The customer may also qualify for this credit upon

(Continued on Sheet No. D-14.02)

(Continued from Sheet No. D-14.01)

RATE SCHEDULE NO. D1.8 (Contd.)**RESIDENTIAL SERVICE RATE - DYNAMIC PEAK PRICING RATE GENERAL SERVICE RATE – DYNAMIC PEAK PRICING**

INCOME ASSISTANCE SERVICE PROVISION (RIA)(contd):

confirmation by an authorized State or Federal agency verifying that the customer's total household income does not exceed 150% of the poverty level as published by the United States department of health and human services or if the customer receives any of the following: i) Assistance from a state emergency relief program; ii) Food stamps or iii) Medicaid.

The monthly credit for the residential Income Assistance Service Provision shall be applied as follows:

Delivery Charges: These charges are applicable to Full Service and Retail Open Access customers.
Income Assistance Credit: $(8.50) per customer per month

RESIDENTIAL SERVICE SENIOR CITIZEN PROVISION: When service is supplied to a Principal Residence Customer, who is 65 years of age or older and head of household, a credit shall be applied during all billing months. The monthly credit for the Residential Service Senior Citizen Provision shall be applied as follows:

Delivery Charges: The Senior Citizen Credit is $(4.25) per customer per month and is applicable to Full Service and Retail Open Access customers.

This credit shall not be taken in conjunction with a credit for the Income Assistance Service Provision (RIA) or the Special Low Income Assistance Credit (LIA).

RATE SCHEDULE NO. D1.9 **ELECTRIC VEHICLE RATE**

AVAILABILITY OF SERVICE:

Available on an optional basis to residential and commercial customers desiring separately metered service for the sole purpose of charging licensed electric vehicles. Installations must conform to the Company's specifications. Service under this tariff is limited to 5,000 customers. Service on this rate is limited to electric vehicles that are SAE J1772 compliant, and all vehicles shall be registered and operable on public highways in the State of Michigan to qualify for this rate. Low-speed electric vehicles including golf carts are not eligible to take service under this rate even if licensed to operate on public streets. The customer may be required to provide proof of registration of the electric vehicle to qualify for the program.

HOURS OF SERVICE: 24 Hours

CURRENT, PHASE AND VOLTAGE: Alternating current, single-phase, nominally at 120/240 volts, three wire. In certain city districts, alternating current is supplied from a Y connected secondary network from which 120/208 volts, three-wire service may be taken

CONTRACT TERM: Open order, terminable on three days' notice by either party. Where special services are required, the term will be as specified on the applicable contract rider.

MINIMUM CHARGE: The Service Charge plus any applicable per meter per month surcharges.

LATE PAYMENT CHARGE: See Section C4.8.

OPTION 1: TIME OF DAY PRICING

Full Service Customers:

Power Supply Charges:

Capacity Energy Charge:
2.470¢ per kWh for all On-peak kWh
0.618¢ per kWh for all Off-peak kWh

Non-Capacity Energy Charge:
14.635¢ per kWh for all On-peak kWh
3.657¢ per kWh for all Off-peak kWh
On-Peak Hours: All kWh used between 9 am and 11 pm Monday through Friday.
Off-Peak Hours: All other kWh used.

Delivery Charges:

Service Charge: $1.95 per month
Distribution Charge: ***8.137¢*** per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8.

Retail Access Service Customers:

Power Supply Charges for Retail Access Customers taking Utility Capacity Service from DTE:

Capacity Energy Charge:
2.470¢ per kWh for all On-peak kWh
0.618¢ per kWh for all Off-peak kWh

(Continued on Sheet No. D-14.04)

(Continued from Sheet No. D-14.03)

RATE SCHEDULE NO. D1.9 (Contd.) **ELECTRIC VEHICLE RATE**

Retail Access Service Cutomer (Contd.):

On-Peak Hours: All kWh used between 9 am and 11 pm Monday through Friday.
Off-Peak Hours: All other kWh used.

Delivery Charges:
Service Charge: $1.95 per month
Distribution Charge: ***8.137*¢** per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8. Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See C8.5.

OPTION 2: MONTHLY FLAT FEE (Residential only)*:*
Closed to new customers as of May 31, 2019. Existing customers will be moved to a new rate by December 31, 2019.

SPECIAL TERMS AND CONDITIONS:

Service under this rate must be supplied through a separately metered circuit and approved electric vehicle charging equipment. Installations must conform with the Company's specifications.

The Company is exploring additional possible metering options to be offered at the Company's discretion. This includes but is not limited to, collecting data directly from charging stations and/or utilizing technology beyond the general service meter to measure EV usage.

M.P.S.C. No. 1 - Electric
DTE Electric Company
(Final Order Case No. U-21297)

First Revised Sheet No. D-14.05
Cancels Original Sheet No. D-14.05

RATE SCHEDULE NO. D1.11 **RESIDENTIAL SERVICE RATE – STANDARD TOU**

AVAILABILITY OF SERVICE: This rate will be available for service no later than May 31, 2023. Available to customers desiring service for all residential purposes though one meter to a single or double occupancy dwelling unit including farm dwellings. A dwelling unit consists of a kitchen, bathroom, and heating facilities connected ona permanent basis. Service to appurtenant buildings may be taken on the same meter.

This rate is not available for common areas of separately metered apartments and condominium complexes, nor to a separate meter which serves a garage, boat well or other non-dwelling applications.

HOURS OF SERVICE: 24 hours.

CURRENT, PHASE AND VOLTAGE: Alternating current, single-phase, nominally at 120/240 volts, three-wire. Where available, and the demand justifies, three-phase four-wire, Y connected service may be had at 208Y/120 volts nominally.

In certain city districts, alternating current is supplied from a Y connected secondary network from which 120/208 volts, three-wire service may be taken.

RATE PER MONTH:

Full Service Customers:

Power Supply Charges:

Capacity Energy Charge (June through September):
2.060 cents per kWh for all On-peak kWh
1.241 cents per kWh for all Off-peak kWh
Capacity Energy Charge (October through May):
1.438 cents per kWh for all On-peak kWh
1.241 cents per kWh for all Off-peak kWh

Non-Capacity Energy Charge (June through September):
12.201 cents per kWh for all On-peak kWh
7.354 cents per kWh for all Off-peak kWh

Non-Capacity Energy Charge (October through May):
8.518 cents per kWh for all On-peak kWh
7.354 cents per kWh for all Off-peak kWh

On-Peak Hours: All kWh used between 3:00PM and 7:00PM Monday through Friday.
Off-Peak Hours: All other kWh used.

Delivery Charges:
Service Charge: $8.50 per month
Distribution Charge: ***8.137¢*** per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8.

(Continued on Sheet No. D-14.06)

Issued ____________, 2023
M. Bruzzano
Senior Vice President
Corporate Strategy & Regulatory Affairs

Detroit, Michigan

Effective for service rendered on
and after _______________, 2023

Issued under authority of the
Michigan Public Service Commission
dated ________________, 2023
in Case No. U-21297

(Continued from Sheet No. D-14.05)

RATE SCHEDULE NO. D1.11 (Contd.) **RESIDENTIAL SERVICE RATE – STANDARD TOU**

Retail Access Service Customers:

Power Supply Charges for Retail Access Customers taking Utility Capacity service for DTE:

Capacity Energy Charge (June through September):
2.060 cents per kWh for all On-peak kWh
1.241 cents per kWh for all Off-peak kWh

Capacity Energy Charge (October through May):
1.438 cents per kWh for all On-peak kWh
1.241 cents per kWh for all Off-peak kWh

Delivery Charges:

Service Charge:	$8.50 per month
Distribution Charge:	6.879¢ per kWh for all kWh

Surcharges and Credits: As approved by the Commission. Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Sections C8.5 and C9.8.

LATE PAYMENT CHARGE: See Section C4.8.

MINIMUM CHARGE: The Service Charge plus any applicable per meter per month surcharges.

CONTRACT TERM: ***Open order, terminable on three days' notice by either party. Where special services are required, the term will be as specified in the applicable contract rider.***

WATER HEATING SERVICE: Water heating service is available on an optional basis.

INTERRUPTIBLE SPACE CONDITIONING PROVISION: Rate D1.1 is available on an optional basis.

INCOME ASSISTANCE SERVICE PROVISION (RIA): When service is supplied to a Principal Residence Customer, where the household receives a Home Heating Credit (HHC) in the State of Michigan, a credit shall be applied during all billing months. For an income assistance customer to qualify for this credit, the Company shall require annual evidence of the HHC energy draft or warrant. The customer may also qualify for this credit upon confirmation by an authorized State or Federal agency verifying that the customer's total household income does not exceed 150% of the poverty level as published by the United States department of health and human services or if the customer receives any of the following: i) Assistance from a state emergency relief program; ii) Food stamps or iii) Medicaid.

(Continued on Sheet No. D-14.07)

(Continued from Sheet No. D-14.06)

RATE SCHEDULE NO. D1.11 (Contd.) **RESIDENTIAL SERVICE RATE – STANDARD TOU**

The monthly credit for the residential Income Assistance Service Provision shall be applied as follows:

Delivery Charges: These charges are applicable to Full Service and Retail Open Access customers.
Income Assistance Credit: $(8.50) per customer per month

RESIDENTIAL SERVICE SENIOR CITIZEN PROVISION: When service is supplied to a Principal Residence Customer, who is 65 years of age or older and head of household, a credit shall be applied during all billing months. The monthly credit for the Residential Service Senior Citizen Provision shall be applied as follows:

Delivery Charges: ***The Senior Citizen Credit is $(4.25) per customer per month and is applicable*** to Full Service and Retail Open Access customers.

This credit shall not be taken in conjunction with a credit for the Income Assistance Service Provision (RIA) ***or the Special Low Income Assistance Credit (LIA)***.

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RATE SCHEDULE NO. D1.13 ***RESIDENTIAL SERVICE RATE – OVERNIGHT SAVERS***

AVAILABILITY OF SERVICE: ***Available to customers desiring service for all residential purposes though one meter to a single or double occupancy dwelling unit including farm dwellings. A dwelling unit consists of a kitchen, bathroom, and heating facilities connected ona permanent basis. Service to appurtenant buildings may be taken on the same meter. This rate is not available for common areas of separately metered apartments and condominium complexes, nor to a separate meter which serves a garage, boat well or other non-dwelling applications. Service on this rate is limited to 10,000 customers.***

HOURS OF SERVICE: 24 hours.

CURRENT, PHASE AND VOLTAGE: Alternating current, single-phase, nominally at 120/240 volts, three-wire. Where available, and the demand justifies, three-phase four-wire, Y connected service may be had at 208Y/120 volts nominally.

In certain city districts, alternating current is supplied from a Y connected secondary network from which 120/208 volts, three-wire service may be taken.

RATE PER MONTH:

Full Service Customers:

June – September – all values in cents per kWh

	Power supply capacity Charge	***Power Supply Non Capacity Charge***	***Distribution Charge***
On peak	***2.274***	***13.470***	***16.298***
Off peak	***1.525***	***9.031***	***12.224***
Super Off-peak	***0.982***	***5.816***	***4.075***

October – May – all values in cents per kWh

	Power supply capacity Charge	***Power Supply Non Capacity Charge***	***Distribution Charge***
On peak	***1.298***	***7.692***	***8.149***
Off peak	***1.176***	***6.967***	***6.112***
Super Off-peak	***0.982***	***5.816***	***4.075***

On-Peak Hours: ***All kWh used between 3:00PM and 7:00PM Monday through Friday.***
Super Off-peak: ***All kWh used between 1:00AM and 7:00AM***
Off-Peak Hours: ***All other kWh used.***

Delivery Charges:
Service Charge: ***$8.50 per month***
Distribution Charge: ***see table above***

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8.

(Continued on Sheet No. D-14.09)

(Continued from Sheet No. D-14.08)

RATE SCHEDULE NO. D1.13 (Contd.) ***RESIDENTIAL SERVICE RATE – OVERNIGHT SAVERS***

Retail Access Service Customers:

Power Supply Charges for Retail Access Customers taking Utility Capacity service for DTE

June – September – all values in cents per kWh

	Power supply capacity Charge	*Distribution Charge*
On peak	*2.274*	*16.298*
Off peak	*1.525*	*12.224*
Super Off-peak	*0.982*	*4.075*

October – May – all values in cents per kWh

	Power supply capacity Charge	*Distribution Charge*
On peak	*1.298*	*8.149*
Off peak	*1.176*	*6.112*
Super Off-peak	*0.982*	*4.075*

On-Peak Hours: ***All kWh used between 3:00PM and 7:00PM Monday through Friday.***
Super Off-peak: ***All kWh used between 1:00AM and 7:00AM***
Off-Peak Hours: ***All other kWh used.***

Delivery Charges:
Service Charge: ***$8.50 per month***
Distribution Charge: ***see table above***

Surcharges and Credits: As approved by the Commission. Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Sections C8.5 and C9.8.

LATE PAYMENT CHARGE: See Section C4.8.

MINIMUM CHARGE: The Service Charge plus any applicable per meter per month surcharges.

CONTRACT TERM: The customer shall contract to remain on this rate for at least 12 months terminable on three days' notice after the initial 12 months by either party, at which time the customer may take service on any other rate for which they are eligible.

WATER HEATING SERVICE: Water heating service is available on an optional basis.

INTERRUPTIBLE SPACE CONDITIONING PROVISION: Rate D1.1 is available on an optional basis.

(Continued on Sheet No. 14.10)

(Continued from Sheet No. D-14.09)

RATE SCHEDULE NO. D1.13 (Contd.) ***RESIDENTIAL SERVICE RATE – OVERNIGHT SAVERS***

INCOME ASSISTANCE SERVICE PROVISION (RIA): When service is supplied to a Principal Residence Customer, where the household receives a Home Heating Credit (HHC) in the State of Michigan, a credit shall be applied during all billing months. For an income assistance customer to qualify for this credit, the Company shall require annual evidence of the HHC energy draft or warrant. The customer may also qualify for this credit upon confirmation by an authorized State or Federal agency verifying that the customer's total household income does not exceed 150% of the poverty level as published by the United States department of health and human services or if the customer receives any of the following: i) Assistance from a state emergency relief program; ii) Food stamps or iii) Medicaid

The monthly credit for the residential Income Assistance Service Provision shall be applied as follows:

Delivery Charges: These charges are applicable to Full Service and Retail Open Access customers.
Income Assistance Credit: $(8.50) per customer per month

RESIDENTIAL SERVICE SENIOR CITIZEN PROVISION: When service is supplied to a Principal Residence Customer, who is 65 years of age or older and head of household, a credit shall be applied during all billing months. The monthly credit for the Residential Service Senior Citizen Provision shall be applied as follows:

Delivery Charges: The Senior Citizen Credit is $(4.25) per customer per month and is applicable to Full Service and Retail Open Access customers.

This credit shall not be taken in conjunction with a credit for the Income Assistance Service Provision (RIA) or the Special Low Income Assistance Credit (LIA).

RATE SCHEDULE NO. D2 **RESIDENTIAL SERVICE RATE - SPACE HEATING**

AVAILABILITY OF SERVICE: Available on an optional basis to customers desiring service for all residential purposes to a single or double occupancy dwelling unit including farm dwellings. All of the space heating must be total electric installed on a permanent basis and served through one meter. This rate also available to customers with add-on heat pumps and fossil fuel furnaces served on this rate prior to July 16, 1985. The design and method of installation and control of equipment as adopted to this service are subject to approval by the Company. This rate is also available to customers with electric heat assisted with a renewable heat source.

This rate is available only to dwellings being served on this rate prior to December 17, 2015.

HOURS OF SERVICE: 24 hours.

CURRENT, PHASE AND VOLTAGE: Alternating current, single-phase, nominally at 120/240 volts, three-wire. Where available, and the demand justifies, three-phase four-wire, Y connected service may be had at 208Y/120 volts nominally. In certain city districts, alternating current is supplied from a Y connected secondary network from which 120/208 volt three-wire service may be taken.

RATE PER DAY:

Full Service Customers:

Power Supply Charges:

Capacity Energy Charges: (June through October):	***1.059¢*** per kWh for the first 17 kWh per day
	1.514¢ per kWh for over 17 kWh per day
Capacity Energy Charges: (November through May):	***0.624¢*** per kWh for the first 20 kWh per day
	0.244¢ per kWh for over 20 kWh per day
Non-Capacity energy Charge:	***6.274¢*** per kWh for all kWh

Delivery Charges:

Service Charge	***$***8.50 per month
Distribution Charge: (June through October):	***8.137¢*** per kWh for all kWh
Distribution Charge: (November through May):	***8.137¢*** per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8. Applies only to actual consumption and not to the minimum charge

Retail Access Service customers:

Power Supply Charges for Retail Access Customers taking Utility Capacity Service from DTE***:***

Capacity Energy Charges: (June through October):	***1.059¢*** per kWh for the first 17 kWh per day
	1.514¢ per kWh for over 17 kWh per day
Capacity Energy Charges: (November through May):	***0.624¢*** per kWh for the first 20 kWh per day
	0.244¢ per kWh for over 20 kWh per day

(Continued on Sheet No. D-16.00)

(Continued from Sheet No. D-15.00)

RATE SCHEDULE NO. D2 (Contd.) **RESIDENTIAL SERVICE RATE - SPACE HEATING**

Delivery Charges:

Service Charge	$8.50 per month
Distribution Charge: (June through October):	***8.137¢*** per kWh for all kWh
Distribution Charge: (November through May):	***8.137¢*** per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Section C9.8. Applies only to actual consumption and not to the minimum charge. Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Section C8.5.

BILLING FREQUENCY: Based on a nominal 30-day month. See Section C4.5.

MINIMUM CHARGE: The Service Charge plus any applicable per meter per month surcharges.

CONTRACT TERM: Open order, terminable on three days' notice by either party. Where special services are required, the term will be as specified in the applicable contract rider.

WATER HEATING SERVICE: Water heating service is available on an optional basis. See Schedule Designation No. D5.

LATE PAYMENT CHARGE: See Section C4.8.

INTERRUPTIBLE SPACE-CONDITIONING PROVISION: Rate D1.1 is available on an optional basis.

INSULATION STANDARDS FOR ELECTRIC HEATING: See Section C4.9.

INCOME ASSISTANCE SERVICE PROVISION (RIA): When service is supplied to a Principal Residence Customer, where the household receives a Home Heating Credit (HHC) in the State of Michigan, a credit shall be applied during all billing months. For an income assistance customer to qualify for this credit, the Company shall require annual evidence of the HHC energy draft or warrant. The customer may also qualify for this credit upon confirmation by an authorized State or Federal agency verifying that the customer's total household income does not exceed 150% of the poverty level as published by the United States department of health and human services or if the customer receives any of the following: i) Assistance from a state emergency relief program; ii) Food stamps or iii) Medicaid.

The monthly credit for the residential Income Assistance Service Provision shall be applied as follows:

Delivery Charges: These charges are applicable to Full Service and Retail Open Access customers.
Income Assistance Credit: $(8.50) per customer per month

RESIDENTIAL SERVICE SENIOR CITIZEN PROVISION: When service is supplied to a Principal Residence Customer, who is 65 years of age or older and head of household, a credit shall be applied during all billing months. The monthly credit for the Residential Service Senior Citizen Provision shall be applied as follows:

Delivery Charges: The Senior Citizen Credit is $(4.25) per customer per month and is applicable to Full Service and Retail Open Access customers.

This credit shall not be taken in conjunction with a credit for the Income Assistance Service Provision (RIA) or the Special Low Income Assistance Credit (LIA).

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Cancels Ninth Revised Sheet No. D-18.00

RATE SCHEDULE NO. D3 **GENERAL SERVICE RATE**

AVAILABILITY OF SERVICE: Available to customers desiring service for any purpose. ***T***his rate is not available for service in conjunction with the Large General Service Rate ***except when used exclusively to serve electric vehicle service equipment.*** At the Company's option, service may be available to loads in excess of 1000 kW for situations where significant modifications to service facilities are not required to serve the excess load. The 1000 kW discretionary demand restriction does not apply to service provided to Electric Vehicle Fast-Chargin Stations until June 1, 2024***.*** Effective May 27, 1981, this rate is not available to customers desiring service through one meter for residential purposes to a single or double occupancy dwelling unit.

HOURS OF SERVICE: 24 hours.

CURRENT, PHASE AND VOLTAGE: Alternating current, single-phase, nominally at 120/240 volts, three-wire; or three-phase four-wire, Y connected at 208Y/120 volts; or under certain conditions three-phase four-wire, Y connected at 480Y/277 volts.

In certain city districts, alternating current is supplied from a Y connected secondary network from which 120/208 volts, single-phase three-wire; or 208Y/120 volts, three-phase four-wire service may be taken.

RATE PER MONTH:

Full Service Customers:

Power Supply Charges:

Capacity Energy Charge:	***1.010¢*** per kWh for all kWh
Non-Capacity Energy Charge***:***	***7.096¢*** per kWh for all kWh

Delivery Charges:

Service Charge:	$11.25 per month
Distribution Charge:	***5.288¢*** per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8.

Retail Access Service Customers:

Power Supply Charges for Retail Access Service Customers taking Utility Capacity Service from DTE:

Capacity Energy Charg***e:***	***1.010¢*** per kWh for all kWh

Delivery Charges:

Service Charge:	$11.25 per month
Distribution Charge:	***5.288¢*** per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Section C9.8. Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Section C8.5.

LATE PAYMENT CHARGE: See Section C4.8.

MINIMUM CHARGE: The Service Charge plus any applicable per meter per month surcharges.

(Continued on Sheet No. D-19.00)

RATE SCHEDULE NO. D3.1 **UNMETERED GENERAL SERVICE RATE**

AVAILABILITY OF SERVICE: Available at the option of the Company to customers for loads that can be readily calculated and are impractical to meter.

HOURS OF SERVICE: 24 hours.

CURRENT, PHASE AND VOLTAGE: Alternating current, single-phase, nominally at 120/240 volts, three-wire; or three-phase four-wire, Y connected at 208Y/120 volts; or under certain conditions three-phase four-wire, Y connected at 480Y/277 volts.

In certain city districts, alternating current is supplied from a Y connected secondary network from which 120/208 volts, three-wire; or 208Y/120 volts, three-phase four-wire service may be taken.

SERVICE CONNECTIONS: The customer is to furnish and maintain all necessary wiring and equipment, or reimburse the Company therefore. Connections are to be brought to the Company's underground or overhead lines by the customer as directed by the Company, and the final connections to the Company's line are to be made by the Company.

Conversion and/or relocation of existing facilities must be paid for by the customer, except when initiated by the Company. The detailed provisions and schedule of such charges will be quoted upon request.

RATE: Capacity charge of ***0.848¢*** and non-capacity charge of ***11.247¢*** both applied per month per kilowatthour of the total connected load in service for each customer. Loads operated cyclically will be prorated. This rate is based on 350 hours per month. Proration of cyclical loads will not apply when hours of operation are within 10% of base. Proration may either increase or decrease connected load.

The Company may, at its option, install meters and apply a standard metered rate schedule applicable to the service.

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8.

LATE PAYMENT CHARGE: See Section C4.8.

MINIMUM CHARGE: $3.00 per month.

CONTRACT TERM: Open order on a month-to-month basis.

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DTE Electric Company
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Tenth Revised Sheet No. D-20.01
Cancels Ninth Revised Sheet No. D-20.01

RATE SCHEDULE NO. D3.2 **SECONDARY EDUCATIONAL INSTITUTION RATE**

AVAILABILITY OF SERVICE: Available to Educational Institution (school, college, university) customer locations desiring service at secondary voltage. School shall mean buildings, facilities, playing fields, or property directly or indirectly used for school purposes for children in grades kindergarten through twelve, when provided by a public or nonpublic school. School does not include instruction provided in a private residence or proprietary trade, vocational training, or occupational school. "College" or "University" shall mean buildings owned by the same customer which are located on the same campus and which constitute an integral part of such college or university facilities.

HOURS OF SERVICE: 24 hours.

CURRENT, PHASE AND VOLTAGE: Alternating current, single-phase, nominally at 120/240 volts, three-wire; or three-phase four-wire, Y connected at 208Y/120 volts; or under certain conditions three-phase four-wire, Y connected at 480Y/277 volts.

In certain city districts, alternating current is supplied from a Y connected secondary network from which 120/208 volts, single-phase three-wire; or 208Y/120 volts, three-phase four-wire service may be taken.

RATE PER MONTH:

Full Service Customers:

Power Supply Charges:

Capacity Energy Charge: ***0.939¢*** per kWh for all kWh
Non-Capacity Energy Charge: ***6.937¢*** per kWh for all kWh

Delivery Charges:

Service Charge: $11.25 per month
Distribution Charge: ***5.288¢*** per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8.

Retail Access Service Customers:

Power Supply Charges for Retail Access Service Customers taking Utility Capacity Service from DTE:
Capacity Energy Charge: ***0.939¢*** per kWh for all kWh

Delivery Charges:

Service Charge: $11.25 per month
Distribution Charge: ***5.288¢*** per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Section C9.8. Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the approved commission. See section C8.5.

LATE PAYMENT CHARGE: See Section C4.9.

MINIMUM CHARGE: The Service Charge plus any applicable per meter per month surcharges.

(Continued on Sheet No. D-20.02)

(Continued from Sheet No. D-21.00)

RATE SCHEDULE NO. D3.3 (Contd.) **INTERRUPTIBLE GENERAL SERVICE RATE**

RATE PER MONTH:

Full Service Customers:

Power Supply Charges:

Capacity Energy Charge: ***0.844¢*** per kWh for all kWh
Non-Capacity Energy Charge*:* ***5.929¢*** per kWh for all kWh

Delivery Charges:

Service Charge: $11.25 per month
Distribution Charge: ***5.288¢*** per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8.

Retail Access Service Customers:

Power Supply Charges for Retail Access Service Customers taking Utility Capacity Service from DTE*:*
Capacity Energy Charge: ***0.844¢*** per kWh for all kWh

Delivery Charges:

Service Charge: $11.25 per month
Distribution Charge: ***5.288¢*** per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Section C9.8. Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the commission. See Section C8.5.

LATE PAYMENT CHARGE: See Section C4.8.

MINIMUM CHARGE: The Service Charge plus any applicable per meter per month surcharges.

PRODUCT PROTECTION PROVISION*:* (Full Service Customers Only): A customer on rate D3.3 may elect to contract for a minimum load during the period of interruption to protect his product or process. This minimum load called "product protection load" shall not exceed 50% of the total contracted interruptible load and shall be charged rates equal to the General Service Rate (D3) power supply charge.

CONTRACT TERM: The contract term is one year, extending thereafter from month-to-month until terminated by mutual consent or on twelve months written notice by either party, which may be given at any time after the end of the first year. However, where special services are required or where the investment to serve is out of proportion to the revenue derived there from, the contract term will be as specified in the applicable contract rider or Extension of Service Agreement.

RATE SCHEDULE NO. D3.5 **COMPANY OWNED EV CHARGING SERVICE PILOT**

AVAILABILITY OF SERVICE: Available on an optional basis to customers for use of Company-owned electric vehicle charging equipment. The service may be offered by the Company for charging infrastructure of any kilowatt (kW) capacity at the Company's discretion. Availability shall be subject to the technical compatibility of the customer's vehicle and the charging equipment. This rate is limited to 100 individual chargers. EV charging equipment will be sited at the Company's discretion

HOURS OF SERVICE: 24 hours

CURRENT, PHASE AND VOLTAGE: Service on this rate will be delivered at varying current, phase, and voltage subject to the technical specifications of the customer's vehicle and the EV charging equipment.

RATES: This service is offered as a volumetric charge at the market price of energy, and a single fixed charge encompassing all power supply capacity charges, delivery charges, and surcharges. The volumetric charge is consisten across EV charging equipment capacity. There is a separate fixed charge based on EV charging equipment capacity.

The relevant volumetric charge and session fee will be available to the customer before they choose to take service under this rate.

Volumetric Charges:

Non-Capacity Energy Charge (on peak):	***7.688***¢ per kWh
Non-Capacity Energy Charge (off peak):	***6.843***¢ per kWh

Fixed Charges:

Session Fee (< 200 kW charger)	$2***1*** per vehicle-session
Session Fee (≥ 200kW charger)	$***66*** per vehicle-session

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8. Those surcharges reflected on a per meter basis in Sections C8.5 and C9.8 will be converted to a volumetric equivalent for this rate schedule using the following formula: ((meter/month rate)*12 months*count of installed chargers) / total projected sales

METERING: Usage on this rate will be metered at the EV charging equipment

BILLING: An accepted form of payment is required to take service on this rate. Customers taking service on this rate will be billed at the time of service. The billing transaction may be managed by a third-party vendor on behalf of the Company.

LATE PAYMENT CHARGE: Payment is required at the point-of-sale

MINIMUM CHARGE: The Session Fee

CONTRACT TERM: Effective for the period of the charging session and governing the rates, metering, and billing of the service. There is no contractual relationship between the customer and Company beyond the charging session.

(Continued on Sheet D-23.01)

RATE SCHEDULE NO. D4 **LARGE GENERAL SERVICE RATE**

AVAILABILITY OF SERVICE: Available to customers desiring service for any purpose, except that this rate is not available for service in conjunction with the General Service Rate.

Effective May 27, 1981, this rate is not available to customers desiring service through one meter for residential purposes to a single or double occupancy dwelling unit.

HOURS OF SERVICE: 24 hours.

CURRENT, PHASE AND VOLTAGE: Alternating current, single-phase, nominally at 120/240 volts, three-wire; or three-phase four-wire, Y connected at 208Y/120 volts; or under certain conditions three-phase four-wire, Y connected at 480Y/277 volts.

In certain city districts, alternating current is supplied from a Y connected secondary network from which 120/208 volts, single-phase three-wire; or 208Y/120 volts, three-phase four-wire service may be taken.

RATE PER MONTH:

Full Service Customers:

Power Supply Charges:

Capacity Demand Charge:	$***3.57*** per kW applied to the Monthly Billing Demand
Non-Capacity Demand Charges*:*	***$13.02*** per kW applied to the Monthly Billing Demand
Non-Capacity Energy Charges*:*	***4.012¢*** per kWh for the first 200 kWh per kW of billing demand
	3.097¢ per kWh for the excess

Delivery Charges:

Service Charge:	$13.67 per month
Distribution Demand Charge:	$***21.80*** per kW applied to the Monthly Billing Demand

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8.

Retail Access Service Customers:

Power Supply Charges for Retail Access Service Customers taking Utility Capacity Service from DTE:

Capacity Demand Charge:	$***3.57*** per kW applied to the Monthly Billing Demand

Delivery Charges:

Service Charge:	$13.67 per month
Distribution Demand Charge:	$***21.80*** per kW applied to the Monthly Billing Demand

(Continued on Sheet No. D-25.00)

RATE SCHEDULE NO. D5 **WATER HEATING SERVICE RATE**

AVAILABILITY OF SERVICE: Available to customers using hot water for sanitary purposes (other uses subject to the approval of the Company) and taking service under Residential and General Service Rate Schedules. This rate is also available to customers with solar assisted hot water heaters. Company approved waste heat reclamation systems and heat pump water heaters when used in conjunction with an approved electric water heater are also acceptable for use.

Available to customers who desire controlled water heating service to all of the heating elements of electric water heaters, the design and method of installation of which are approved by the Company as adapted to this service, taken through a separately metered circuit to which no other load except water heating may be connected.

HOURS OF SERVICE: 24 hours.

HOURS OF INTERRUPTION: Interruptions may be called for, but not limited to, system testing and evaluation, maintaining system integrity, making an emergency purchase, economic reasons, or when available system generation is insufficient to meet anticipated system load. A System Integrity Interruption Order may be given by the Company when the failure to interrupt will contribute to the implementation of the rules for emergency electrical procedures under Section C3. The Company will limit interruptions to intervals of no longer than 4 hours in any 24-hour period.

CURRENT, PHASE AND VOLTAGE: Alternating current, single-phase, nominally at 240 volts, three-wire, except that, in certain city districts, alternating current service at 208 volts, nominal, three-wire, or three-phase at the option of the Company.

RATE PER MONTH:

Full Service Customers:

Residential Power Supply Charges:
Capacity Energy Charge: ***0.698¢*** per kWh for all kWh
Non-Capacity Energy Charge: ***4.132¢*** per kWh for all kWh

Residential Delivery Charges:
Service Charge: $1.95 per month
Distribution Charge: ***8.137¢*** per kWh for all kWh

Commercial Power Supply Charges:
Capacity Energy Charge: ***0.595¢*** per kWh for all kWh
Non-Capacity Energy Charge: ***4.178¢*** per kWh for all kWh

Commercial Delivery Charges:
Service Charge: $1.95 per month
Distribution Charge: ***5.288¢*** per kWh for all kWh

(Continued on Sheet No. D-27.00)

(Continued from Sheet No. D-26.00)

RATE SCHEDULE NO. D5 (Contd.) **WATER HEATING SERVICE RATE**

Retail Access Service Customers:
Residential Power Supply Charges for Retail Access Service Customers taking Utility Capacity Service from DTE:

Capacity Energy Charge***:*** ***0.698¢*** per kWh for all kWh

Residential Power Supply Charges for Retail Access Service Customers taking Utility Capacity Service from DTE (contd):

Residential Delivery Charges:
Service Charge: $1.95 per month
Distribution Charge: ***8.137¢*** per kWh for all kWh

Commercial Power Supply Charges for Retail Access Service Customers taking Utility Capacity Service from DTE***:***

Capacity Energy Charge***:*** ***0.595¢*** per kWh for all kWh

Commercial Delivery Charges:
Service Charge: $1.95 per month
Distribution Charge: ***5.288¢*** per kWh for all kWh

SURCHARGES AND CREDITS: As approved by the Commission. Power Supply Charges are subject to Section C8.5. Delivery Charges are subject to Section C9.8. Capacity related surcharges and credits applicable topower supply, excluding PSCR, as approved by the Commission. see Section C8.5.

CONTRACT TERM: Open order, terminable or three days' notice by either party. Where special services are required, the term will be as specified in the applicable contract rider.

LATE PAYMENT CHARGE: See Section C4.8.

MINIMUM CHARGE: The Service Charge plus any applicable per meter per month surcharges.

WATER HEATER REQUIREMENTS FOR WATER HEATER RATE APPLICATION:

Rate Option	Minimum Tank Capacity*	Maximum Total Connected Load**
Residential	30 gallons	5.5 kW

Rate Option	Minimum Tank Capacity*	Maximum Total Connected Load**
Commercial	2 gallons per kW of total connected load 40 gallon minimum	Controlled by minimum tank capacity requirements

*No limitation to number of tanks
**Single or multi-element

Issued ____________, 2023
M. Bruzzano
Senior Vice President
Corporate Strategy & Regulatory Affairs

Detroit, Michigan

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in Case No. U-21297

RATE SCHEDULE NO. D6.2 **PRIMARY EDUCATIONAL INSTITUTION RATE**

AVAILABILITY OF SERVICE: Available to Educational Institution (school, college, university) customer locations desiring service at primary, sub-transmission, or transmission voltage who contract for a specified capacity of not less than 50 kilowatts at a single location. School shall mean buildings, facilities, playing fields, or property directly or indirectly used for school purposes for children in grades kindergarten through twelve, when provided by a public or nonpublic school. School does not include instruction provided in a private residence or proprietary trade, vocational training, or occupational school. "College" or "University" shall mean buildings owned by the same customer which are located on the same campus and which constitute an integral part of such college or university facilities.

HOURS OF SERVICE: 24 hours, subject to interruption by agreement, or by advance notice.

CURRENT, PHASE AND VOLTAGE: Alternating current, three-phase, nominally at 4,800, 13,200, 24,000, 41,570 or 120,000 volts at the option of the Company.

CONTRACT CAPACITY: Customers shall contract for a specified capacity in kilowatts sufficient to meet normal maximum requirements but not less than 50 kilowatts. The Company undertakes to provide the necessary facilities for a supply of electric power from its primary distribution system at the contract capacity. Any single reading of the demand meter in any month that exceeds the contract capacity then in effect shall become the new contract capacity. The contract capacity for customers served at more than one voltage level shall be the sum of the contract capacities established for each voltage level.

RATE PER MONTH:
Full Service Customers:
Power Supply Charges:
Capacity
Demand Charge: $***3.58*** per kW of on-peak billing demand

Voltage Level Discount:
$***0.15*** per kW at transmission level
$***0.07*** per kW at subtransmission level

Non-Capacity
Demand Charge: $10.04 per kW of on-peak billing demand

Voltage Level Discount:
$0.40 per kW at transmission level
$0.18 per kW at subtransmission level

Energy Charges: ***4.322¢*** per kWh for all on-peak kWh
4.022¢ per kWh for all off-peak kWh

Voltage Level Discount:
0.162¢ per kWh at transmission level
0.073¢ per kWh at subtransmission level

Delivery Charges:
Primary Service Charge: $70 per month

Subtransmission and Transmission Service Charge: $375 per month

Distribution Charges:

For primary service (less than 24 kV) $***6.15*** per kW of maximum demand.
For service at subtransmission voltage (24 to 41.6 kV) $***1.96*** per kW of maximum demand.
For service at transmission voltage (120 kV and above) $***0.86*** per kW of maximum demand.

(Continued on Sheet No. D-36.02)

(Continued from Sheet No. D-36.01)

RATE SCHEDULE NO. D6.2 (Contd.) **PRIMARY EDUCATIONAL INSTITUTION RATE**

Full Service Customers (Contd):

Substation Credit: Available to customers where service at sub-transmission voltage level (24 to 41.6 kV) or higher is required, who provide the on-site substation including all necessary transforming, controlling and protective equipment. A credit of $0.30 per kW of maximum demand shall be applied to the maximum demand charge. A credit of 0.040¢ per kWh shall be applied to the energy charge where the service is metered on the primary side of the transformer.

Surcharges and Credits: As approved by the Commission. See Section C9.8.

Retail Access Service Customers:

Capacity (Only applicable to Retail Access Service Customers receiving utility Capacity Service from DTE Electric)

Demand Charge*:* $***3.58***per kW of on-peak billing demand

Voltage Level Discount:

$0.15 per kW of on-peak billing demand at transmission level
$0.07 per kW of on-peak billing demand at subtransmission level

Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Section C8.5.

Delivery Charges:

Primary Service Charge: $70 per month
Subtransmission and Transmission Service Charge: $375 per month
Distribution Charges:
For primary service (less than 24 kV) $***6.15*** per kW of maximum demand.
For service at subtransmission voltage (24 to 41.6 kV) $***1.96*** per kW of maximum demand.
For service at transmission voltage (120 kV and above) $***0.86*** per kW of maximum demand.

Substation Credit: Available to customers where service at sub-transmission voltage level (24 to 41.6 kV) or higher is required, who provide the on-site substation including all necessary transforming, controlling and protective equipment. A credit of $0.30 per kW of maximum demand shall be applied to the maximum demand charge. A credit of 0.040¢ per kWh shall be applied to the energy charge where the service is metered on the primary side of the transformer.

LATE PAYMENT CHARGE: See Section C4.8.

DEFINITION OF CUSTOMER VOLTAGE LEVEL: See Section C13.

MONTHLY ON-PEAK BILLING DEMAND: The monthly on-peak billing demand shall be the single highest 30-minute integrated reading of the demand meter during the on-peak hours of the billing period. The monthly on-peak billing demand will not be less than 65% of the highest monthly on-peak metered billing demand during the billing months of June, July, August, September, and October of the preceding eleven billing months, nor less than 50 kilowatts.

(Continued on Sheet No. D-36.03)

(Continued from Sheet No. D-40.00)

RATE SCHEDULE NO. D8 (Contd.) **INTERRUPTIBLE SUPPLY RATE**

NON-INTERRUPTION FEE: Customers who do not interrupt by the effective start time of a capacity deficiency order shall be billed at the cost of replacement energy plus 0.576¢ per kWh during the time of interruption plus the applicable voltage level charge, but not less than the normal D8 rate. Voltage level charges for service other than transmission voltage are:

0.138¢ per kWh at the distribution level.
0.076¢ per kWh at the subtransmission level.

SYSTEM INTEGRITY INTERRUPTION ORDER:

NOTICE OF SYSTEM INTEGRITY INTERRUPTION*:* The customer shall be provided:

1) Notice at least 1 hour in advance of probable interruption**,** whenever possible;
2) The time in which customer must fully reduce load; and
3) The estimated duration of the interruption.

The customer shall be provided notice of the actual end time for the system integrity order.

NON-INTERRUPTION PENALTY: A customer who does not fully comply with the timing and load reduction prescribed in the Notice of System Integrity Interruption shall be billed at the higher of (i) the rate of $50 per kW applied to the highest 60-minute integrated interruptible demand (kW) created during the interruption period or (ii) the actual damages incurred by the Company, including any MISO penalties in addition to the prescribed monthly rate. In addition, the interruptible contract capacity of a customer who does not fully comply with a System Integrity interruption order may be immediately reduced by the amount the customer failed to interrupt, unless the customer demonstrates that failure to interrupt was beyond its control.

(Continued on Sheet No. D-41.00)

(Continued from Sheet No. D-41.00)

RATE SCHEDULE NO. D8 (Contd.) **INTERRUPTIBLE SUPPLY RATE**

RATE PER MONTH:

Full Service Customers:

Power Supply Charges:
Capacity

Demand Charge: $***1.62*** per kW of on-peak billing demand
Voltage Level Discount***:***
$***0.15*** per kW of on-peak billing demand at transmission level
$***0.07*** per kW of on-peak billing demand at subtransmission level

Non-Capacity
Demand Charge***:*** $***8.50*** per kW of on-peak billing demand
Voltage Level Discount***:***
$***0.33*** per kW of on-peak billing demand at transmission level
$***0.15*** per kW of on-peak billing demand at subtransmission level

Energy Charge: ***4.257¢*** per kWh for all on-peak kWh
3.257¢ per kWh for all off-peak kWh

Voltage Level Discount:
0.138¢ per kWh at transmission level
0.062¢ per kWh at subtransmission level

Delivery Charges:
Primary Service Charge: $70 per month
Subtransmission and Transmission Service Charge: $375 per month
Distribution Charges:
For primary service (less than 24 kV) $***6.15*** per kW of maximum demand.
For service at subtransmission voltage (24 to 41.6 kV) $***1.96*** per kW of maximum demand.
For service at transmission voltage (120 kV and above) $***0.86*** per kW of maximum demand.

(Continued on Sheet No. D-42.00)

(Continued from Sheet No. D-41.00)

RATE SCHEDULE NO. D8 (Contd.) **INTERRUPTIBLE SUPPLY RATE**

Substation Credit: Available to customers where service at sub-transmission voltage level (24 to 41.6 kV) or higher is required, who provide the on-site substation including all necessary transforming, controlling and protective equipment. A credit of $0.30 per kW of maximum demand shall be applied to the maximum demand charge. A credit of 0.040¢ per kWh shall be applied to the energy charge where the service is metered on the primary side of the transformer.

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8.

Retail Access Service customers:

Capacity (only applicable to Retail Access Service Customers receiving Utility Capacity Service from DTE Electric)

Demand Charge: $***1.62*** per kW of on-peak billing demand
Voltage Level Discount:
$***0.07*** per kW of on-peak billing demand at transmission level
$***0.03*** per kW of on-peak billing demand at subtransmission level

Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Section C8.5.

Delivery Charges:

Primary Service Charge: $70 per month
Subtransmission and Transmission Service Charge: $375 per month
Distribution Charges:
For primary service (less than 24 kV) $***6.15*** per kW of maximum demand.
For service at subtransmission voltage (24 to 41.6 kV) $***1.96*** per kW of maximum demand.
For service at transmission voltage (120 kV and above) $***0.86*** per kW of maximum demand.

Substation Credit: Available to customers where service at sub-transmission voltage level (24 to 41.6 kV) or higher is required, who provide the on-site substation including all necessary transforming, controlling and protective equipment. A credit of $.30 per kW of maximum demand shall be applied to the maximum demand charge. A credit of .040¢ per kWh shall be applied to the energy charge where the service is metered on the primary side of the transformer.

Surcharges and Credits: As approved by the Commission. See Section C9.8.

LATE PAYMENT CHARGE: See Section C4.8.

DEFINITION OF CUSTOMER VOLTAGE LEVEL: See Section C13.

MONTHLY ON-PEAK BILLING DEMAND: The monthly on-peak billing demand shall be the single highest 30-minute integrated reading of the demand meter during the on-peak hours of the billing period. In no event will the monthly on-peak billing demand be less than 65% of the highest monthly on-peak metered billing demand during the billing months of June, July, August, September, and October of the preceding eleven billing months, nor less than 50 kilowatts.

(Continued on Sheet No. D-43.00)

(Continued from Sheet No. D-44.00)

RATE SCHEDULE NO. D9 **OUTDOOR PROTECTIVE LIGHTING**

SPECIAL TERMS AND CONDITIONS (contd.):

The stated charges for underground service on Sheet No. D-46.00 cover the ordinary trenching for cable extensions under normal soil conditions in cleared areas.

(1) Special purpose facilities are considered to be line or cable extensions, transformers, and any additional poles without lights, excluding facilities provided under stated charges on Sheet No. D-45.00. Where special purpose facilities are required, a service charge of 18% per year on the investment in such facilities will be billed in installments as an addition to the regular rate for each light. In the event the customer discontinues service before the end of the contract term, the established rate as well as the service charge on special purpose facilities for the remaining portion of the contract term shall immediately become due and payable. This provision was closed to new installations as of January 22, 1994.
(2) For new installations after January 22, 1994, which require investment in excess of three times the annual revenue, this rate is available only to customers who make a contribution in aid of construction equal to the amount by which the investment exceeds three times the annual revenue at the prevailing rate at the time of installation.
(3) For new underground-fed installations of 5 lights or more after May 1, 2019, which require investment in excess of three times the annual revenue, the customer may elect to pay a post charge for each increment of $1,000 investment required above three times the annual revenue.
(4) As an alternative, where the required contribution exceeds $10,000, upon agreement of the customer and the Company, the customer will pay an additional annual charge of the Company's weighted average cost of capital (***6.92***%) times the contribution amount in lieu of the cash contribution.

DE-ENERGIZED LIGHTS: Customers may elect to have any or all luminaires served under this rate disconnected. The charge per luminaire per year, payable in equal monthly installments, shall be 60% of the regular yearly rates. A $35.00 charge per luminaire will be made at the time of de-energization and at the time of re-energization.

DUSK TO MIDNIGHT SERVICE: For service to parking lots from dusk to approximately twelve o'clock midnight E.S.T., a ***distribution*** discount of 1.060¢ per nominal lamp size wattage per month and a 50% reduction in the average monthly hours of use will be applied. One control per circuit or luminaire will be provided.

EXPERIMENTAL PROGRAMMABLE PHOTOCELL SERVICE: Customers may elect to place luminaires on photocells that are programmable to turn off lights at pre-determined times during the night. A distribution discount of 1.060¢ per nominal lamp size wattage per month and a 50% reduction in the average monthly hours of use will be applied.

MONTHLY RATES: Overhead Outdoor Protective Lighting with Existing Pole and Existing Secondary Facilities ***(***All-night service***)***.

Power Supply Charges:

Capacity Energy Charge:	0.00***¢*** per kWh for all kWh
Non-Capacity Energy Charge***:***	***4.46***¢ per kWh for all kWh

(Continued on Sheet No. D-45.01)

M.P.S.C. No. 1 - Electric
DTE Electric Company
(Final Order Case No. U-21297)

Seventh Revised Sheet No. D-45.01
Cancels Sixth Revised Sheet No. D-45.01

(Continued from Sheet No. D-45.00)

RATE SCHEDULE NO. D9 (Contd.) **OUTDOOR PROTECTIVE LIGHTING**

Luminaire Charges:

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Nominal Lamp Size	**Type of Service**	**Distribution Charge per Lamp per Month**	**System Wattage**	**Average Monthly Hours (4200/12)**	**Energy Charge**	**Average Energy Cost per Month (d*e*f/1000)**	**Average Mon Cost**
100 W	Mercury Vapor	***$15.04***	120	350	***$0.0446***	***$1.87***	***$16.91***
175 W	Mercury Vapor	***$18.68***	210	350	***$0.0446***	***$3.28***	***$21.95***
250 W	Mercury Vapor	***$22.32***	300	350	***$0.0446***	***$4.68***	***$27.00***
400 W	Mercury Vapor	***$29.40***	450	350	***$0.0446***	***$7.02***	***$36.42***
1,000 W	Mercury Vapor	***$60.24***	1060	350	***$0.0446***	***$16.53***	***$76.78***
100 W	High Pressure Sodium	***$14.00***	135	350	***$0.0446***	***$2.11***	***$16.10***
150 W	High Pressure Sodium	***$16.71***	200	350	***$0.0446***	***$3.12***	***$19.83***
250 W	High Pressure Sodium	***$21.49***	305	350	***$0.0446***	***$4.76***	***$26.25***
400 W	High Pressure Sodium	***$26.42***	465	350	***$0.0446***	***$7.25***	***$33.68***
1,000 W	High Pressure Sodium	***$53.23***	1100	350	***$0.0446***	***$17.16***	***$70.38***
100 W	Metal Halide	***$14.03***	120	350	***$0.0446***	***$1.87***	***$15.90***
150 W	Metal Halide	***$16.77***	180	350	***$0.0446***	***$2.81***	***$19.58***
175 W	Metal Halide	***$18.14***	210	350	***$0.0446***	***$3.28***	***$21.42***
250 W	Metal Halide	***$22.25***	300	350	***$0.0446***	***$4.68***	***$26.93***
320 W	Metal Halide	***$26.09***	365	350	***$0.0446***	***$5.69***	***$31.78***
400 W	Metal Halide	***$30.48***	460	350	***$0.0446***	***$7.17***	***$37.65***
1,000 W	Metal Halide	***$63.38***	1050	350	***$0.0446***	***$16.38***	***$79.75***
20 - 29 W	LED	***$11.20***	25	350	***$0.0446***	***$0.39***	***$11.59***
30 - 39 W	LED	***$11.79***	35	350	***$0.0446***	***$0.55***	***$12.33***
40 - 49 W	LED	***$12.37***	45	350	***$0.0446***	***$0.70***	***$13.07***
50 - 59 W	LED	***$12.95***	55	350	***$0.0446***	***$0.86***	***$13.81***
60 - 69 W	LED	***$13.53***	65	350	***$0.0446***	***$1.01***	***$14.55***
70 - 79 W	LED	***$14.12***	75	350	***$0.0446***	***$1.17***	***$15.29***
80 - 89 W	LED	***$14.70***	85	350	***$0.0446***	***$1.33***	***$16.03***
90 - 99 W	LED	***$15.28***	95	350	***$0.0446***	***$1.48***	***$16.76***
100 - 109 W	LED	***$15.86***	105	350	***$0.0446***	***$1.64***	***$17.50***
110 - 119 W	LED	***$16.45***	115	350	***$0.0446***	***$1.79***	***$18.24***
120 - 129 W	LED	***$17.03***	125	350	***$0.0446***	***$1.95***	***$18.98***
130 - 139 W	LED	***$17.61***	135	350	***$0.0446***	***$2.11***	***$19.72***
140 - 149 W	LED	***$18.14***	145	350	***$0.0446***	***$2.26***	***$20.40***
150 - 159 W	LED	***$18.66***	155	350	***$0.0446***	***$2.42***	***$21.08***
160 - 169 W	LED	***$19.18***	165	350	***$0.0446***	***$2.57***	***$21.76***
170 - 179 W	LED	***$19.71***	175	350	***$0.0446***	***$2.73***	***$22.44***
180 - 189 W	LED	***$20.23***	185	350	***$0.0446***	***$2.89***	***$23.12***
190 - 199 W	LED	***$20.75***	195	350	***$0.0446***	***$3.04***	***$23.80***
200 - 209 W	LED	***$21.28***	205	350	***$0.0446***	***$3.20***	***$24.47***
210 - 219 W	LED	***$21.80***	215	350	***$0.0446***	***$3.35***	***$25.15***
220 - 229 W	LED	***$22.32***	225	350	***$0.0446***	***$3.51***	***$25.83***
230 - 239 W	LED	***$22.85***	235	350	***$0.0446***	***$3.67***	***$26.51***
240 - 249 W	LED	***$23.37***	245	350	***$0.0446***	***$3.82***	***$27.19***

(Continued on Sheet No. D-45.02)

Issued ____________, 2023
M. Bruzzano
Senior Vice President
Corporate Strategy & Regulatory Affairs

Detroit, Michigan

Effective for service rendered on
and after ______________, 2023

Issued under authority of the
Michigan Public Service Commission
dated _______________, 2023
in Case No. U-21297

(Continued from Sheet No. D-45.01)

RATE SCHEDULE NO. D9 (Contd.) **OUTDOOR PROTECTIVE LIGHTING**

Luminaire Charges(Contd)**:**

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Nominal Lamp Size	**Type of Service**	**Distribution Charge per Lamp per Month**	**System Wattage**	**Average Monthly Hours (4200/12)**	**Energy Charge**	**Average Energy Cost per Month (d*e*f/1000)**	**Average Monthly Cost**
250 - 259 W	LED	***$23.89***	255	350	***$0.0446***	***$3.98***	***$27.87***
260 - 269 W	LED	***$24.42***	265	350	***$0.0446***	***$4.13***	***$28.55***
270 - 279 W	LED	***$24.94***	275	350	***$0.0446***	***$4.29***	***$29.23***
280 - 289 W	LED	***$25.47***	285	350	***$0.0446***	***$4.44***	***$29.91***
290 - 299 W	LED	***$25.99***	295	350	***$0.0446***	***$4.60***	***$30.59***
300 - 309 W	LED	***$26.51***	305	350	***$0.0446***	***$4.76***	***$31.27***
310 - 319 W	LED	***$27.04***	315	350	***$0.0446***	***$4.91***	***$31.95***
320 - 329 W	LED	***$27.56***	325	350	***$0.0446***	***$5.07***	***$32.63***
330 - 339 W	LED	***$28.08***	335	350	***$0.0446***	***$5.22***	***$33.31***
340 - 349 W	LED	***$28.61***	345	350	***$0.0446***	***$5.38***	***$33.99***
350 - 359 W	LED	***$29.13***	355	350	***$0.0446***	***$5.54***	***$34.67***
360 - 369 W	LED	***$29.65***	365	350	***$0.0446***	***$5.69***	***$35.35***
370 - 379 W	LED	***$30.18***	375	350	***$0.0446***	***$5.85***	***$36.03***
380 - 389 W	LED	***$30.70***	385	350	***$0.0446***	***$6.00***	***$36.70***
390 - 399 W	LED	***$31.22***	395	350	***$0.0446***	***$6.16***	***$37.38***

For installations prior to January 22, 1994. New Pole and Single Span of Secondary Facilities. The above rate plus $24.48 per pole per year.

Effective January 22, 1994 installation requiring additional facilities shall pay a contribution in aid of construction in lieu of the service charge. Contribution is described in paragraph (2) above.

Multiple Lamps on a Single Pole. For each additional luminaire added to the same pole the charge will be at the existing pole rate.

The Energy Policy Act of 2005 states that no Mercury Vapor lamp ballasts may be manufactured or imported after January 1, 2008. As a result, effective January 1, 2008, new Mercury Vapor lamps will no longer be available. Customers with existing Mercury Vapor lamp ballasts will continue to receive service until those fixtures fail. At that time, the luminaire will be converted to LED.

MONTHLY RATES: Underground Outdoor Protective Lighting with Lamp Spacing up to 120 Feet (All-night service).

Power Supply Charges:
Capacity Energy Charge***:*** 0.00¢ per kWh for all kWh
Non-Capacity Energy Charge: ***4.46¢*** per kWh for all kWh

(Continued on Sheet No. D-46.00)

(Continued from Sheet No. D-45.02)

RATE SCHEDULE NO. D9 (Contd.) **OUTDOOR PROTECTIVE LIGHTING**

Luminaire Charges (Contd)**:**

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Nominal Lamp Size	**Type of Service**	**Distribution Charge per Lamp per Month**	**System Wattage**	**Average Monthly Hours (4200/12)**	**Energy Charge**	**Average Energy Cost per Month (d*e*f/1000)**	**Average Monthly Cost**
100 W	Mercury Vapor	***$27.60***	120	350	***$0.0446***	***$1.87***	***$29.47***
175 W	Mercury Vapor	***$30.35***	210	350	***$0.0446***	***$3.28***	***$33.62***
250 W	Mercury Vapor	***$35.65***	300	350	***$0.0446***	***$4.68***	***$40.33***
400 W	Mercury Vapor	***$46.25***	450	350	***$0.0446***	***$7.02***	***$53.27***
1,000 W	Mercury Vapor	***$86.55***	1060	350	***$0.0446***	***$16.53***	***$103.08***
70 W	High Pressure Sodium	***$24.09***	95	350	***$0.0446***	***$1.48***	***$25.57***
100 W	High Pressure Sodium	***$24.86***	135	350	***$0.0446***	***$2.11***	***$26.96***
150 W	High Pressure Sodium	***$26.49***	200	350	***$0.0446***	***$3.12***	***$29.61***
250 W	High Pressure Sodium	***$29.75***	305	350	***$0.0446***	***$4.76***	***$34.51***
400 W	High Pressure Sodium	***$34.64***	465	350	***$0.0446***	***$7.25***	***$41.90***
1,000 W	High Pressure Sodium	***$54.21***	1100	350	***$0.0446***	***$17.16***	***$71.37***
100 W	Metal Halide	***$14.03***	120	350	***$0.0446***	***$1.87***	***$32.41***
150 W	Metal Halide	***$16.77***	180	350	***$0.0446***	***$2.81***	***$37.10***
175 W	Metal Halide	***$18.14***	210	350	***$0.0446***	***$3.28***	***$39.44***
250 W	Metal Halide	***$22.25***	300	350	***$0.0446***	***$4.68***	***$46.47***
400 W	Metal Halide	***$30.48***	460	350	***$0.0446***	***$7.17***	***$60.22***
1,000 W	Metal Halide	***$63.38***	1050	350	***$0.0446***	***$16.38***	***$114.45***
20 - 29 W	LED	***$25.22***	25	350	***$0.0446***	***$0.39***	***$25.61***
30 - 39 W	LED	***$25.66***	35	350	***$0.0446***	***$0.55***	***$26.21***
40 - 49 W	LED	***$26.10***	45	350	***$0.0446***	***$0.70***	***$26.80***
50 - 59 W	LED	***$26.55***	55	350	***$0.0446***	***$0.86***	***$27.40***
60 - 69 W	LED	***$27.00***	65	350	***$0.0446***	***$1.01***	***$28.01***
70 - 79 W	LED	***$27.41***	75	350	***$0.0446***	***$1.17***	***$28.58***
80 - 89 W	LED	***$27.84***	85	350	***$0.0446***	***$1.33***	***$29.16***
90 - 99 W	LED	***$28.25***	95	350	***$0.0446***	***$1.48***	***$29.73***
100 - 109 W	LED	***$28.66***	105	350	***$0.0446***	***$1.64***	***$30.30***
110 - 119 W	LED	***$29.09***	115	350	***$0.0446***	***$1.79***	***$30.88***
120 - 129 W	LED	***$29.49***	125	350	***$0.0446***	***$1.95***	***$31.44***
130 - 139 W	LED	***$29.89***	135	350	***$0.0446***	***$2.11***	***$31.99***
140 - 149 W	LED	***$30.27***	145	350	***$0.0446***	***$2.26***	***$32.53***
150 - 159 W	LED	***$30.65***	155	350	***$0.0446***	***$2.42***	***$33.07***
160 - 169 W	LED	***$31.03***	165	350	***$0.0446***	***$2.57***	***$33.60***
170 - 179 W	LED	***$31.41***	175	350	***$0.0446***	***$2.73***	***$34.14***
180 - 189 W	LED	***$31.79***	185	350	***$0.0446***	***$2.89***	***$34.68***
190 - 199 W	LED	***$32.17***	195	350	***$0.0446***	***$3.04***	***$35.22***
200 - 209 W	LED	***$32.56***	205	350	***$0.0446***	***$3.20***	***$35.75***
210 - 219 W	LED	***$32.94***	215	350	***$0.0446***	***$3.35***	***$36.29***
220 - 229 W	LED	***$33.32***	225	350	***$0.0446***	***$3.51***	***$36.83***
230 - 239 W	LED	***$33.70***	235	350	***$0.0446***	***$3.67***	***$37.37***
240 - 249 W	LED	***$34.08***	245	350	***$0.0446***	***$3.82***	***$37.91***
250 - 259 W	LED	***$34.47***	255	350	***$0.0446***	***$3.98***	***$38.44***
260 - 269 W	LED	***$34.85***	265	350	***$0.0446***	***$4.13***	***$38.98***

(Continued on Sheet No. D-46.01)

(Continued from Sheet No. D-46.00)

RATE SCHEDULE NO. D9 (Contd.) **OUTDOOR PROTECTIVE LIGHTING**

Luminaire Charges (Contd)**:**

(a) Nominal Lamp Size	(b) Type of Service	(c) Distribution Charge per Lamp per Month	(d) System Wattage	(e) Average Monthly Hours (4200/12)	(f) Energy Charge	(g) Average Energy Cost per Month (d*e*f/1000)	(h) Average Monthly Cost
270 - 279 W	LED	***$35.23***	275	350	***$0.0446***	***$4.29***	***$39.52***
280 - 289 W	LED	***$35.61***	285	350	***$0.0446***	***$4.44***	***$40.05***
290 - 299 W	LED	***$35.99***	295	350	***$0.0446***	***$4.60***	***$40.59***
300 - 309 W	LED	***$36.37***	305	350	***$0.0446***	***$4.76***	***$41.13***
310 - 319 W	LED	***$36.76***	315	350	***$0.0446***	***$4.91***	***$41.67***
320 - 329 W	LED	***$37.14***	325	350	***$0.0446***	***$5.07***	***$42.21***
330 - 339 W	LED	***$37.52***	335	350	***$0.0446***	***$5.22***	***$42.74***
340 - 349 W	LED	***$37.90***	345	350	***$0.0446***	***$5.38***	***$43.28***
350 - 359 W	LED	***$38.28***	355	350	***$0.0446***	***$5.54***	***$43.82***
360 - 369 W	LED	***$38.66***	365	350	***$0.0446***	***$5.69***	***$44.36***
370 - 379 W	LED	***$39.05***	375	350	***$0.0446***	***$5.85***	***$44.89***
380 - 389 W	LED	***$39.43***	385	350	***$0.0446***	***$6.00***	***$45.43***
390 - 399 W	LED	***$39.81***	395	350	***$0.0446***	***$6.16***	***$45.97***

Effective January 22, 1994 installation requiring additional facilities shall pay a contribution in aid of construction in lieu of the service charge. Contribution is described in paragraph (2) above.

Effective May 1, 2019, installations requiring additional facilities shall pay a post charge of $***6.88*** per increment of $1,000 of expense in lieu of contribution in aid of construction. Contribution is described in paragraph (3) above.

Long Span

- For lamp spacing over 120 feet up to 325 feet on the same side of street, add to rate per lamp per year $24.48

Semi-Ornamental

- For Semi-Ornamental Systems which employ Ornamental Post Units served from overhead conductors, where such construction is practical, reduce rate per luminaire per year $21.48

Multiple Luminaires on a Single Pole

- For additional luminaires added to the same pole, a reduced rate per luminaire per year on the added luminaire.
  Ornamental $97.92
  Ornamental-Lamp spacing over 120 feet $122.40
  Semi-Ornamental $76.56

The Energy Policy Act of 2005 states that no Mercury Vapor lamp ballasts may be manufactured or imported after January 1, 2008. As a result, effective January 1, 2008, new Mercury Vapor lamps will no longer be available. Customers with existing Mercury Vapor lamp ballasts will continue to receive service until those luminaires fail. At that time, the luminaire will be converted to LED.

RATE SCHEDULE NO. D10 **ALL-ELECTRIC SCHOOL BUILDING SERVICE RATE**

AVAILABILITY OF SERVICE: Available to customers desiring service in school buildings served at primary voltage who contract for a specified installed capacity of not less than 50 kilowatts at a single location provided the space heating and water heating for all or a substantial portion of the premises is supplied by electric service and is installed on a permanent basis.

HOURS OF SERVICE: 24 hours, subject to interruption by agreement, or by advance notice.

CURRENT, PHASE AND VOLTAGE: Alternating current, three-phase, nominally at 4,800 or 13,200 volts at the option of the Company.

RATE PER MONTH:

Full Service Customers:

Power Supply Charges:

Capacity

Energy Charge (June through October):	***2.107¢*** per kWh for all kWh
Energy Charge (November through May):	***0.094¢*** per kWh for all kWh

Non-Capacity

Energy Charge (June through October):	***7.430¢*** per kWh for all kWh
Energy Charge (November through May):	***7.430¢*** per kWh for all kWh

Delivery Charges:

Service Charge:	$***70*** per month
Distribution Charge:	***1.968¢*** per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8.

Retail Access Service Customers:

Capacity (Only applicable to Retail Access Service Customers receiving Utility Capacity Service from DTE Electric)

Energy Charge (June through October):	***2.107¢*** per kWh for all kWh
Energy Charge (November through May***):***	***0.094¢*** per kWh for all kWh

Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Section C8.5.

Delivery Charges:

Service Charge:	$***70*** per month
Distribution Charge:	***1.968¢*** per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Section C9.8.

(Continued on Sheet No. D-48.00)

M.P.S.C. No. 1 - Electric
DTE Electric Company
(Final Order Case No. U-21297)

Ninth Revised Sheet No. D-48.01
Cancels Eighth Revised Sheet No. D-48.01

RATE SCHEDULE NO. D11 **PRIMARY SUPPLY RATE**

AVAILABILITY OF SERVICE: Available to customers desiring service at primary, sub-transmission, or transmission voltage who contract for a specified capacity of not less than 50 kilowatts at a single location.

HOURS OF SERVICE: 24 hours, subject to interruption by agreement, or by advance notice.

CURRENT, PHASE AND VOLTAGE: Alternating current, three-phase, nominally at 4,800, 13,200, 24,000, 41,570 or 120,000 volts at the option of the Company.

CONTRACT CAPACITY: Customers shall contract for a specified capacity in kilowatts sufficient to meet normal maximum requirements but not less than 50 kilowatts. The Company undertakes to provide the necessary facilities for a supply of electric power from its primary distribution system at the contract capacity. Any single reading of the demand meter in any month that exceeds the contract capacity then in effect shall become the new contract capacity. The contract capacity for customers served at more than one voltage level shall be the sum of the contract capacities established for each voltage level.

RATE PER MONTH:
Full Service Customers:
Power Supply Charges:
Capacity
Demand Charge: $***3.56*** per kW of on-peak billing demand
Voltage Level Discount:
$***0.15*** per kW of on-peak billing demand at transmission level
$***0.07*** per kW of on-peak billing demand at subtransmission level

Non-Capacity
Demand Charge***:*** $***13.33*** per kW of on-peak billing demand
Voltage Level Discount***:***
$***0.53*** per kW of on-peak billing demand at transmission level
$***0.24*** per kW of on-peak billing demand at subtransmission level
Energy Charge: ***4.257¢*** per kWh for all on-peak kWh
3.257¢ per kWh for all off-peak kWh

Voltage Level Discount:
0.138¢ per kWh at transmission level
0.062¢ per kWh at subtransmission level

Delivery Charges:
Primary Service Charge: $70 per month
Subtransmission and Transmission Service Charge: $375 per month

Distribution Charges:
For primary service (less than 24 kV) $***6.15*** per kW of maximum demand.
For service at subtransmission voltage (24 to 41.6 kV) $***1.96*** per kW of maximum demand.
For service at transmission voltage (120 kV and above) $***0.86*** per kW of maximum demand.

Continued on Sheet No. D-48.02)

Issued ____________, 2023
M. Bruzzano
Senior Vice President
Corporate Strategy & Regulatory Affairs

Detroit, Michigan

Effective for service rendered on
and after _______________, 2023

Issued under authority of the
Michigan Public Service Commission
dated ________________, 2023
in Case No. U-21297

(Continued from Sheet No. D-48.01)

RATE SCHEDULE NO. D11 (Contd.) **PRIMARY SUPPLY RATE**

Substation Credit: Available to customers where service at sub-transmission voltage level (24 to 41.6 kV) or higher is required, who provide the on-site substation including all necessary transforming, controlling and protective equipment. A credit of $0.30 per kW of maximum demand shall be applied to the maximum demand charge. A credit of 0.040¢ per kWh shall be applied to the energy charge where the service is metered on the primary side of the transformer.

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8.

Retail Access Service Customers:

Capacity (Only applicable to Retail Access Service Customers receiving Utility Capacity Service from DTE Electric)

Demand Charge: $***3.56*** per kW of on-peak billing demand
Voltage Level Discount***:***
$***0.15*** per kW of on-peak billing demand at transmission level
$***0.07*** per kW of on-peak billing demand at subtransmission level

Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Section C5.8.

Delivery Charges:

Primary Service Charge: $70 per month
Subtrassmission and Transmission Service Charge: $375 per month

Distribution Charges:

For primary service (less than 24 kV) $***6.15*** per kW of maximum demand***.***
For service at subtransmission voltage (24 to 41.6 kV) $***1.96*** per kW of maximum demand.
For service at transmission voltage (120 kV and above) $***0.86*** per kW of maximum demand.

Substation Credit: Available to customers where service at sub-transmission voltage level (24 to 41.6 kV) or higher is required, who provide the on-site substation including all necessary transforming, controlling and protective equipment. A credit of $0.30 per kW of maximum demand shall be applied to the maximum demand charge. A credit of 0.040¢ per kWh shall be applied to the energy charge where the service is metered on the primary side of the transformer.

Surcharges and Credits: As approved by the Commission. See Section C9.8.

LATE PAYMENT CHARGE: See Section C4.8.

DEFINITION OF CUSTOMER VOLTAGE LEVEL: See Section C13.

MONTHLY ON-PEAK BILLING DEMAND: The monthly on-peak billing demand shall be the single highest 30-minute integrated reading of the demand meter during the on-peak hours of the billing period. The monthly on- peak billing demand will not be less than 65% of the highest monthly on-peak metered billing demand during

(Continued on Sheet No. D-48.03)

RATE SCHEDULE NO. D12 **EXPERIMENTAL LARGE CUSTOMER LOW PEAK DEMAND SUPPLY RATE**

AVAILABILITY OF SERVICE: Available on an experimental basis to new full-service customers with a minimum metered contract capacity of 10,000 kW and with high on-peak demands set during the October through May billing months and on-peak demands of ten percent (10%) or less during the June through September billing months and taking service at sub-transmission, or transmission voltage at a single location. Total contracted capacity on this tariff is limited to 100 MW. Service under this tariff may not be combined with any other tariff, rider, or separately metered service except for Rider Nos. 17 or 19.

HOURS OF SERVICE: 24 hours, subject to interruption by agreement, or by advance notice.

CURRENT, PHASE AND VOLTAGE: Alternating current, three-phase, nominally at 24,000, 41,570 or 120,000 volts at the option of the Company.

CONTRACT CAPACITY: Customers shall contract for a specified capacity in kilowatts sufficient to meet normal maximum requirements but not less than 10,000 kilowatts. The Company undertakes to provide the necessary facilities for a supply of electric power from its primary distribution system at the contract capacity. Any single reading of the demand meter in any month that exceeds the contract capacity then in effect shall become the new contract capacity. The contract capacity for customers served at more than one voltage level shall be the sum of the contract capacities established for each voltage level.

RATE PER MONTH:
Full Service Customers:
Power Supply Charges:
Capacity (October through May)
Demand Charge: $***0.32*** per kW of on-peak billing demand

Capacity (June through September)
Demand Charge: $***8.00*** per kW of on-peak billing demand

Capacity Voltage Level Discount:
$(0.005) per kW of on-peak billing demand at transmission level (October through May)
$(***0.14)*** per kW of on-peak billing demand at transmission level (June through September)

Non-Capacity (October through May)
Demand Charge: $***0.32*** per kW of on-peak billing demand

Non-Capacity (June through September)
Demand Charge: $***41.16*** per kW of on-peak billing demand

Non-Capacity Voltage Level Discount:
$(0.005) per kW of on-peak billing demand at transmission level (October through May)
$(***0.70***) per kW of on-peak billing demand at transmission level (June through September)

(Continued on Sheet No. D-48.06)

(Continued from Sheet No. D-48.05)

RATE SCHEDULE NO. D12 (contd.)

EXPERIMENTAL LARGE CUSTOMER LOW PEAK DEMAND SUPPLY RATE

Energy Charge: ***4.112*¢** per kWh for all on-peak kWh
***3.611*¢** per kWh for all off-peak kWh

Energy Voltage Level Discount: (***0.056***)¢ per kWh at transmission level

Delivery Charges:
Subtransmission Service Charge: $375 per month
Transmission Service Charge: $375 per month

Distribution Charges:
For service at subtransmission voltage (24 to 41.6 kV) $***1.96*** per kW of maximum demand.
For service at transmission voltage (120 kV and above) $***0.86*** per kW of maximum demand.

Substation Credit: Available to customers where service at sub-transmission voltage level (24 to 41.6 kV) or higher is required, who provide the on-site substation including all necessary transforming, controlling and protective equipment. A credit of $0.30 per kW of maximum demand shall be applied to the maximum demand charge. A credit of 0.040¢ per kWh shall be applied to the energy charge where the service is metered on the primary side of the transformer.

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8.

LATE PAYMENT CHARGE: See Section C4.8.

DEFINITION OF CUSTOMER VOLTAGE LEVEL: See Section C13.

MONTHLY ON-PEAK BILLING DEMAND: The monthly on-peak billing demand shall be the single highest 30-minute integrated reading of the demand meter during the on-peak hours of the billing period, but not less than 50 kilowatts.

MAXIMUM DEMAND: The maximum demand shall be the highest 30-minute demand created during the previous 12 billing months, including the current month but not less than 50% of contract capacity. This clause is applicable to each voltage level served.

MINIMUM CHARGE: All applicable demand charges plus the service charge and any applicable per meter per month surcharges.

SCHEDULE OF ON-PEAK HOURS: See Section C11.

(Continued on Sheet No. D-48.07)

RATE SCHEDULE NO. D13 **XL HIGH LOAD FACTOR RATE**

AVAILABILITY OF SERVICE: Available to customers desiring service at primary, sub-transmission, or transmission voltage who contract for a specified capacity of not less than 50,000 kilowatts, which may be located at one or more sites within the Company's electric service territory. The customer's load must reflect the following characteristics:

1) The contract capacity under this schedule must be new and incremental. Existing ("baseline") usage will remain eligible for service under any other rate schedule or rider for which it qualifies. The required incremental contracted capacity must be in service within four years of initially taking service under this rate.

2) Service taken by the customer must be at a load factor of no less than 75% for the capacity contracted under this rate. The required incremental load factor must be demonstrated in the twelve months following achievement of the contracted capacity described in (1) and maintained for the duration of service on this rate.

3) Any customer site taking service under this rate shall require separately metered circuits for such service.

4) Any customer failing to meet the incremental contract capacity and load factor requirement will be removed from this rate and placed on an eligible rate of the customer's choosing.

5) The rate is available at the discretion of the Company.

HOURS OF SERVICE: 24 hours, subject to interruption by agreement, or by advance notice.

CURRENT, PHASE AND VOLTAGE: Alternating current, three-phase, nominally at 4,800, 13,200, 24,000, 41,570 or 120,000 volts at the option of the Company.

CONTRACT CAPACITY: Customers shall contract for a specified capacity in megawatts sufficient to meet normal maximum requirements but not less than 50,000 kilowatts. The customer may not exceed the contract capacity by more than 5%. Demand in excess of 105% of contract capacity will be placed on Rate Schedule No. D11, or any other eligible rate at the election of the customer. At the Company's discretion, it may offer to increase contract capacity on this rate without effect on the term of the contract. The contract capacity for customers served at more than one voltage level at one site shall be the sum of the contract capacities established for each voltage level.

The contract capacity, however established, shall not be decreased during the term of the contract except by mutual consent, and in no event may a decrease in contract capacity result in less than the minimum required capacity or load factor.

RATES:

Power Supply Charges for all service voltages	
Capacity	$15.14 / MWh
Non-Capacity	$***34.30*** / MWh
Transmission	$***3.04*** / MWh
Delivery Charge	
Primary Service Charge	$70 per meter/month
Subtransmission and Transmission Service Charge	$375 per meter/month

(Continued on Sheet No. D-48.09)

(Continued from Sheet No. D-48.08)

RATE SCHEDULE NO. D13 (contd.) **XL HIGH LOAD FACTOR RATE**

RATES (contd.)**:**

Distribution Charges

For primary service (less than 24 kV)	$***9.36*** / MWh
For service at sub-transmission voltage (24 to 41.6 kV)	$***2.98*** / MWh
For service at transmission voltage (120 kV and above)	$***1.31*** / MWh

Substation Credit: Available to customers where service at sub-transmission voltage level (24 to 41.6 kV) or higher is required, who provide the on-site substation including all necessary transforming, controlling and protective equipment. A credit of $0.55 per MWh shall be applied to the contracted load on this rate. A credit of $0.40 per MWh shall be applied to the energy charge where the service is metered on the primary side of the transformer.

Administration Charge

Administration	$0.15 / MWh

Surcharges and Credits: Customers are subject to surcharges as approved by the Commission. Customers taking service on this rate are not subject to the Power Supply Cost Recovery (PSCR) factor, the Nuclear Surcharge, or the Transitional Reconciliation Mechanism. Customers taking service on this rate will be subject to an adjustment to reconcile projected and actual power supply non-capacity and transmission costs.

Other: The power supply capacity charge shall remain fixed for the term of the contract

BASELINE USAGE: Baseline usage is the Customer's existing contracted capacity at the time of taking service on D13. The Company reserves the right to define baseline usage based on exceptional circumstances as appropriate. Baseline usage may be served on any eligible rate schedule or rider, and it may in the future take service under any eligible rate or rider. No capacity or energy defined as baseline is eligible for service under this rate schedule and no capacity or energy may be moved from a baseline usage circuit to a circuit served under this rate.

DEFINITION OF LOAD FACTOR: For the purposes of this rate schedule Load Factor is defined on an annual basis. It is calculated as:

(Total MWh of usage in year / (incremental contract capacity in MW*hours in year))

POWER FACTOR CLAUSE: The rates and charges under this tariff are based on the customer maintaining a power factor of not less than 85% lagging. Any power factor less than 70% will not be permitted and the customer will be required to install at his own expense such corrective equipment as may be necessary to improve power factor. A penalty will be applied to the total amount of the monthly billing for electric energy for power factor below 85% lagging in accordance with the table in Power Factor Determination, Section C12. The Power Factor Clause will be applied to metered quantities.

(Continued on Sheet No. D-48.10)

(Continued from Sheet No. D-49.00)

RATE SCHEDULE NO. E1 (Contd.) **MUNICIPAL STREET LIGHTING RATE**

CONTRACT TERM: Minimum 5 year term. Upon expiration of the initial term shall continue on a month-to-month basis until terminated by mutual written consent of the parties or by either party with thirty (30) days prior written notice to the other party. Any conversion, relocation and/or removal of existing street lighting facilities at the customer's request, including those removals necessitated by termination of service, must be paid for by the customer. The detailed provisions and schedule of charges, which may include the remaining value of the existing facilities, will be quoted upon request. The Company shall not withdraw service, and the municipality shall not substitute another source of service in whole or in part, without twelve months' written notice to the other party.

Option I: Company Owned Street Lighting System

Where new installations require an investment in excess of an investment allowance, Option I is available only to customers who make a contribution in aid of construction equal to the amount by which the investment exceeds three times the annual revenue at the prevailing rate at the time of installation. (Effective January 1, 1991, the investment amount will be limited to direct cost. Effective January 1, 1992, the investment amount will include full cost.)

As an alternative, where the required contribution exceeds $10,000, upon agreement of the customer and the Company, the customer will pay an additional annual charge of the Company’s weighted average cost of capital (***6.92***%) times the contribution amount in lieu of the cash contribution.

For new underground-fed installations of 5 lights or more after May 1, 2019, which require investment in excess of three times the annual revenue at the prevailing rate at the time of installation, the customer may elect to pay a post charge for each increment of $1,000 investment required above three times the annual revenue.

DE-ENERGIZED LIGHTS: Customers may elect to have any or all luminaires served under this rate disconnected. The charge per luminaire per year, payable in equal monthly installments, shall be 60% of the regular yearly rates. A *$35.00* charge per luminaire will be made at the time of de-energization and at the time of re-energization.

DUSK TO MIDNIGHT SERVICE: For service to parking lots from dusk to approximately twelve o’clock midnight E.S.T., a ***distribution*** discount of 1.060¢ per nominal lamp size wattage per month and a 50% reduction in the average monthly hours of use will be applied. One control per circuit or luminaire will be provided.

EXPERIMENTAL PROGRAMMABLE PHOTOCELL SERVICE: Customers may elect to place luminaires on photocells that are programmable to turn off lights at pre-determined times during the night. A distribution discount of 1.060¢ per nominal lamp size wattage per month and a 50% reduction in the average monthly hours on use will be applied.

MONTHLY RATES OPTION I: Overhead Municipal Street Lighting *(*All-night service*)*.

Power Supply Charges:
Capacity Energy Charge: 0.00¢ per kWh for all kWh
Non-Capacity Energy Charge***: 4.46¢*** per kWh for all kWh

(Continued on Sheet No. D-50.01)

(Continued from Sheet No. D-50.00)

RATE SCHEDULE NO. E1 (Contd.) **MUNICIPAL STREET LIGHTING RATE**

Luminaire Charges*:*

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Nominal Lamp Size	**Type of Service**	**Distribution Charge per Lamp per Month**	**System Wattage**	**Average Monthly Hours (4200/12)**	**Energy Charge**	**Average Energy Cost per Month (d*e*f/1000)**	**Average Monthly Cost**
100 W	Mercury Vapor	***$25.34***	120	350	***$0.0446***	***$1.87***	***$27.21***
175 W	Mercury Vapor	***$31.35***	210	350	***$0.0446***	***$3.28***	***$34.63***
250 W	Mercury Vapor	***$37.52***	300	350	***$0.0446***	***$4.68***	***$42.20***
400 W	Mercury Vapor	***$49.56***	450	350	***$0.0446***	***$7.02***	***$56.58***
1,000 W	Mercury Vapor	***$105.40***	1060	350	***$0.0446***	***$16.53***	***$121.93***
70 W	High Pressure Sodium	***$18.86***	95	350	***$0.0446***	***$1.48***	***$20.34***
100 W	High Pressure Sodium	***$21.53***	135	350	***$0.0446***	***$2.11***	***$23.63***
150 W	High Pressure Sodium	***$25.87***	200	350	***$0.0446***	***$3.12***	***$28.99***
250 W	High Pressure Sodium	***$33.61***	305	350	***$0.0446***	***$4.76***	***$38.36***
360 W	High Pressure Sodium	***$42.05***	418	350	***$0.0446***	***$6.52***	***$48.57***
400 W	High Pressure Sodium	***$45.12***	465	350	***$0.0446***	***$7.25***	***$52.37***
1,000 W	High Pressure Sodium	***$82.64***	1100	350	***$0.0446***	***$17.16***	***$99.80***
70 W	Metal Halide	***$24.48***	85	350	***$0.0446***	***$1.33***	***$25.81***
100 W	Metal Halide	***$24.83***	120	350	***$0.0446***	***$1.87***	***$26.70***
150 W	Metal Halide	***$30.17***	180	350	***$0.0446***	***$2.81***	***$32.97***
175 W	Metal Halide	***$32.83***	210	350	***$0.0446***	***$3.28***	***$36.11***
250 W	Metal Halide	***$40.84***	300	350	***$0.0446***	***$4.68***	***$45.52***
320 W	Metal Halide	***$47.70***	365	350	***$0.0446***	***$5.69***	***$53.39***
400 W	Metal Halide	***$55.53***	460	350	***$0.0446***	***$7.17***	***$62.71***
1,000 W	Metal Halide	***$114.64***	1050	350	***$0.0446***	***$16.38***	***$131.02***
20 - 29 W	LED	***$15.91***	25	350	***$0.0446***	***$0.39***	***$16.30***
30 - 39 W	LED	***$16.65***	35	350	***$0.0446***	***$0.55***	***$17.20***
40 - 49 W	LED	***$17.39***	45	350	***$0.0446***	***$0.70***	***$18.09***
50 - 59 W	LED	***$18.12***	55	350	***$0.0446***	***$0.86***	***$18.98***
60 - 69 W	LED	***$19.29***	65	350	***$0.0446***	***$1.01***	***$20.30***
70 - 79 W	LED	***$20.46***	75	350	***$0.0446***	***$1.17***	***$21.63***
80 - 89 W	LED	***$21.63***	85	350	***$0.0446***	***$1.33***	***$22.95***
90 - 99 W	LED	***$22.80***	95	350	***$0.0446***	***$1.48***	***$24.28***
100 - 109 W	LED	***$23.97***	105	350	***$0.0446***	***$1.64***	***$25.61***
110 - 119 W	LED	***$25.14***	115	350	***$0.0446***	***$1.79***	***$26.93***
120 - 129 W	LED	***$26.31***	125	350	***$0.0446***	***$1.95***	***$28.26***
130 - 139 W	LED	***$27.40***	135	350	***$0.0446***	***$2.11***	***$29.50***
140 - 149 W	LED	***$28.27***	145	350	***$0.0446***	***$2.26***	***$30.53***
150 - 159 W	LED	***$29.13***	155	350	***$0.0446***	***$2.42***	***$31.55***
160 - 169 W	LED	***$30.00***	165	350	***$0.0446***	***$2.57***	***$32.58***

(Continued on Sheet No. D-50.02)

(Continued from Sheet No. D-50.01)

RATE SCHEDULE NO. E1 (Contd.) **MUNICIPAL STREET LIGHTING RATE**

Luminaire Charges (Contd.):

(a) Nominal Lamp Size	(b) Type of Service	(c) Distribution Charge per Lamp per Month	(d) System Wattage	(e) Average Monthly Hours (4200/12)	(f) Energy Charge	(g) Average Energy Cost per Month (d*e*f/1000)	(h) Average Monthly Cost
170 - 179 W	LED	*$30.86*	175	350	*$0.0446*	*$2.73*	*$33.59*
180 - 189 W	LED	*$31.73*	185	350	*$0.0446*	*$2.89*	*$34.61*
190 - 199 W	LED	*$32.59*	195	350	*$0.0446*	*$3.04*	*$35.63*
200 - 209 W	LED	*$33.46*	205	350	*$0.0446*	*$3.20*	*$36.66*
210 - 219 W	LED	*$34.32*	215	350	*$0.0446*	*$3.35*	*$37.67*
220 - 229 W	LED	*$34.61*	225	350	*$0.0446*	*$3.51*	*$38.12*
230 - 239 W	LED	*$34.90*	235	350	*$0.0446*	*$3.67*	*$38.56*
240 - 249 W	LED	*$35.74*	245	350	*$0.0446*	*$3.82*	*$39.56*
250 - 259 W	LED	*$36.58*	255	350	*$0.0446*	*$3.98*	*$40.55*
260 - 269 W	LED	*$37.41*	265	350	*$0.0446*	*$4.13*	*$41.55*
270 - 279 W	LED	*$38.25*	275	350	*$0.0446*	*$4.29*	*$42.54*
280 - 289 W	LED	*$39.09*	285	350	*$0.0446*	*$4.44*	*$43.54*
290 - 299 W	LED	*$39.93*	295	350	*$0.0446*	*$4.60*	*$44.53*
300 - 309 W	LED	*$40.77*	305	350	*$0.0446*	*$4.76*	*$45.53*
310 - 319 W	LED	*$41.61*	315	350	*$0.0446*	*$4.91*	*$46.52*
320 - 329 W	LED	*$42.45*	325	350	*$0.0446*	*$5.07*	*$47.52*
330 - 339 W	LED	*$43.29*	335	350	*$0.0446*	*$5.22*	*$48.51*
340 - 349 W	LED	*$44.12*	345	350	*$0.0446*	*$5.38*	*$49.51*
350 - 359 W	LED	*$44.96*	355	350	*$0.0446*	*$5.54*	*$50.50*
360 - 369 W	LED	*$45.80*	365	350	*$0.0446*	*$5.69*	*$51.49*
370 - 379 W	LED	*$46.64*	375	350	*$0.0446*	*$5.85*	*$52.49*
380 - 389 W	LED	*$47.48*	385	350	*$0.0446*	*$6.00*	*$53.48*
390 - 399 W	LED	*$48.32*	395	350	*$0.0446*	*$6.16*	*$54.48*

Multiple Lamps on a Single Pole

- For each additional luminaire added to the same pole, reduce rate per lamp per year on the added luminaire $12.24.

The Energy Policy Act of 2005 states that no Mercury Vapor lamp ballasts may be manufactured or imported after January 1, 2008. As a result, effective January 1, 2008, new Mercury Vapor lamps will no longer be available. Customers with existing Mercury Vapor lamp ballasts will continue to receive service until those luminaires fail. At that time, the luminaire will be converted to LED.

(Continued on Sheet No. D-51.00)

(Continued from Sheet No. D-50.02)

RATE SCHEDULE NO. E1 (Contd.) **MUNICIPAL STREET LIGHTING RATE**

Option I: Company Owned Street Lighting System (Contd.)

MONTHLY RATES OPTION I: Ornamental Underground Municipal Street Lighting for Lamp Spacing up to 120 Feet of Street ***(***All-night service***)***.

Power Supply Charges:
Capacity Energy Charge***:*** 0.00¢ per kWh for all kWh
Non-Capacity Energy Charge***: 4.46¢*** per kWh for all kWh

Luminaire Charges:

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Nominal Lamp Size	**Type of Service**	**Distribution Charge per Lamp per Month**	**System Wattage**	**Average Monthly Hours (4200/12)**	**Energy Charge**	**Average Energy Cost per Month (d*e*f/1000)**	**Average Monthly Cost**
100 W	Mercury Vapor	***$32.48***	120	350	***$0.0446***	***$1.87***	***$34.36***
175 W	Mercury Vapor	***$37.64***	210	350	***$0.0446***	***$3.28***	***$40.91***
250 W	Mercury Vapor	***$45.55***	300	350	***$0.0446***	***$4.68***	***$50.23***
400 W	Mercury Vapor	***$57.87***	450	350	***$0.0446***	***$7.02***	***$64.89***
1,000 W	Mercury Vapor	***$118.04***	1060	350	***$0.0446***	***$16.53***	***$134.58***
70 W	High Pressure Sodium	***$24.77***	95	350	***$0.0446***	***$1.48***	***$26.25***
100 W	High Pressure Sodium	***$28.06***	135	350	***$0.0446***	***$2.11***	***$30.17***
150 W	High Pressure Sodium	***$31.04***	200	350	***$0.0446***	***$3.12***	***$34.16***
250 W	High Pressure Sodium	***$38.42***	305	350	***$0.0446***	***$4.76***	***$43.17***
360 W	High Pressure Sodium	***$46.06***	418	350	***$0.0446***	***$6.52***	***$52.58***
400 W	High Pressure Sodium	***$48.83***	465	350	***$0.0446***	***$7.25***	***$56.09***
1,000 W	High Pressure Sodium	***$92.93***	1100	350	***$0.0446***	***$17.16***	***$110.08***
70 W	Metal Halide	***$34.36***	85	350	***$0.0446***	***$1.33***	***$35.68***

100 W	Metal Halide	***$36.37***	120	350	***$0.0446***	***$1.87***	***$38.25***
150 W	Metal Halide	***$40.05***	180	350	***$0.0446***	***$2.81***	***$42.86***
175 W	Metal Halide	***$40.52***	210	350	***$0.0446***	***$3.28***	***$43.79***
250 W	Metal Halide	***$48.13***	300	350	***$0.0446***	***$4.68***	***$52.81***

(Continued on Sheet No. D-51.01)

(Continued from Sheet No. D-51.00)

RATE SCHEDULE NO. E1 (Contd.) **MUNICIPAL STREET LIGHTING RATE**

Luminaire Charges (Contd):

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Nominal Lamp Size	**Type of Service**	**Distribution Charge per Lamp per Month**	**System Wattage**	**Average Monthly Hours (4200/12)**	**Energy Charge**	**Average Energy Cost per Month (d*e*f/1000)**	**Average Monthly Cost**
320 W	Metal Halide	***$53.97***	365	350	***$0.0446***	***$5.69***	***$59.66***
400 W	Metal Halide	***$60.63***	460	350	***$0.0446***	***$7.17***	***$67.80***
1,000 W	Metal Halide	***$110.60***	1050	350	***$0.0446***	***$16.38***	***$126.98***
20 - 29 W	***LED***	***$20.50***	***25***	***350***	***$0.0446***	***$0.39***	***$20.89***
30 - 39 W	LED	***$21.23***	35	350	***$0.0446***	***$0.55***	***$21.78***
40 - 49 W	LED	***$21.97***	45	350	***$0.0446***	***$0.70***	***$22.67***
50 - 59 W	LED	***$22.69***	55	350	***$0.0446***	***$0.86***	***$23.55***
60 - 69 W	LED	***$23.42***	65	350	***$0.0446***	***$1.01***	***$24.44***
70 - 79 W	LED	***$24.15***	75	350	***$0.0446***	***$1.17***	***$25.32***
80 - 89 W	LED	***$24.88***	85	350	***$0.0446***	***$1.33***	***$26.21***
90 - 99 W	LED	***$25.78***	95	350	***$0.0446***	***$1.48***	***$27.26***
100 - 109 W	LED	***$26.68***	105	350	***$0.0446***	***$1.64***	***$28.32***
110 - 119 W	LED	***$27.58***	115	350	***$0.0446***	***$1.79***	***$29.37***
120 - 129 W	LED	***$28.48***	125	350	***$0.0446***	***$1.95***	***$30.43***
130 - 139 W	LED	***$29.38***	135	350	***$0.0446***	***$2.11***	***$31.48***
140 - 149 W	LED	***$30.18***	145	350	***$0.0446***	***$2.26***	***$32.44***
150 - 159 W	LED	***$30.99***	155	350	***$0.0446***	***$2.42***	***$33.40***
160 - 169 W	LED	***$31.79***	165	350	***$0.0446***	***$2.57***	***$34.36***
170 - 179 W	LED	***$32.59***	175	350	***$0.0446***	***$2.73***	***$35.32***
180 - 189 W	LED	***$33.40***	185	350	***$0.0446***	***$2.89***	***$36.28***
190 - 199 W	LED	***$34.20***	195	350	***$0.0446***	***$3.04***	***$37.24***
200 - 209 W	LED	***$35.01***	205	350	***$0.0446***	***$3.20***	***$38.20***
210 - 219 W	LED	***$35.81***	215	350	***$0.0446***	***$3.35***	***$39.16***
220 - 229 W	LED	***$36.61***	225	350	***$0.0446***	***$3.51***	***$40.12***

(Continued on Sheet No. D-51.02)

(Continued from Sheet No. D-51.01)

RATE SCHEDULE NO. E1 (Contd.) **MUNICIPAL STREET LIGHTING RATE**

Luminaire Charges (Contd):

(a) Nominal Lamp Size	(b) Type of Service	(c) Distribution Charge per Lamp per Month	(d) System Wattage	(e) Average Monthly Hours (4200/12)	(f) Energy Charge	(g) Average Energy Cost per Month (d*e*f/1000)	(h) Average Monthly Cost
230 - 239 W	LED	***$37.42***	235	350	***$0.0446***	***$3.67***	***$41.08***
240 - 249 W	LED	***$38.22***	245	350	***$0.0446***	***$3.82***	***$42.04***
250 - 259 W	LED	***$39.02***	255	350	***$0.0446***	***$3.98***	***$43.00***
260 - 269 W	LED	***$39.83***	265	350	***$0.0446***	***$4.13***	***$43.96***
270 - 279 W	LED	***$40.63***	275	350	***$0.0446***	***$4.29***	***$44.92***
280 - 289 W	LED	***$41.44***	285	350	***$0.0446***	***$4.44***	***$45.88***
290 - 299 W	LED	***$42.24***	295	350	***$0.0446***	***$4.60***	***$46.84***
300 - 309 W	LED	***$43.04***	305	350	***$0.0446***	***$4.76***	***$47.80***
310 - 319 W	LED	***$43.85***	315	350	***$0.0446***	***$4.91***	***$48.76***
320 - 329 W	LED	***$44.65***	325	350	***$0.0446***	***$5.07***	***$49.72***
330 - 339 W	LED	***$45.46***	335	350	***$0.0446***	***$5.22***	***$50.68***
340 - 349 W	LED	***$46.26***	345	350	***$0.0446***	***$5.38***	***$51.64***
350 - 359 W	LED	***$47.06***	355	350	***$0.0446***	***$5.54***	***$52.60***
360 - 369 W	LED	***$47.87***	365	350	***$0.0446***	***$5.69***	***$53.56***
370 - 379 W	LED	***$48.67***	375	350	***$0.0446***	***$5.85***	***$54.52***
380 - 389 W	LED	***$49.47***	385	350	***$0.0446***	***$6.00***	***$55.48***
390 - 399 W	***LED***	***$50.28***	395	350	***$0.0446***	***$6.16***	***$56.44***

Long Span

- For lamp spacing over 120 feet up to 325 feet on the same side of street, add to rate per lamp per year.. $24.48

Semi-Ornamental

- For Semi-Ornamental Systems which employ Ornamental Post Units served from overhead conductors, where such construction is practical, reduce rate per luminaire per year $21.48

Post Charge

- For each increment of $1,000 of investment which exceeds three times the annual revenue at the prevailing rate at the time of installation, add to rate per year***……………………………………..$82.56***

(Continued on Sheet No. D-52.00)

(Continued from Sheet No. D-51.02)

RATE SCHEDULE NO. E1 (Contd.) **MUNICIPAL STREET LIGHTING RATE**

Multiple Luminaires on a Single Pole

- For additional luminaire*s* added to the same pole, a reduced rate per luminaire per year on the added luminaire**.**
  Ornamental $97.92
  Ornamental-Lamp spacing over 120 feet $122.40
  Semi-Ornamental $76.56

OPTION II: Street Equipment Owned by Municipality

MONTHLY RATES OPTION II: Overhead and Underground Ornamental Municipality Owned Street Lighting *(* All-night service***)***.

Power Supply Charges:
Capacity Energy Charge: 0.00¢ per kWh for all kWh
Non-Capacity Energy Charge***: 4.46¢*** per kWh for all kWh

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Nominal Lamp Size	**Type of Service**	**Distribution Charge per Lamp per Month**	**System Wattage**	**Average Monthly Hours (4200/12)**	**Energy Charge**	**Average Energy Cost per Month (d*e*f/1000)**	**Average Monthly Cost**
175 W	Mercury Vapor	***$24.71***	210	350	***$0.0446***	***$3.28***	***$27.98***
250 W	Mercury Vapor	***$22.46***	300	350	***$0.0446***	***$4.68***	***$27.14***
400 W	Mercury Vapor	***$17.97***	450	350	***$0.0446***	***$7.02***	***$24.99***
1,000 W	Mercury Vapor	***$0.00***	1060	350	***$0.0446***	***$16.53***	***$16.53***
70 W	High Pressure Sodium	***$5.36***	95	350	***$0.0446***	***$1.48***	***$6.85***
100 W	High Pressure Sodium	***$6.56***	135	350	***$0.0446***	***$2.11***	***$8.67***
250 W	High Pressure Sodium	***$12.55***	305	350	***$0.0446***	***$4.76***	***$17.30***
360 W	High Pressure Sodium	***$16.94***	418	350	***$0.0446***	***$6.52***	***$23.45***
400 W	High Pressure Sodium	***$18.53***	465	350	***$0.0446***	***$7.25***	***$25.78***
1,000 W	High Pressure Sodium	***$42.47***	1100	350	***$0.0446***	***$17.16***	***$59.63***

- The Energy Policy Act of 2005 states that no Mercury Vapor lamp ballasts may be manufactured or imported after January 1, 2008. As a result, effective January 1, 2008, new Mercury Vapor lamps will no longer be available.

Customers with existing Mercury Vapor lamp ballasts will continue to receive service until those luminaires fail. At that time, customers will be given the option of switching to High Pressure Sodium, Metal Halide, LED or retiring the Luminaire.

(Continued on Sheet No. D-53.00)

(Continued from Sheet No. D-52.00)

RATE SCHEDULE NO. E1 (Contd.) **MUNICIPAL STREET LIGHTING RATE**

- **DE-ENERGIZED LIGHTS:** Customers may elect to have any or all luminaires served under this rate disconnected. The charge per luminaire per year, payable in equal monthly installments, shall be 10% of the above yearly rates. A $35.00 charge per luminaire will be made at the time of de-energization and at the time of re-energization.
- **DUSK TO MIDNIGHT SERVICE:** For service to parking lots from dusk to approximately twelve o'clock midnight E.S.T., a discount of 1.060¢ per nominal watt per month will be applied. One control per circuit will be provided.

OPTION III: Municipally Owned and Maintained Street Lighting System (Unmetered)

HOURS OF SERVICE: For circuits controlled by automatic timing devices, one-half hour after sunset until one-half hour before sunrise. For circuits controlled by photo-sensitive devices, dusk to dawn for approximately 4,200 hours per year.

RATES: Where the municipality owns, operates, cleans and renews the lamps, and the Company's service is confined solely to the supply of electricity from dusk to dawn, the monthly charge of said service shall be a power supply capacity energy charge of 0.00¢ per kilowatthour, a power supply non-capacity charge of ***4.46¢*** per kilowatthour and a distribution charge of ***10.88¢*** per kilowatthour. If it is necessary for the Company to install facilities to provide service for the lamps, the customer will reimburse the Company for these costs. Contract Rider No. 2 charges will also apply.

OPTION III: Municipally Owned and Maintained Street Lighting System (Controlled/Metered)

AVAILABILITY OF SERVICE: Available to governmental agencies desiring controlled nighttime service for primary or secondary voltage energy-only street lighting service where the Company has existing distribution lines available for supplying energy for such service. Luminaires served under any of the Company's other street lighting rates shall not be intermixed with luminaires serviced under this street lighting rate. This rate is not available for resale purposes. Service is governed by the Company's Standard Rules and Regulations.

KIND OF SERVICE:
Secondary Voltage Service: Alternating current, 60 hertz, single-phase 120/240 nominal volt service for a minimum of ten luminaires located within a clearly defined area. Except for control equipment, the customer will furnish, install, own and maintain all equipment comprising the street lighting system up to the point of attachment with the Company's distribution system. The Company will connect the customer's equipment to the Company's lines and supply the energy for operation. All of the customer's equipment will be subject to the Company's review.

Primary Voltage Service: Alternating current, 60 hertz, single-phase or three-phase, primary voltage service for actual demands of not less than 100 kW at each point of delivery. The particular nature of the voltage shall be determined by the Company. The customer will furnish, install, own and maintain all equipment comprising the street lighting system, including control equipment, up to the point of attachment with the Company's distribution system. The Company will supply the energy for operation of the customer's street lighting system.

(Continued on Sheet No. D-54.00)

(Continued from Sheet No. D-53.00)

RATE SCHEDULE NO. E1 (Contd.) **MUNICIPAL STREET LIGHTING RATE**

Primary and Secondary Energy
Full Service Customers:

Power Supply Charge:

Capacity Dusk to Midnight: 3.023¢ per kWh

Capacity Energy Charge**:** ***0.692¢*** per kWh for all other kWh

Non-Capacity Energy Charge***:*** ***4.892¢*** per kWh for all kWh

Delivery System Charge:

5.288¢ per kWh based on the capacity requirements in kilowatts of the equipment assuming 4,200 burning hours per year, adjusted by the ratio of the monthly kWh consumption to the total annual kWh consumption.

Retail Access Service Customers:

Power Supply Charges for Retail Access Service Customers taking Utility Capacity Service from DTE:

Capacity Energy Charge***:*** ***0.692¢*** per kWh for all kWh

Delivery System Charge:

5.288¢ per kWh based on the capacity requirements in kilowatts of the equipment assuming 4,200 burning hours per year, adjusted by the ratio of the monthly kWh consumption and the total annual kWh consumption.

At the Company's option, service may be metered and the metered kWh will be the basis for billing. Capacity requirements of lighting equipment shall be determined by the Company from manufacturer specifications, but the Company maintains the right to test such capacity requirements from time to time. In the event that Company tests show capacity requirements other than those indicated in manufacturer specifications, the capacity requirements indicated by Company tests will be used. The customer shall not change the capacity requirements of its equipment without first notifying the Company in writing.

BILLING: Billing will be on a monthly basis.

SURCHARGES AND CREDITS: As approved by the Commission. Power Supply Charges are subject to Section C8.5. Delivery Charges are subject to Section C9.8.

LATE PAYMENT CHARGE: See Section C4.8.

MINIMUM CHARGE: The contract minimum.

CONTRACT TERM: Contracts will be taken for a minimum of two years, extending thereafter from year to year until terminated by mutual consent or upon 12 months' written notice by either party.

RATE SCHEDULE NO. E2 **TRAFFIC AND SIGNAL LIGHTS**

AVAILABILITY OF SERVICE: Available to municipalities or other public authorities, hereinafter referred to as customer, operating lights for traffic regulation or signal lights on streets, highways, airports or water routes, as distinguished from street lighting. Customers desiring service under Rate Schedule No. E2 are free to determine the appropriate light source for their application including incumbent and emerging technologies (including LEDs). Customers must supply adequate documentation of the wattage of the light source that will be subject to the approval of the Company.

HOURS OF SERVICE: 24 hours.

CURRENT, PHASE AND VOLTAGE: Alternating current, single-phase, at 120 volts two-wire.

SERVICE CONNECTIONS: The customer is to furnish and maintain all necessary wiring and equipment, including lamps and lamp replacements, or reimburse the Company therefore, except that the Company will furnish, install and maintain such span poles and messenger cable as may be needed to support the traffic or signal lights of the overhead type. Connections are to be brought to the Company's underground and overhead lighting mains by the customer as directed by the Company, and the final connection to the Company's main is to be made by the Company.

Conversion and/or relocation of existing facilities must be paid for by the customer, except when initiated by the Company. The detailed provisions and schedule of such charges will be quoted upon request.

RATES: Distribution charge of ***2.63¢***, capacity energy charge of ***0.560¢*** and non-capacity energy charge of ***5.83¢*** per month per kilowatthour of the total connected traffic light or signal light load in service for each customer.

Total connected wattage will be reckoned as of the fifteenth of the month. Lamps removed from service before the fifteenth or placed in service on or after the fifteenth will be omitted from the reckoning; conversely, lamps placed in service on or before the fifteenth of the month or removed from service after the fifteenth of the month will be reckoned for a full month. Lamps operated cyclically, on and off, will be reckoned at one-half wattage and billed for a full month. No such reduction of reckoned wattage will be allowed for lamps in service but turned off during certain hours of the day.

The Company may, at its option, install meters and apply a standard metered rate schedule applicable to the service.

SURCHARGES AND CREDITS: As approved by the Commission. See Sections C8.5 and C9.8.

LATE PAYMENT CHARGE: See Section C4.8.

MINIMUM CHARGE: $3.00 per customer per month.

CONTRACT TERM: Open order on a month-to-month basis. However, the Company shall not withdraw service, and the customer shall not substitute another source of service in whole or in part, without twelve months' written notice to the other party.

(Continued from Sheet No. D-57.00)

STANDARD CONTRACT RIDER NO. 1.1 (Contd.) **ALTERNATIVE ELECTRIC METAL MELTING**

RATE PER MONTH:

Full Service Customers:

Power Supply Charges:

Capacity

Energy Charges:

For service at secondary voltage level (less than 4.8 kV)
0.706¢ per kWh for the first 100 hours use of maximum demand
0.267¢ per kWh for the excess

For service at primary voltage level (4.8 kV to 13.2 kV)
0.525¢ per kWh for the first 100 hours use of maximum demand
0.191¢ per kWh for the excess

For service at subtransmission voltage level (24 kV to 41.6 kV)
0.512¢ per kWh for the first 100 hours use of maximum demand
0.178¢ per kWh for the excess

For service at transmission voltage level (120 kV and above)
0.434¢ per kWh for the first 100 hours use of maximum demand
0.144¢ per kWh for the excess

Non-Capacity

Energy Charge***:*** ***5.251¢*** per kWh for all kWh

Delivery Charges:

Distribution Charges:

For service at secondary voltage level (less than 4.8 kV)
5.288¢ per kWh for the first 100 hours use of maximum demand
5.288¢ per kWh for the excess

For service at primary voltage level (4.8 kV to 13.2 kV)
1.832¢ per kWh for the first 100 hours use of maximum demand
1.832¢ per kWh for the excess

For service at subtransmission voltage level (24 kV to 41.6 kV)
0.677¢ per kWh for the first 100 hours use of maximum demand
0.677¢ per kWh for the excess

For service at transmission voltage level (120 kV and above)
0.274¢ per kWh for the first 100 hours use of maximum demand
0.274¢ per kWh for the excess

(Continued on Sheet No. D-59.00)

(Continued from Sheet No. D-58.00)

STANDARD CONTRACT RIDER NO. 1.1 (Contd.) **ALTERNATIVE ELECTRIC METAL MELTING**

Substation Credit: Available to customers where service at sub-transmission voltage (24 kV to 41.6 kV) or higher is required, who provide the on-site substation including all necessary transforming, controlling and protective equipment. A credit of 0.3¢/kWh will be applied to the energy use associated with the first 100 hours use of maximum demand.

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8

Retail Access Service Customers:

Capacity (Only applicable to Retail access Service Customers receiving Utility Capacity Service from DTE Electric)

Energy Charges:
For service at secondary voltage level (less than 4.8 kV)
0.706¢ per kWh for the first 100 hours use of maximum demand
0.267¢ per kWh for the excess

For service a primary voltage level (4.8 kV to 13.2 kV)
0.525¢ per kWh for the first 100 hours use of maximum demand
0.191¢ per kWh for the excess

For service at subtransmission voltage level (24 kV to 41.6 kV)
0.512¢ per kWh for the first 100 hours use of maximum demand
0.178¢ per kWh for the excess

For service at transmission voltage level (120 kV and above)
0.434¢ per kWh for the first 100 hours use of maximum demand
0.144¢ per kWh for the excess

Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Section C8.5.

Delivery Charges:
Distribution Charges:
For service at secondary voltage level (less than 4.8 kV)
5.288¢ per kWh for the first 100 hours use of maximum demand
5.288¢ per kWh for the excess

For service at primary voltage level (4.8 kV to 13.2 kV)
1.832¢ per kWh for the first 100 hours use of maximum demand
1.832¢ per kWh for the excess

(Continued from Sheet No. D-60.00)

(Continued from Sheet No. D-59.00)

STANDARD CONTRACT RIDER NO. 1.1 (Contd.) **ALTERNATIVE ELECTRIC METAL MELTING**

For service at subtransmission voltage level (24 kV to 41.6 kV)
0.677¢ per kWh for the first 100 hours use of maximum demand
0.677¢ per kWh for the excess

For service at transmission voltage level (120 kV and above)
0.274¢ per kWh for the first 100 hours use of maximum demand
0.274¢ per kWh for the excess

Substation Credit: Available to customers where service at sub-transmission voltage (24 kV to 41.6 kV) or higher is required, who provide the on-site substation including all necessary transforming, controlling and protective equipment. A credit of 0.3¢/kWh will be applied to the energy use associated with the first 100 hours use of maximum demand.

Surcharges and Credits: As approved by the Commission. See Section C9.8.

LATE PAYMENT CHARGE: See Section C4.8.

MAXIMUM DEMAND: The maximum demand shall be the highest 30-minute integrated demand created during the current billing month. This clause is applicable to each voltage level served.

MINIMUM CHARGES: 1) A monthly minimum charge of $2.10 per kW of contract capacity shall be applied to that portion of the customer's load which is served under this rider. This minimum charge will be waived if the customer over the past 12 months (including the current bill), or from the start of the contract term if less than 12 months, has averaged $2.10 per kW per month in revenues. This minimum charge is in addition to the minimum charge under the above rates, plus; 2) any applicable per meter per month surcharges.

POWER FACTOR CLAUSE (Retail Access Service Customers Only): A power factor of less than 70% is not permitted and necessary corrective equipment must be installed by the Customer to correct to a minimum level of 70%. Power factor and excess Reactive Demand charges will be calculated at each Customer location at the time of the Location’s single highest 30-minute integrated kW reading of the Interval Demand Meter during the on-peak hours of the billing period, which are those hours from 7 a.m. until 11 p.m. consistent with the ITC Open Access Transmission Tariff. Excess Reactive Demand is any Reactive Demand resulting from operations below 80% power factor. A monthly charge of $3.50/kVAR will be applied to excess Reactive Demand.

CONTRACT CAPACITY: Customers shall contract for a specified capacity in kilowatts sufficient to meet the normal maximum requirements of the load qualifying for service under this rider. Any single reading of the demand meter in any month that exceeds the contract capacity then in effect shall become the new contract capacity. The contract capacity for this rider shall not be included in the contract capacity established for the filed rate which is used in conjunction with this rider.

SPECIAL TERMS AND CONDITIONS: The customer is responsible for all new facilities and lines required for service under this rider. Said facilities and lines must meet all Company standards. The Company at its option may install and own said facilities under the provisions of Standard Contract Rider No. 2.

TERM: One year under written contract and month-to-month thereafter.

(Continued from Sheet No. D-61.00)

STANDARD CONTRACT RIDER NO. 1.2 (Contd.) **ELECTRIC PROCESS HEAT**

RATE PER MONTH:

Full Service Customers:

Power Supply Charges:

Capacity

Energy Charges:

For service at secondary voltage level (less than 4.8 kV)
0.706¢ per kWh for the first 100 hours use of maximum demand
0.267¢ per kWh for the excess

For service at primary voltage level (4.8 kV to 13.2 kV)
0.525¢ per kWh for the first 100 hours use of maximum demand
0.191¢ per kWh for the excess

For service at primary voltage level (24 kV to 41.6 kV)
0.512¢ per kWh for the first 100 hours use of maximum demand
0.178¢ per kWh for the excess

For service at transmission voltage level (120 kV and above)
0.434¢ per kWh for the first 100 hours use of maximum demand
0.144¢ per kWh for the excess

Non-Capacity

Energy Charge***:*** ***5.251¢*** per kWh for all kWh

Delivery Charges:

Distribution Charges:

For service at secondary voltage level (less than 4.8 kV)
5.288¢ per kWh for the first 100 hours use of maximum demand
5.288¢ per kWh for the excess

For service at primary voltage level (4.8 kV to 13.2 kV)
1.832¢ per kWh for the first 100 hours use of maximum demand
1.832¢ per kWh for the excess

For service at subtransmission voltage level (24 kV to 41.6 kV)
0.677¢ per kWh for the first 100 hours use of maximum demand
0.677¢ per kWh for the excess

For service at transmission voltage level (120 kV and above)
0.274¢ per kWh for the first 100 hours use of maximum demand
0.274¢ per kWh for the excess

(Continued on Sheet No. D-63.00)

(Continued from Sheet No. D-62.00)

STANDARD CONTRACT RIDER NO. 1.2 (Contd.) **ELECTRIC PROCESS HEAT**

Substation Credit: Available to customers where service at sub-transmission voltage (24 kV to 41.6 kV) or higher is required, who provide the on-site substation including all necessary transforming, controlling and protective equipment. A credit of 0.3¢/kWh will be applied to the energy use associated with the first 100 hours use of maximum demand.

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8.

Retail Access Service Customers:

Capacity (Only applicable to Retail Access Service Customers receiving Utility Capacity Service from DTE Electric)

Energy Charges:

For service at secondary voltage level (less than 4.8 kV)
0.706¢ per kWh for the first 100 hours use of maximum demand
0.267¢ per kWh for the excess

For service at primary voltage level (4.8 kV to 13.2 kV)
0.525¢ per kWh for the first 100 hours use of maximum demand
0.191¢ per kWh for the excess

For service at subtransmission voltage level (24 kV to 41.6 kV)
0.512¢ per kWh for the first 100 hours use of maximum demand
0.178¢ per kWh for the excess

For service at transmission voltage level (120 kV and above)
0.434¢ per kWh for the first 100 hours use of maximum demand
0.144¢ per kWh for the excess

Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Section C8.5.

Delivery Charges:
Distribution Charges:

For service at secondary voltage level (less than 4.8 kV)
5.288¢ per kWh for the first 100 hours use of maximum demand
5.288¢ per kWh for the excess

For service at primary voltage level (4.8 kV to 13.2 kV)
1.832¢ per kWh for the first 100 hours use of maximum demand
1.832¢ per kWh for the excess

(Continued on Sheet No. D-64.00)

(Continued from Sheet No. D-63.00)

STANDARD CONTRACT RIDER NO. 1.2 (Contd.) **ELECTRIC PROCESS HEAT**

For service at subtransmission voltage level (24 kV to 41.6 kV)
0.677¢ per kWh for the first 100 hours use of maximum demand
0.677¢ per kWh for the excess

For service at transmission voltage level (120 kV and above)
0.274¢ per kWh for the first 100 hours use of maximum demand
0.274¢ per kWh for the excess

Substation Credit: Available to customers where service at sub-transmission voltage (24 kV to 41.6 kV) or higher is required, who provide the on-site substation including all necessary transforming, controlling and protective equipment. A credit of 0.3¢/kWh will be applied to the energy use associated with the first 100 hours use of maximum demand.

Surcharges and Credits: As approved by the Commission. See Section C9.8.

LATE PAYMENT CHARGE: See Section C4.8.

MAXIMUM DEMANDS: The maximum demand shall be the highest 30-minute integrated demand created during the current billing month. This clause is applicable to each voltage level served.

MINIMUM CHARGES: 1) A monthly minimum charge of $2.10 per kW of contract capacity shall be applied to that portion of the customer's load which is served under this rider. This minimum charge will be waived if the customer over the past 12 months (including the current bill), or from the start of the contract term if less than 12 months, has averaged $2.10 per kW per month in revenues. This minimum charge is in addition to the minimum charge under the above rates, plus; 2) any applicable per meter per month surcharges.

POWER FACTOR CLAUSE (Retail Access Service Customers Only): A power factor of less than 70% is not permitted and necessary corrective equipment must be installed by the Customer to correct to a minimum level of 70%. Power factor and excess Reactive Demand charges will be calculated at each Customer location at the time of the Location's single highest 30-minute integrated kW reading of the Interval Demand Meter during the on-peak hours of the billing period, which are those hours from 7 a.m. until 11 p.m. consistent with the ITC Open Access Transmission Tariff. Excess Reactive Demand is any Reactive Demand resulting from operations below 80% power factor. A monthly charge of $3.50/kVAR will be applied to excess Reactive Demand.

CONTRACT CAPACITY: Customers shall contract for a specified capacity in kilowatts sufficient to meet the normal maximum requirements of the load qualifying for service under this rider. Any single reading of the demand meter in any month that exceeds the contract capacity then in effect shall become the new contract capacity. The contract capacity for this rider shall not be included in the contract capacity established for the filed rate which is used in conjunction with this rider.

SPECIAL TERMS AND CONDITIONS: The customer is responsible for all new facilities and lines required for service under this rider. Said facilities and lines must meet all Company standards. The Company at its option may install and own said facilities under the provisions of Standard Contract Rider No. 2.

TERM: One year under written contract and month-to-month thereafter.

(Continued from Sheet No. D-70.00)

STANDARD CONTRACT RIDER NO. 3 (Contd.) **PARALLEL OPERATION AND STANDBY SERVICE AND STATION POWER STANDBY SERVICE**

DEFINITIONS (contd):

MAINTENANCE PERIODS (contd):

(e) If there is a substantial change in circumstances which make the agreed upon schedule impractical for either party, the other party upon request shall make reasonable efforts to adjust the schedule in a manner that is mutually agreeable.

WAIVERS AND LIMITS FOR GENERATION RESERVATION FEE AND DAILY DEMAND CHARGES:

For customers taking supplemental service on rate schedules D4, D11, D6.2 or D8, the following waivers apply:

If the total of daily demand charges for the month is less than the monthly generation reservation fee, then the daily demand charges will be waived for that month.

If the total of daily demand charges for the month is greater than the monthly generation reservation fee, then the generation reservation fee will be waived for that month.

Waivers and limits for energy-only rates:

For customers taking supplemental service on energy-only rates for the entire billing cycle, schedules D3, or D3.3, the following applies.

If the total of daily demand charges for the month is less than the monthly generation reservation fee, then the daily demand charges will be waived for that month.

If the total of daily demand charges for the month is greater than the monthly generation reservation fee, then the daily demand charges will be waived for that month provided that the supplemental rate continues as an energy-only rate. If not, then the total of daily demand charges for the month will be charged and the generation reservation fee for the month will be waived..

RATES:

Power Supply Charges:

Capacity

Monthly Generation Reservation Fee:

$***0.13*** times the standby contract capacity in kW, per month.

The daily on-peak backup demand charge is $***0.36*** per kW per day during periods other than maintenance periods as defined below.

The daily on-peak backup demand charge is $***0.18*** per kW per day during maintenance periods as defined below.

(Continued from Sheet No. D-72.00)

(Continued from Sheet No. D-72.00)

STANDARD CONTRACT RIDER NO. 3 (Contd.) **PARALLEL OPERATION AND STANDBY SERVICE AND STATION POWER STANDBY SERVICE**

RATES (contd):

Energy Charge:

For customers served on supplemental rate schedules D3, D3.2 and D3.3, the energy charge will be the applicable power supply energy charge specified in the customer's supplemental rate.

The energy as stated herein, is also subject to provisions of the PSCR clause and other Surcharges and Credits Applicable to Power Supply as approved by the Commission. See Section C8.5.

Non-Capacity

Monthly Generation Reservation Fee:

$***0.48*** times the standby contract capacity in kW, per month.

The daily on-peak backup demand charge is $***1.33*** per kW per day during periods other than maintenance periods as defined below.

The daily on-peak backup demand charge is $***0.67*** per kW per day during maintenance periods as defined below.

Energy Charge:

An energy charge for back-up and maintenance power will be charged based on standby contract capacity less the output toward internal load of the customer's generator, but not less than zero. For customers served on supplemental rate schedules D4, D11, D6.2 and D8, the energy charge will be ***4.890¢*** per kWh, plus appropriate power supply credits, including but not limited to an off-peak credit of 1.00¢ per kWh, and voltage level credits of ***0.062¢*** per kWh for subtransmission and ***0.138¢*** per kWh for transmission. For customers served on supplemental rate schedules D3, D3.2 and D3.3, the energy charge will be the applicable power supply energy charge specified in the customer's supplemental rate.

The energy as stated herein, is also subject to provisions of the PSCR clause and other Surcharges and Credits Applicable to Power Supply as approved by the Commission. See Section C8.5.

Delivery Charges:

Service Charge:

$70 per customer per month for customers served at primary voltage.
$375 per customer per month for customers served above primary voltage.
$70 per customer per month for customers served at secondary voltages.

Distribution Charge:

Distribution charges will be as follows:

$***6.15*** per kW at primary voltage applied to the standby contract capacity
$***1.96*** per kW at subtransmission voltage applied to the standby contract capacity
$***0.86*** per kW at transmission voltage applied to the standby contract capacity

(Continued on Sheet No. D-73.00)

(Continued from Sheet No. D-72.00)

STANDARD CONTRACT RIDER NO. 3 (Contd.) **PARALLEL OPERATION AND STANDBY SERVICE AND STATION POWER STANDBY SERVICE**

RATES (contd):

Distribution Charge:

For service provided in conjunction with a secondary voltage base rate the Delivery Charge will be the greater of $***13.22*** per kW applied to standby contract capacity or ***5.288¢***/kWh applied to all standby energy delivered.

Substation Credit: Available to customers served at subtransmission voltage level (24 to 41.6 kW) or higher who provide the on-site substation including all necessary transforming, controlling, and protective equipment. A credit of $.30 per kW shall be applied to the distribution demand charge per kW of standby capacity. An additional credit of 0.040¢ per kWh of standby delivered will be given where the service is metered on the high voltage side of the transformer.

Surcharges and Credits Applicable to Delivery Service: As approved by the Commission. See Section C9.8.

ADJUSTMENT OF PRIOR RATCHETS: When a customer takes standby service under Rider No. 3, the setting or the increasing or decreasing of standby contract capacity will affect the existing ratchet levels on the supplemental rate as follows:

(a) An amount in kW equal to the initial standby contract capacity (or to the increase or decrease) will be subtracted from (or subtracted from or added to) the existing ratcheted maximum demand level for customers on supplemental rates D6.2 and D8 and D11.

(b) An amount in kW equal to 65% of the initial standby contract capacity (or of the increase or decrease) will be subtracted from (or subtracted from or added to) the existing ratcheted on-peak billing demand level for customers on supplemental rates D4, D6.2 and D8 and D11.

LATE PAYMENT CHARGE: See Section C4.8.

SCHEDULE OF ON-PEAK HOURS: See Section C11.

POWER FACTOR CLAUSE: The rates and charges under this tariff are based on the customer maintaining a power factor of not less than 85% lagging. Customers are responsible for correcting power factors less than 70% at their own expense. The size, type and location of any power factor correction equipment must be approved by the Company. Such approval will not be unreasonably withheld. A penalty will be applied to the total amount of the monthly billing for supplemental and standby service for power factor below 85% lagging in accordance with the table in Power Factor Determination, Section C12. The penalty will not be applied to the on-peak billing demand ratchet nor to the minimum contract demand of the supplemental rate, but will be applied to metered quantities.

(Continued on Sheet No. D-73.01)

(Continued from Sheet No. D-73.01)

STANDARD CONTRACT RIDER NO. 3 (Contd.) **PARALLEL OPERATION AND STANDBY SERVICE AND STATION POWER STANDBY SERVICE**

STATION POWER STANDBY SERVICE

SERVICE UNDER THIS PROVISION BECOMES EFFECTIVE APRIL 1, 2014

STATION POWER STANDBY SERVICE: Available to customers with generation facilities that are located within the Company's retail service territory and that are interconnected to ITC Transmission. The power supply requirements necessary to maintain and operate the generating facility that are normally served by the facility's on-site generation but which instead are provided by the facility's taking power through its transmission interconnection must be provided under the station Power Standby Service provisions of this rider.

APPLICABLE TO: General Service Rate Schedule Designation D3

HOURS OF SERVICE: 24 hours, subject to interruption by agreement, or by advance notice.

CONTRACT CAPACITY: Customers shall initially contract for a specified capacity in kilowatts sufficient to meet expected maximum requirements. Any single reading of the demand meter or aggregation of demand meters recording inflow to the facility in any month that exceeds the contract capacity then in effect shall become the new contract capacity.

METERING REQUIREMENTS: All customers taking service under this rider must install the necessary equipment to permit metering. The Company will supply the metering equipment. Service to the customer under this Rider will be metered with demand-recording equipment. Any equipment installed by the customer necessary to accommodate the Company's metering equipment must be approved by the Company and must be compatible with the Company's Meter Data Acquisition System.

RATES:

Power Supply:

Non-Capacity

Station Power Energy Service will be priced on the basis of the real time MISO locational hourly marginal energy price for the Company-appropriate load node. In additional to the MISO locational hourly marginal energy price the following charges will also apply:

0.767¢/kWh for MISO network transmission costs and MISO energy market costs plus,
An administrative charge of ***0.00¢***/kWh plus,
Surcharges and Credits Applicable to Power Supply, excluding PSCR, as approved by the Commission. See Section C8.5

Service Charge:

Primary Service Charge:	$70 per month
Subtransmission and Transmission Service Charge:	$375 per month

(Continued on Sheet No. D-73.03)

STANDARD CONTRACT RIDER NO. 7 **GREENHOUSE LIGHTING SERVICE**

APPLICABLE TO:	General Service Rate	Schedule Designation D3
	Large General Service Rate	Schedule Designation D4

Available on an optional basis to customers desiring high intensity discharge lighting service for greenhouses or other environmentally controlled growing facilities as a daylight supplement. All lighting on this rider shall be separately metered. The customer will furnish, install, own, and maintain all equipment comprising the lighting system. No other device may be connected to this circuit except for controls, lighting and associated equipment.

HOURS OF SERVICE: Dusk to dawn service for circuits controlled by photo-sensitive or clock timing devices.

CURRENT, PHASE AND VOLTAGE: Alternating current, 60 hertz, single phase, nominally at 120/240 volts, three-wire; or three-phase, four-wire, Y connected at 208Y/120 volts; or under certain conditions three-phase, four-wire, Y connected at 480Y/277 volts.

RATE PER MONTH:

Full Service Customers:

Power Supply Charge:

Capacity Energy Charge:	***0.577¢*** per kWh for all kWh
Non-Capacity Energy Charge:	***4.054¢*** per kWh for all kWh

Delivery Charges:

Service Charge:	$1.95 per month
Distribution Charge:	***5.288¢*** per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8.

Retail Access Service Customers:

Power Supply Charge for Retail Access Service Customers taking Utility Capacity Service for DTE:

Capacity Energy Charge:	***0.577¢*** per kWh for all kWh

Delivery Charges:

Service Charge:	$1.95 per month
Distribution Charge:	***5.288¢*** per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Section C9.8.

(Continued on Sheet No. D-85.00)

STANDARD CONTRACT RIDER NO. 8 **COMMERCIAL SPACE HEATING**

APPLICABLE TO:	General Service Rate	Schedule Designation D3
	Large General Service Rate	Schedule Designation D4

Available on an optional basis to customers desiring service for commercial space conditioning furnished through separately metered circuits to which no other device except electric space heating, water heating, air conditioning, or humidity control equipment may be connected and provided that all of the space heating must be either total electric or an electric heat pump supplemented by a fossil fuel furnace installed on a permanent basis. The customer must provide special circuits, the design and method of installation of which are approved by the Company as adapted to this service.

Electric space heating under the terms of this rider will be considered to include heating by light systems, provided the primary means of space heating at the time of maximum requirements will be furnished by the lighting system, with the balance furnished by supplementary electric heating equipment. After June 15, 1970, under the authority of the Commission in Case U-3189, service to facilities which heat by lighting is not available for premises not previously qualified for service hereunder.

RATE PER MONTH:

Full Service Customers:

Power Supply Charge:

Capacity Energy Charge: ***1.539¢*** per kWh for all kWh, except that during the billing months of November through May, usage in excess of 1,000 kWh per month shall be billed at ***0.510¢*** per kWh.

Non-Capacity Energy Charge: ***6.173¢*** per kWh

Delivery Charges:

Service Charge: $11.25 per month

Distribution Charge: ***5.288¢*** per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8.

Retail Access Service Customers:

Power Supply Charge for Retail Access Service Customers taking Utility Capacity service from DTE***:***

Capacity Energy Charge: ***1.539¢*** per kWh for all kWh, except that during the billing months of November through May, usage in excess of 1,000 kWh per month shall be billed at ***0.510¢*** per kWh.

Delivery Charges:

Service Charge: $11.25 per month

Distribution Charge: ***5.288*** per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Section C9.8.

(Continued on Sheet No. D-87.00)

(Continued from Sheet No. D-86.00)

STANDARD CONTRACT RIDER NO. 8 (Contd.) **COMMERCIAL SPACE HEATING**

LATE PAYMENT CHARGE: See Section C4.8.

MINIMUM CHARGE: The Service Charge plus any applicable per meter per month surcharges.

CONTRACT TERM: This rate is made effective by a rider modifying the contract form prescribed for one of the applicable filed rates listed above. The contract term is co-extensive with the contract term of the applicable filed rate under which service is being taken.

INSULATION STANDARDS FOR ELECTRIC HEATING: See Section C4.9.

OPTIONAL PROVISION FOR CERTAIN COMMON AREA ACCOUNTS: Electric heating and common area usage of apartment or condominium accounts supplied through a single meter and billed under the terms of the Domestic Space Heating Rate D2 prior to September 28, 1978 may be billed under this provision without the necessity of separate metering if an initial block of kilowatthours is billed at the current General Service Rate D3. This initial block of kilowatthours will be calculated each November by averaging the usage during the previous billing months of June through October.

Full Service Customers:

Usage in excess of the initial block of kilowatthours per month shall be billed at a power supply capacity charge of ***1.539¢*** and a non-capacity charge of ***6.173¢*** per kilowatthour during the billing months of June through October, and a capacity charge ***0.510¢*** and a non-capacity charge of ***6.173¢*** per kilowatthour during the billing months of November through May. A Distribution charge of ***5.288¢*** per kWh for all kWh shall also be applied. The only service charge to be billed to a customer utilizing this provision will be the D3 service charge.

Retail Access Service Customers:

Power Supply Charge for Retail Access Service Customers taking Utility Capacity Service from DTE:

For Retail Access customers taking capacity service from DTE, usage in excess of the initial block of kilowatthours per month shall be billed at a power supply capacity charge of ***1.539¢*** per kilowatthour during the billing months of June through October, and a power supply capacity charge of ***0.510¢*** per kilowatthour during the billing months of November through May.

For all retail access customers, usage in excess of the initial block of kilowatthours per month shall be billed a distribution charge of ***5.288¢*** per kWh for all kWh.

SUPPLEMENTAL SPACE HEATING PROVISION: This provision is available to customers taking service under the General Service Rate D3 or the Large General Service Rate D4 who purchase energy for a minimum of 10 kW of supplemental, permanently installed, electric space heating equipment. To qualify for this provision, a customer must certify in writing the amount of permanently installed space heating equipment, subject to inspection at the option of the Company, and have the said equipment on separately metered circuits to which no other device is connected. Section C4.9, Insulation Standards for Electric Heating, will not apply to this provision.

(Continued from Sheet No. D-90.00)

STANDARD CONTRACT RIDER NO. 10 (Contd.) **INTERRUPTIBLE SUPPLY RIDER**

CONTRACT CAPACITY: Customers shall contract for a specified capacity in kilowatts sufficient to meet the customers' maximum interruptible requirements, but not less than the minimum contract capacity amounts, specified above. Demand/Energy in excess of the contracted load level will be billed under the applicable Primary Supply Rate. The contract capacity shall not be decreased during the term of the contract and subsequent renewal periods as long as service is required unless there is a specific reduction in connected load. Capacity disconnected from service under this rider shall not be subsequently served under any other tariff during the term of this contract and subsequent renewal periods.

RATE PER MONTH:

Full Service Customers:

Power Supply Charges:

Non-Capacity**:**
The Energy charge will be the real time MISO locational hourly marginal energy price for the DTE Electric-appropriate load node. In addition to the MISO locational hourly marginal energy price the following charges will also apply:

***0.767*¢**/kWh for MISO network transmission costs and MISO energy market costs plus,
An administrative charge of ***0.00¢***/kWh plus,
A voltage level service adder of 1.56% for transmission, 3.73% for subtransmission and 5.50% for primary.

Delivery Charges:
Primary Service Charge: $70 per month
Subtransmission and Transmission Service Charge: $375 per month
Distribution Charges:
For primary service (less than 24kV) $***6.15*** per kW of maximum demand
For service at subtransmission voltage (24 to 41.6 kV) $***1.96*** per kW of maximum demand
For service at transmission voltage (120 kV and above) $***0.86*** per kW of maximum demand.

Substation Credit: Available to customers where service at subtransmission voltage level or higher is required, who provide the on-site substation including all necessary transforming, controlling and protective equipment. A credit of $.30 per kW of maximum demand shall be applied to the maximum demand charge. A credit of .040¢ per kWh shall be applied to the energy charge where the service is metered on the primary side of the transformer.

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8

(Continued on Sheet No. D-92.00)

M.P.S.C. No. 1 - Electric
DTE Electric Company
(Final Order Case No. U-21297)

Eighth Revised Sheet No. D-92.00
Cancels Seventh Revised Sheet No. D-92.00

(Continued from Sheet No. D-91.00)

STANDARD CONTRACT RIDER NO. 10 (Contd.) **INTERRUPTIBLE SUPPLY RIDER**

Retail Access Service Customers:

Delivery Charges:

Primary Service Charge: $70 per month
Subtransmission and Transmission Service Charge: $375 per month
Distribution Charges:
For primary service (less than 24kV) $***6.15*** per kW of maximum demand
For service at subtransmission voltage (24 to 41.6 kV) $***1.96*** per kW of maximum demand
For service at transmission voltage (120 kV and above) $***0.86*** per kW of maximum demand.

Substation Credit: Available to customers where service at subtransmission voltage level or higher is required, who provide the on-site substation including all necessary transforming, controlling and protective equipment. A credit of $.30 per kW of maximum demand shall be applied to the maximum demand charge. A credit of .040¢ per kWh shall be applied to the energy charge where the service is metered on the primary side of the transformer.

Surcharges and Credits: As approved by the Commission. See Section C9.8.

LATE PAYMENT CHARGE: See Section C4.8.

MINIMUM CHARGE: The Service Charge plus the Maximum Demand Charge, plus all applicable energy charges plus any applicable per meter per month surcharge.

MAXIMUM DEMAND: The maximum demand shall be the highest 30-minute demand created during the previous 12 billing months, including the current month but not less than 50% of the contract capacity. This clause is applicable to each voltage level served.

POWER FACTOR CLAUSE: Shall be the Power Factor Clause as defined in the Primary Supply Rate (D11).

SPECIAL TERMS AND CONDITIONS: Customer-owned equipment must be operated so the voltage fluctuations on the primary distribution system of the Company shall not exceed permissible limits.

The customer will own and maintain the necessary equipment to separate the interruptible load from the firm power load. This equipment must meet the Company standards. The customer must also provide space for the separate metering of the interruptible load.

The interruptible load shall not be served from firm power circuits at any time. Violations of this provision will result in a charge of $50 per kilowatt per month applied to the interruptible load determined to have been served from firm power circuits.

(Continued on Sheet No. D-93.00)

Issued ____________, 2023
M. Bruzzano
Senior Vice President
Corporate Strategy & Regulatory Affairs

Detroit, Michigan

Effective for service rendered on
and after ______________, 2023

Issued under authority of the
Michigan Public Service Commission
dated _______________, 2023
in Case No. U-21297

STANDARD CONTRACT RIDER NO. 14 **DISTRIBUTED RESOURCES**

APPLICABLE TO: ***All full service customers unless otherwise noted on the customer's applicable tariff.***

AVAILABILITY OF SERVICE: Available to customers with on-site distributed ***resources*** desiring to operate in parallel with the Company's system and take service for their supplemental needs under one of the applicable tariffs listed above. The on-site generation capacity shall be no greater than 150 kW at a single location. ***For the purposes of this Rider***, ***eligible distributed*** resources include reciprocating engine generator sets, small turbine-generators, fuel cells, regenerative dynamometers, and renewable resources

PARALLEL OPERATION: The customer must meet the interconnection requirements of the Company specified in "The Michigan Electric Utility Generator Interconnection Requirements" as approved by the Commission, and must enter into an Interconnection and Operating Agreement with the Company before parallel operation will be permitted. Operating in parallel with the Company's system without written approval by the Company of the interconnection and any subsequent changes to the interconnection will make the customer subject to disconnection.

The customer is advised to consult its insurers and insurance policies regarding the existence of coverage for on-site distributed generation resources. Homeowners' policies and insurers may afford varying degrees of coverage for this exposure, or may exclude it altogether. This statement is not to be viewed as the rendering of advice regarding the customer's insurance coverage.

RATES: The customer shall pay all direct costs of controlling and protective equipment necessitated by the presence of a source of power on his premises and costs to comply with the Guidelines.

Sell-Back Energy Rate:
For customers with a standard energy meter, the Company's monthly average top incremental cost of power will be applied to all kilowatt-hours delivered to the Company's system.

For customers with a time-of-day meter, the Company's average monthly top incremental cost of power for each time-of-day period will be applied to all kilowatt-hours delivered to the Company's system during that time-of-day period.

For customers with an interval meter, the Company's top incremental cost for each hour will be applied to all kilowatt-hours delivered to the Company's system during that hour.

METERING REQUIREMENTS: The Company will install separate metering for energy sold by the Company to the customer and for energy sold-back to the Company by the customer. The Company will, at the customer's request, upgrade the sell-back meter to either a time-of-day or interval meter, but the incremental cost of such upgrade is the responsibility of the customer.

CONTRACT TERM: Open order, terminable on three day's written notice by either party. Where special services are required, the term will be as specified in the applicable contract rider.

M.P.S.C. No. 1 - Electric
DTE Electric Company
(Final Order Case No. U-21297)

Third Revised Sheet No. D-115.00
Cancels Second Revised Sheet No. D-115.00

(Continued from Sheet D-114.00)

STANDARD CONTRACT RIDER NO. 18 (contd.) **DISTRIBUTED GENERATION PROGRAM**

Rate Schedule	Outflow Credit $ per kWh			
Residential				
D1/D1.6 Residential	First 17 kWh per Day: ***$0.08937***	Excess: ***$0.09435***		
D1.1 Int. Air	Summer: ***$0.07174***	Winter: ***$0.06355***		
D1.2 Time-of-Day	Summer On-Peak: ***$0.15369***	Summer Off-Peak: ***$0.05265***	Winter On-Peak: ***$0.13210***	Winter Off-Peak: ***$0.05059***
D1.7 Time-of-Day	Summer On-Peak: ***$0.08830***	Summer Off-Peak: ***$0.04583***	Winter On-Peak: ***$0.06299***	Winter Off-Peak: ***$0.04951***
D1.8 Dymanic Peak Pricing	Critical Peak: $0.95000	On-Peak: ***$0.16814***	Mid-Peak: ***$0.08779***	Off-Peak: ***$0.04530***
D1.9 Elec. Vehicle	On-Peak: ***$0.17105***	Off-Peak: ***$0.04275***		
D1.11 Stan. TOU	June-Sept On-Peak: ***$0.14261***	June-Sept Off-Peak: ***$0.08595***	Oct-May On-Peak: ***$0.09956***	Oct-May Off-Peak: ***$0.08595***
D1.13 Overnight Savers	***On-Peak: June-Sept: $0.15744 Oct-Nov: $0.08990***	***Off-Peak: June-Sept: $0.10556 Oct-Nov: $0.08143***	***Super Off-Peak: June-Sept: $0.06798 Oct-Nov: $0.06798***	
D2 Elec Space Heat	Summer First 17 kWh per Day: ***$0.07333***	Summer Excess: ***$0.07788***	Winter First 20 kWh per Day: ***$0.06898***	Winter Excess: ***$0.06518***
D5 Water Heat	All kWh: ***$0.04830***			
Secondary				
D1.1 Int. Air	Summer: ***$0.07126***	Winter: ***$0.06547***		
D1.7 Time-of-Day	Summer On-Peak: ***$0.04952***	Summer Off-Peak: ***$0.04523***	Winter On-Peak: ***$0.04631***	Winter Off-Peak: ***$0.04631***
D1.8 Dynamic Peak Pricing	Critical Peak: ***$0.95***	On-Peak: ***$0.16545***	Mid-Peak: ***$0.08982***	Off-Peak: ***$0.04572***
D1.9 Elec. Vehicle	On-Peak: ***$0.17105***	Off-Peak: ***$0.04275***		
D3 General Service	All kWh: ***$0.08106***			
D3.2 Secondary Education	All kWh: ***$0.07876***			
D3.3 Interruptible General Service	All kWh: ***$0.06773***			
D4 Large General Service	Demand: ***$16.59***	First 200 kWh per kW: ***$0.04012***	Excess: ***$0.03097***	
D5 Water Heat	All kWh: ***$0.04773***			
E1.1 Eng. St. Ltg.	All kWh: ***$0.05584***			

(Continued on Sheet No. D-116.00)

Issued ____________, 2023
M. Bruzzano
Senior Vice President
Corporate Strategy & Regulatory Affairs

Detroit, Michigan

Effective for service rendered on
and after ______________, 2023

Issued under authority of the
Michigan Public Service Commission
dated _______________, 2023
in Case No. U-21297

(Continued from Sheet D-115.00)

STANDARD CONTRACT RIDER NO. 18 (contd.) **DISTRIBUTED GENERATION PROGRAM**

Rate Schedule	Outflow Credit $ per kWh			
Primary				
D11 Primary Supply	Demand:	On-Peak:	Off-Peak:	
Primary	***$16.89*** per kW	***$0.04257***	***$0.03257***	
Subtransmission	***$16.58*** per kW	***$0.04195***	***$0.03195***	
Transmission	***$16.21*** per kW	***$0.04119***	***$0.03119***	
D6.2 Primary Educational Institution	Demand:	On-Peak:	Off-Peak:	
Primary	***$13.62 per kW***	***$0.04322***	***$0.04022***	
Subtransmission	***$13.37 per kW***	***$0.04249***	***$0.03949***	
Transmission	***$13.07 per kW***	***$0.04160***	***$0.03860***	
D8 Interruptible Supply	Demand:	On-Peak	Off-Peak	
Primary	***$10.12 per kW***	***$0.04257***	***$0.03257***	
Subtransmission	***$9.94 per kW***	***$0.04195***	***$0.03195***	
Transmission	***$9.72 per kW***	***$0.04119***	***$0.03119***	
D10 All Electric School	Summer: ***$.0.9537***	Winter: ***$0.07524***		
D13 XL	***All kWh: $0.05248***			

(1) Retail Open Access Customers

The Outflow Credit will be determined by the Retail Service Supplier. For customers taking capacity service from the Company, the capacity outflow credit shall be the appropriate capacity rate(s) from the customer's rate schedule.

APPLICATION FOR SERVICE

In order to participate in the Distributed Generation Program, a customer shall submit completed Interconnection and Distributed Generation Program Applications, including the application fee of $50 to the Company.

The Distributed Generation Program application fee is waived if the customer is transitioning from the Net Metering Program.

If a customer does not act or correspond on an application for over 6 months, when some action is required by the customer, the application may be voided by the Company.

(Continued on Sheet No. D-116.01)

STANDARD CONTRACT RIDER NO. 21 **UTILITY INVESTMENT TARIFF FOR *LARGE* ELECTRIC *VEHICLE* BATTERIES AND CHARGING STATIONS**

1 **AVAILABILITY OF SERVICE:** Eligible on an optional and voluntary basis to any Company customer operating ***internal combustion engine (ICE)*** buses who takes service under any Company rate schedule. Service is available at the Company's discretion.

2 **REQUIREMENTS OF PARTICIPATION:** To participate in the Program, a customer must:

2.1 Provide the Company with an Electric ***Vehicle*** Procurement Plan as described in Section 3 and agree to pay the Company's fee, if any, for reviewing the cost effectiveness analysis as described in Section 3.4.

2.2 Assure disassembly and recycling of ***vehicle*** components associated with ***ICE*** fuel use in ***vehicles*** to be replaced.

2.3 Assure that charging equipment will include customer override functionality that allows customer to charge at times outside the limits used in the cost effectiveness analysis described in Section 3.

2.4 Accept the terms of this tariff and associated Upgrade Procurement Agreement (Agreement) described in Section 4.

3 **ELECTRIC *VEHICLE* PROCUREMENT PLANS:** The Company or its agent will review an Upgrade Procurement Plan (Plan) for electric ***vehicles (with battery size per vehicle greater than 150 kWh)*** that includes a cost effectiveness analysis of procuring electric ***vehicles*** and charging stations (Upgrades) compared with ***ICE vehicles***. Costs and benefits considered must include all customer costs and savings associated with procurement and operation, including electricity on an available rate schedule and annual ***ICE*** fuel costs, charging stations, maintenance, and planned replacements of batteries during the cost-recovery period. The Company will approve any Plan for electric ***vehicles*** found to be cost effective for the customer based on the Participant Cost Test and for the Company based on the Utility Cost Test. The Company costs must include cost of capital and cost paid for the Upgrades. The Company's cost recovery in the proposed Upgrade Procurement Plan will be limited to an amount equal to 80% of the estimated savings resulting from the Upgrades, providing the Company's investment amount and cost recovery meets the parameters in Sections 3.2 and 6.

3.1 **INCENTIVE PAYMENT:** The Company may make an incentive payment toward an electric ***vehicle*** procurement project that is less than or equal to the value of the replacement of a***n ICE vehicle*** with an all-electric ***vehicle*** to the Company based on the Utility Cost Test. This value would be in addition to any rebate to any customer replacing a***n ICE vehicle*** with an all-electric ***vehicle***.

3.2 **NET SAVINGS:** Approved Plans and Company investment amounts will be limited to those for which the annual Program Service Charges (Service Charges) as described in Section 6, including program fees and the Company's cost for capital, are no greater than 80% of the customer's estimated annual savings from net reduction in Customers' annual operating costs based on current fuel prices and rates for electricity and any documented reduced operations and maintenance costs. If any special rate is used to calculate Customer savings, the Plan must specify the conditions of such rate. In addition to any Company incentive payments as described

(Continued on Sheet D-123.01)

(Continued from Sheet D-123.00)

STANDARD CONTRACT RIDER NO. 21 *(Contd.)* **UTILITY INVESTMENT TARIFF FOR *LARGE* ELECTRIC *VEHICLE* BATTERIES AND CHARGING STATIONS**

in 3.1, any grants or state or federal incentives available to the customer that can be used to lower the Customer's incremental cost of all-electric ***vehicles*** within 1 year of the delivery of the new ***vehicle*** must be included in the Plan and cost effectiveness analysis.

3.3 COPAY OPTION: In order to qualify a project that is not sufficiently cost effective for the Program, a Customer may agree to pay the portion of a project's cost that prevents it from qualifying for the Program as an upfront copayment to the seller. The Company will assume no responsibility for copayments.

3.4 COST EFFECTIVENESS ANALYSIS REVIEW FEE: If the cost of the Company's review of the Plan and its associated cost effectiveness analysis exceeds the lifecycle value to the Company of all-electric ***vehicles*** procured by Customer based on the Utility Cost test, the Company may recover from Customer the portion of the cost for its review and analysis that is greater than the value of the investment to the Company. The Company will not recover costs for its review of analyses if the Company concludes that proposed all-electric ***vehicle*** procurements are cost effective only with a copayment. The Company will recover all of its costs for the analysis from a Customer who declines to procure electric ***vehicles*** identified as cost effective in a Plan that does not require a copayment.

4 **ACCEPTANCE:** Should the Customer wish to proceed with implementing the Plan approved by the Company, the Company will determine the appropriate monthly Service Charge, as described in Section 6. The Customer will sign an Upgrade Procurement Agreement (Agreement) and select a vendor from the Company's list of approved vendors or seek approval of its preferred vendor to effect the procurement of Upgrades.

4.1 NOTICE: If the Customer does not own the property where the electric ***vehicles*** are to be charged, the Customer must secure the site owner's signature on an Owner Agreement, agreeing to the installation on the property of fixed assets associated with charging the all-electric***vehicles***. Owner must agree to not remove or damage these fixed assets, to have a Notice of the Upgrades attached to their property records, and to provide notice to successor customers at this location of the benefits and obligations of the Upgrade Procurement Agreement associated with the all-electric***vehicles***. Failure to obtain the signature of a successor customer on the Notice Form indicating that the successor customer received notice will constitute the owner's acceptance of consequential damages and permission for a tenant or purchaser to break their lease or sales agreement without penalty.

5 **QUALITY ASSURANCE:** When the Customer's procurement is completed, the vendor will be paid the amount that is determined to be cost effective by the Company as described in Section 3 and 6, following on-site or telephone inspection by the Company or its Agent confirming operation of the new equipment and decommissioning of any ***ICE*** equipment it replaced.

6 **PROGRAM SERVICE CHARGES:** The Company will recover the costs for Upgrades, including any fees as allowed in this tariff, through a fixed monthly Program Service Charge (Service Charge) assigned to the location where charging occurs until all Company costs have been recovered. Service

(Continued on Sheet D-123.02)

(Continued from Sheet D-123.01)

STANDARD CONTRACT RIDER NO. 21 *(Contd.)* **UTILITY INVESTMENT TARIFF FOR *LARGE* ELECTRIC *VEHICLE* BATTERIES AND CHARGING STATIONS**

Charges must meet the net savings requirements described in Section 3.2. Service Charges will be set for a duration either equal to the length of a full parts and labor warranty or not to the exceed 80% of the estimated life of the new***vehicles***, including any major part replacements such as batteries, unless the cost for these replacements is covered by the Agreement and included in the Company's analysis as described in Sections 3.2 and 3.4, whichever is longer. The Service Charges and their duration will be included in the Agreement.

6.1 **COST RECOVERY:** No sooner than 45 days after approval of completed electric ***vehicle*** procurement(s) by the Company or its Agent, the Customer shall be billed the monthly Service Charge as determined by the Company. The Company will bill and collect Service Charges until cost recovery is complete except in cases discussed in Section 7.

6.2 **VACANCY OR LOCATION CHANGE:** If the Customer leaves the electric service location where the ***vehicles*** are charged, they must either relocate the charging assets and the associated Service Charges to a new location within the Company's service territory or pay the Company an amount equal to all of the remaining Service Charges and any Company incentives in Section 3.1.

6.3 **TERMINATION OF SERVICE CHARGE:** Once the Company's costs described in Section 6 have been recovered, the monthly Service Charge in Section 6 shall no longer be billed, except as described in Section 7.

6.4 **EXTENSION OF SERVICE CHARGE:** As described in Section 7 or for any other reason, if the monthly Service Charge is reduced or suspended, once repairs have been successfully effected or service reconnected, the number of total monthly payments shall be extended until the Service Charges collected equal the Company's cost for its investment in an electric***vehicle***, including costs associated with repairs, deferred payments, and missed payments as long as the current occupant is still benefitting from the all-electric***vehicles***. Service Charges will not be extended if the Company obtains cost recovery from a reserve fund or from all ratepayers.

6.5 **TIED TO THE LOCATION:** Until cost recovery for the Company's investments in electric ***vehicles*** for a Customer at a billing location is complete or these ***vehicles*** fail as described in Section 7, the terms of this tariff shall be binding at the metered location and on any future Customer who receives service at that location. If the Customer or its successor wishes to relocate its operations from the assigned meter, it must first obtain consent from Company and the Customer must agree to assign its payment obligation to the new location.

6.6 **DISCONNECTION FOR NON-PAYMENT:** Without regard to any other Commission or Company rules or policies, the Service Charges will be considered an essential part of the Customer's bill for electric service, and the Company may disconnect the metered location for non-payment of Charges under the same provisions as for any other electric service.

(Continued on D-123.03)

(Continued from Sheet D-123.02)

STANDARD CONTRACT RIDER NO. 21 ***(Contd.)*** **UTILITY INVESTMENT TARIFF FOR *LARGE* ELECTRIC *VEHICLE* BATTERIES AND CHARGING STATIONS**

7 **REPAIRS:** During the billing of Service Charges, the battery should remain under manufacturer warranty. If the charging equipment capitalized by the Company no longer functions as intended and the Company determines that the Customer did not damage or fail to maintain the Upgrades, then the Company shall reduce or suspend the Service Charges until such time as the Company and/or its vendor can repair the Upgrades. If the electric ***vehicle*** and/or charging station(s) cannot be repaired or replaced cost effectively, the Company will waive remaining Service Charges.

If an Upgrade fails, the Company is responsible for determining its cause and for repairing the equipment in a timely manner as long as the Customer, Owner if different, or occupants did not damage them, in which case the Customer will reimburse the Company as described in Section 7.

If the Company determines the Customer, or ***vehicle*** owner if different, damaged or failed to maintain the electric***vehicle***, it will seek to recover from the Customer all costs associated with the installation, including any fees, the Company's cost for capital, incentives paid to lower project costs, and legal fees.

The Service Charges will continue until cost recovery is complete.

8 **MAINTENANCE OF UPGRADES:** Participating Customers must agree to keep all Upgrades in place for the duration of Service Charges, to maintain them per manufacturers' instructions, and report their failure to the Company or its Agent as soon as possible. As described in Section 2.4, if the Customer is not the site owner, the site owner must sign an Owner's Agreement.

9 **OWNERSHIP OF UPGRADES:** During the period of time when Service Charges are billed to Customers at locations where procurement of Upgrades are located, the Company will retain ownership of the Upgrades. Upon termination of the Service Charge, ownership will be assigned to the site owner unless the Agreement specifies a different party than the site owner or Company.

10 **MONITORING AND EVALUATION:** The ***Company or its Agent will compare each participant's post-installation actual annual savings to estimated annual savings at least once for each location. If any instances are identified where actual savings are below 80% of the estimated savings in Section 3.2, the Company or its Agent will investigate to identify the cause and take appropriate action, including action described in Section 7 above or enforcement of agreements with contractors or participating customers.***

Michigan Public Service Commission Case No.: U-21297
DTE Electric Company ATTACHMENT C
Capacity Charge Calculation
FOR ORDER

	Total Electric	
CAPACITY COSTS DETERMINATION		
Net Production Costs Rev. Req.	$ 3,073,347	
Proj '22 Enrgy Sales Rev Net of Fuel & Recon	$ (1,419,741)	
Less Fuel	$ (926,820)	
Less MERC Revenue Requirement	$ (6,479)	
Less MISO Energy in PP	$ (51,836)	
Less Other Energy in PP	$ (262,052)	
Less Variable O&M	$ (30,866)	
Capacity Revenue Requirement	$ 375,553	
Capacity Charge Demand (10k)	12,524	MW
Capacity Charge /MW-Year	$ 29,987	
Capacity Charge /MW-Day	$ 82.16	

P R O O F O F S E R V I C E

STATE OF MICHIGAN)

Case No. U-21297

County of Ingham)

Brianna Brown being duly sworn, deposes and says that on December 1, 2023 A.D. she electronically notified the attached list of this **Commission Order via e-mail transmission**, to the persons as shown on the attached service list (Listserv Distribution List).

Brianna J. Brown

Brianna Brown

Subscribed and sworn to before me
this 1st day of December 2023.

Angela P. Sanderson

Angela P. Sanderson
Notary Public, Shiawassee County, Michigan
As acting in Eaton County
My Commission Expires: May 21, 2024

Service List for Case: U-21297

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