STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of DTE ELECTRIC COMPANY for approval of Interconnection Procedures and Waivers from Interconnection and Distributed Generation Standards R 460.901a et. seq.	))))))	Case No. U-21482

Introduction

The Michigan Energy Innovation Business Council ("Michigan EIBC") appreciates the opportunity to provide comments on the final electric utility procedures. Michigan EIBC was involved in the development of the new Interconnection and Distributed Generation Standards ("MIXDG rules") over the last several years. In addition to the comments on Consumers Energy's proposed final interconnection procedures, Michigan EIBC members are already experiencing issues with the implementation of these new procedures, which are detailed below.

Michigan EIBC notes that in addition to the comments contained herein, conversations are ongoing at the Michigan Legislature regarding the underlying statutes governing certain aspects of Michigan's interconnection standards and procedures. It will be important for the Commission to ensure that any changes in statute that occur this year are reflected in the approved utility interconnection procedures.

Timelines

As a result of the newly implemented interconnection procedures, Michigan EIBC members and their customers have experienced significantly longer timelines for approval of interconnection applications. For example, Michigan EIBC members have found that approvals for Level 1 projects used to take approximately two weeks and those same approvals now take four to ten weeks. Some of these delays may be related to the new timelines in the procedures, but others appear to be due to a lack of appropriate online processing systems, including for payment processing, and apparent lack of appropriate staff capacity. For example, minor typographical

errors in applications are often not reviewed/retuned to applicants before the full 10-day review period is complete. In other cases, an applicant may be told of one error, only to wait for a 10-day review to be told of another error. Every error should be identified and presented during the initial review period. Moreover, the timelines in the rules are not meant to be the defined time by which each step shall occur; instead, the timelines are meant to be the maximum amount of time for each step. There is no reason to believe that the MIXDG rules were intended to *lengthen* the interconnection process.

Rejections based on minimal errors

As referenced above, multiple Michigan EIBC members have experienced rejections of applications for very small, often typographical, errors. These tend to come at the end of the allowed 10-day review timeline, resetting the clock yet again and unnecessarily lengthening the interconnection process. In addition to responding to applications in a timelier manner, utilities should act reasonably and in the interest of their customers by not rejecting applications for minor errors when it is otherwise clear that the application is complete and filled out properly.

Requirements for new or different information

It is critical during the implementation of these new procedures that each utility make it very clear to customers and developers what information is required and, even more importantly, what has changed from the old and new requirements. Michigan EIBC members are experiencing rejected applications because the applications are missing information that has never been requested for any previous project. In addition, applicants have submitted information using the incorrect form, only to be provided with the new form, resetting the timeline for review and restarting a new 10-day review period. If new information or new forms are required because of the new standards and new procedures, this needs to be made very clear at the outset to applicants and developers. Michigan EIBC would be happy to work with any interested utility to host a webinar or other information sharing opportunity to ensure that developers are aware of the new requirements.

Apparent confusion over procedures and lack of communication

Michigan EIBC members have found that the relevant utility staff are not always fully up to speed regarding the new interconnection procedures. According to Michigan EIBC members, this is resulting in confusion and the inappropriate rejection of applications. Each utility should ensure that their public facing staff are fully aware of and consistently applying the new procedures. In addition, when errors do occur, it would be helpful for each utility to identify one or more liaisons for developers as a direct line of contact.

System size issues

For years, Michigan EIBC members have experienced issues with allowable system sizes, for example, in new homes and in homes with expected future increases in load. Utilities have also challenged a system's nameplate capacity despite there being site-specific conditions that influence expected system production. As such, Michigan EIBC recommends that applicants should be able to provide their own capacity factor with supporting evidence if desired. In addition, Michigan EIBC encourages each electric utility to adopt procedures to accept systems expected to exceed the customer's historic consumption if the customer can demonstrate an expected future increase in load such as the purchase of an electric vehicle or other home electrification device.

DTE Electric-Specific Comments

Fast Track

DTE indicates that it will "aggregate all existing and proposed generation on a site in determining fast track eligibility." This does not comport with the MIXDG Interconnection Standards (R 460.944), which indicate that "Level 1, level 2, level 3, level 4 applications, and level 5 applications as large as 5 MWac in which the DER is not proposing to interconnect with the electric utility's high voltage distribution system are eligible for the fast track." The Commission should require DTE to consider only the proposed generation in determining fast track eligibility (not any existing generation on a site).

Inverters

DTE indicates that inverter manufacturers, under Abnormal Operating Performance are "required to mark the abnormal operating category on the equipment." (p. 24). However, this is in conflict with UL 1741 SB 5.4, which requires this information to be provided in the installation manual. As such, this requirement should be deleted.

In addition, DTE requires that "Documentation of harmonics testing of the inverter to IEEE-519 standards and supporting harmonics tables shall be submitted to DTE." (p. 24). This requirement should be deleted because inverter harmonics are not tested to IEEE 519, they are tested to IEEE 1547.1.

Costs

The initial fees and fee caps are established in R 460.926 and DTE proposes fees for the pre-application report, non-export track, and fast track initial review that are consistent with these fees. However, instead of proposing fees for supplemental reviews aligned with these initial fee caps, DTE proposes that the supplemental review fee for Level 3, 4, and 5 projects should be $2,500 for certified projects and $5,000 for non-certified projects. This seems excessive because the Commission set the initial fee cap at $1,000. DTE should be required to justify these higher fees under a rebuttable presumption that a $1,000 fee is reasonable.

In addition, instead of adopting the study fees set in the interconnection standards, DTE requests a waiver from these maximum fees for studies, indicating that the costs for Level 3, 4, and 5 projects will be "as necessary." DTE indicates that there are significant supplemental costs for a large variety of potential studies. These costs range from $100 for a reinspection fee all the way up to $50,000 for a transmission impact study. These costs are far above the initial fee caps set in the MIXDG rules and the fees set by other utilities including Consumers Energy. Michigan EIBC recommends that the Commission reject DTE Electric's Waiver Request from the Maximum Fee-Related Rules and instead require DTE to explore opportunities to reduce these costs and revise the fees accordingly. DTE has not provided sufficient explanation to justify its fees being such an outlier.

Power-Limited Export

DTE lists among the options for power-limited export that a DER may utilize a NRTL Certified Power Control and inverter system. However, unlike Consumers Energy which, in a similar manner to the MIXDG rules, lists the required characteristics of such a power control and inverter system, DTE requires that the system must have "manufacturer secured firmware that disables end user settings modification post installation" (p. 27). This seems unnecessary and unreasonable in that, for example, it could preclude desirable changes to settings in the future. Instead, Michigan EIBC recommends that DTE use a similar option to that listed by Consumers Energy related to power control systems.

DTE also indicates that an "Applicant may not limit the DER below 80% of the DER capacity when using reverse or under power relaying functions, power control systems in order to protect against inadvertent export." Michigan EIBC submits that there should not be a reason that applicants using these methods should be restricted to limit the DER capacity only to 80%. Especially for reverse power relays, which could fully limit the export capacity (i.e., creating a non-exporting system), it does not make sense to restrict export limitations to only 80% of the DER capacity. For example, consider a customer has a solar plus storage system with one inverter for the solar system and one inverter for the storage system. If those inverters are sized similarly and the solar system is allowed to export fully, while the storage is not allowed to export, then the export capacity would be 50% of the nameplate capacity. Even though the system would never be capable of exporting 80% of the nameplate capacity (except in the case of inadvertent export), the customer would be forced to specify 80% as the export capacity, and DTE would evaluate the project as such. DTE has failed to justify such a limitation.

In addition, the process outlined to evaluate inverter-based power control systems by DTE seems unnecessarily complex and burdensome on customers. It appears that at any point in this process, DTE could require additional paperwork or data, ultimately significantly slowing approvals for small energy storage systems that are very unlikely, even in the case of catastrophic failure, to cause any system damage. Instead, this seems to be an attempt to create unnecessary roadblocks. Michigan EIBC strongly recommends that DTE removes these hurdles for inverter-based power

control systems. The Commission should at the very least require the Company to provide justification and timelines for each step in the process to ensure that these additional steps are warranted and do not overly burden customers.

Direct Transfer Trip

DTE requires blanket application of Direct Transfer Trip ("DTT") for inverter-based systems. This is an unnecessarily conservative and costly requirement, which will significantly limit penetration of larger DER projects. Having a blanket requirement for DTT above a certain threshold is outdated, and several utilities that still screen for risk of islanding have taken a more advanced approach to determine if a risk of islanding study is warranted before applying DTT. Considering that risk of islanding from solar systems, which is worst-case when capacity is equal to 2/3 of maximum load (e.g., 200-400% of minimum load), is on the order of $8.3x10^{-6}$ per year,[1] such a blanket application of DTT for inverter-based systems is unwarranted.

Battery Storage Policy

DTE indicates that energy storage devices for customers in the LNM or DG program must "be configured to prohibit the ability to provide energy to the grid." The Company indicates that this can be accomplished by operating in import only mode or by not exchanging active power with the grid. Such requirements would seem to preclude any LNM or DG customer with storage from participating in aggregation programs such as those soon to be established under FERC Order 2222. In addition, these requirements would mean that any LNM or DG customer could not participate in a utility pilot program or future statutorily required program wherein behind-the-meter storage is used to provide grid services. Given that most, if not all, customers with solar plus storage systems are participants in the LNM or DG programs, this limitation seems unreasonable and highly limiting on customer and utility future options. Michigan EIBC strongly recommends that the Commission require DTE to revise or remove this requirement.

[1] Cullen, N., Thornycroft, J, and Collins, A. 2002. International Energy Agency. Report IEA PVPS T5-08. *Risk analysis of islanding of photovoltaic power systems within low voltage distribution networks*. Available at https://iea-pvps.org/wp-content/uploads/2020/01/rep5_08.pdf.