STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

* * * * *

In the matter, on the Commission's own motion, to open a docket for certain regulated electric utilities to file their five-year distribution investment and maintenance plans and for other related, uncontested matters.	))))))	Case No. U-20147

At the November 21, 2018 meeting of the Michigan Public Service Commission in Lansing, Michigan.

PRESENT: Hon. Sally A. Talberg, Chairman
Hon. Norman J. Saari, Commissioner
Hon. Rachael A. Eubanks, Commissioner

ORDER

Considering the regulatory environment at the time, increased investments in electric distribution systems, aging electric distribution equipment, the need to incorporate advanced energy technologies and modernize the distribution system, and reliability concerns, the Commission, in Case Nos. U-17990 and U-18014, and then subsequently U-18370,[1] launched an ongoing initiative focused on transparent and long-term electric distribution planning, now in this docket (Case No. U-20147). The primary impetus for this initiative, captioned above, was for the Commission and interested stakeholders to be able to examine distribution investments, including capital and operations and maintenance, in a comprehensive manner—beyond the limited

[1] Case Nos. U-17990, U-18014, and U-18370 were respective general rate cases for Consumers Energy Company (Consumers), DTE Electric Company (DTE Electric), and Indiana Michigan Power Company (I&M).

12-month snapshot of time (i.e., projected test year) provided by utilities in their general rate cases. The Commission has observed the significant increase in distribution investments over the past few years and multi-billion-dollar utility capital plans to upgrade and modernize electric distribution systems in Michigan. With this level of proposed investment and the short- and long-term implications for affordability, safety, reliability, and access to the electrical grid, the Commission stressed the need to thoroughly examine system conditions, needs, and investment strategies and options through a transparent planning process with stakeholder involvement. This approach to planning is particularly important at this time given the inherent risks and opportunities associated with the rapidly evolving energy landscape with increased distributed energy resources (DERs) and other technologies such as plug-in electric vehicles (PEVs) that may affect the distribution system. Accordingly, this planning initiative was designed for the Commission, utilities, and stakeholders to gain an understanding of the utilities' long-term distribution system needs and strategies to enable appropriate evaluation of the above-mentioned issues outside of the contested rate case process (ultimately all in one consolidated proceeding, being this docket). With this goal in mind, the Commission required each of the utilities footnoted above to file five-year distribution investment and maintenance plans (distribution plans) by specified dates, with opportunities for interested persons to comment in between draft and final iterations.[2] *See*, February 28, 2017 order in Case No. U-17990, pp. 14-19, 167; January 31, 2017 order in Case No. U-18014, pp. 35-41, 131; August 4, 2017 notice in Case Nos. U-17990 and U-18014 (August 4 notice); and April 12, 2018 order in Case No. U-18370, pp. 27-28, 86.

[2] Consumers' and DTE Electric's final five-year distribution plans are available to view in this docket, with prior information correspondingly available in Case Nos. U-17990 and U-18014. I&M's draft and final five-year distribution plans, however, were not yet due. *See*, April 12, 2018 order in Case No. U-18370, pp. 28, 86.

Several interested persons commented on the final five-year distribution plans available at the time and how information in those distribution plans can help inform ratemaking and other regulatory processes.[3] In light of the comments received and pursuant to directives in the October 11, 2017 order in Case Nos. U-17990 and U-18014 (October 11 order), pp. 17-18, and the April 12, 2018 order in this case (April 12 order), p. 4, the Staff met with stakeholders on August 7, 2018,[4] and timely filed its report of its findings (Staff's report) in this case on September 4, 2018. Thereafter, as contemplated by the April 12 order, p. 3, the Commission sought further comments from stakeholders on the draft distribution planning framework set forth within Staff's report, with those comments to be filed and received no later than 5:00 p.m. on October 5, 2018. *See*, September 11, 2018 notice in Case No. U-20147.

The Staff's report and succeeding comments are summarized below. Discussion and future guidance from the Commission follow thereafter.

[3] On May 11 and 14, 2018, comments on Consumers' and DTE Electric's final five-year distribution plans were filed in this docket, and in Case Nos. U-17990 and U-18014, by John M. Dempsey; the Association of Businesses Advocating Tariff Equity (ABATE); the Michigan Energy Innovation Business Council (EIBC) and the Advanced Energy Economy Institute (AEE Institute) (jointly); the Michigan Municipal Association for Utility Issues; Vote Solar and the Environmental Law & Policy Center (ELPC) (jointly); the Natural Resources Defense Council (NRDC) and Plugged In Strategies (jointly); the Residential Customer Group (RCG); and the Energy Reduction Coalition.

[4] Along with additional details on five-year distribution plans in Michigan, details of this technical conference can be viewed on the Commission's website at: https://www.michigan.gov/mpsc/0,4639,7-159-16377_47107-464286--,00.html.

The Commission Staff's Report

Based on a review of the distribution plans filed by the utilities, feedback from stakeholders, industry research, and considering the focus of the first round of distribution plans as compared to all of the Commission's overarching objectives[5] for Michigan's electric distribution system, the Staff, in its report titled "Michigan Distribution Planning Framework," details the following specific recommendations for its proposed framework for future electric distribution plans:

- The Commission should require a dynamic approach to load forecasting for the purpose of distribution planning which considers multiple scenarios and probabilistic planning to properly accommodate uncertainty around distributed energy resource penetrations.

- The Commission should require utilities to work with stakeholders to develop a cost-effective approach to providing publicly available hosting capacity information in the near term.

- Utilities with advanced metering infrastructure (AMI) should utilize the *Green Button Download my Data and Green Button Connect* standards developed by the Green Button Alliance to provide customers and third-party service providers access to customer usage data.

- Future distribution plans should provide detailed information regarding suitable criteria for non-wires alternatives projects and clear cost information for nontraditional approaches to capacity investments.

- The Commission should require the utility companies to work with Staff and the stakeholders in the development of a common cost-benefit methodology that can be applied in developing future distribution plans.

- The Commission should work with the companies outside of the rate case process to develop replacement/upgrade criteria for aging assets to ensure accountability during electric distribution system infrastructure refresh efforts.

- Future iterations of distributions [sic] plans should contain a workforce adequacy and development plan to outline steps being taken to assure the proposed spending plans are feasible.

[5] Safety, reliability and resiliency, cost-effectiveness and affordability, and accessibility. *See*, October 11 order, pp. 10-12.

Staff's report, Executive Summary, pp. iv-v.[6] The Staff further states that, based on the representation of stakeholders at the technical conference, "it is clear there is robust interest in the development of a transparent, inclusive distribution planning process desired by the Commission." *Id*., Executive Summary, p. v. Thus, the Staff also recommends that the Commission "establish a formal stakeholder effort to capture the perspectives of all participants in the refinement and finalization of the framework, and that stakeholders specifically consider the use of performance-based ratemaking to achieve specific performance outcomes related to distribution system planning and spending." *Id*. In the Staff's opinion, its recommended standardized framework labeled "Draft Framework for Future Iterations of Distribution Plans" and further detailed on pages 18-21 of its report, signifies movement in the direction of an open, transparent distribution planning process aimed at a smart, modern grid. In addressing the applicability of this process to rate case proceedings, and with regard to safety, reliability, and resiliency, the Staff also advocates support for the addition of performance-based regulation (PBR) and consideration of investment recovery mechanisms (IRMs) for the utilities' aging electric infrastructure. The Staff believes IRMs to be reasonable "assuming that each Company could show appropriate work plans, risk ranking, and metrics to ensure achievement of the IRM's objectives" and that a PBR approach, appropriating risk and reward associated with performance, "could reduce annual rate case filings, create efficiencies in utility personnel utilization, and provide regulatory certainty around cost recovery." *Id*., p. 22. While indicating that it would be reasonable for Consumers and DTE Electric to file an update to their distribution plans in two years (i.e., in early 2020), given that

[6] Further details and rationale for these recommendations are explained by the Staff on pages 11-18 of its report, under the specific categories of dynamic system load forecasting, customer data access and enablement, non-wires alternatives (NWAs), cost-benefit analysis, replacement/upgrade criteria, and workforce adequacy plans.

their current general rate cases seek approval of projected distribution expenditures through 2019 and that both of their integrated resource plan (IRP) filings will be made before April 2019, the Staff states that it does not recommend a static timeframe for all future distribution plan updates. Rather, in the Staff's opinion, updates to distribution plans should be provided when they are meaningful, effective, and actionable, possibly alongside future IRP filings, because of the interdependent nature between distribution plans and IRPs. *Id*., p. 23.

Comments

On October 5, 2018, comments to the Staff's report were filed by EIBC and AEE Institute (jointly); ABATE; Opus One Solutions; I&M; Michigan Electric and Gas Association (MEGA); Consumers; DTE Electric; Vote Solar, ELPC, NRDC, and Plugged In Strategies (jointly and hereinafter referred to as the Joint Commenters); and Michelle Rison.

Michigan Energy Innovation Business Council and the Advanced Energy Economy Institute

Generally pleased with the Staff's report, EIBC and AEE Institute articulate areas of agreement, along with a few suggestions for improvement. Specifically, the two organizations agree with and encourage an open and transparent stakeholder process for further development of future distribution plans, given evolving needs and expectations and changing technology options. They also agree that the framework for this should include dynamic probabilistic load forecasting focusing on DER penetration, hosting capacity analysis, improved access to and use of data, explicit consideration of NWAs, a robust cost-benefit analysis[7] framework, and performance-based ratemaking. EIBC and AEE Institute's joint comments, p. 2. EIBC and AEE Institute additionally encourage valuation of DERs (including all distributed generation (DG) types) to be

[7] Cost-benefit analyses are synonymous with benefit-cost analyses.

factored into this framework, considering the solutions DERs can provide to distribution system challenges. In this context, the two organizations reference and recommend an issue brief prepared by the Advanced Energy Economy (AEE), an affiliate of AEE Institute.

Along with highlighting the benefits of stakeholder input in this process, with particular emphasis that relevant data and information be shared with participants, the organizations advocate taking experiences from other states into consideration, from a lessons-learned on best practices standpoint.

Acknowledging the reliability focus of the initial distribution plans filed by Consumers and DTE Electric, EIBC and AEE Institute agree with the Staff that future iterations of distribution plans will require additional areas of focus to align with Commission objectives. The organizations also support the Staff's recommendation regarding performance-based ratemaking, specifically stating that they:

> [B]elieve that PBR can serve as a foundational regulatory framework for the electric grid of the future. Future infrastructure investments should be judged based on the value delivered by and through those investments. However, we recognize that there is no one-size-fits-all solution for PBR deployment. In implementing PBR, we recommend using a basic framework of factors and steps, as described by AEE in its Issue Brief on Performance Based Regulation.

EIBC and AEE Institute's joint comments, p. 5 (footnote omitted). Tying in that basic framework of factors and steps with the 2018 Commission PBR report and the relation to future distribution plan filings, the organizations reference Table 1 located at the end of their comments, along with Table 2, the latter of which outlines their suggestions on potential performance metrics that they contend lend themselves to near-term implementation and inform multiple categories of performance. EIBC and AEE Institute, nevertheless, also indicate support for a stakeholder process to explore and refine these metrics and to start instituting PBR as a part of distribution system planning.

Emphasizing the importance of integrating planning processes, EIBC and AEE Institute agree with the Staff's recommendation for when Consumers' and DTE Electric's next five-year distribution plans should be filed. The organizations also agree that it would be effective and make sense to file future iterations alongside IRP filings, given the relatedness and interdependence of these filings and the importance of different planning processes using consistent assumptions. Prior to these submissions, however, EIBC and AEE Institute aver that, to identify potential operational restrictions and investments needed for DER aggregation purposes, effort should be made to integrate and coordinate with transmission owners and other interested parties.

The organizations indicate support for the development and use of a framework that is robust and uniform to guide future distribution plans. According to EIBC and AEE Institute, standardization will improve outcomes, and adjustments to uniform requirements can be made for any utility's particular needs. In this vein, the organizations highlight in detail what they contend are "key aspects" of the framework provided in Staff's report, along with suggestions for additions and improvements. EIBC and AEE Institute's joint comments, pp. 7-12.

Association of Businesses Advocating Tariff Equity

ABATE claims that the Staff's reasons supporting an IRM are erroneous for electric utilities, pointing to its prior comments on this issue addressing serious practical and legal concerns with IRM implementation, comments which ABATE contends were ignored. ABATE refutes the Staff's justification using a comparison of IRMs for gas utilities by arguing that, "[w]hile there are safety and reliability concerns related to electric distribution systems' aging infrastructure, they are not of the same magnitude as those associated with high risk aging pipeline on natural gas distribution systems." ABATE's comments, p. 2. In again referring back to its prior comments,

ABATE highlights specific concerns it has with IRMs for electric utilities, placing particular emphasis on its lack of legal authority concern. ABATE's comments, p. 3. ABATE additionally notes the Commission's consistent rejection of IRMs for electric utilities in the past and highlights testimony on behalf of DTE Electric in another case where the witness admitted there is no statutory authority for implementing mechanisms that remove the link between energy sales and utility revenues. Thus, claiming them to be unnecessary, unsupported, and without statutory authority to implement, ABATE contends that IRMs for electric utilities should and must be rejected for consideration in this context.

Opus One Solutions

Opus One Solutions, a software and engineering company, applauds the Commission and the Staff on this proactive planning approach. The company does, however, offer some observations and comments on the Staff's report, along with how its GridOS intelligent energy networking platform could assist with distribution planning.

First, Opus One Solutions agrees that the Commission, in general, should encourage a dynamic approach to load forecasting and the planning process, indicating that considering multiple forecast scenarios is consistent with distribution planning objectives and requirements in other states.

Next, Opus One Solutions agrees with the recommendation to develop a cost-effective approach to providing publicly available hosting capacity information in the near term. Noting the absence of the availability of this information any time soon from Consumers and DTE Electric, Opus One Solutions states that "the ability to evaluate time-series information and dynamic hosting capacity will yield significant benefits and enhance the ability to integrate clean, distributed energy resources to the benefits of customers." Opus One Solutions' comments, p. 3.

Opus One Solutions thus encourages the Commission to ensure that a robust evaluation of hosting capacity solutions is incorporated into any future distribution plan processes, with considerations for not only interconnection, as it relates to evaluating locational value, but also rate design and incentive structures for distributed resources as it relates to the same, along with frequency of updates to hosting capacity analyses.

Third, Opus One Solutions agrees with the recommendation surrounding cost-effective alternatives to traditional capital investments and encourages the establishment of guidance for investments to consider NWAs, whether in terms of a particular dollar amount or some other metric. For this, the company references a current proceeding before the Washington Utilities and Transportation Commission.

Last, Opus One Solutions avers that the best distribution plan process will be achieved through a collaborative, open stakeholder process, that includes local knowledge and wisdom, and recommends notable resources for the Commission to consider. *Id*., pp. 5-7.

Indiana Michigan Power Company

As an addition to the comments provided by MEGA, I&M, while agreeing with the consideration of DERs in this space, contends that it would be "extremely burdensome for [it] to perform hosting capacity analyses for its entire grid." I&M's comments, p. 1. I&M further states, "Although technically possible, performing grid-wide hosting capacity analyses would involve countless individual analyses considering the impact of distributed energy resources at numerous locations." *Id*. The company notes that neither it nor any other American Electric Power utility currently performs this kind of system-wide analysis, the considerable resources that it would require and resulting increase to its cost of service, security concerns with publicly releasing detailed information about its distribution grid, the little benefit it would provide, and the ongoing

re-evaluation that would be needed as changes occur with the grid and technologies. I&M indicates its willingness to conduct analyses for specific customers with a desire to install a DER, as it currently does today, but argues that system-wide hosting capacity analyses are not necessary at this time.

With regard to the Green Button recommendation made by the Staff,[8] I&M touts the initiative and highlights that it was one of the first utilities to endorse it in 2012 and adopt the standard, allowing its customers to directly download their own energy consumption data. The company further states that it and others in the utility industry are continuing to consider the direct release of this information to third parties with customer consent. Here, focusing on the importance of customers making informed decisions, I&M points to its recently filed data privacy tariff, which the company states mandates customer authentication and consent, directly from the customer to I&M. Given this recent filing, however, I&M states that "any provision of customer data directly from I&M to a third party utilizing different authentication and consent forms and processes (including Green Button Connect) would be inconsistent . . . ." *Id*., p. 3.

I&M indicates that it understands the potential value and importance of NWAs to distribution planning and asserts that resources are being devoted to studying and testing them; however, because NWAs are an "exceedingly broad concept," the company recommends that the discussion of NWAs be focused for purposes of five-year distribution plans to be submitted to the Commission. *Id*. Specifically, I&M states, "In distribution planning, it is important to focus on

[8] "The Green Button initiative is an industry-led effort that responds to a 2012 White House call-to-action to provide utility customers with easy and secure access to their energy usage information in a consumer-friendly and computer-friendly format for electricity, natural gas, and water usage." <http://www.greenbuttondata.org> (accessed November 19, 2018).

specific, feasible equipment that can be installed on the distribution grid to provide service to customers." *Id.*

While welcoming input from various stakeholders on its distribution plan, I&M nevertheless joins with MEGA in defending the need for utilities to maintain management responsibilities for their own systems. I&M further states that "[r]eview [of its distribution plan], not development, is where Staff and stakeholder interaction should be focused." *Id.*, p. 4.

On framework, I&M recommends that the Commission view the approach proposed by the Staff as a guide or example, not a rigid template that must be followed. In support, the company states that each utility is different, thus questioning the appropriateness of every aspect for all utilities to follow or the exclusion of a topic that may be of importance. As an example, I&M refers back to its discussion on conducting a system-wide hosting capacity analysis, reiterating the little benefit and high cost it mentioned earlier. The company also encourages flexibility with regard to cost-benefit analyses recommended by the Staff, asserting that "[t]he Commission should avoid any 'one size fits all' approach . . . ." *Id.*, p. 5.

Michigan Electric and Gas Association

MEGA acknowledges that only one of its members (I&M) is obligated to file five-year distribution plans; however, believing the Staff's proposed framework to be of general applicability, MEGA states that it opposes general adoption of the proposed framework in its present form for numerous legal, regulatory, and possible operational reasons. MEGA's comments, pp. 2-3. While indicating that it respects the ability of individual electric utilities to voluntarily agree to all or some of the measures, MEGA states that it does not believe voluntary agreement is a proper foundation to create general regulatory requirements applicable to all regulated utilities. Although also respecting the Commission's ability and desire to stay apprised

of system reliability and distribution planning, MEGA believes this should be addressed on an individual basis, whether through individual rate cases or through contact with the Staff. In this vein, MEGA expresses concern about smaller utilities being subjected to a framework geared towards larger utilities and contends that existing regulatory powers and proceedings are adequate to provide transparency on this subject. *Id*., p. 3; *see also*, *id*., pp. 4-7.

On the topic of initial distribution plans, MEGA takes issue with some of the comments made by the Staff, clarifying that "evaluation of reasonableness is the role of the Commission," not the Staff or intervenors in a general rate case. *Id*., p. 8. MEGA also questions the indicated use of these distribution plans, raising a list of "important operational and practical questions" with regard to rate cases and the Staff's proposed framework. *Id*., p. 8.

MEGA asserts that the preamble to the Staff's recommendations raises the question as to whether the independent analysis of distribution plans filed will result in separate, stand-alone contested cases. MEGA then provides comments on each specific recommendation.

For dynamic system load forecasting, MEGA indicates that this should be determined by company management; it should not be a "one-size-fits-all regulatory requirement;" DER forecasting is still in the infancy stage in the industry, thus informal workgroups and other processes should continue; modeling multiple scenarios and varying DER assumptions will drive up overall costs; and considerable employee hours will need to be dedicated for this process, along with the purchasing of modeling methods and consulting services which may not be available or established. *Id*., p. 9. MEGA also finds the Staff's reference to Commission goals on page 13 of its report[9] to be "interesting," given the potential cost impacts and what the Legislature has already

[9] MEGA specifically references page 10; however, if following the Staff's pagination set forth in its table of contents, the referenced page is page 13.

stated with regard to renewable energy and waste reduction. *Id*., p. 10. Thus, MEGA requests that the Commission "take a measured approach on these matters rather than proposing increased requirements." *Id*.

MEGA agrees that providing publicly available hosting capacity should be cost-effective but that smaller utilities should be excluded from any requirements at this time.

For customer data access and enablement, MEGA asserts that requiring the Green Button standards "is premature and may be unnecessary," and implementing new measures at this time may not be cost-effective, given that its members currently use automatic meter reading but may roll out AMI, along with the low levels of DER penetration and net metering in its members' service areas (aside from Upper Peninsula Power Company). *Id*.

While generally agreeing that NWAs should be considered in utility planning, MEGA highlights that NWAs are already being addressed in IRP cases. MEGA also expresses disagreement over requiring this type of analysis in routine distribution system projects, citing excessive costs as a concern necessitating project size limits or a waiver process and noting that Consumers' Swartz Creek NWA project is only a pilot program at this time.

Overall, MEGA agrees that cost-benefit analyses can be a helpful evaluation tool and that a common approach could be useful. MEGA, however, cautions about the qualitative limitations that cost-benefit analyses have and avers that overreliance on the same motivates overlooking other reasonable considerations which could preclude utilities from moving forward with what would, in other respects, be worthwhile investments. *Id*., p. 11. Concerned again with cost and a one-size-fits-all approach, MEGA asserts that, without more specifics and varying views on what constitutes a cost or a benefit, threshold limits and waivers should be available with regards to cost-benefit analyses.

For replacement/upgrade criteria, MEGA agrees with the Staff's proposal, so long as management flexibility is preserved.

MEGA supports examining workforce adequacy, in general, but details forums where this is already occurring; avers that such efforts should be flexible, not mandated through rules or plan requirements; and asserts that "ensuring an adequate workforce to implement [distribution] plans is a management responsibility." *Id*., pp. 12-13.

Regarding the Staff's draft framework for future iterations, MEGA repeats its assertions that general applicability requirements need to be done through rulemaking and that the framework "should incorporate applicability limits and avoid imposing detailed and costly analysis requirements on all distribution-level projects." *Id*., p. 13.

In conclusion, MEGA states that it:

> [R]espectfully requests that any Framework implementation be delayed pending an analysis of the legal basis for the proposal and continued informal processes for ongoing examination of the regulatory and operational issues raised in these Comments. MEGA believes that the smaller utilities should not be subject to the formalized process and requirements that may have been adopted by consent for the major providers. Multistate utilities could be allowed to utilize distribution planning framework approaches from another state, as appropriate. MEGA, by these Comments, does not intend to affect voluntary distribution planning measures that may have been adopted by agreement of the parties. MEGA highly supports the use of informal processes and working groups, as the Commission and Staff have often done, in addressing developing issues.

Id., pp. 13-14.

Consumers Energy Company

Consumers states that its comments primarily focus on specific recommendations, even though it does not necessarily agree with some of the statements made within the Staff's report. At the outset of its comments, Consumers also argues that the Staff's proposed framework "exceeds the bounds of the Commission's guidance." Consumers' comments, p. 5. Specifically,

the company recalls the Commission's overarching objectives in its review of the electric distribution system in Michigan and, in referring back to the October 11 order, asserts that the Staff's proposed framework goes beyond providing the Commission and stakeholders a better understanding of distribution planning. Consumers explicitly avers that the "Staff's recommendations appear to allow for outside management of the Company's distribution planning. This is outside the parameters of these discussions as set forth by the Commission, and more importantly, it impedes on the Company's ability to make management decisions." *Id*.

Against this backdrop, wherein the company states there is no statutory provision for outside participation in utility management decisions relative to distribution planning, Consumers addresses the Staff's first recommendation pertaining to dynamic system load forecasting by asserting that DER penetration at this time is very minimal and that complex processes are, thus, currently unwarranted and would lead to a large amount of work with little benefit to customers. The company further avers that compounding uncertainty upon additional uncertainty can be "problematic." *Id*., p. 6. Specifically, Consumers states:

> Staff is recommending dynamic and probabilistic planning for load forecasting. Currently, the Company develops a probabilistic corporate load forecast. However, a dynamic approach creates a consequence on capacity planning. The utility has an obligation to serve, but (third-party) DER does not have an obligation to connect or even be on-line. A utility cannot predict locations of DER - even from the interconnection queue. This lack of obligation means that Consumers Energy cannot rely on DER to serve its load. Thus, whenever connected DERs have unplanned outages, the Company will have an overloaded system because it had planned for the DER to be online or it must drop load, which will interrupt customers' service because it had planned for the DER to be online. Future interconnection rules and agreements, and/or power purchase agreements, will need to ensure that these DERs are indeed available when needed for electric supply and grid support.

Id., pp. 6-7. The company expresses further concern over the Staff's recommendation that assumptions for scenarios should be motivated by stakeholder input and provided to the Staff

before developing spending plans, arguing that this would complicate the rate case process for numerous reasons. *Id.*, p. 7. Though maintaining it is unnecessary, Consumers stresses that, if dynamic and probabilistic forecasting is required, management flexibility must be retained by the utility, an onerous process for distribution planning should not be required, and the stakeholder process should be for feedback and input, not for strict compliance. Again noting that DER penetration is currently minimal, along with the underdevelopment of necessary software, Consumers argues why hosting capacity analyses are not warranted at this time. The company cautions that "[s]imply providing hosting capacity data without proper context could easily lead to misinterpretation of data by other parties" and that, similar to probabilistic forecasting, it would lead to a large amount of work with minimal customer benefit. *Id.*, p. 9. Consumers, in disputing the Staff's justification that hosting capacity analyses are important to encourage efficient siting operations, argues that hosting capacity data would be to the benefit of independent, third-party generation developers, as opposed to retail customers who generally do not have the ability to relocate to where the system could benefit from DERs. Along with providing further detail on this issue, Consumers warns that "[p]ublically advertising where the Company's 'strong system' is located will invite the developers to attach in areas where they can use up available capacity and cause others to have to invest in upgrading the Company's system." *Id.*, pp. 9-10. Consumers also discusses the additional risk that could be introduced with publicly publishing hosting capacity information and concludes by agreeing with the Staff that incremental investments above what is already planned would be required, incremental investments which the company assumes would then be found by the Commission to be reasonable and prudent, along with additional time allotted to include such an analysis.

With customer data access and enablement, Consumers expresses concern about the inclusion of third-party service providers in the Staff's recommendation. The company explicitly states, "While [it] is not opposed to providing customers with their own data, absent customer consent, the Company cannot and will not provide customer data to third parties due to the Company's data privacy tariff." *Id*., p. 11.

For NWAs, Consumers contends that the Staff's recommendation is unclear and asserts that it would not be reasonable to require the level of detail provided for the company's Swartz Creek pilot for every single capacity project. In support of the latter, Consumers cites knowing, through its own engineering knowledge and expertise, that an NWA would not be viable based on such factors as cost and underdeveloped programs. Echoing similar arguments it made before, the company also asserts that requiring this type of analysis for every proposed capacity project would lead to a large amount of work and additional costs for little to no benefit, "as the Company would need to dedicate engineering and planning resources and personnel to developing hypothetical NWA projects that clearly would not be viable." *Id*., p. 12. Consumers concludes by stating that it already has an NWA pilot in place for testing and evaluation purposes and that, until fully analyzed and understood, accelerated ramping-up of NWA planning is premature. Nevertheless, should the Commission decide otherwise, the company states that, because it currently does not perform NWA analyses for all capacity projects, it would need additional time in order to meet this requirement for a future distribution plan.

Generally, Consumers indicates that it is not opposed to collaborating on the development of common cost-benefit methodologies. However, given the substantial number of individual distribution projects and the impracticability of applying a full cost-benefit analysis to each, the company avers that some size threshold should be applied to determine when a cost-benefit

analysis must be produced. Also, according to Consumers, similar to above, if this recommendation is adopted, it would need to substantially increase resources to comply. The company further asserts the need for flexibility, not a one-size-fits-all approach and expresses concern that "benefits vary in nature among reliability, capacity, and safety-related projects, and projects related to North American Electric Reliability Corporation compliance and other regulatory issues; a common cost-benefit methodology must take care to avoid forcing apples-to-oranges comparisons." *Id*., p. 13.

With replacement/upgrade criteria, Consumers states that it is not opposed to reviewing its own criteria for replacing aging assets with the Commission or the Staff, written criteria that it already has for various situations; however, the company explicitly indicates that it would not support the Staff rewriting its criteria or unilaterally imposing new ones. Consumers reiterates that flexibility, not a one-size-fits-all approach, is needed "to ensure that hard and fast criteria do not obscure the big picture . . . ." *Id*. And on the Staff's last component, workforce adequacy plans, the company states that it, in general, does not oppose sharing its workforce adequacy plans but states that the level of detail as to what would be expected is presently unclear.

Consumers contends that the Staff's draft framework for future iterations is also unclear and could require utilities to provide voluminous information and, in that regard, outlines some specific concerns. *Id*., p. 14.

On the topic of stakeholder process, Consumers indicates that it appreciates all the feedback on its five-year distribution plan and further states that it is amenable to creating a more open and transparent planning process. After disputing the effectiveness of frequent, loosely organized meetings, however, the company suggests a process over two years, with meetings involving defined stakeholders every four to six weeks. Consumers further states:

> If the Commission does develop a stakeholder collaboration process, the Company recommends utilization of a framework in which different parties, including the utilities, are invited to develop and present proposals for their ideal state regarding distribution planning, after which others would be able to develop responses. If recommendations from a stakeholder process are adopted by a utility, it should lead to a streamlined approval process of projects in future electric rate case proceedings without extended scrutiny, since the process adopted would have been explicitly supported by all stakeholders. Regardless, in the end, the utilities should always have the right to run its business as it sees fit.

Id., p. 15.

And lastly, as to timing for its next distribution plan, Consumers recommends that it be filed in 2021, versus 2020 as recommended by the Staff, "to allow adequate time to develop meaningful responses." *Id*., p. 16. Although acknowledging some merit to the filing of distribution plans alongside IRP cases, the company highlights that it is not scheduled to file an IRP in either 2020 or 2021 and that IRP proceedings are governed by statute, while this distribution planning process is not.

DTE Electric Company

Initially, DTE Electric states that it agrees with the Staff's assessment of its distribution system, confirming that the evolution of its distribution system as being in "Stage 1: Reliability & Operational Efficiency," per the United States Department of Energy's recent publication titled, "Modern Distribution Grid Decision Guide Volume III." DTE Electric's comments, pp. 1-2. DTE Electric states that its five-year distribution plan details actions to achieve the company's goals of making its distribution system safe, reliable, resilient, and affordable. In parallel with significant investments to address these goals, DTE Electric also indicates that it is focused on increasing the deployment of advanced grid technologies, namely an advanced distribution management system (ADMS), to provide not only operational and reliability benefits but to also set the stage for effective DER integration.

While indicating that the Staff's report serves as an excellent starting point, DTE Electric nevertheless contends that future distribution planning will probably evolve given the emergence of new technologies. Due to there being no consensus on the appropriate framework on this complex and differing area though, DTE Electric avers that it would be helpful for the Commission to issue guidelines for utilities to follow. DTE Electric states that it does not, however, suggest that distribution plans be subject to hard rules, referencing issues such as statutory authority, the need to follow the Administrative Procedures Act rulemaking process, the utility-specific nature of distribution planning, and management decisions for such planning being within utilities' exclusive purview. *Id*., pp. 2-3.

Next, in addressing specific recommendations from the Staff, beginning with dynamic system load forecasting, DTE Electric contends that scenario-based forecasting that incorporates DERs should be explored for viability purposes, suggesting some areas that will need to be understood in detail. *Id*., pp. 3-4.

With regard to the recommendation surrounding hosting capacity information, the company comments that it "believes that any benefits of a hosting capacity analysis must be evaluated against the costs of collecting and providing such information, which could be significant (estimated at $10 million or more)." *Id*., p. 4. According to DTE Electric, there would be very little or no benefit/value of a hosting capacity analysis for small and larger DER interconnections for reasons involving studies/upgrades and the need to work directly with larger DER interconnections. The company further questions the value of hosting studies given Michigan's current DER adoption levels, compared to California and New York. Thus, because of the high cost of these studies and the lack of appreciable benefits to customers, DTE Electric explicitly states that it "does not favor hosting capacity studies at this time" and avers that, if decided

otherwise, those stakeholders requesting the analysis should cover the costs "to prevent undue cost burdens on the remaining customers." *Id*. Should the situation change, however, where DER adoption increases rapidly and a hosting capacity map has value, the company asserts that the current state of grid technology should be taken into consideration when determining scope and timelines for compliance, because it currently does not have high supervisory control and data acquisition penetration and lacks an integrated ADMS.

For customer data access and enablement, DTE Electric agrees that customers should have access to their usage information and provides details on how its customers are currently able to acquire such information. Referencing Mich Admin Code, R 460.153(g) and an insert that it filed to its current privacy tariff regarding providing clear instructions to customers on accessing and sharing usage data, the company states that it is currently exploring enhancements for its website. DTE Electric discusses being in the early stages of developing a portal and states that, as part of this development, it will review and assess the Green Button Standards. With the Green Button Connect My Data, however, the company raises concerns over data security and customer privacy implications that it contends necessitate further research and discussion before it can take a position. DTE Electric also points out that customers already have the ability to share their data with third parties through the excel file they can currently obtain from the company.

With NWAs, DTE Electric highlights statistics showing limited deployment and industry experience and thus avers that conducting pilots is critical to validate technologies and assumptions before moving forward with large-scale NWA deployments. Repeating discussion from the technical conference, the company talks about ways that it is working with stakeholders and pilot programs that it is engaging in to be able to properly analyze and value NWA projects.

DTE Electric further provides some information that it has collected for purposes of creating a robust framework for NWA evaluation. *Id*., p. 6.

Addressing the cost-benefit analysis recommendation, the company mentions its global prioritization model that it uses as the basis and assessment for its distribution plan. *Id*., p. 7. Explaining how its model utilizes historic data and evaluates benefits that may be unique to its system, DTE Electric expresses uncertainty and concerns about a common cost-benefit methodology for all utilities in Michigan. The company does nevertheless indicate a willingness to engage in discussions about the viability of bringing some level of commonality to cost-benefit methodologies.

DTE Electric supports the recommendation regarding replacement/upgrade criteria, particularly with regard to the implementation of an IRM. And, for workforce adequacy plans, the company states that it has taken active steps to address workforce adequacy and is open to sharing this information with the Staff but only in closed sessions.

With respect to the Staff's proposed framework for future iterations of distribution plans, DTE Electric, echoing some of its comments above, states that it supports a common framework. The company also states that it is willing to work with the Staff in such development and that the Staff's framework provides an excellent starting point but asserts that some aspects of distribution planning are unique to each utility. While commenting that some items in the Staff's framework are reasonable, the company nevertheless contends others require clarification or are items it is not positioned to provide. DTE Electric also mentions its current four-pillar strategic investment framework, which it contends would be "overly burdensome to alter" but nonetheless could possibly be harmonized with the Staff's proposed framework. *Id*., p. 9. In addition to repeating

some initial observations and comments previously discussed, the company then articulates some further points with regard to the Staff's proposed framework. *Id.*, pp. 9-10.

Addressing the stakeholder process, DTE Electric maintains that its distribution plan does provide, contrary to the Staff's opinion, the necessary details to ascertain reasonableness, prudency, and cost-effectiveness and states that during the development of this plan, the company met with the Staff numerous times and participated in technical conferences with stakeholders to receive comments and feedback. DTE Electric states that it is open to participating in a stakeholder discussion group regarding the Staff's proposed framework but asserts that such discussion needs to be carefully tailored to not hamper management prerogatives and that participants should meet certain agreed-upon qualifications to ensure constructive discussion. Further, according to the company:

> Given the dynamic and complex nature of distribution planning, it would be impractical for stakeholders to be actively involved in the development of the distribution plan or daily planning decisions. It is more realistic and beneficial to hold stakeholder discussions regarding key objectives and assumptions, particularly around DER and non-wire alternatives to be included in the plan, and then for DTE Electric to produce the plan.

Id., p. 11.

With reference to the Staff's recommendation regarding IRMs, DTE Electric states that it agrees and welcomes working on the development of a recovery mechanism to address aging infrastructure and improve safety and reliability. And lastly, regarding the Staff's recommendation to co-file distribution plans alongside IRPs, the company questions the value of co-filing and notes the following concerns:

> First, the IRP is a statutorily required contested case process with very specific statutory requirements. Distribution planning is not. Second, there is a much shorter planning cycle for distribution planning than for generation or transmission planning. IRPs are required every five years and must remain so to be compliant with the governing statute. DTE Electric supports continuing to update five-year

> distribution plans more often than once every five years. Third, both IRP and distribution planning updates are complex processes on their own, and DTE Electric fears combining them could be overly burdensome for the Company, the Commission and Staff, and the Administrative Law Judges (ALJs). Combining them may also cause confusion among stakeholders because of their complexity. Finally, the cost and complexity of the co-filing needs to be evaluated alongside a clear description of the benefits that would accrue to customers to determine if the expense associated with a co-filing is offset by customer benefits.

Id., p. 12.

Vote Solar, the Environmental Law & Policy Center, the Natural Resources Defense Council, and Plugged In Strategies

Overall, the Joint Commenters applaud the Commission and the Staff for the systemic, statewide approach taken to distribution system planning and contend that the Staff's report provides a strong foundation for "a robust, consistent and transparent distribution planning process going forward." Joint Commenters' comments, p. 6. While recognizing that the Staff's proposed framework incorporates many best practices for which they advocated, the Joint Commenters nonetheless aver that some refinements could help with clarity, enhance comprehensiveness, and make some of the sections more helpful to the Commission, the Staff, and stakeholders. The Joint Commenters categorize their comments as follows:

- Consistency Among Underlying Assumptions and Methodologies: The extent to which the Commission will specify assumptions, methodologies, investment criteria and other aspects of the plan beyond the structural requirements of the Framework.

- Internal Alignment with Other Processes and Plans: Encouraging more integration and alignment between the distribution planning process, rate cases and other internal planning processes, especially the required Integrated Resource plans.

- Stakeholder Process and Performance Based Ratemaking: The Commission should continue refining the distribution system planning through an ongoing stakeholder process. Also, recognizing that distribution system investments impact municipal costs, quality of municipal government services and responsibilities, and achievement of energy-related municipal policy objectives;

and that in turn municipal governments have a lot of ability both [sic] to expedite distribution system projects.

- Recommended Additions to the Draft Framework

Id., pp. 6-7.

Addressing their first category and the Staff's recommendation concerning dynamic system load forecasting, the Joint Commenters, although indicating support, actually recommend more granularity in both the analysis and reporting of results, to inform grid needs and improve the quality of system-wide forecasts. To support their recommendation and to demonstrate the potential benefits of a very granular approach, the Joint Commenters reference experience from New York detailed in an article that they attached to their comments as Attachment A. The Joint Commenters also opine that, on top of forecasting DER penetrations, utilities should also forecast DER contributions "to circuit and substation level load profiles throughout the year." Joint Commenter's comments, p. 8.

The Joint Commenters strongly support the Staff's recommendation pertaining to hosting capacity analysis. Rationale the Joint Commenters cite includes the useful information this type of analysis provides, the facilitation of interconnection processes, and aiding developers and customers. *Id.* In the Joint Commenters' opinions, however, engaging municipal governments in this process would also be valuable. Here, the Joint Commenters additionally talk about locational value and how hosting capacity analysis can help with this issue, when the time comes. In order to implement hosting capacity analysis and facilitate consistency, however, the Joint Commenters assert that "the Commission should further define its expectations about the methodology and 'use case' for the resultant analysis. Defining clearly what the intended uses are will dictate the preferred HCA [hosting capacity analysis] methodology and the level of resources that will be required to implement." *Id.* In furtherance of this recommendation and for thorough

consideration, the Joint Commenters highlight four types of hosting capacity methods, as summarized by the Electric Power Research Institute in 2017: (1) stochastic, (2) iterative (integration capacity analysis), (3) streamlined, and (4) "DRIVE." *Id*., pp. 9-10.

Associated with hosting capacity analysis, the Joint Commenters opine that there is also a need for "a transparent and granular grid needs analysis," which "extends beyond load forecasting to include voltage regulation, reactive power compensation, system protection modifications, increased hosting capacity, equipment replacement or other investments to improve reliability or power quality." *Id*., p. 10. The Joint Commenters additionally indicate that they strongly support the Staff's recommendations pertaining to data sharing and data access, as it will be vital to the growth and optimal use of DERs across the state, along with helping customers find solutions for their electricity needs. The Joint Commenters also assert, with this recommendation, the need for consistency, open standards, and an easily integrable format.

With NWAs, the Joint Commenters encourage the Commission to adopt the Staff's recommendation, albeit with the industry standard terminology of "'Non-Wires Alternatives Suitability Criteria'" or "'Screening Criteria'" versus "'suitable criteria for NWA'" and with a stakeholder process that "define[s] criteria for types of projects that qualify for NWA, require[s] utilities to identify candidate locations and specif[ies] a process for considering NWA in any grid upgrade decisions." *Id*., p. 12. Here, in discussing a potential starting point in developing NWA suitability criteria, the Joint Commenters reference a report they attached to their comments as Attachment B and list NWA screening criteria other states have established. *Id*.

Next, the Joint Commenters urge the Commission to consider extending the planning horizon from five years to 10 years, or at least a longer provision for development and evaluation of long-term investments. With this suggestion, the Joint Commenters reference other states and utilities

as support and further recommend aligning this distribution planning process alongside IRP cases for coordination of the two planning processes to be truly leveraged.

On the topic of cost-benefit analysis, the Joint Commenters again support the Staff's recommendation but also urge the common cost-benefit methodology to be consistent with principles laid out in the report attached to their comments as Attachment C, which the Joint Commenters contend should apply to all resources, including DERs. Joint Commenter's comments, pp. 13-14.

The Joint Commenters then move on to discussing smart inverters and claim that these are increasingly being incorporated into system design. In this regard, after mentioning a revised standard recently issued for smart inverters and the resulting capabilities, value, and significant services that smart inverters will now be able to provide to the grid, the Joint Commenters recommend that the Staff's proposed framework explicitly acknowledge this potential impact and that, through the recommended stakeholder process, "the Commission should examine how/when these capabilities will be incorporated into the utilities['] grid operations and how DER owners will be compensated for providing these services." *Id.*, p. 14.

Moving on to their next category of comments, internal alignment with other processes and plans, the Joint Commenters aver that, given cross-over, utilities should consider and include explicit discussion about relationships between distribution planning and other planning processes. The Joint Commenters exemplify the DR investments that Consumers and DTE Electric are planning over the coming years to meet capacity requirements and claim that these DR investments could also impact and benefit distribution system needs, if optimally located, which, according to the Joint Commenters, could then "increase the amount of DR found to be economically optimal in IRPs." *Id.*, p. 15. The Joint Commenters opine that the same could also

be true for energy efficiency (EE) resources and discuss how this all could make potential NWA projects economically viable. *Id.* The Joint Commenters additionally contend that utilities should be mandated to explain how different internal staff managing these different plans and programs interact and integrate to prevent duplication and to ensure consistency within the business. The Joint Commenters also recommend that utilities be encouraged to update and provide organizational charts to "identify what specifically has changed to facilitate necessary cross functionality between distribution planning, other forms of planning and DER program delivery." *Id.* To ensure that the system is operated in the most efficient and optimal manner, the Joint Commenters assert that it is vital for integrated resource planning, load forecasts, and distribution system planning to be aligned.

On their third category of comments, stakeholder process and performance-based ratemaking, the Joint Commenters express full support for an ongoing stakeholder process and encourage the Commission to adopt best practices for stakeholder engagement. In referencing a GridLab report attached to their comments as Attachment D, the Joint Commenters lay out best practices from the report. *Id.*, p. 16. Here, the Joint Commenters state that municipalities and other relevant units of local government could play a significant role in this stakeholder process considering their unique relationship with the utilities' distribution systems. *Id.*, pp. 16-17.

Finally, with their last category of comments, the Joint Commenters recommend additions to the Staff's proposed distribution planning framework, contending that these additions, along with a planning horizon of 10 years, should be formally incorporated in the framework for the purpose of consistency. *Id.*, pp. 17-18.

Michelle Rison

Michelle Rison, founding member of the RCG, states that this path forward directly affects and needs to consider residential customers, as the majority of investor-owned utilities' end-users. Ms. Rison contends that recent capital expenditures "have been fraught with customer complaints and technical glitches at great cost and customer hardship . . . ." Ms. Rison's comments, p. 1. Accordingly, Ms. Rison suggests the inclusion of two additional categories in this path forward: (1) an accountability category, which could lay a foundation for PBR, and (2) technology vetting. *Id*., pp. 1-2. Ms. Rison also mentions trainings or meetings that she has recently attended, addressing current energy related issues that affect or relate to grid modernization, and stresses the importance of stakeholder inclusion in this and other related dockets.

Discussion

From the outset, it is important to acknowledge the extensive, productive, and collaborative work over the past two years by utilities, the Staff, and other stakeholders on this new distribution planning process. This planning was resource intensive and conducted at a time when the Commission, utilities, and stakeholders were immersed in the implementation of landmark energy policy reform laws, among other responsibilities. The positive results from this planning initiative—not only the extensive written plans but, as equally important, the increased understanding and collaborative discussions to support the planning—only reinforce its importance and the Commission's interest in building on this effort. The Commission appreciates the utilities' commitment to this initiative and participation in the August 7, 2018 technical conference, the Staff for its role and work on its report, and those stakeholders who were engaged in the process and filed comments thereafter. The Commission finds collaboration from all types

of stakeholders necessary to advance this distribution planning process and to bring about "no regrets" grid investments that are adaptable regardless of what the future holds.

The Commission would also like to acknowledge the timely filing of I&M's draft five-year distribution plan in this docket on October 31, 2018. Consistent with past practice, specifically the August 4 notice, the Commission invites interested persons to comment on I&M's draft distribution plan with the same, albeit slightly modified and customized, questions in mind:

1. Does the company's draft distribution planning report provide a transparent review to identify and make cost-effective grid modernization and aging infrastructure investments necessary to support improved reliability, power quality, and future growth? Do the proposed investments provide a clear strategic path to address resiliency, reliability, and grid modernization, consistent with the Commission's stated goals as outlined in recent electric rate case orders?

2. Do the plans identify system upgrades or investment strategies and concrete, measurable performance targets and timeliness in areas such as safety and reliability?

3. Aside from those already generally raised in this docket, are there longer-term enhancements to the plan or the planning process that the Commission, utilities, and stakeholders should be considering in future rounds?

4. What is the impact of transmission outages and system issues on distribution reliability for I&M and neighboring utilities, as well as the status and expected impact of solutions?

5. Any other feedback for the Commission's or the Staff's consideration.

Initial comments on I&M's draft distribution plan must be filed in this docket no later than 5:00 p.m. on December 21, 2018, with reply comments to be filed no later than 5:00 pm on January 11, 2019. Written comments should be sent to: Executive Secretary, Michigan Public Service Commission, P.O. Box 30221, Lansing, MI 48909. Electronic comments may be e-mailed to mpscedockets@michigan.gov. Comments should reference this docket (Case No. U-20147). All information submitted to the Commission in this matter will become public information

available on the Commission's website and subject to disclosure. Comments should not include information commenters wish to remain private.

The Commission's vision moving forward for the next round of distribution plans in this docket is twofold: (1) For the second iteration of distribution plans to present a progress report on the core goals of safety, reliability, and resiliency; and (2) to include additional components discussed and adopted by the Commission below.

In that regard, considering the comments provided by interested stakeholders, the Commission addresses the Staff's specific recommendations as follows:

1. Dynamic System Load Forecasting

The Commission emphasizes the importance of accurate forecasting in planning and investment decisions and the need to ensure best practices in forecasting methods as technologies and customer behavior evolve with the adoption of DERs and PEV charging, which may include scenario-based forecasting to account for uncertainties and identify least regret solutions. Whether it is at the bulk transmission system or the individual distribution circuit level, the Commission believes prudent planning and investments will require more sophisticated forecasting approaches to develop best practices and mitigate risks. The Commission seeks to avoid prescribing specific methods or approaches in the next round of distribution plans but acknowledges that the Staff's recommended dynamic approach to load forecasting with scenario analysis could help better understand and accommodate uncertainty associated with DERs, PEV charging, and other factors. The Commission encourages continued discussion of forecasting methods to inform the next iteration of distribution plans.

Likewise, given the level of DERs, experience in other states, and the need to prioritize efforts, and other feedback, the Commission does not believe it is appropriate to require

hosting capacity studies across the utilities' systems at this time. Rather, the Commission believes that an appropriate next step would be to hold a technical conference with utilities, stakeholders, and experts that have experience with hosting capacity studies in other jurisdictions to examine what types of information is needed to conduct such studies and the availability of such information in Michigan, as well as the cost, uses, and feasibility of such studies. Depending on the outcome of that discussion, the Commission would be interested in a pilot application in the next iteration of distribution plans. A well-structured pilot should balance policy and technical issues that may need to be addressed to allow a broader application of hosting capacity studies.

2. Customer Data Access and Enablement

As part of its updated billing rules (Mich Admin Code, R 460.101 *et seq*.), the Commission reinforced its expectations that customers, as well as third parties with explicit customer consent, have access to customer energy consumption information in an easy-to-use and timely manner. This is important for customers to understand and modify their energy use and to make decisions about energy waste reduction and renewable energy investments. While this issue is tangentially related to distribution planning, the Commission is addressing the Staff's recommendation on customer data access in another docket, where it recently approved tariffs for numerous utilities and kicked off a collaborative on this topic. *See*, Case No. U-18485. Further, as explained in the Commission's order adopting rule language, the Commission is not prescribing a particular platform, such as Green Button, but does expect consumption data to be provided in a timely manner and readily accessible format. *See*, April 28, 2017 order in Case No. U-18120, p. 27. As a result, the Commission is also not adopting the Staff's recommendation here as a requirement in the next round of distribution plans.

3. Non-Wires Alternatives

The Commission believes that robust evaluation of alternatives, whether "wires" or "non-wires," is important to ensuring long-term cost-effectiveness, prioritization of investments, and solutions that can adapt to changing distribution grid needs going forward. Billions of dollars in investments are being examined as part of the planning process that will have a long-term impact on operations, reliability, and the ability to integrate new technologies. As the grid is modernized, not all solutions will be "like-for-like" replacements. Unconventional solutions, including targeted EE, DR, energy storage, and/or customer-owned generation, that could displace or defer investments in a cost-effective, reliable, and timely manner should be considered and evaluated. The Commission is also sensitive to the need to ensure prudent distribution investments can be made in a timely manner and that NWAs are not always an appropriate technical solution. Therefore, the Commission believes that further discussions related to the criteria for alternative analyses are warranted and would help shape the development of the next set of distribution plans. Again, the Commission sees a tremendous opportunity to inform policy and technical issues through pilot applications and encourages the development of additional NWAs by utilities. The sharing of experiences and lessons learned related to NWAs in Michigan and in other jurisdictions should be instructive to the next iteration of distribution plans.

4. Cost-Benefit Analysis

Although the Commission does not believe that a cost-benefit analysis is necessary for all projects that a utility is considering, the Commission does believe that this type of analysis for alternatives would be beneficial, for those alternatives that could be viable. Therefore, the Commission believes that further discussion in a future technical conference regarding a

common, yet flexible, cost-benefit methodology for alternatives is warranted and would help shape the development of the next set of distribution plans.

The Commission is particularly interested in the planning and vetting of technology and communications solutions that will underpin a more modern grid. With increased use of DERs and upgrades to hardware and software systems to support distribution operations and customer engagement, the sequencing and integration of controls, sensors, communications, and data management systems will be important for safety, reliability, and cost. There are inherent operational and financial risks to utilities and their customers and ratepayers associated with new technology deployments, particularly large systems that may still interface with legacy systems. The Commission views cost-benefit analyses as a tool that can assist with the examination of technology solutions. Understanding the expected costs, timeframes, functions, and integration risk issues on the front end will assist with the Commission's prudency reviews in rate cases and ongoing monitoring as technology projects are implemented.

5. Replacement/Upgrade Criteria

Given concerns from stakeholders, which the Commission shares, about a one-size-fits-all approach, and the relative value the Commission believes such criteria would bring, the Commission is reluctant to adopt the Staff's recommendation here at this time.

6. Workforce Adequacy Plans

The Commission acknowledges that an adequate utility workforce is key to the distribution system. However, the Commission believes that a focus more on implementation considerations generally, with workforce being a component, would be sufficient for the next

round of distribution plans. The Commission is also sensitive to publishing detailed workforce information that could affect bidding and contracting by utilities.

Having addressed the Staff's specific recommendations, the Commission clarifies that the purpose of a framework for the next round of distribution plans is to provide focused discussion, longer-term visibility than what is available in a rate case, and better understanding, not to set prescriptive mandates on the utilities. As applicable, the Commission's mission is to protect the public by ensuring safe, reliable, and accessible energy services at reasonable rates for Michigan's residents. The Commission cannot usurp utility management prerogatives. *See*, *Union Carbide Corp v Pub Serv Comm*, 431 Mich 135, 148; 428 NW2d 322 (1988). Thus, any framework at this time is not to be treated as a one-size-fits-all approach but is to be used as a guide for the next iterations of distribution plans to be filed by those directed to do so. The Commission recommends that utilities, stakeholders, and the Staff discuss, as a part of a future workshop, elements where it would be most useful to have information presented in a consistent manner among utilities. This could facilitate the aggregation of information across utilities and provide insight into trend analysis. The Commission is sensitive to concerns by smaller utilities in terms of the feasibility and cost associated with preparing certain elements of the distribution plans. The Commission also recognizes the need for flexibility with distribution planning, and although the distribution plans in this docket arose from rate cases where significant investments were proposed by the utilities, the Commission does not expect an across-the-board requirement for the utilities to do them at this time. The need, scope, and timing for additional utilities to develop distribution plans will be addressed on a case-by-case basis.

The Commission agrees with the Staff that Consumers' and DTE Electric's next set of plans should be filed in 2020, specifically no later than June 30, 2020. Although these updates to their

distribution plans will not then be filed directly alongside their IRPs,[10] an alignment with potential long-term value, these next iterations will nevertheless follow on the heels of a Commission order addressing Consumers' IRP and then the filing of DTE Electric's IRP application, along with Commission orders addressing the companies' current pending rate cases (Case Nos. U-20134 and U-20162), all being matters which should bring about meaningful, effective, and actionable items within Consumers' and DTE Electric's next iterations of their distribution plans. As these processes evolve, the Commission envisions improved alignment of resource, transmission, and distribution planning in terms of timing, assumptions, and alternative analyses.

In the next iteration of plans, the Commission stresses the importance of both top-down and bottom-up planning. The first set of plans created an extensive inventory of system and equipment conditions, and priorities for investments over the next five years. This provided a foundation for future planning and investment decisions. As the Commission, utilities, and stakeholders engage in the development of the next iteration of plans, it is important to have discussions around the longer-term vision for grid architecture and performance expectations.

Finally, distribution planning cannot be conducted in a silo, without consideration of other issues. This is apparent from the August 7, 2018 workshop and the Staff's report in this proceeding, the Commission's recent announcement to upgrade its generation interconnection rules,[11] approval of data access tariffs, and the myriad of issues in pending contested cases such as standby rates, time-based pricing, DG program pricing as set forth in the 2016 energy laws,

[10] Consumers timely filed its IRP in Case No. U-20165 on June 15, 2018, and DTE Electric's IRP is due by March 29, 2019. *See*, December 20, 2017 order in Case Nos. U-15896 *et al*., p. 4.

[11] *See*, November 8, 2018 order in Case No. U-20344, addressing interconnection, DG, and legacy net metering rules.

examination of performance-based ratemaking,[12] PEV infrastructure and charging rates, integrated resource planning, and implementation of the Public Utility Regulatory Policies Act. Additionally, outside the Commission, the Michigan Infrastructure Council (MIC) was created in mid-2018 via the Michigan Infrastructure Council Act, 2018 PA 323, MCL 21.601 *et seq.*, "to bring together local utility and infrastructure owners, regional representatives, finance and policy experts, and state department leaders to coordinate infrastructure-related goals and develop a long-term strategy for Michigan's infrastructure assets."[13] The Commission believes utilities should coordinate distribution planning efforts with the MIC in order to benefit all Michigan residents through more efficient and effective planning. There is also increased interplay between state and federal roles on issues such as third-party aggregation of energy and capacity resources in wholesale markets, resource adequacy, and long-term planning. Given the pace of change and complexity of these issues, the Commission has a sense of urgency to address many interrelated issues in an integrated fashion. This will allow the Commission and stakeholders to successfully navigate the rapidly evolving energy landscape, ensure reliability and resiliency with mitigation of security threats, facilitate fair and timely access to the grid by third parties and the integration of new energy technologies, and ensure affordable utility bills and accurate price signals. This may also necessitate innovations in the business models of utilities and regulatory approaches with both federal and state jurisdictional implications. Additional guidance will be forthcoming to

[12] *See*, Michigan Public Service Commission, *Report on the Study of Performance-Based Regulation* (April 20, 2018) <https://www.michigan.gov/documents/mpsc/MI_PBR_Report_Final_621112_7.pdf> (accessed November 19, 2018).

[13] <https://www.michigan.gov/snyder/0,4668,7-277-57738-473705--,00.html> (accessed November 19, 2018).

encourage broad stakeholder participation in these efforts related to planning, grid access, and regulatory innovation.

THEREFORE, IT IS ORDERED that:

A. Consumers Energy Company and DTE Electric Company shall file, in this docket, by June 30, 2020, next versions of their five-year distribution investment and maintenance plans consistent with this order.

B. Any person interested in commenting on Indiana Michigan Power Company's draft five-year distribution investment and maintenance plan may do so in accordance with this order. Initial comments must be filed in this docket no later than 5:00 p.m. on December 21, 2018, with reply comments to be filed no later than 5:00 pm on January 11, 2019. Written comments should be sent to: Executive Secretary, Michigan Public Service Commission, P.O. Box 30221, Lansing, MI 48909. Electronic comments may be e-mailed to mpscedockets@michigan.gov. Comments should reference this docket (Case No. U-20147). All information submitted to the Commission in this matter will become public information available on the Commission's website and subject to disclosure. Comments should not include information commenters wish to remain private.

The Commission reserves jurisdiction and may issue further orders as necessary.

MICHIGAN PUBLIC SERVICE COMMISSION

Sally A. Talberg, Chairman

Norman J. Saari, Commissioner

Rachael A. Eubanks, Commissioner

By its action of November 21, 2018.

Kavita Kale, Executive Secretary

P R O O F O F S E R V I C E

STATE OF MICHIGAN)

Case No. U-20147

County of Ingham)

Lisa Felice being duly sworn, deposes and says that on November 21, 2018 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).

Lisa Felice

_____

Lisa Felice

Subscribed and sworn to before me
this 21st day of November 2018

Angela P. Sanderson

_____

Angela P. Sanderson
Notary Public, Shiawassee County, Michigan
As acting in Eaton County
My Commission Expires: May 21, 2024

GEMOTION DISTRIBUTION SERVICE LIST

kadarkwa@itctransco.com	ITC
tjlundgren@varnumlaw.com	Energy Michigan
lachappelle@varnumlaw.com	Energy Michigan
CBaird-Forristall@MIDAMERICAN.COM	Mid American
david.d.donovan@XCELENERGY.COM	Xcel Energy
ddasho@cloverland.com	Cloverland
bmalaski@cloverland.com	Cloverland
vobmgr@UP.NET	Village of Baraga
braukerL@MICHIGAN.GOV	Linda Brauker
info@VILLAGEOFCLINTON.ORG	Village of Clinton
jgraham@HOMEWORKS.ORG	Tri-County Electric Co-Op
mkappler@HOMEWORKS.ORG	Tri-County Electric Co-Op
psimmer@HOMEWORKS.ORG	Tri-County Electric Co-Op
frucheyb@DTEENERGY.COM	Citizens Gas Fuel Company
mpscfilings@CMSENERGY.COM	Consumers Energy Company
jim.vansickle@SEMCOENERGY.COM	SEMCO Energy Gas Company
kay8643990@YAHOO.COM	Superior Energy Company
ebrushford@UPPCO.COM	Upper Peninsula Power Company
christine.kane@we-energies.com	WEC Energy Group
jlarsen@uppco.com	Upper Peninsula Power Company
dave.allen@TEAMMIDWEST.COM	Midwest Energy Coop
bob.hance@teammidwest.com	Midwest Energy Coop
tharrell@ALGERDELTA.COM	Alger Delta Cooperative
tonya@CECELEC.COM	Cherryland Electric Cooperative
bscott@GLENERGY.COM	Great Lakes Energy Cooperative
sculver@glenergy.com	Great Lakes Energy Cooperative
panzell@glenergy.com	Great Lake Energy Cooperative
kmarklein@STEPHENSON-MI.COM	Stephson Utilities Department
debbie@ONTOREA.COM	Ontonagon County Rural Elec
ddemaestri@PIEG.COM	Presque Isle Electric & Gas Cooperative, INC
dbraun@TECMI.COOP	Thumb Electric
rbishop@BISHOPENERGY.COM	Bishop Energy
mkuchera@AEPENERGY.COM	AEP Energy
todd.mortimer@CMSENERGY.COM	CMS Energy
jkeegan@justenergy.com	Just Energy Solutions
david.fein@CONSTELLATION.COM	Constellation Energy
kate.stanley@CONSTELLATION.COM	Constellation Energy
kate.fleche@CONSTELLATION.COM	Constellation New Energy
mpscfilings@DTEENERGY.COM	DTE Energy
bgorman@FIRSTENERGYCORP.COM	First Energy
vnguyen@MIDAMERICAN.COM	MidAmerican Energy
rarchiba@FOSTEROIL.COM	My Choice Energy
greg.bass@calpinesolutions.com	Calpine Energy Solutions
rabaey@SES4ENERGY.COM	Santana Energy

Updated 9-12-2018

GEMOTION DISTRIBUTION SERVICE LIST

cborr@WPSCI.COM	Spartan Renewable Energy, Inc. (Wolverine Power Marketing Corp)
cityelectric@ESCANABA.ORG	City of Escanaba
crystalfallsmgr@HOTMAIL.COM	City of Crystal Falls
felicel@MICHIGAN.GOV	Lisa Felice
mmann@USGANDE.COM	Michigan Gas & Electric
mpolega@GLADSTONEMI.COM	City of Gladstone
rlferguson@INTEGRYSGROUP.COM	Integrys Group
lrgustafson@CMSENERGY.COM	Lisa Gustafson
tahoffman@CMSENERGY.COM	Tim Hoffman
daustin@IGSENERGY.COM	Interstate Gas Supply Inc
krichel@DLIB.INFO	Thomas Krichel
cityelectric@BAYCITYMI.ORG	Bay City Electric Light & Power
Stephen.serkaian@lbwl.com	Lansing Board of Water and Light
George.stojic@lbwl.com	Lansing Board of Water and Light
jreynolds@MBLP.ORG	Marquette Board of Light & Power
bschlansker@PREMIERENERGYLLC.COM	Premier Energy Marketing LLC
ttarkiewicz@CITYOFMARSHALL.COM	City of Marshall
d.motley@COMCAST.NET	Doug Motley
mpauley@GRANGERNET.COM	Marc Pauley
ElectricDept@PORTLAND-MICHIGAN.ORG	City of Portland
gdg@alpenapower.com	Alpena Power
dbodine@LIBERTYPOWERCORP.COM	Liberty Power
leew@WVPA.COM	Wabash Valley Power
kmolitor@WPSCI.COM	Wolverine Power
ham557@GMAIL.COM	Lowell S.
AKlaviter@INTEGRYSENERGY.COM	Integrys Energy Service, Inc WPSES
BusinessOffice@REALGY.COM	Realgy Energy Services
landerson@VEENERGY.COM	Volunteer Energy Services
Ldalessandris@FES.COM	First Energy Solutions
cmcarthur@HILLSDALEBPU.COM	Hillsdale Board of Public Utilities
mrzwiers@INTEGRYSGROUP.COM	Michigan Gas Utilities/Upper Penn Power/Wisconsin
djtyler@MICHIGANGASUTILITIES.COM	Michigan Gas Utilities/Qwest
Teresa.ringenbach@directenergy.com	Direct Energy
christina.crable@directenergy.com	Direct Energy
angela.schorr@directenergy.com	Direct Energy
ryan.harwell@directenergy.com	Direct Energy
johnbistranin@realgy.com	Realgy Corp.
jweeks@mpower.org	Jim Weeks
mgobrien@aep.com	Indiana Michigan Power Company
mvorabouth@ses4energy.com	Santana Energy
sjwestmoreland@voyager.net	MEGA
hnester@itctransco.com	ITC Holdings
lpage@dickinsonwright.com	Dickinson Wright
Karl.J.Hoesly@xcelenergy.com	Xcel Energy

Updated 9-12-2018

GEMOTION DISTRIBUTION SERVICE LIST

Deborah.e.erwin@xcelenergy.com	Xcel Energy
mmpeck@fischerfranklin.com	Matthew Peck
CANDACE.GONZALES@cmsenergy.com	Consumers Energy

Updated 9-12-2018