THE UNIVERSITY OF CHICAGO
ABRAMS ENVIRONMENTAL LAW CLINIC
OF THE UNIVERSITY OF CHICAGO LAW SCHOOL

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Via E-Filing Only

Ms. Barbara Kunkel
Michigan Public Service Commission
7109 W. Saginaw Hwy.
P. O. Box 30221
Lansing, MI 48917

RE: MPSC Case No. U-20471

Dear Ms. Kunkel:

Please find enclosed the DIRECT TESTIMONY OF JACKSON KOEPPEL ON BEHALF OF SOULARDARITY and accompanying proof of service, for electronic filing in the above referenced matter. Please do not hesitate to contact my office with any questions or comments.

Sincerely,

Mark N. Templeton, *pro hac vice*
6020 S. University Avenue
Chicago, IL 60637
Phone: (773) 702-9611
Email: templeton@uchicago.edu

xc: Parties to Case No. U-20471

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of DTE Electric Company for approval of its integrated resource plan pursuant to MCL 460.6t, and for other relief.	Case No. U-20471 ALJ Sally L. Wallace

DIRECT TESTIMONY OF JACKSON KOEPPEL

ON BEHALF OF SOULARDARITY

I. Introduction and Summary

Q: Please state your name, occupation, and business address.

A: My name is Jackson Koeppel. I am the Executive Director of Soulardarity, 21 Highland Street, Highland Park, Michigan 48203.

Q: Please describe your work experience.

A: I studied climate change and social inequity at Oberlin College in Oberlin, Ohio until I transferred to Wayne State University to pursue my work on community solar advocacy. I moved to Highland Park, Michigan in 2012 and co-founded Soulardarity, an organization rooted in the Highland Park community, to organize community-owned solar streetlights and improve weatherization to reduce home energy-usage. I am presently co-directing and growing Soulardarity, as well as organizing regionally and nationally, to democratize and decarbonize our energy economy. I am also working on wealth redistribution, democratization of land ownership, local development, and other projects to build community control and local assets. I have been part of the LeadNow Fellowship organized by SustainUS and the Will Steger Foundation's Intergenerational Co-Mentorship fellowship, and I recently received the Brower Youth Award and the Vehicle of Change Award for my work. I am currently a Detroit Innovation Fellow.

Q: For what purpose was Soulardarity created?

A: In 2011, DTE Energy repossessed more than 1,000 streetlights from Highland Park, Michigan, a predominantly low-income and minority city, after its municipal government

defaulted on its utility payments. A coalition of Highland Park residents formed Soulardarity in 2012 to help alleviate the crisis by installing community-owned, solar-powered streetlights in the city. Soulardarity's mission has subsequently broadened to include energy education and advocacy for community solar and greater equity in Michigan's energy generation and delivery system. Through activism and advocacy, Soulardarity seeks to emphasize the particular needs, experiences, and perspectives of low-income communities and communities of color.

Q: What is Soulardarity's focus?

A: Soulardarity's goal is to improve access to affordable, clean energy for low-income communities and communities of color, including women, children, the elderly, people with disabilities, and others who are statistically more likely to live in poverty. As such, Soulardarity promotes solar street lighting, solar bulk purchasing, energy education, and expanding access to clean energy to improve the economic condition of low-income communities, especially low-income communities of color, in southeast Michigan. Soulardarity has developed partnerships with other Michigan stakeholders interested in energy justice and affordability, including experienced solar installers and developers. Soulardarity also advocates for equitable utility rates and services, including but not limited to investments in reliability, safety, and energy waste reduction, on behalf of low-income communities and communities of color.

Q: Has Soulardarity previously intervened in or commented on an MPSC matter?

A: Yes, Soulardarity intervened in MPSC matter U-18232 and advocated, through testimony and briefing, for the inclusion of community solar projects in DTE's Renewable Energy Plan and for

accommodating diverse ratepayers in DTE's energy decision-making. Soulardarity filed a comment in MPSC matter U-18418 regarding the proposed Integrated Resource Planning process and advocated that the process include more robust engagement with diverse stakeholders. Soulardarity also commented during the MPSC Staff's development of the Distributed Generation Tariff in MPSC matter U-18383 and advocated for changes that would increase transparency and access to solar energy for low-income communities and communities of color. Soulardarity joined a Response to Prior Comments in U-18076 concerning DTE's application for approval of a previous amended Renewable Energy Plan. Soulardarity intervened in DTE's 2018 rate case, MPSC matter U-20162, and advocated, through testimony and briefing, for a more equitable rate design through the provision of increased resources in underserved communities and for policies that promote access to distributed generation programs for low-income and people of color ratepayers. Finally, Soulardarity has intervened in DTE's latest rate case, MPSC matter U-20561.

Q: What is the purpose of your testimony?

A: I am testifying as an advocate for clean energy availability, affordability and infrastructure, and public health in low-income and people of color communities. I will provide a unique perspective on the issues in this case. I have useful information, and extensive knowledge and experience in the areas of renewable energy and expanding access to community-owned clean energy and will bring this expertise to bear in this proceeding. I will submit evidence and testimony that centers on the experiences of Soulardarity's members and the communities they represent. This includes first-hand observations about how DTE's business practices impact low-

income and people of color communities. My testimony will provide essential information about how best to design programs to meet all consumers' needs equitably and effectively.

Q: Please provide an overview of the topics you will discuss in your testimony.

A: I will first discuss my general concerns, including the urgent need for DTE to increase access to renewable energy for low-income communities and communities of color, and the need for DTE and the MPSC to include low-income and people of color communities in the planning process for the Integrated Resource Plan ("IRP").

I will then provide testimony on the problems I see with DTE's approach to renewable energy. I will highlight my concerns with the "flexible pathways approach" in the IRP. I will also describe DTE's low level of commitment to renewable energy relative to other public utilities. A large part of this, as I will discuss, is DTE's refusal to consider anything other than utility-scale, company-owned renewable energy projects, which violates its obligation to consider reasonable options for meeting projected generation needs. I will provide testimony that explains the potential benefits of community-based energy projects for low-income communities and communities of color.

I will also discuss the critical need for DTE and the MPSC to view this IRP proceeding through an equity lens. As I will explain, this is because DTE's IRP will disproportionately negatively impact low-income and people of color communities. The MPSC must take equity into account during this proceeding rather than considering equity issues only in individual Certificate of Need (CON) proceedings or leaving considerations of equity to the Environmental Justice Work Group, which does not have the power to regulate utilities.

I will discuss shortcomings of DTE's stakeholder engagement process for the IRP and how DTE's public participation process systematically excluded low-income and people of color communities. I will also comment on the need for the MPSC to continue the work it started at the public hearing it hosted in Detroit and the importance of gathering input directly from the community about DTE's IRP.

My testimony will discuss the benefits of Energy Waste Reduction (EWR) programs for low-income households, which spend a disproportionate amount of their income on energy bills and often live in homes with poor insulation. Along with the benefits of EWR programs for low-income communities, I will highlight barriers to participation, the role of DTE in creating these barriers, and the steps DTE must take to overcome these barriers. Finally, I will discuss DTE's Demand Response program from the perspective of low-income and people of color communities.

Overall, the Commissioners should reject DTE's proposed IRP because it is a flawed document that fails to reflect perspectives from low-income and communities of color stakeholders. DTE's IRP is shortsighted and neglects the value of community-based renewable energy programs.

Q: Are you sponsoring any exhibits?

A: Yes. I am sponsoring the following exhibits:

1. United States Environmental Protection Agency, Green Book, https://www3.epa.gov/airquality/greenbook/tncs.html#MI\
2. MPSC Staff Report, Case U-20169 (August 10, 2018).
3. DTE Energy, Renewables Program Focus Group, (September 8, 2016).

4. Matt Kasper, *Utility Front Group 'Michigan Energy Promise' Emerges to Rally DTE Energy Foundation Recipients to Target Solar*, Energy and Policy Institute (March 5, 2019), Available at: https://www.energyandpolicy.org/michigan-energy-promise-dte-energy-front-group/.
5. Xcel Energy, Carbon Report (Feb 2019), Available at: https://www.xcelenergy.com/staticfiles/xe/PDF/Xcel%20Energy%20Carbon%20Report%20-%20Mar%202019.pdf.
6. NIPSCO, Integrated Resource Plan (2018), Available at: https://www.nipsco.com/docs/librariesprovider11/rates-and-tariffs/irp/2018-nipsco-irp.pdf?sfvrsn=15.
7. "Get Free: Understanding the Potential for Community Solar Power in Highland Park"," a report written by Dow Sustainability Masters Fellows at the University of Michigan in partnership with Souladarity (December 2017).
8. Emily Prehoda, Joshua M. Pearce, & Chelsea Shelly, *Policies to Overcome Barriers for Renewable Energy Distributed Generation: A Case Study of Utility Structure and Regulatory Regimes in Michigan* (2019), Available at: https://digitalcommons.mtu.edu/cgi/viewcontent.cgi?article=1181&context=social-sciences-fp.
9. DTE Energy website, https://empoweringmichigan.com/renewable-energy-improving-grid-reliability/ (2019).
10. National Association for the Advancement of Colored People, Indigenous Environmental Netwrk & Little Village Environmental Justice Organization, *Coal Blooded: Putting*

Profits Before People (2016), Available at: https://www.naacp.org/wp-content/uploads/2016/04/CoalBlooded.pdf.

11. DTE Energy, Renewable Energy Programs Exploration, Final Report (June 19, 2014).
12. John Farrell, *Advantage Local – Why Local Energy Ownership Matters*, Institute for Local Self-Reliance (September 2014), Available at: https://ilsr.org/wp-content/uploads/2018/03/Advantage_Local-FINAL.pdf.
13. Citizens Utility Board, *Electrical Utility Performance: Ranking Michigan Amongst the States* (2019) https://d3n8a8pro7vhmx.cloudfront.net/cubofmichigan/pages/15/attachments/original/1563405525/CUB_of_MI_Electric_Utility_Performance_Report_2019_Edition_Final_for_Website.pdf?1563405525.
14. Gideon Weissman, Emma Searson & Rob Sargent, *The True Value of Solar: Measuring the Benefits of Rooftop Solar*, Environment America (July 2019). https://environmentamerica.org/sites/environment/files/resources/AME%20Rooftop%20Solar%20Jul19%20web.pdf.
15. Mikati I, Benson AF, Luben TJ, Sacks JD, Richmond-Bryant J, *Disparities in Distribution of Particulate Matter Emissions Sources By Race and Poverty Status*, 108 American Journal of Public Health 480 (2018). https://www.ncbi.nlm.nih.gov/pubmed/29470121.
16. Dominic J. Bednar, Tony Gerard Reames, & Gregory A. Keoleian, *The Intersection of Energy and Justice: Modeling the Spatial, Racial/ Ethnic, and Socioeconomic Patterns of Urban Residential Heating Consumption and Efficiency in Detroit, Michigan*, 143

Energy and Buildings 25 (2017), Available at: https://www.sciencedirect.com/science/article/pii/S0378778817308435.

17. Fisher, Sheehan & Colton, *Home Energy Affordability Gap* (2018). http://www.homeenergyaffordabilitygap.com/03a_affordabilityData.html.
18. Michigan Environmental Justice Work Group Report, (March 2018), Available at: https://www.michigan.gov/documents/snyder/Environmental_Justice_Work_Group_Report_616102_7.pdf.
19. "Comments on MPSC Case No. U-18418 Regarding Stakeholder Engagement in the Integrated Resource Planning Process," (2017), Available at: https://mi-psc.force.com/sfc/servlet.shepherd/version/download/068t0000001UYexAAG.
20. NYPSC Order, Case 14-M-0565 (January 8, 2015), Available at: http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={B9477FFE-87E4-427F-937A-12E490920EEB}.
21. California Public Utilities Commission Website, *Prior Public Participation Hearings and Certain Events,* Available at: http://www.cpuc.ca.gov/priorpph/.
22. DTE, *Energy Waste Reduction 2017 Annual Report* (2017), Available at: https://www.newlook.dteenergy.com/wps/wcm/connect/e20de3d0-11df-41e5-bfbc-b41927e5a77c/2015-EO-Annual-Report.pdf?MOD=AJPERES.
23. Ben Stacey & Tony Reames, *Social Equity in State Energy Policy: Indicators for Michigan's Energy Efficiency Programs*, (December 1, 2017), Available at: https://justurbanenergy.files.wordpress.com/2017/12/equity-in-energy-efficiency-investment-and-savings-report-2017.pdf.

24. Tony Reames, *Targeting Energy Justice: Exploring Social, Racial/Ethnic and Socioeconomic Disparities in Urban Residential Heating Energy Efficiency*, 97 Energy Policy 549 (2016). https://reader.elsevier.com/reader/sd/pii/S0301421516304098?token=3ADE4397B4EC220D539CBDB141184A2D30A4196D8D5D66FFE9C198CC1DD65F69C10AAF31C3DAF58A169AF406A22189FB.
25. Julian Specter, *Another California City Drops Gas Peaker in Favor of Clean Portfolio*, Green Tech Media, https://www.greentechmedia.com/articles/read/glendale-drops-gas-peaker-in-favor-of-clean-and-distributed-portfolio#gs.vco74f (July 30, 2019).
26. Tony Reames, *A Community-Based Approach to Low Income Residential Energy Efficiency Participation Barriers*, 21 Local Environment: The International Journal of Justice and Sustainability 1449 (2016), Available at https://www.tandfonline.com/doi/abs/10.1080/13549839.2015.1136995
27. Advanced Energy Economy Institute, *Economic Potential for Peak Demand Reduction in Michigan,* (February 2017), Available at: http://info.aee.net/hubfs/PDF/Peak-Demand-Reduction-Potential-for-Michigan021717.pdf?t=1487398737782.

II. General Concerns

Q. What kinds of concerns do low-income communities and communities of color bring to an IRP and the IRP process?

A: Low-income communities are concerned with having an electricity system that is affordable, reliable, safe and not harmful to their health. Though these concerns are shared among all

communities regardless of income, DTE's IRP disproportionately harms low-income communities and communities of color.

In addition, low-income communities have consistently borne many of the burdens of the electric power system.

With respect to environmental and public health impacts, people in low-income communities live near fossil fuel plants and must deal with the emissions that the plants produce that contribute to substandard air quality. For example, DTE has failed to consider how its emissions would affect ozone formation in the seven-county area in Southeast Michigan that is out of compliance with (or "attainment") the National Ambient Air Quality Standards ("NAAQS") standards for ozone. This omission is particularly troubling because the ozone season—meaning the times when counties exceed public health standards—will likely expand as global warming continues. DTE claims to have implemented a plan to reduce sulfur dioxide emissions to ensure that southern Wayne County meets the sulfur dioxide NAAQS, yet the area is still out of attainment. Exhibit 1. Further, DTE stated that its retirement of the St. Clair coal plant will support the attainment of sulfur dioxide NAAQS near Port Huron, which is currently another nonattainment area. Exhibit 1. However, that retirement is scheduled for 2030, and the 2018 sulfur dioxide data showed a spike in concentration to 82 ppb, above the 75 ppb standard.

With respect to utility upgrades and programs, low-income consumers have been systematically excluded from infrastructure improvements and other programs designed to increase reliability and safety and to lower energy expenditures.

DTE's relationship with the community in Highland Park is a microcosm of these problems. The company has neglected to include economically distressed areas like Highland

Park in its hardening program, leaving such communities with dangerously outdated power lines and transmission infrastructure. Residents in Highland Park find it difficult to participate in programs to improve energy efficiency and consequently pay more for electricity. This is a particular burden for low-income communities, who already commit a disproportionate share of their income to electricity. As an example, when Highland Park residents try to sign up for weatherization services through Wayne Metropolitan Community Action Agency, they are told of two-year long wait times. Residents facing those two-year waits only get to that point if they have not already been disqualified because their homes suffer from other deferred maintenance issues, such as an aging roofing or asbestos within building materials. These programs are severely oversubscribed and there is a lack of integration between weatherization and resources available to assist with other aspects of home repair or hazard abatement.

The IRP process should focus on costs to and impacts on the community—not just benefits to DTE. Although one of DTE's planning principles for the IRP is "Community Impact," DTE has not adequately addressed the needs of low-income and people of color communities in its IRP.

Q: Why is renewable energy important for low-income communities?

A: Renewable energy resources, and particularly community-based projects, are good for low-income communities. They provide clean energy and thus help alleviate the environmental costs borne by low-income communities located near fossil fuel generation assets. For instance, renewable energy resources reduce the need for reliance on coal-burning power plants, which emit toxins that are harmful to the surrounding communities, many of which have historically

been located in low-income communities of color. Access to community-based renewable resources also promotes control over how areas produce their energy, which furthers energy democracy. Energy democracy is about improving community engagement in and comfort with the energy system and its development, ensuring that the energy system develops in ways that reflect community values and priorities, and creating owners and stakeholders in the energy system within the community.

Renewable energy projects also promote grid resilience and reliability by increasing diversity in both resource-type and location. This benefits low-income communities for whom the effects of power outages can be particularly devastating. For instance, losing a refrigerator can threaten the health of those who must refrigerate their medication and can lead to insecurity for low-income households which do not have extra funds to replace refrigerated food or medication. Persons relying on life sustaining technology, such as dialysis machines, are especially vulnerable to blackouts. When power outages occur during high temperatures, it can put seniors and other vulnerable populations at risk of health problems, including death, due to a lack of air conditioning. Blackouts also disrupt life and create uncertainty in low-income communities, where a power outage that shuts down a daycare center may close that business and force parents who rely on it to miss work or pay out of pocket to make alternative or emergency arrangements for childcare or transportation. These situations lead to lost wages and force residents to bear emergency costs. For low-income households, a reliability issue in the grid can quickly become a significant problem.

A shift from fossil fuels to renewable energy is also good for low-income communities because it reduces greenhouse gas emissions. Low-income communities and communities of color are disproportionately impacted by climate change. Climate change increases the instances

of extreme weather events, to which low-income communities are particularly vulnerable as they lack the resources to prepare for, respond to, and recover from such events. Moreover, the infrastructure in low-income communities is often outdated and in need of repair, making it less able to withstand extreme climate events, such as more frequent and intense storms. MPSC's own staff has documented the unconscionable and dangerous state of DTE's infrastructure in low-income communities. Over a five-year period, Detroit suffered an equal number of downed wires to the entirety of DTE's territory outside of Detroit, despite hosting merely about 14% of DTE's mileage of wire. These downed wire incidents led to 8 fatalities in Detroit. Exhibit 2 at 2, 22. Climate change will also increase the frequency of heatwaves, which are especially dangerous for low-income households that often lack air-conditioning or sufficient insulation to avoid heat-related illnesses, such as heatstroke.

Community-owned renewable energy projects also present an opportunity to foster a greater sense of investment in and awareness of the electrical system among low-income communities. This has the potential to improve the comfort of community members to engage with and hold accountable decision-makers in the energy system, leading to better communication and ultimately, better services.

Q: What are your views on DTE's commitments to renewable energy?

A: DTE underinvests in renewable energy resources. As I will explain below, DTE's commitment to renewable energy is insufficient as compared to other public utility companies. DTE also refuses to consider any renewable energy options other than company-owned, utility-

scale projects, which excludes many potential renewable energy sources, including community solar.

Moreover, DTE engages in a number of practices that make it difficult for low-income communities to access renewable resources. The programs that DTE does have for customers to access renewable energy unjustly make it difficult for low-income customers to participate. Meanwhile, DTE foregoes options that would greatly benefit low-income communities.

Community-based energy projects, explored in greater depth below, increase low-income communities' access to renewable energy while also providing financial benefits. That makes them a better option that DTE's existing voluntary green pricing ("VGP") programs. Yet, DTE has no plans to promote community-based projects. DTE's lack of support for community-based options and promotion of expensive, centralized voluntary programs prevents many low-income individuals from effectively accessing renewable resources.

Q: How would you characterize DTE's public outreach for the IRP?

A: Shamefully poor. Although DTE held four public outreach sessions, the sessions were not sufficient to engage the community. Indeed, these sessions were not designed to solicit input from the community; the sessions were designed to deliver DTE's self-congratulatory public relations messaging. The company did not advertise these proceedings in low-income areas nor did it provide translators at many of the proceedings. It held sessions during the business day, making it difficult for many who work regular business hours to attend. These decisions result in low-income communities not being able to express their voice or viewpoint in DTE's planning process. Although the MPSC strongly encouraged DTE to engage with stakeholders and create

opportunities for dialogue between the company and its customers, the design of DTE's public outreach process systematically excluded low-income communities and communities of color. For instance, though DTE held six focus groups on its VGP program, it held no such sessions in Detroit, and subsequently concluded that low-income ratepayers were uninterested in the program. Exhibit 3.

Q: Why is it important for low-income communities and communities of color to provide input into the formation of DTE's IRP?

Low-income customers are an important stakeholder group whose input is valuable to the IRP planning process. As the MPSC noted in its directive to DTE to engage with stakeholders throughout the IRP process, eliciting feedback from customers "encourage[s] robust and informed dialogue on resource decisions," and "reduce[s] utility regulatory risk by building understanding and support for utility resource decisions." Michigan Public Service Commission, DTE Electric Company IRP Filing Requirements, Exhibit A-1 at 2 (Offer 16). It is important for DTE to have an open and transparent dialogue with all customers, and it is particularly important to listen to low-income and people of color communities who have unique needs.

The MPSC should make a special effort to receive input from low-income communities because the communities and their members lack the resources to engage in formal lobbying processes that influence energy policies, whereas DTE spends considerable resources to advance its interests. DTE engages in lobbying efforts to undermine laws that require utilities to adopt renewable technologies. For example, Michigan Energy First's president is DTE's Vice President of Corporate and Government Affairs, and the group's treasurer is a manager of

regulatory accounting at DTE. Exhibit 4. Moreover, Michigan Energy Promise has many members that receive funding from the DTE Energy Foundation. Exhibit 4. This relative lack of lobbying capacity means that the perspective of low-income communities is often overpowered by DTE's interests. Instead of soliciting real input from its ratepayers, DTE is investing millions of dollars in manufacturing the appearance of ratepayer support through misinformation and tactical philanthropy.

III. DTE's Commitment to Renewables

Q: What are your concerns about DTE's approach to renewable energy in its IRP?

A: We are concerned that DTE does not plan to increase renewable energy and to decrease carbon-based energy as rapidly as other utilities, that DTE pledges in the media to invest in renewable energy but proposes only flexible pathways and not real commitments to achieve those goals in its proposed plan, and that DTE does not consider community-level renewable energy projects.

Q: How do DTE's goals and plans for renewable energy and carbon emissions reductions compare to those of other public utilities in Michigan and in the region?

A: With respect to whether DTE's commitments are reasonable and realistic, other utilities in Michigan and throughout the country have proposed significantly greater increases in renewables and decreases in fossil-fueled plants. For example, Consumers Energy committed to a 90 percent reduction in carbon emissions by 2040 and to phase out all of its coal-fired power by the same

year. Additionally, Consumers Energy committed to 5,000 MW of new solar by 2030 and an additional 1,000 MW of solar by 2040. Xcel Energy (which serves Michigan and numerous states throughout the region) committed to 80 percent carbon reduction by 2030 and a 100 percent reduction by 2050, based on company-wide emissions. Exhibit 5 at 3-4. Northern Indiana Public Service Company's ("NIPSCO") plan to transition to renewable energy is projected to reduce NIPSCO's greenhouse gas emissions by more than 90 percent and retire 100% of coal capacity by 2028. Exhibit 6 at 103. By contrast, in May 2018, DTE committed to 50 percent clean energy by 2030 and a plan to retire its coal capacity by 2040. Mikulan Direct at LKM-14, Pfueffer Direct at SGP-13. DTE also stated that it will reach 80 percent carbon reduction by 2040, 10 percent less than Consumers Energy. Further, DTE's claims to these reductions are a disingenuous shell game. While the company claims greenhouse gas emissions reduction in its electricity business, its subsidiaries invest heavily in new construction of gas pipelines, pipelines that will likely serve as a source for DTE's electrical utility, and emit significant amounts of methane, a potent greenhouse gas.

Q: What concerns do you have about the "flexible pathways approach" in DTE's IRP?

A: DTE has separated its IRP into two parts: the near-term proposed course of action and a "flexible" proposed course of action (PCA). DTE Application at 2, Pfeuffer Direct at SGP-13. The proposed IRP provides concrete plans only in the near-term PCA, which covers from 2020 through 2024, or until its next IRP. In its flexible PCA, which covers from 2025 until 2040, DTE advanced four potential pathways for covering capacity need in 2030. During this time period, DTE "commits" to increasing renewables by 525 MW of solar between 2025 and 2030 and adding an additional 2,000 MW of solar by 2040. Mikulan Direct at LKM-18. Achieving 80

percent carbon reduction by 2040 is highly contingent on DTE's course of action from 2025 through 2040, the period DTE defines as "flexible."

Soulardarity is concerned about the extent DTE's "commitments." For example, at least two of DTE's proposed pathways include the construction of a new natural gas-fueled power plant, which would appear to undermine DTE's ability to meet its carbon reduction goals. DTE IRP, Ex. A-3 at 157. Further, the flexibility of DTE's proposed IRP gives it the option of returning to its projections in the future and changing them.

While today DTE can extol its commitment to renewables, ratepayers are left uncertain as to whether DTE is firm on its commitments or whether and under what circumstances DTE may step back from those pledges. For example, DTE has not conducted any analysis of potential fluctuations in the VGP program given cost of service factors or broader economic factors. This is particularly important because people can unsubscribe from the VGP program at any time, and most of DTE's renewable build-out is contingent on VGP demand. If that demand stalls or drops due to other factors, so will a meaningful portion of DTE's renewable energy development.

Another concern about these flexible approaches is that they are not as fluid as DTE's phrasing implies. DTE requests that they be allowed to select the plans that are best for them every five years, but some of these plans have significant investments and time horizons that will lock-in the effect of earlier decisions. For example, in two of its plans, DTE suggests building a new natural gas plant. Once DTE has made this decision and started construction, DTE will not be able to be as "flexible" in subsequent IRP proceedings because such a plant would be built and there would be no flexibility to move away from relying on it in a future IRP. The Commission should not allow DTE to equivocate among multiple plans, some of which include a massive new facility with a life span of decades, particularly where that facility faces a

substantial risk of becoming a stranded asset in the event that resource prices fluctuate or regulatory requirements change, costing ratepayers long beyond its usefulness. This alone should lead the MPSC to reject DTE's proposed IRP.

In order to fulfill its mission to protect the public, the Commission should hold DTE to its public representations in considering whether to approve DTE's IRP. The Commission should not approve an IRP that leaves customers unsure as to how DTE will live up to its publicly stated carbon reduction goals.

Q: What types of renewable generation assets has DTE identified in its IRP?

A: DTE considered large utility scale generation assets exclusively—not distributed generation or community-based assets—for its firm five-year plan and its four flexible plans. According to DTE, "Distributed Generation resources were not part of any of the 12 plans evaluated, so they were not considered in the 2019 IRP Planning Principle evaluation." DTE Electric Company's First Partial Response to Soulardarity's First Discovery Request, SDE-1.13c. Witness Mikulan noted that DTE modeled utility scale solar exclusively due to economics, though neither the IRP nor her testimony explain this economic analysis. Mikulan Direct at LKM- 50. DTE's analysis seems to assume that DTE would own both the small-scale and large-scale solar systems. DTE did not consider that, despite potentially higher equipment costs for small systems as compared to large systems, it may be beneficial for third parties to deploy small-scale solar system to reduce their own payments to DTE for power and to generate revenue through sales of excess power. It appears that DTE manipulated its analysis to be skewed towards large scale projects, which would be particularly difficult to develop for low-income communities (which lack

enough capital) and communities of color (which are typically located in denser urban areas with less space for large scale solar developments). Thus, all of the 693 MW of wind production by 2024 and 2500 MW of solar by 2040 are utility-scale. Pfeuffer Direct at SGP-15, 18. DTE did not include community-based assets in the list of technologies considered for future investment, which categorically excludes many viable options and therefore fails to meet the requirement of MCL 460.6s and MCL 460.6t, which require DTE to include an analysis of any supply-side resources "that reasonably could address any need for additional generation capacity." MCL 460.6t(f)(iii).

It appears that DTE seeks to avoid analyzing the value of distributed generation to avoid the conclusions that such an analysis would likely support. As demonstrated by the "Get Free: Understanding the Potential for Community Solar Power in Highland Park" report, completed by a team from University of Michigan, in Highland Park alone, 68% of rooftops are viable for solar and could produce 96% of the community's commercial and residential energy demands. When the possible production from vacant lots is included, Highland Park could produce ten times its own energy demand in solar power. Exhibit 7 at 7-9. The "Get Free" report was introduced as evidence in DTE's last rate case, U-20162. That DTE continues to avoid its findings and underlying data amounts to inexcusable and intentional ignorance of the merits of distributed generation.

DTE is entirely passive in its approach to distributed generation, neither promoting its use nor even studying its potential benefits or feasibility. The company does not have any stated plans to increase the use or adoption of distributed generation, and their projections are based entirely around existing interconnections. As of 2017, 13.6 MW of distributed generation was on the grid in DTE's service territory. DTE IRP, Ex. A-3 at 123. DTE anticipates annual growth

of between five and seven percent through 2040. If these projections are correct, then DTE anticipates only 350 MW of distributed generation capacity by 2040, roughly 0.4 percent of total renewable sources for DTE's plan. DTE IRP, Ex. A-3 at 123. This figure is shockingly low given the benefits of distributed renewable energy generation, such as improved reliability, lower emissions of carbon and other air pollutants, and the creation of power sources based in the community. DTE continues to claim that distributed generation users do not financially support the costs of infrastructure used in common with all other ratepayers, when, in fact, data shows that distributed generation reduces overall infrastructure costs for a utility and all of its customers. Exhibit 8 at 10-11. Further, small-scale renewable distributed generation programs provide financial benefits to individuals who have or subscribe to solar systems through electric bill savings, electricity sales, and increased property values. One study estimates the savings on electric bills of those who have residential solar projects as $0.026 kwh in Wayne County. Exhibit 8 at 5.

By failing to consider community-based energy projects, DTE failed its statutory obligation under MCL 460.6t(5)(k) to consider all reasonable means of meeting the projected needs of the next 20 years..

Q: How does DTE's preference for utility-scale solar and wind compare with concerns it has raised in the past?

A: DTE's messaging in the past is not consistent with its decision to invest in large, centralized renewable energy projects. In both public comments and proceedings before the MPSC, DTE has claimed that the problem with renewable energy is that the source is not consistently available. In

effect, they have claimed that solar and wind are not reliable because the sun does not always shine and the wind does not always blow. Exhibit 9.

If DTE is primarily concerned about the reliability of renewable resources, then the solution would be to invest in distributed generation and community-based energy projects, not the centralized utility-owned systems preferred by DTE. Increasing the geographic diversity of its resources through smaller-scale and community-based projects would mitigate fluctuations due to variable amounts of sun or wind at particular locations and the intermittency of the underlying solar or wind resource. DTE's attempt to justify its preference for utility-owned resources with a misplaced reference to reliability concerns suggests that the company's combined regulatory, business, and philanthropic strategy is focused on inhibiting the growth distributed generation to promote exclusive utility-ownership of any new generation, thereby advancing its shareholders' economic interests.

Q: What are community-based energy projects?

A: Community-based energy projects allow multiple community members or organizations to own an electric system that provides them with power and/or financial benefits. Pricing models, ownership structures, and project scales vary among projects. What all community-based energy projects have in common is the provision of more equitable access to reliable, clean energy generated in the community and benefitting that community economically. Community-based energy meets the needs of the community as defined by the community, not a utility's needs dictated by DTE.

Q: What are the benefits of community-based energy projects?

A: Community-based energy projects have important implications for energy democracy, energy justice, and economic development. By placing these generation resources in the community, the community itself is given control over their power and how it is generated. This is an aim worth pursuing for its own sake, but it is especially relevant in light of the distrust between DTE and the community. In Highland Park, for example, DTE removed more than 1,000 streetlights from the community because the municipality was behind on its payments. This decision impacted all of the residents in Highland Park—creating safety issues and negatively impacting residents' ability to access public transportation and to participate in the community, as well as hampering the potential for equitable economic development that relies on reliable utility services. If assets are controlled by the community in which they are located, then generation and operation will better reflect the community's needs.

Community-based energy projects also have important implications for communities that have historically borne the costs of the energy system. Many low-income communities of color have shouldered the burdens of the energy system by living near fossil fuel plants and suffering the health consequences that come with exposure to emissions from those plants. Prolonged exposure to sulfur dioxide, nitrogen oxide and fine particulate matter emitted by fossil fuel plants is linked to a host of health problems including cancer, asthma and other respiratory diseases. Exhibit 10 at 14-16. As more clean community energy projects are added, the need to burn fossil fuels decreases. This impacts positively not only the environment writ large, but also communities that are located near the fossil-fuel plants. Although DTE has made "Community Impact" one of its core planning principles, it does not consider healthcare costs—which substantially impact communities surrounding fossil fuel plants—in its analysis.

The community also benefits economically from these projects. Community-based energy projects provide construction and maintenance jobs, which can benefit the community as a whole, especially if the workers reside in the communities. Confusingly, in its planning principle ranking process, DTE ranked large generation builds higher than other plans because it assumed only "large generation builds…to be positive for job creation." Witness Mikulan, Exhibit A-4, Appendix T at 147. This logic is flawed, because community-based energy projects also create jobs, and they distribute the jobs more equitably across Michigan than large generation builds. In addition to the economic development that these projects promote, communities will also enjoy the added benefit of being able to sell energy back to the grid.

Finally, community-based projects in low-income communities and communities of color can help to right the imbalance of DTE's disproportionate present and past investment in other communities. DTE has invested in improving its transmission infrastructure in well-off areas, and it has shifted energy-efficiency program investments from low-income communities to higher income ones. The result is that DTE has provided additional benefits to those who are already better off. These inequities in DTE's spending are mirrored by inequitable DTE rates: DTE has a regressive billing structure that effectively taxes low-income ratepayers and distributes greater benefits to higher income and higher consuming rate classes. DTE should build community-based energy projects because they can invest directly in communities that were left behind by the Company's previous policies and begin to treat all communities equitably, regardless of income level.

Low-income consumers are more likely to participate in community-based renewable energy projects than other renewable energy programs. In its 2014 focus group, DTE presented study participants with a potential community solar plan. DTE found that participants were

"open to forgoing a more profitable return via other investments" in order to reap the various benefits of community solar. Exhibit 11 at 35. Further, research conducted by the Institute for Local Self-Reliance suggests that individuals are more likely to support renewable energy projects when the project is locally owned. Exhibit 12 at 4. (showing local ownership increased the net support (i.e. support less opposition) for additional renewable power "from -44% to +33%, a shift of 77 percentage points" in one case study). This support may stem, at least in part, from the fact that local ownership of renewable energy significantly increases the economic benefit that communities receive from the project. Exhibit 12 at 3. (showing three to four times more economic benefit when there is local ownership of renewable resources in two case studies). Whereas DTE's VGP program charges a premium to access renewable energy resources, community-owned energy projects can make renewable energy a source of income for participants. While it will be a central issue in in DTE's upcoming rate case, U-20561, I note here that DTE's newly proposed low-income renewables pilot program similarly fails to meet these needs because it will not lead to new distributed generation being developed and it will not create economic benefit for the community. DTE has proposed solutions that simply do not match as the urgent need for clean community energy.

Q: How would community-based energy help to address DTE's reliability problems and help DTE achieve its reliability planning principle?

Reliability is a critically important characteristic for an electrical power system. Blackouts and other interruptions to electricity can have dire consequences for customers, particularly those that are low-income. DTE itself recognizes the importance of reliability as it has made it one of its core "planning principles." Yet, DTE's service is extremely unreliable.

Furthermore, a recent study found that DTE is the slowest utility in Michigan at restoring power after an outage. Exhibit 13 at 68.

To illustrate the community impacts of these unacceptable reliability issues, consider the following. During the most recent blackout, roughly one-fourth of Highland Park's approximately 2,400 households, so about 600 households, was without power for roughly four days. Conservatively assuming that each household suffered $200 in losses whether through lost wages, emergency costs, food and medication spoilage or hospital visits, produces an estimate of $120,000 in total financial losses caused by DTE's failure to promptly restore power for just those residents in less than one square mile.

As a generation resource, community-based energy provides reliable electricity that suffers fewer losses through transmission because the power is produced in close proximity to where much of it is used. Having clean generation resources located in the community makes the electricity system more robust when faced with the possibility of outages and severe weather conditions. If a neighborhood's power is produced locally, then they will not necessarily be affected by problems with generation or transmission that originate elsewhere.

Though they consider "reliability" as a planning principle, DTE fails to take a number of factors into consideration, including the potential benefits of DG on grid resilience Indeed, DTE admitted that they performed no analysis of the reliability benefits of DG or community solar. DTE Discovery Response, SDE-2.1b(i).

Q: Are there any additional reasons why DTE should have considered community-based energy projects when assessing generation assets for the IRP?

A: MCL 460.6t(5)(k) requires DTE to consider the cost, capacity factor, and viability of all reasonable options. Community-based energy offers many benefits to local neighborhoods in terms of generation as well as health and economic benefits. Accordingly, these projects represent reasonable options that could allow DTE to meet projected demand. Instead of considering these options, DTE focused on utility-scale generation assets and technologies that provide it with a high return on investment.

Moreover, under MCL 460.6t(8)(a)(vi) the Commission is required to look at whether DTE's proposed plan offers a diversity of generation. This requirement should encompass more than just opting for utility scale wind and solar installations. Community-based energy projects represent an increase in the technological diversity of DTE's generation portfolio, and these projects can be tailored to the needs and resources of individual communities.

Distributed generation and community solar also offer diversity in an additional sense: location. These choices not only expand the technologies on the grid, they help alleviate DTE's oft repeated concern that renewable sources are unreliable. If DTE is truly concerned about the sun not always shining in a particular location, then it should distribute its renewable energy resources across many communities in a variety of locations.

Q: What sorts of community-based energy projects should DTE consider?

A: DTE should be required to include community-based renewables in the list of technologies in their models. This should include at minimum consideration of community solar, small-scale

wind, and anaerobic digesters. All of these options are sensible, and none require experimental or untested technology.

In addition, these projects should be directly controlled by the community. This could take the form of either direct ownership by all members of the community or ownership by a host institution located in the community. For example, in the community solar context, local businesses or churches could serve as the owner of a solar array that serves the community. Other examples include CLEAN Contract policies, which guarantee long term contracts and grid connection at a set price, or community "solar gardens," which require utilities to buy a certain amount of power from locally owned arrays. Exhibit 12 at 10. There are many different mechanisms for implementing third-party renewable energy, and large utility-scale facilities are not the best or only way to build Michigan's energy infrastructure.

Q: Are community-based energy projects economically justifiable?

A: Community-based energy projects give communities and community members the opportunity to install and maintain such systems and to sell energy back to the grid, earning income for themselves and offsetting their need for power from DTE.

Having generation located in the community where energy is used means lower transmission distances and, therefore, lower transmission losses, so DTE does not need to produce as much electricity. This is particularly true in areas that DTE has underserved through antiquated infrastructure, which can be expected to have greater line losses. The grid becomes more robust and outages are less likely to occur. Smaller projects also avoid the stranded costs

associated with large scale utility installations as they age. This begs the question why DTE refuses to analyze and consider more cost effective alternatives.

Moreover, even aside from the direct economic benefits that community-based energy projects bring, the MPSC should require DTE to consider valuable community benefits like health and reliability of service. DTE itself raised community impact as part of its planning principles but failed to analyze it in a meaningful way. DTE only included these factors in its qualitative "planning principle" analysis instead of quantifying these benefits. This allowed DTE to skew the economic analysis in its model away from community-based energy projects and toward large-scale, company-owned assets.

This selective quantification of factors in its economic analysis is a reflection of DTE's broader strategy of putting obstacles and costs between consumers and renewable energy and then claiming that renewables do not make economic sense. In both U-20162, DTE's last rate case, and U-18232, DTE's last renewable energy plan case, DTE consistently refused to consider public health impacts, which allows the company to continue proposing only utility-scale installations that yield DTE a high return on investment. Furthermore, by charging customers a premium to access renewable energy, in its VGP, DTE tries to drive a wedge between health and affordability. Community-based renewable energy can address both of these concerns, reducing toxic emissions from fossil fuels while also providing communities with financial benefits.

A survey of utility-commissioned valuations of distributed generation found that most did not include the reduction in greenhouse gases, economic development, and societal benefits of community-based energy projects. By failing to account for the full value of community solar DTE does a disservice to ratepayers, by not considering all cost-effective ways to meet demand. At least two utilities have incorporated a more comprehensive model of the benefits of

community-based energy. Austin Energy calculates the value of solar to include the social cost of carbon, while Xcel Energy in Minnesota includes avoided environmental costs. In both studies, the calculus strongly favored community-based solar. By calculating the value of solar using a truer accounting, Austin Energy's value of solar, measured in cents per kilowatt hour, increased by 17 percent, and Xcel Energy's increased by 33 percent. Exhibit 14.

Community-based energy projects are good for communities, and DTE is under an obligation to meet the generation needs of its customers in the most reasonable and prudent way, not in the way that presents its own generation assets in the best light and, thereby allows it to assert it should be able to reap the highest possible financial rewards.

Q: How does DTE's refusal to consider community-based energy projects impact its IRP?

A: As the testimony of Witness Mikulan made clear, in the concrete plan for the next five years DTE's Strategist model selected utility scale wind because wind offered more opportunities to sell excess generation on the market Mikulan Direct at LKM-82. This decision illustrates that DTE is prioritizing generation assets that produce the most profit for the company, not generation assets that are best for the community or the environment. By systematically failing to assess the viability of community-based energy projects, DTE has clearly fallen short of its obligation to consider all reasonable means of meeting demand.

DTE's systematic failure to consider these technologies shows that DTE did not consider all reasonable options or adequately increase diversity of generation; the current IRP does not warrant Commission approval. The Commissioners must reject this IRP. This needs to be rebuilt

from the bottom up. The IRP is built on a flawed foundation that can't be fixed via small, marginal changes.

IV. Community Benefits Analysis

Q: Why is it important for DTE to consider the impacts of its PCA on low-income communities?

A: Many aspects of the IRP—including DTE's renewable energy target, decisions to open new facilities, and decisions to invest in demand response and energy waste reduction programs—have the potential to disproportionately affect low-income communities of color. Generally speaking, the location and concentration of power plants has centered in low-income communities of color. Because poor, non-white communities are more likely to live near plants that burn fossil fuels, they are more likely to be burdened by particulate matter pollution than wealthier white communities and are more likely to see adverse health effects caused by this pollution. Exhibit 15 at 1. Approximately two million Americans live within three miles of one of the 12 worst polluting power plants in the nation. The average per capita income of these nearby residents is $14, 626 (compared with the U.S. average of $21,587. Approximately 76 percent of these nearby residents are people of color. Exhibit 10 at 29-30. DTE operates the seventh worst among these offenders, the River Rouge Plant, which receives an F grade from the NAACP in its study. Two other DTE facilities received a similar F score, and the company overall received an F on the NAACP's Corporate Environmental Justice Performance Score. Exhibit 10 at 64-67, 86-93. DTE's decisions to build new fossil fuel-burning plants instead of investing in renewable energy will thus have a disproportionate effect on the individuals who are

more likely to see detrimental environmental and health outcomes from the new plant. DTE's strategy of continued reliance on fossil fuels is part of its historic failure to gather input from low-income communities, and continuing to operate without that input. DTE clearly needs to do more to hear from its low-income rate payers.

Further, low-income consumers are seven times more likely to have their services shut off by the utility than high-income consumers. The inequity is evident because that disparity is larger than the underlying trends in on-time utility payments: low-income customers are less than three-times more likely to actually fall behind in their utility payments (40% for low-income customers; 14% for high-income customers). Exhibit 16 at 2.

In addition, in Michigan, households with incomes of below 50% of the Federal Poverty Level spend 32% of their annual income for home energy bills (29% in Wayne County) and households with incomes between 50 and 100% of the Federal Poverty Level spend 17% of their annual income on home energy bills (15% in Wayne County). Exhibit 17. DTE's decisions to invest in demand response and energy waste reduction programs that reduce the energy costs for low-income individuals will provide direct benefits to those hit hardest by energy burden. DTE should consider fully the effects of its proposed course of action on community impacts such as equity, environmental impact, and health and safety in order to present a plan that mitigates any negative impacts to the fullest extent possible.

Q: One of DTE's seven planning principles, which it uses to evaluate potential resource plans, is "community impact," which DTE defines as "aspects of employment, tax base, and other community impacts" as well as "increased low-income customer programs" and

"clean energy offerings." See Mikulan Direct at LKM-549**. Do you have any concerns about DTE's definition and application of the community impact planning principle throughout the IRP?**

A: I was glad to see that DTE listed "community impacts" as one of its seven planning principles. DTE's inclusion of community impacts as one of its planning factors implies that it considers community impact to be a part of the determination into whether a plan is "reasonable and prudent" MCL 460.6t.

However, it is alarming and ludicrous that DTE did not define "aspects of employment," "tax base," "other community impacts," "increased low-income customer programs," or "clean energy offerings" in any detail. It did not quantify these factors or describe its methodology for determining what constituted a positive or negative community impact. It also did not provide information to substantiate its claims of how these factors would be impacted by its various plans. Notably, the IRP also fails to consider explicitly public health, although DTE seems to implicitly recognize that public health is an important community impact because it includes "clean energy" as one of its community impact factors.

There is no evidence or indication that DTE measured the effects of its Proposed Course of Action ("PCA") on the factors it listed as community impacts, namely employment, tax base, low-income customer programs, and clean energy offerings. It is equally impossible to determine the ultimate effect of the PCA on other important community factors such as health, safety, and equity. DTE includes words in their plan that sound nice without backing up those pleasantries with actual analysis, let alone action. This treatment of community impact as a token is insulting in its vagueness and its avoidance of responsibility to ratepayers.

Q: In its order establishing the IRP filing requirements, the MPSC stated that "equity analyses" which include "identification of communities that will bear a disproportionate share of the environmental and/or public health impacts of the utility's proposed IRP" are "more appropriately performed in a CON [Certificate of Necessity] proceeding." What are your concerns with shifting that analysis to a proceeding outside the IRP?

A: The problem here is one of scope; it is the difference between looking at the forest and looking at a single tree. The scope of a CON proceeding is confined to the impact of the particular proposed facility. During a CON proceeding, the Commission would be unable to assess the equity, environmental, or health and safety effects on low-income communities of the portfolio of DTE's renewable energy sources, large-scale infrastructure decisions, and demand response and energy waste reduction programs. However, one also needs to look at these individual decisions collectively in order to understand the cumulative and interrelated impacts on equity, health, safety and the environment. Because the IRP requires DTE to detail its overall course of action with respect to all aspects of the utility's operation, the commission has a unique opportunity to assess the equity, environmental, and health and safety impacts of the utility's operations as a whole on low-income communities during the IRP proceeding. Even if the MPSC analyzed fully the equity, environmental, health and safety effects on low-income communities of the individual facility at issue in a CON proceeding, this narrower analysis would not allow the MPSC to appreciate fully the systemic and cumulative problems that DTE's overall plan poses for low-income communities. It is important to recognize that CON proceedings examine particular proposed DTE investments that fit within a general plan embodied in the IRP. To meaningfully address system-wide equity issues, the Commission cannot constrain itself to its

review of particular investments and must consider equity issues in the more fundamental, system-wide planning process.

Indeed, during DTE's most recent CON proceeding, the MPSC did not robustly or sufficiently consider the equity, environmental, or health effects on low-income communities of any of DTE's actions, including the proposed plant at issue. Although the Commission broadly considered the environmental effect of the proposed plant as compared to the "status quo" in which DTE continued to operate eight coal-fired plants in place of the new gas plant, the MPSC did not consider the effect of the new plant on individual nearby communities. *In the matter of the application of DTE Electric Company for approval of certificates of necessity pursuant to MCL 406.6s, as amended, in connection with the addition of a natural gas combined cycle generating facility to its generation fleet and for related accounting and ratemaking authorizations,* Case No. U-18419, at 124 (April 27, 2018). For example, the MPSC did not consider whether construction of the new plant will disproportionately harm already disadvantaged communities or whether low-income ratepayers will be required to pay a disproportionate amount of the cost of construction for the new plant. The fact that the MPSC failed to consider fully equity impacts during the last CON proceeding—despite recommending in the IRP filing order that CON proceedings were the forum to analyze equity impacts—is an example of how conducting multiple proceedings for these interrelated issues is inefficient and creates a situation where important issues remain unaddressed.

Given that the MPSC failed to consider equity issues during the last CON proceeding, the MPSC should make "equity analyses" of DTE's plan and portfolio a priority during the IRP proceeding.

Q: In the context of discussing "equity analyses" in its IRP filing order, the MPSC referenced the Michigan Environmental Justice Work Group, implying that issues of environmental justice are being handled by this separate entity. What are your concerns with this implication?

A: The Environmental Justice Work Group, while important, cannot regulate the actions of the utility companies. The Environmental Justice Work Group developed policy recommendations for the Governor as to how departments, agencies and commissions can promote environmental justice. In its March 2018 report, the Work Group stated that "the Governor should establish appropriate policies and procedures to ensure that all departments and offices of State government with regulatory authority institute a health in all policies approach to implementing all . . . regulations and policies and procedures." Exhibit 18 at 17. Now that the Environmental Justice Work Group has issued its report and been dissolved, it is up to the departments, agencies and commissions, such as the MPSC, to implement its recommendations.

The MPSC can require DTE to complete a more thorough and transparent analysis of community impacts and to select a PCA that minimizes adverse equity, environmental, or health impacts in Michigan communities. IRP proceedings are one appropriate opportunity for consideration of the environmental justice impact of DTE's proposed action on communities; it is insufficient to consider these issues in a CON proceeding because of the cumulative and systematic impacts of such decisions. By refusing to consider equity issues during the IRP proceeding, the MPSC is forfeiting its opportunity to require the utility to analyze environmental justice factors thoughtfully and thoroughly.

V. Public Participation

Q: What are your concerns about DTE's public engagement throughout the IRP planning and design process?

A: Although DTE hosted four technical workshops and three public open houses during the IRP planning process, DTE did not engage the public meaningfully. I attended one technical workshop by phone, and two of the public open houses in person, one at Schoolcraft College and one at Wayne County Community College. On the one hand, the technical workshops were indecipherable to anyone but the most sophisticated technical analysts. On the other hand, all of the informational brochures that DTE distributed at the public open houses contained general information about the company rather than specific information about the IRP planning or implementation process.

In addition, DTE did not meaningfully engage participants during the public meetings. Rather than allowing for public debate during the open houses, DTE presented a highly skewed version of the IRP which showed DTE in the best light possible. Although I was glad to see that DTE provided comment cards for participants of the open houses, it was not clear how or if DTE would incorporate any of the feedback it received from those cards. DTE presented all of the information about the IRP as if all of the details of the IRP were already set in stone. This indicated to meeting participants that DTE would not consider, let alone incorporate, feedback from commenters.

DTE also failed to make its meetings accessible to all individuals. There was no child care provide at the meetings, many of the open houses were not easily accessible by public transportation, and translation services were insufficient. For example, although DTE provided

Spanish translation services at one public open house, the meeting was only advertised in English, which made it unlikely that a non-English speaker would attend the meeting and utilize the translation service.

Q: Why should the MPSC require DTE to increase public participation in the IRP design and implementation process?

A: It is critical that DTE engage community members in the decision-making process, particularly with those communities that will be the hardest hit by energy decisions, such as decisions to increase rates or build new fossil fuel-burning facilities. Meaningful public involvement in utility proceedings is an issue of great importance to Soulardarity and one that Soulardarity has raised in several DTE proceedings. Exhibit 19. In her Notice of Proposal for Decision for case number U-18232, the administrative law judge recommended that the MPSC "acknowledge Soulardarity's concern for an adequate opportunity for community members to voice their concerns to the utility" and state that it will "consider this concern in the exercise of its discretion when future opportunities arise for members of the public to be heard on matters of community interest." The IRP, which broadly encompasses DTE's future course of action and contains many "matters of community interest," is the perfect "opportunity" for the MPSC to require DTE to engage the public more meaningfully. *In the matter, on the Comission's own motion, regarding the regulatory reviews, revisions, determinations, and/or approvals necessary for DTE Electric Company to fully comply with Public Act 295 of 2008*, Case No. U-18232, 49 (May, 21, 2009).

Q: What steps should the MPSC require DTE to take in order to engage the public adequately in the planning and design process of the IRP?

A: Generally speaking, DTE public meetings should be led not by DTE officials who only represent DTE's interests, but by community leaders who understand the dynamics of communities and their members. During the meetings, DTE should provide clear and informative presentations to communities about the technical aspects of the IRP, including the health, safety, economic, environmental, impacts of the plan. Technical workshops, while designed to contain more technical information than the open houses, should not be so complicated that they frustrate participation by someone with a basic familiarity with the issues.

During all meetings, DTE should clearly articulate how stakeholder input will impact the IRP planning and design process and actively encourage public comment and debate during public meetings. Rather than DTE collecting public input, there should be an objective participant who asks for and collects comments during the meeting. DTE should also be required to submit the original public comments that it receives to the MPSC rather than be allowed to synthesize the comments in a manner most favorable to the utility.

DTE should also hold more frequent public meetings in the communities which are most impacted by energy decisions. In order to make these meetings accessible to all, DTE should provide translation services and child care and make sure that the meeting is outside of work hours in a location accessible by public transportation.

It is essential that DTE's process for public hearings is iterative. There must be more hearings at additional points in the process, not just one hearing, at a stage when information may or may not be adequate or complete. DTE should prioritize holding hearings in its most

impacts communities, but also consider holding these hearings throughout the DTE electric service territory.

Q: What is your view of DTE's use of a "focus group" to consider the "Community Impact" Planning Principle?

A: It is laughable—and insulting—that the focus groups behind the planning principles, including community impact, were comprised solely of DTE employees. Witness Mikulan Response to Discovery Request SDE-2.5b. This tells the MPSC all that it needs to know about DTE's efforts to gather meaningful input from the community.

Q: What steps should the MPSC take to increase public participation in the IRP approval process?

A: I was heartened that the MPSC hosted a public hearing on DTE's IRP in Detroit. This was a great first step. The MPSC should continue to seek direct, unbiased input itself from ratepayers rather than rely solely on DTE to collect comments from consumers. As an example, the New York Public Service Commission ("NYPSC") sought input from low-income ratepayers in Case No. 14-M-0565, a proceeding, specifically launched to review the low-income programs offered by New York utilities. Exhibit 20. The NYPSC held 12 public statement hearings in six different cities located throughout the state, with "more than 100 speakers . . . generating nearly 600 pages of transcript." Exhibit 20. The NYPSC went on to set a policy aiming for "an energy burden at or below 6% of household income" for low-income households, achieved through a "holistic approach" coordinating and leveraging "all available resources." Exhibit 20 at 3. This recent example from New York demonstrates the significant impact that low-income community

members' voices can and should have on policy decisions, particularly on policy decisions that have the potential for acute negative effects on their day-to-day lives.

The MPSC should also provide education to stakeholders about the mechanics of the IRP planning, design, and approval process including how to make impactful comments. MPSC public meetings, particularly those in which input from ratepayers is sought, should be conducted by MPSC officials who have influence over the final decisions of the MPSC proceedings.

Finally, the ALJ should hold the IRP hearing itself in Detroit, rather than Lansing, in order to allow more people affected by DTE's plan to attend. Neither DTE Electric or Gas supply Lansing. For example, the California Public Service Commission holds public hearings across the state in order to gather public input on issues before the Commission. Exhibit 21. This ensures that more individuals, particularly those who are unable to travel, due to transportation, time, or affordability barriers, can attend PSC hearings and become better informed about PSC activities. Similarly, by holding the DTE public hearings in Detroit, rather than Lansing, more individuals who are directly affected by these hearings will have the opportunity to attend and become better informed about the range of issues raised by these proceedings as well as the MPSC's final decision.

VI. Energy Waste Reduction

Q: Has DTE adequately allocated funding to low-income Energy Waste Reduction (EWR) Programs?

A: No. Because low-income individuals spend a significantly higher percentage of their income on energy, low-income customers have a greater need for EWR programs than wealthier

customers and low-income customers have been paying the costs of these programs without receiving the benefits for decades. Moreover, because low-income customers tend to live in less energy-efficient homes as compared to wealthier people, investments in EWR programs in low-income households will yield a greater return on investment than in high-income households. Despite these facts, DTE continues to underinvest in low-income EWR programs that could help alleviate the energy burden on low-income populations. In its 2017 EWR Report, DTE stated that only 7% of its electric program EWR funding was spent on its low-income EWR program and only 2% of total electric energy savings resulted from the low-income EWR program. Exhibit 22.

In their study entitled *Social Equity in State Energy Policy*, Ben Stacey and Tony Reames found that, on average, the public utility companies in Michigan invested three times more per capita on high-income EWR electricity programs than low-income programs. Exhibit 23 at 2. The study also found that in 2010, 2013, and 2016, DTE spent 30%, 25%, and 31%, respectively, less than the amount of funding allocated for low-income EWR in those years.

Q: How should DTE focus its spending within the Energy Waste Reduction Programs?

A: Given that low-income participants have a larger opportunity for energy savings from EWR than higher income individuals, DTE should focus more of its EWR spending on low-income EWR programs. DTE should choose EWR programs that make a measurable difference in energy efficiency, even if the upfront costs or challenges of the program are greater than other programs. For example, although passing out energy-efficient light bulbs at a community fair is much less cost- and time-intensive than weatherizing an old home, the latter is much more likely

to reduce dramatically the energy cost burden of the homeowner. While light bulb programs are a fine temporary solution, weatherization and home repair provides real capital improvements that actually increase the value of a ratepayer's home with lasting impact. It is critical that low-income households have equal access to the opportunity for capital improvement. One study, performed by Tony Reames, suggested that space heating accounts for 41% of residential energy consumption, and prioritizing efficiency in this realm would have a greater potential savings than lighting efficiency, due to the longer lifetime of the residential unit. Exhibit 24.

More broadly, DTE should consider EWR to be an alternative to investing in new fossil-fuel facilities. As an example, the City of Glendale, California recently reviewed its IRP and rapidly changed course. Instead of following its original plan to spend $500 million retrofitting and renovating an existing natural gas facility, the city council saved taxpayers $125 million by pursuing an alternative suite of storage, energy efficiency, and demand response strategies. Exhibit 25. DTE should assess whether investing one billion dollars in EWR programs would save enough energy to eliminate the need for DTE to invest that same billion dollars in a new fossil fuel plant, which will disproportionately harm low-income communities.

Q: What are some challenges with the implementation of Energy Waste Reduction (EWR) Programs that are specific to low-income populations?

A: Because low-income individuals often live in older homes with high energy bills, they may be more likely to benefit from weatherization programs than newer, wealthier homes. However, these older homes are more likely to have structural issues including health hazards such as lead paint, asbestos-wrapped pipes, and roof repair needs, which, if left unaddressed, can disqualify a

home for weatherization or undermine any benefits of weatherization. Exhibit 26 at1460. Low-income weatherization programs should work in conjunction with other programs such as the lead abatement assistance of the Michigan Department of Health and Human Services and provide for structural home repairs and even the removal of hazardous substances. Exhibit 26 at 1461. Weatherization programs need to be actively coordinated with or broadened to include home repair, which, often improves home energy efficiency in and of itself.

In addition, low-income individuals are more likely to live in renter-occupied, multi-family homes than wealthier individuals. Because tenants pay the majority of energy costs but landlords are often required to pay part of the EWR program costs, landlords have less of an incentive to update units to be more energy-efficient. Exhibit 26 at 1459. Multi-family homes receive a small proportion of the megawatt hours saved, i.e. saving only thirty-one thousand megawatt hours compared to three million saved in total, and of life-cycle dollar savings, i.e. $2.5 million saved compared to. $237.7 million saved in total. Exhibit 22.

Finally, low-income people may be less aware of the existence of EWR programs and are more likely to experience language barriers that prevent them from taking full advantage of EWR programs. Low-income people may also distrust large utility companies because they are more likely to have negative interactions with the company, such as through utility shut-offs. Exhibit 26 at 1456. Other factors, such as high levels of crime in certain low-income neighborhoods or distrust of strangers claiming to represent utilities, may cause some individuals to be wary of allowing strangers into their home to perform EWR audits or updates. Exhibit 26 at 1459.

To combat some of these challenges, Tony Reames suggests a community-based approach to EWR programs in which the specific energy burdens of low-income, minority communities are

recognized and addressed by community leaders who then guide the implementation of the programs. Exhibit 26 at 1451. DTE would be wise to follow these recommendations so that its EWR program can bring to low-income consumers and communities the benefits to which they are entitled as any other ratepayer and, in particular, for the decades in which low-income ratepayers have subsidized these programs for higher income ratepayers.

VII. Demand Response Programs

Q: Why is it critical for low-income populations that DTE implement a robust Demand Response (DR) Program?

A: As mentioned above, low-income populations spend a much larger percentage of their income on monthly energy bills than do higher-income populations. DR programs, which can lower monthly energy bills, have the potential to reduce the energy burden of low-income populations

Even if low-income individuals do not participate directly in the DR program, strong DR programs reduce overall energy demand, which lowers energy costs for everyone. Exhibit 27. In addition, lowered energy demand reduces the need for new energy-generating facilities that produce pollution, which disproportionately harms low-income populations.

Q: Are there any concerns with the implementation of DR programs in low-income households?

A: Because low-income people often live in older, poorly-insulated homes, the actual temperature of the home may not match the temperature displayed by the thermostat. A DR

program that remotely either increases or decreases the temperature of a home based on the reading of a smart thermostat may cause these older homes to reach significantly colder or hotter temperatures than intended. In some cases, the home could become dangerously hot or cold, particularly for children and the elderly who are more susceptible to health risks from extreme temperatures. Exhibit 24 at 549.

Q: What are some reasons why low-income individuals may not want to participate in Demand Response Programs?

A: In order to participate in Demand Response programs, customers must allow the utility company to enter their homes in order to install technology, such as a smart thermostat. Many individuals have expressed to me their wariness of programs in which a utility company employee enters their home, particularly since many interactions between low-income individuals and utility companies are negative. Additionally, these individuals may not have the digital resources, such as a solid Wi-Fi connection, to support technology like a smart thermostat. Low-income individuals may also be worried that an installation of smart technology would enable the utility company to shut off their utilities automatically if they are unable to make a full payment. Without this smart technology, the utility company must manually shut off services, giving customers who struggle to cover their high energy bills a few days grace period. Finally, some individuals may be wary of the presence of smart technology in their home more generally, fearing that it will be used to monitor their activity.

Q: How can DTE allay some of these concerns about Demand Response Programs?

A: The most important thing DTE can do is to give people an ownership stake in the broader electricity system. The three things that will most allay concerns about DR programs are ownership, affordability, and shutoff protections. As mentioned above, ownership and stakeholdership give people comfort through better understanding of changes made to their energy system. Affordability can be achieved through community ownership and the proliferation of distributed generation sources. Finally, in its most vulnerable communities served, DTE could provide more and more robust shutoff protections and more aggressively and equitably address system reliability problems to ensure these communities are less likely to experience outages and that any outages that do occur are more promptly redressed.

Q: Does this conclude your testimony?

A: Ye

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the Application of **DTE ELECTRIC COMPANY** for approval of its Integrated Resource Plan pursuant to MCL 460.6t, and for other relief.	Case No. U-20471 ALJ Sally L. Wallace

CERTIFICATE OF SERVICE

I, Mark Templeton, certify that an electronic copy of **THE DIRECT TESTIMONY OF JACKSON KOEPPEL ON BEHALF OF SOULARDARITY** was served electronically on the following on August 20, 2019:

ADMINISTRATIVE LAW JUDGE
Hon. Sally L. Wallace
Michigan Public Service Commission
7109 West Saginaw Highway
Lansing, MI 48917
Wallaces2@michigan.gov

ASSOCIATION OF BUSINESSES ADVOCATING TARIFF EQUITY
Bryan A. Brandenburg
Michael J. Pattwell
Clark Hill PLC
212 East César E. Chávez Avenue
Lansing, MI 48906
bbrandenburg@clarkhill.com
mpattwell@clarkhill.com

CONVERGEN ENERGY, LLC
Laura Chappelle
Tim Lundgren
The Victor Center, Suite 910
201 N. Washington Square
Lansing, MI 48933
lachappelle@varnumlaw.com
tjlundgren@varnumlaw.com

CYPRESS CREEK RENEWABLES, LLC
Jennifer Utter Heston
Angie Babbitt
Fraser Trebilcock Davis & Dunlap, P.C.
124 W. Allegan, Ste. 1000
Lansing, MI 48933
jheston@fraserlawfirm.com
ababbitt@fraserlawfirm.com

DTE ELECTRIC COMPANY
Estella R. Branson
Lauren D. Donofrio
Martin L. Heiser
Kevin L. O'Neill
One Energy Plaza, 1635 WCB
Detroit Michigan, MI 48226-1279
Estella.branson@dteenergy.com
Lauren.donofrio@dteenergy.com
Martin.heiser@dteenergy.com
Kevin.oneill@dteenergy.com

ENERGY MICHIGAN
Laura Chappelle
Justin K. Ooms
Timothy J. Lundgren
Varnum LLP
201 N. Washington Square, Suite 910
Lansing, MI 48933
lachappelle@varnumlaw.com
jkooms@varnumlaw.com
tjlundgren@varnumlaw.com

ENVIRONMENTAL LAW & POLICY CENTER, THE ECOLOGY CENTER, THE SOLAR ENERGY INDUSTRIES ASSOCIATION, THE UNION OF CONCERNED SCIENTISTS, VOTE SOLAR
Margrethe Kearney
1514 Wealthy Street, SE, Suite 256
Grand Rapids, MI 49506
mkearney@elpc.org
MPSCDocket@elpc.org

ENVIRONMENTAL LAW & POLICY CENTER
Adrienne Dunham
Jean-Luc Kreitner
35 E. Wacker Drive, Suite 1600 Chicago, IL 60601
adunham@elpc.org
jkreitner@elpc.org

CITY OF ANN ARBOR; GERONIMO ENERGY
Laura Chappelle
Timothy J. Lundgren
Justin K. Ooms
Varnum LLP
201 N. Washington Square, Suite 910
Lansing, MI 48933
lachappelle@varnumlaw.com
tjlundgren@varnumlaw.com
jkooms@varnumlaw.com

Missy Stults
MStults@a2gov.org

GREAT LAKES RENEWABLE ENERGY ASSOCIATION
Don L. Keskey
Brian W. Coyer
University Office Place
333 Albert Avenue, Suite 425
East Lansing, MI 48823
donkeskey@publiclawresourcecenter.com
bwcoyer@publiclawresourcecenter.com

HEELSTONE DEVELOPMENT, LLC; MIDLAND COGENERATION VENTURE, LP
Jason T. Hanselman
John Janiszewski
Dykema Gossett PLLC
201 Townsend St. Suite 900
Lansing, Michigan 48933
jhanselman@dykema.com
jjaniszewski@dykema.com

INTERNATIONAL TRANSMISSION COMPANY D/B/A ITC TRANSMISSION
Richard J. Aaron
Courtney F. Kissel
Dykema Gossett PLLC
201 Townsend St., Suite 900
Lansing, Michigan 48933
raaron@dykema.com
ckissel@dykema.com

MICHIGAN ATTORNEY GENERAL
Joel King
Assistant Attorney General
ENRA Division
525 W. Ottawa Street, 6th Floor
P.O. Box 30755
Lansing, Michigan 48909
KingJ38@michigan.gov
ag-enra-spec-lit@michigan.gov

Michael Deupree
MichaelDeupree@acadianconsulting.com

MICHIGAN ENERGY INNOVATION BUSINESS COUNCIL AND THE INSTITUTE FOR ENERGY INNOVATION
Laura A. Chappelle
The Victor Center
201 N. Washington Square, Ste. 910
Lansing, MI 48933
lachappelle@varnumlaw.com

Toni L. Newell
333 Bridge St. NW Grand Rapids, MI 49504
tlnewell@varnumlaw.com

MICHIGAN ENVIRONMENTAL COUNCIL; NATURAL RESOURCES DEFENSE COUNCIL; SIERRA CLUB; SOULARDARITY
Christopher M. Bzdok
Tracy Jane Andrews
Kimberly Flynn, Legal Assistant
Karla Gerds, Legal Assistant
Breanna Thomas, Legal Assistant
Olson, Bzdok & Howard, P.C.
420 East Front Street
Traverse City, MI 49686
chris@envlaw.com
tjandrews@envlaw.com
kimberly@envlaw.com
karla@envlaw.com
breanna@envlaw.com

MICHIGAN PUBLIC POWER AGENCY
Peter H. Ellsworth
Nolan J. Moody
215 S. Washington Square, Suite 200
Lansing, MI 48933
pellsworth@dickinsonwright.com
nmoody@dickinsonwright.com

MPSC STAFF
Heather M.S. Durian
Benjamin J. Holwerda
Amit T. Singh
Daniel E. Sonneveldt
Sarah Mullkoff
7109 West Saginaw Hwy, 3rd Floor
Lansing, I 48917
durianh@michigan.gov
holwerdab@michigan.gov
singha9@michigan.gov
sonneveldtd@michigan.gov
Mullkoffs1@michigan.gov

Date: August 20, 2019

UNIVERSITY OF CHICAGO LAW SCHOOL, ABRAMS ENVIRONMENTAL LAW CLINIC

Counsel for Soulardarity

By: /s/ Mark N. Templeton

Mark N. Templeton, *pro hac vice*
6020 S. University Ave.
Chicago, IL 60637
Phone: (773) 702-9611
Email: templeton@uchicago.edu