STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

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In the matter, on the Commission's own motion, to promulgate rules governing electric interconnection and distributed generation, and rescind legacy interconnection and net metering rules.	)))))	Case No. U-20890

At the March 17, 2022 meeting of the Michigan Public Service Commission in Lansing, Michigan.

PRESENT: Hon. Daniel C. Scripps, Chair
Hon. Tremaine L. Phillips, Commissioner
Hon. Katherine L. Peretick, Commissioner

ORDER

Background

Section 173(1) of Public Act 295 of 2008 (Act 295), MCL 460.1173(1), authorized the Commission to promulgate administrative rules governing net metering. In the May 26, 2009 order in Case No. U-15787, the Commission formally adopted the Electric Interconnection and Net Metering Standards (legacy net metering rules). *See*, Mich Admin Code, R 460.601a *et seq*. The legacy net metering rules focused primarily on small electric generators and divided them into five categories. The first four categories apply to projects up to 2 megawatts (MW) and the fifth category applies to projects greater than 2 MW. In the December 20, 2012 order in Case No. U-15919, the Commission adopted procedures for interconnection of smaller projects (Categories 1 and 2). The Commission has not yet adopted procedures governing the interconnection of larger projects (Categories 3 through 5).

As the Commission explained in the September 9, 2021 order in this docket (September 9 order), since the 2009 promulgation of the legacy net metering rules there have been substantial changes in Michigan's energy landscape driven by rapidly advancing renewable energy technology, changes to electrical standards, and changes in state and federal law. Most significantly, with the passage of Public Acts 341 and 342 of 2016, section 173(1) of Act 295 was revised to authorize the Commission to promulgate rules governing distributed generation. MCL 460.1173(1); MCL 460.1173(6). In the November 8, 2018 order in Case No. U-20344, the Commission commenced an effort to consider rescinding the legacy net metering rules and promulgating new rules that would address interconnection (IX) and distributed generation (DG), and directed the Commission Staff (Staff) to initiate a stakeholder process in the Case No. U-20344 docket. The Staff thereafter undertook an extensive stakeholder process to arrive at a draft set of rules titled Interconnection and Distributed Generation Standards (also known as the MIXDG rules). The instant docket was opened to address the MIXDG rulemaking and the rescission of the legacy net metering rules.

On September 8, 2020, the Commission submitted an RFR to MOAHR to rescind the legacy net metering rules. MOAHR approved the RFR on September 29, 2020, MOAHR #2020-95. On September 29, 2020, the Commission submitted the draft rules (rescinded) to MOAHR and the Legislative Service Bureau (LSB) for their approvals, which were granted on October 13, 2020. The RIS was submitted on April 28, 2021, and approved on July 21, 2021. The Notice of Public Hearing was submitted on July 27, 2021, and approved on July 29, 2021. The rules appeared in the Michigan Register on October 1, 2021. The RIS is available on the Commission's website at: https://adms.apps.lara.state.mi.us/Mpsc/ViewRuleMakingDocument/10.

On September 8, 2020, the Commission submitted an RFR to MOAHR to promulgate the Interconnection and Distributed Generation Standards (the MIXDG rules). MOAHR approved the RFR on September 25, 2020, MOAHR #2020-96. On October 28, 2020, the Commission submitted the draft rules to MOAHR and LSB for their approvals, which were granted on July 9, 2021. The RIS was submitted on April 28, 2021, and approved on July 21, 2021. The Notice of Public Hearing was submitted on July 27, 2021, and approved on July 29, 2021. The rules appeared in the Michigan Register on October 1, 2021. The RIS is available on the Commission's website at: https://adms.apps.lara.state.mi.us/Mpsc/ViewRuleMakingDocument/11.

To provide the public with an opportunity to comment on the proposed rule promulgation and rescission, in the September 9 order the Commission scheduled a public hearing for October 20, 2021, at 7109 W. Saginaw Hwy., Lansing, in person and via video/teleconference. No one provided comments at the public hearing. In addition, the Commission solicited written comments on the proposed actions, to be received no later than 5:00 p.m. (Eastern time) on November 1, 2021. The Commission received comments from 11 commenters. This order summarizes and responds to the comments. All of the comments suggest revisions to the MIXDG rules. There were no comments filed regarding the rescission of the legacy net metering rules. A revised copy of the MIXDG rules showing changes in strike/bold is attached to this order as Exhibit A, and a final copy is attached as Exhibit B. Additionally, a final copy of the rules approved in 2020-95 (the rescinded legacy net metering rules) is attached as Exhibit C.

Comment Summary

Adam Schaller, Vice President of Lakeshore Die Cast, comments that the new rules do not:

> address the confusion involved with trying to install solar generation over 150kW [kilowatts] in size. . .. I think the new interconnection rule set should explicitly

> spell out that these sized generators are entitled to net metering as amended in EPACT (Energy Policy Act of 2005) and are qualified facilities as explained in PURPA (Public Utility Regulatory Policies Act).

Schaller comments, p. 1.[1] Mr. Schaller is concerned that the rules do not address tariff options for projects in the 1.4 MW size range, and recommends that the rules make it clear that solar generation over 150 kW is entitled to the full avoided cost "as clarified in FERC [Federal Energy Regulatory Commission] order number 872 and outlined in PURPA." *Id.*[2]

The Michigan Energy Innovation Business Council (MEIBC) suggests several changes to the MIXDG rules. MEIBC expresses its concern regarding how much of the interconnection process may be left to the interconnection procedures which will be adopted in a separate proceeding. MEIBC suggests that the new rules spell out how storage will be treated and evaluated during the interconnection screening and study process, and how the utilities will allow for power-limited export, based on FERC Order 845A,[3] which addresses this issue. MEIBC states that there should be no required re-application for legacy net metering or DG program customers when they add storage. MEIBC opines that the addition of energy storage should not qualify as a material modification and should not result in the applicant being terminated from the legacy net metering or DG program.

MEIBC suggests that the utility penalties set in the rules should also apply to interconnections that are below 100 kW. MEIBC recommends that the Commission consider adopting Pacific Gas & Electric's two-part electrical interference test to determine whether a

[1] EPACT refers to PL 109-58, 119 Stat. 594 (2005); PURPA refers to PL 95-617, 92 Stat. 3117 (1978).

[2] FERC Order 872 refers to 172 FERC 61041 (July 16, 2020).

[3] FERC Order 845A refers to 166 FERC 61137 (February 21, 2019).

project proceeds independently or as part of a batch study, and find other ways to speed up the batch study process. MEIBC suggests that the rules clarify the definition of material modification in Part 1 to make it clear that a replacement of a component with a near identical component is not a material modification. MEIBC suggests that utilities be required to provide an interconnection flowchart on their website. MEIBC comments that the rules should allow for the use of distribution studies that are more than six months old, and should not allow the transition batch to be the only required activity in the first year. MEIBC suggests that the transition batch and the first study batches be run in tandem, and the start date of the transition batch be made publicly available as soon as the rules are effective.

MEIBC recommends that applicants be allowed to reduce the capacity of the distributed energy resources (DER) by more than 20%. MEIBC states that there appears to be no plan for stakeholder input in the adoption of the utility procedures. MEIBC is concerned that fees be set by the Commission and not by utilities, and opines that the Commission should adopt the fees charged by other states that have updated their interconnection rules. MEIBC states that some of the study track fees are too high, and there is no reason to grant the utilities waivers from the fees. MEIBC would like to shorten the time period for the pre-application report from 25 business days to 15 business days, and suggests that fast track eligibility should be for projects up to 4 MW, rather than just Level 4 projects. MEIBC states that the cost allocation requirements are vague and again suggests use of the procedures adopted in other states. MEIBC suggests that insurance be required only for 1 MW and up. MEIBC opines that the applicant should not be responsible for obtaining rights-of-way or easements. MEIBC states that the requirement that an energy storage device cannot export to the distribution system should be removed. MEIBC also submitted a redlined version of the rules.

The Association of Businesses Advocating Tariff Equity (ABATE) suggests that the Commission clarify whether the cost allocation described in R 460.970 applies to both installation and operations and maintenance (O&M) costs, and opines that ongoing O&M costs should be paid by the applicants. ABATE also suggests that the Commission clarify in R 460.650 and 460.652 what happens when an interconnection customer leaves the distribution system or is terminated. ABATE states that earned credits should be paid to the customer.

DTE Electric Company's (DTE Electric) comments focus on the legal validity of the MIXDG rules. DTE Electric states that there was no consensus resulting from the stakeholder process and suggests that the comment process will be ineffective as well because the RFR and RIS have already been approved. DTE Electric posits that the Commission lacks legal authority to promulgate these rules.[4] DTE Electric contends that some proposed rules suggest that they have retroactive application because they address interconnection applications filed prior to the effective date of the rules that do not have an executed construction or interconnection agreement (R 460.911, 460.914, 460.916, and 460.918). DTE Electric argues that the rules limit the utility's management authority and use of its own property and are unlawful. DTE Electric maintains that the rules will result in confusion, errors, misunderstandings, and disagreement, and impose unnecessarily complex and prescriptive processes. The company states that it has successfully performed interconnections under the existing rules. DTE Electric further states that the rules provide for too many forms of dispute resolution, and that the pre-application report may result in providing proprietary and commercially valuable information. DTE Electric also submitted a redlined ruleset which contains additional marginal comments. These are discussed below.

[4] The legal basis for the rulemaking is described at pp. 2-3, *supra*.

Michigan Biomass states that it supports language in R 460.911 which addresses applicability, and which indicates that the new rules would not apply to existing interconnected biomass plants.

Ford Motor Company (FMC) comments that electric vehicles (EVs) and fuel cell vehicles should be added to the list of DERs and generation sources in R 460.930; and that the rules should include a fast track process for EVs seeking interconnection as Level 1 or Level 2, and allow the use of the simplified track process. FMC posits that EVs can be Level 1 or 2 individually or Level 3+ in aggregate. FMC also states that application and interconnection fees for individual customers and small businesses should be reduced.

The Coalition for Community Solar Access (CCSA) expresses concern about processing only one batch per year. CCSA posits that utilities may only put applications in the batch that fail an electrical independence test. CCSA suggests that the levels should be much larger than 1 MW; they should be 5 MW, or even up to 20 MW. CCSA suggests a 5 MW cap on fast track reviews. CCSA comments that net metering and interconnection rules should be separate, and the Commission should create an ongoing interconnection working group that updates the rules every two years.

The Ecology Center, the Environmental Law & Policy Center, and Vote Solar (the Clean Energy Organizations or CEOs) comment that the rules do not provide sufficient guidance on how energy storage systems (ESS) will be reviewed during the interconnection process, and urge the Commission to spell out how utilities will allow for limited and non-exporting DER. They suggest following the 2019 Model Interconnection Rules and FERC Order 845A. The CEOs comment that too much detail may be moved into the utility interconnection procedures and they

state that rules are preferable. The CEOs state that they believe the utility procedures will not be binding on the public or the utilities.[5]

Sunrun comments that the Commission needs to institute a second phase of this rulemaking to address storage. Sunrun encourages the Commission to incorporate use of certified power control systems to limit export, and to incorporate inverter power control functions to enable customer savings on interconnection costs. Sunrun notes that UL 1741 Edition 3 was released in fall 2021, and comments that UL 1741 SA inverters can be set with a constant lagging power factor to limit voltage rise and upgrades. Sunrun avers that there is no reason for Level 1 DER to be required to complete a supplemental review process. Sunrun questions the use of nameplate capacity in R 460.980, and suggests that the Commission consider adding the term "ongoing operating capacity" to that rule. Sunrun comments that R 460.1001 should not specify a non-export use case for energy storage because this should be a customer choice. Sunrun also submitted a redlined version of the rules.

Consumers Energy Company (Consumers) comments that R 460.964 should not limit the interconnection costs to 110% of the estimate and should require a timeline for the applicant to respond and provide consent to the utility. Consumers proposes alternate mediation language. Consumers states that R 460.988 should reflect that the utility is responsible for providing easements or rights-of-way. Consumers recommends that the interconnection submittal and review process be incorporated into the material modification request. Consumers also suggests that the DG program review should happen after the interconnection application review, instead

[5] Commission orders are binding on the electric utilities that are the subject of the order. MCL 460.558 provides "Every corporation, its officers, agents and employees, and all persons and firms engaged in the business of furnishing electricity as aforesaid shall obey and comply with every lawful order made by the commission under the authority of this act so long as the same shall remain in force."

of in parallel. Consumers states that certain rules which currently use the term "days" should be changed to "business days."

The Michigan Electric and Gas Association (MEGA) notes that its members have smaller staffs and budgets than the larger utilities. MEGA suggests that the Commission adopt 30 business days rather than 10 business days for deadlines on applications and inspections, or provide some other form of flexibility in the rules regarding timing. MEGA is concerned that the rules will require additional investments in information technology (IT) or additional staff, and small utilities will have to create new systems to manage the interconnection process which could lead to cost shifts. MEGA posits that the new rules are premature because FERC Order 2222[6] will be implemented in 2022. MEGA states that some members use a progressive 3-level review/study process.

MEGA comments that separating the various required studies increases the time and cost associated with them, and disagrees with the prescribed levels in R 460.901b. MEGA states that interconnection agreements should be less concerned with size and more concerned with safe operation. MEGA comments that the required informal mediation proceedings could be costly. MEGA is also concerned with the potential costs and inconvenience associated with the transition non-study group, legacy applications, and the transition batch study process. MEGA suggests that the Commission should define "unreasonably delaying" in R 460.918. MEGA comments that the rule governing communications lacks clarity and members will be required to hire additional staff. MEGA comments that the fees in the rules will be insufficient to cover the cost of reviewing applications and it is not clear who is supposed to collect the fees.

[6] FERC Order 2222 refers to 172 FERC 64207 (September 17, 2020).

MEGA expresses a concern regarding who should register to indicate site control. MEGA further states that proof of insurance should be required for all customers with existing service and all electrical diagrams should be stamped by a professional engineer regardless of size or level. MEGA states that the reason for rejection of an application should be communicated to the customer. MEGA seeks changes to the fast track rules to give the utility the option to elevate an application and to better align with the batching process. MEGA suggests that utilities should be required to provide a draft interconnection agreement within 20 business days. MEGA states that the Commission should include a penalty that would be applicable to a DER that informs the utility of a modification after the fact. MEGA seeks further details in the rules regarding the type of required liability insurance and the breadth of claims that will be covered, and comments that the utility should be able to review (and reject interconnection on the basis of) deficient insurance policies.

Specific requests for revisions as presented in the redlined rule versions or comments are discussed below.

Revisions to the Rules

Definitions: R 460.901a and R 460.901b

Sunrun recommends adding a definition of "Aggregate capacity" or "Aggregate generation capacity" to the list of defined terms. The Commission agrees and has added a definition of "Aggregate capacity" or "Aggregate generation capacity" to R 460.901a(d) as meaning "the aggregated ongoing operating capacities of all DER across multiple points of common coupling, within a defined portion of the distribution system."

DTE Electric recommends specifically excluding all utility holidays in the business day definition. The Commission agrees and has revised R 460.901a(k) to direct utilities to include a

list of all utility holidays in the interconnection procedures.[7] R 460.920(5)(r) has also been added to reflect this addition to the utility's interconnection procedures. DTE Electric proposes revising the "business day" definition to reflect that the utility's highest priority is providing ordinary electric service. The Commission has revised R 460.901a(k) to add "any day in which electric service is interrupted for 10% or more of an electric utility's customers" to the list of excluded business days. Further, in light of this comment, the title of R 460.991 is revised from "Catastrophic conditions" to "Business day exclusions" and provides for reporting when a utility is extending interconnection processing timelines due to electric service interruptions for 10% or more of the utility's customers.

Consumers states that there are several instances where timeframes were described as "days" and not "business days." The Staff identified two instances where "days" refers to calendar days. R 460.920(2) and R 460.1001(2) are clarified to reflect "calendar days" and a definition for "calendar days" is added to R 460.901a(l).

DTE Electric and Sunrun recommend updating the R 460.901a(m) "certified" and R 460.901b(tt) "UL 1741" definitions, as well as in R 460.902(1)(a), to reflect the September 28, 2021 edition of UL 1741. Sunrun comments that the smart inverters certified to UL 1741 Edition 3 issued September 28, 2021, are expected to be available to the market in January 2023 rather than January 2022, which was the date in the proposed rules. The Commission adopts these recommendations and has revised the rules accordingly.

Sunrun recommends adding a definition of "Export capacity" to the list of defined terms. The Commission agrees and has added a definition of "Export capacity" to R 460.901a(bb) as

[7] Where rule numbering has changed, this order refers to the current rule number as reflected in the attachments to the order.

meaning "the maximum possible simultaneous generation of the DER, and is calculated as the maximum amount of export as permitted by limiting the amount of the DER's export at the point of common coupling."

Sunrun further recommends adding a definition of "Generating capacity" to the list of defined terms. The Commission agrees and has added a definition of "Generating capacity" to R 460.901a(gg) as meaning "the maximum nameplate rating of a DER in alternating current, except that where such capacity is limited by any of the methods of limiting electrical export, generating capacity shall be the net capacity as limited through the use of such methods not including inadvertent export."

DTE Electric requests that the definition of "good standing" in R 460.901a(jj) be revised to state that the applicant has paid all bills including disputed bills in a timely manner subject to refund. The Commission declines to make this change and finds the proposed definition is appropriate.

Sunrun recommends adding a definition of "Inadvertent export" to the list of defined terms. The Commission agrees and has added a definition of "Inadvertent export" to R 460.901a(pp) as meaning "the potential condition in which a normally non-exporting or limited exporting DER experiences an unscheduled export that does not exceed limitations in terms of magnitude or duration as specified in UL 1741 CRD for PCS." Additionally, a definition of "UL 1741 CRD for PCS" is added to R 460.901b(uu) as meaning "the Certification Requirement Decision for Power Control Systems for the standard titled Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources, March 8, 2019, as adopted by reference in R 460.902." R 460.902 is modified to adopt this standard by reference.

CCSA recommends moving to a proposed level categorization system that is more aligned with FERC. The Commission notes that levels 1, 2, and 3 are coordinated with the MCL 460.1005(b) definition of eligible electric generator. Further, determining the appropriate track for an interconnection application is based on both the level and the complexity of the interconnection. MEGA comments that the levels do not have an escalation method. The Commission points out that the proposed rules provide an opportunity for interconnection applications which fail the fast track to move directly to the study track or to the fast track supplemental review and then the study track, if necessary. The levels provide a starting point for interconnection application processing; however, as issues are identified and complexity increases, the rules provide for the application processing to progress to increasingly rigorous reviews. The Commission declines to make changes to the level categorization system at this time.

Sunrun recommends adding a definition of "Limited export" to the list of defined terms. The Commission agrees and has added a definition of "Limited export" to R 460.901b(k) as meaning "the exporting capability of a DER whose generating capacity is limited by the use of any configuration or operating mode."

MEIBC comments that the definition of "material modification" in R 460.901b(n) should include a statement indicating that a replacement of a component with a near-identical component does not constitute a material modification. The Commission agrees and has moved that sentence from R 460.982 to the definition of "material modification." Sunrun further recommends replacing "nameplate rating" with "generating capacity" in R 460.901b(n). The Commission agrees and incorporates this change.

MEGA comments that the R 460.901b(t) "nameplate rating" definition should be modified to include amp-hour and kilowatt-hour (kWh) ratings for energy storage. The Commission notes that DTE Electric recommends that kilovolt-ampere (kVa), direct current kW, and kWh of storage should be added to the rule addressing pre-application report applications, R 460.930. The Commission declines to modify the definition and instead adds kWh (for storage) to the nameplate capacity description in R 460.930(2)(e). The Commission finds that this adequately addresses the commenters' concerns.

Sunrun recommends adding a definition of "Ongoing operating capacity" to the list of defined terms. The Commission agrees and has added a definition of "Ongoing operating capacity" to R 460.901b(x) as meaning:

> the actual simultaneous generating capacity, taking into account the operational differences of load offset and export. If the contribution of energy storage to the total contribution is limited by programing of the maximum active power output, use of a power control system, use of a power relay, or some other mutually agreeable, on-site limiting element, only the capacity that is designed to inject electricity to the utility's distribution, other than inadvertent exports and fault contribution, will be used within certain technical screens and evaluations.

Sunrun further recommends adding a definition of "Power control system" to the list of defined terms. The Commission agrees and has added a definition of "Power control system" to R 460.901b(bb) as meaning "systems or devices which electronically limit or control steady state currents to a programmable limit and certified under UL 1741 CRD for Power Control Systems by a nationally recognized testing laboratory."

Informal mediation: R 460.904

MEGA comments that its members are concerned about the cost of implementing a system to track the necessary information for mediation proceedings as described in R 460.904. MEGA comments that some of its members estimate that it could cost more than $4 million. The

purpose of adding informal mediation and formal mediation rules, R 460.904 and R 460.906, respectively, is to provide opportunities for parties to resolve issues and concerns without the expense of filing a formal complaint at the Commission. The Commission declines to adopt this recommendation.

Appointment of experts: (previous) R 460.908

MEGA points out that (previous) R 460.908, which provides for the appointment of experts, will increase costs for its members. The Commission notes that this rule has been included in the Electric Interconnection and Net Metering Standards since 2009 and has never been used. Since 2009, when technical interconnection issues have arisen the Staff has been successful in obtaining needed information and technical expertise by making informal requests and receiving technical assistance grants through the National Association of Regulatory Utility Commissioners, the National Renewable Energy Laboratory, and the Department of Energy. Additionally, other organizations have also been willing to share expertise. The Commission finds it appropriate to delete this rule in its entirety.[8]

Applicability: R 460.911

MEGA and DTE Electric raise concerns with the impact of these rules on existing interconnection requests. DTE Electric comments that the rules have retroactive application and points to the following language in R 460.911: "These rules apply to all interconnection applications filed on or after the effective date of these rules and interconnection applications filed prior to the effective date of these rules that do not have an executed construction or

[8] A new rule R 460.908 is added, which is addressed below.

interconnection agreement." To address any concerns related to retroactive application of the rules, the Commission has revised the applicability language in R 460.911 to the following:

> Rule 11. These rules apply to all interconnection applications filed on or after the effective date of these rules. The electric utility shall complete work on any interconnection study agreement executed prior to the effective date of these rules in accordance with the terms and conditions of that interconnection study agreement. Any new studies or other additional work will be completed pursuant to these rules.

To further clarify this language, "interconnection study agreement" is added as a new defined term in R 460.901a(aaa). Shifting the applicability of the rules to interconnection applications filed on or after the effective date of the rules necessitates the removal of R 460.914 Transition non-study group, R 460.916 Legacy applications, and R 460.918 Transition batch study process. The following definitions, which were only applicable to the removed rules, have also been deleted: R 460.901a(o) "Construction agreement," R 460.901a(u) "Distribution system study," R 460.901a(bb) "Engineering review," and R 460.901b(pp) "Transition batch." Coinciding with the deletion of the definition of "construction agreement," use of the term "construction agreement" is revised to "interconnection agreement" in R 460.964(12)(b).

MEIBC, MEGA, and Sunrun comment about aspects of the transition batch rule. These comments will not be addressed due to the removal of the rule.

MEIBC comments that it is critical to ensure that these rules create a path forward for distributed generation customers to interconnect to the grid outside the legacy net metering or distributed generation programs. The Commission agrees, noting that the legacy net metering and distributed generation programs involve compensation to owners of interconnecting DERs, while these rules govern the engineering and safety requirements and processes governing the interconnection of DERs. As such, the Commission finds it appropriate, in response to MEIBC's comment, to add the following language to R 460.911: "An electric utility or an alternative

electric supplier shall not restrict access to interconnection for level 1, level 2, and level 3 DERs that are not participants in the legacy net metering or distributed generation programs."

Interconnection procedures: R 460.920

MEIBC comments that R 460.920(1) and (2), which address the electric utility interconnection procedures and Commission approval, are vague and should be clarified to say "formal Commission approval" to ensure that the utilities make a filing with the Commission and the Commission acts on the filing through an order. The Commission declines to make this modification because R 460.920(2) explicitly requires that the Commission "shall issue its order approving, rejecting, or modifying the proposed interconnection procedures and forms within 360 calendar days of the effective date of these rules." The Commission finds that this language addresses MEIBC's concerns.

R 460.920(2) provides for the Commission to "either adopt procedures and forms proposed by another party in the proceeding or modify and accept the procedures and forms proposed by the electric utility." MEIBC comments that stakeholders should be given an opportunity to participate in the proceeding in which the interconnection procedures are adopted. The Commission agrees. To clarify that the participant would not be limited to the definition of "party" in these rules (R 460.901b(z)) the word "party" is replaced with "person."

Fees: R 460.926 and Fees and fee cap modifications: R 460.928

DTE Electric comments that fixed fees and fee caps in R 460.920, R 460.926, and R 460.928, for pre-application reports, fast track initial reviews, fast track supplemental reviews, study track, system impact studies, and facilities studies, risk violation of the requirement that "the merchant plant will be responsible for all costs associated with the interconnection unless the commission has otherwise allocated the costs and provided for cost recovery" as stated in

MCL 460.10e(3) and the requirement that "the customer shall pay all interconnection costs" as stated in MCL 460.1175(1). Additionally, DTE Electric comments it has constitutional protections against takings. MEGA also comments that the pre-application report fee is insufficient. MEIBC comments that these fees should be set by the Commission and that the fees provided in MEIBC's redline rules document are the same fees charged by nearly all other states that have already updated their interconnection rules. MEIBC comments that the fee caps for the study track items are very high compared with similar fees charged in other states. MEIBC is concerned about allowing utilities the ability to apply for a waiver from the fee caps because the utilities have already had input in establishing the fee caps.

The rules establish a framework for fees which will be in use by all utilities when the rules become effective and extending through the interim period during which the Commission review of the interconnection procedures is taking place, up until such time as new fees and fee caps are approved at the conclusion of the review of the interconnection procedures. R 460.926 provides that an electric utility may file a request for a waiver pursuant to R 460.910 if costs are expected to be higher than the initial fee caps. The Commission adopts a number of the changes recommended by MEIBC pertaining to the process for establishing fees for the pre-application report, the non-export track, and the fast track that will remain in effect until interconnection procedures are approved by the Commission under R 460.920. Further, the Commission modifies the initial fee caps for a fast track supplemental review, system impact study, and facilities study to $1,000; $10,000; and $15,000, respectively, in R 460.926(3).

Pre-application report request form: R 460.930 and Pre-application report: R 460.932

DTE Electric recommends that the pre-application report request form provided by the utility under R 460.930 should ascertain from the applicant whether the DER is certified. The Commission agrees and the rule is revised accordingly.

MEIBC comments that the pre-application report provided by the utility in R 460.932(3) should include the feeder identifier and feeder voltage. The Commission finds that no modifications are necessary and that the information provided by R 460.932(3)(f), the nominal distribution circuit voltage at the proposed point of common coupling, and R 460.932(3)(g), the label, name, or identifier of the distribution circuit on which the proposed point of common coupling is located, is sufficient.

MEIBC comments that the pre-application report only includes readily available data, and that there is no reason an electric utility should need five weeks (25 business days) to process a request. The Commission finds merit in this comment and modifies R 460.932(6) to reduce the processing time from 25 business days to 20 business days.

Site control: R 460.934

DTE Electric comments that most level 1 and 2 applications are filed by the installer and recommends that the documentation required to demonstrate site control under R 460.934(3) should include the site owner's contact information. The Commission agrees and R 460.934(3) is modified accordingly.

Interconnection applications: R 460.936

MEIBC comments that R 460.936(5) would be more precise if it included "levels 4 and 5" instead of levels "4 and above." The Commission agrees and the rule is modified accordingly.

Public interconnection list: R 460.938

MEIBC comments that R 460.938(1) should be modified to reflect that the sortable public interconnection list must be provided to the public upon request. The Commission agrees and the rule is revised accordingly.

MEGA comments that sensitive information provided in the public interconnection list should be protected. The Commission has identified the items which must be included in the public interconnection list as follows:

> (2) The public interconnection list must include all of the following:
> (a) An application identifier.
> (b) The date that the electric utility received the application.
> (c) The date that the electric utility considered the application to be complete and conforming.
> (d) Whether the application is on the fast track or the study track.
> (e) The proposed DER nameplate capacity.
> (f) The proposed DER interconnection size level.
> (g) The DER technology type.
> (h) The county and township in which the proposed point of common coupling will be located.
> (i) The current status of the application's progress in the interconnection process.
> (j) The labels, names, or identifiers of the distribution circuit and substation.

The Commission finds that these items do not constitute sensitive information and declines to modify the rule.

Simplified track review: R 460.940, Non-export track review: R 460.942, Fast track applicability: R 460.944, Fast track; initial review: R 460.946, and Fast track; supplemental review: R 460.950

MEIBC comments that fast track eligibility should not be limited to level 3 and 4 projects (>150 kW to 1 MW). MEIBC recommends setting the fast track eligibility to at least 4 MW to align with the FERC Small Generator Interconnection Procedures (SGIP). CCSA recommends making the fast track eligible to projects as large as 5 MW. Proposed R 460.944(1) sets eligibility for the fast track at level 3 and level 4 applications which are not connecting to the

utility's high voltage distribution system. The Commission notes that applicants with applications processed under the fast track will pay the fast track application fee, and if the project does not pass the fast track initial screens there is an opportunity for the project to move to the fast track supplemental review, begin the study track pursuant to R 460.952, incorporate modifications offered or suggested by the electric utility, or withdraw the application. R 460.944(2) also provides for the applicant to forgo the fast track and proceed directly to the study track. Increasing the fast track eligibility will result in more projects failing the fast track initial screens. R 460.960(1)(b)(ii) and R 460.962(1)(b)(ii) are modified to provide for the electric utility to account for any appropriate credit in determining the cost estimates for system impact studies or facilities studies where studies have previously been completed pursuant to the fast track or non-export track. The Commission finds it is appropriate to set the maximum fast track eligibility to 5 MW.

DTE Electric notes that the proposed rules comprise 53 pages while the ruleset being replaced is only 17 pages and comments that this level of complexity is unnecessary. DTE Electric's comment resulted in a review of each interconnection track for unnecessary complexity, and the Staff has determined that there is no need for separate rules for the simplified track. The simplified track incorporates initial review screens which are expected to also be included in the fast track initial review screens. To reflect the 10-day initial screen review time applicable to the simplified track, the fast track rule is thus modified to show that for level 1 and 2 applications the fast track initial review time period is 10 business days, while remaining at 20 business days for larger applications. The Commission finds that it is appropriate to remove R 460.940 Simplified track review. Rules R 460.944 Fast track applicability and R 460.946 Fast track: initial review are modified to incorporate the simplified

track. FMC requests a fast track process for level 1 and level 2 projects. With the deletion of the simplified track, level 1 and level 2 projects will be processed using the fast track. In addition, the error in R 460.946(6) is corrected to delete "agreement" and insert "application."

DTE Electric commented that the non-export track in R 460.942(4)(a) requires the electric utility to provide specifications for any equipment the applicant will be required to install within 10 business days of completing the initial review and to notify the customer that no interconnection facilities, distribution upgrades, further study, or application modifications are required. DTE Electric states that 10 business days may not provide enough time if a site visit is necessary. The Commission agrees and modifies the rule by changing 10 business days to 20 business days.

DTE Electric proposes several modifications to the fast track screens. The Commission declines to adopt DTE Electric's recommendations at this time. Sunrun recommends that no additional screens should be added to the fast track review screens and makes several suggestions for modifying the applicability of certain screens. MEIBC states that the Commission should not allow an electric utility to add additional screens that undermine or negate the initial screens proposed in R 460.946. The fast track initial screens are based on those included in the FERC SGIP and are not part of the existing interconnection rules. However, because the fast track initial screens are based on those included in the FERC SGIP, the Commission adopts MEIBC's recommendation not to allow an electric utility to add additional screens for both the Fast track; initial review in R 460.946 and the Fast track; supplemental review in R 460.950.

The Commission further agrees with Sunrun that for level 1 and level 2 DER applications, an electric utility shall consider 100% of applicable loading, if available, instead of 15% of line

section peak load as detailed in R 460.946(4)(b). Further, in order to ensure that the loading data is available, the Commission agrees with Sunrun's comment and modifies and adds the following language to R 460.946(4)(b):

> The electric utility shall consider 100% of applicable loading, if available, instead of 15% of line section peak load for level 1 and level 2 DER. In the event daytime loading data is not available, the data must be collected by January 2023 for electric utilities with more than one million customers in this state, or by a date specified in interconnection procedures approved by the commission for electric utilities with fewer than one million customers in this state, and shall not consider as part of the aggregate generation, for purposes of this screen, DER capacity known to be already reflected in the minimum load data. This screen does not apply to level 1 and level 2 non-export DER applications.

The Commission agrees with Sunrun's comment that for purposes of this screen DER capacity known to be already reflected in the minimum load data shall not be considered as part of the aggregate generation, and that this screen does not apply to level 1 and level 2 non-export DER applications. In addition, for the initial review screens detailed in R 460.946(4)(d) and (e), the Commission agrees with Sunrun's comment that these screens should not apply to level 1 applications. Finally, in calculating the aggregate generation capacity on the shared secondary for the screen in R 460.946(4)(g), the Commission agrees with Sunrun's comment to consider only the proposed DER export capacity as part of this calculation.

Study track: R 460.952

MEGA highlights the definition of "facilities study" in R 460.901a(cc) and comments that some members provide a single consolidated study which includes feasibility, impact, and facilities studies, and that a requirement to separately process studies will significantly increase time and study costs. The Commission declines to modify its study definitions. However, to allow for the practice of consolidating studies to continue, R 460.952(2)-(3) is modified to provide for an alternative process for interconnection applications processed pursuant to the

study track; and a new rule, R 460.956 Alternative process, is added. The alternative process rule provides for an electric utility to utilize a process other than the process described in R 460.954 and R 460.958 to R 460.962. Additionally, MEGA recommends alternate standard terms for a combined feasibility, impact, and facilities study to avoid duplication of the names of studies used by regional transmission organizations and other states. Consistency in study naming conventions with other states and FERC rules is helpful for the electric industry. The Commission declines to adopt this recommendation.

Individual study: R 460.954 and Batch study process: (previous) R 460.956

Several commenters made recommendations about the batch process outlined in (previous) R 460.956. MEGA is concerned that the batch process does not align with the fast track process. MEIBC comments that utilities should process at least two batches per year and that even utilities opting to incorporate a batch process should continue to study electrically remote DER individually. CCSA expresses concern that every interconnection application above 1 MW will be forced into an annual batch study process. CCSA and MEIBC propose adopting an electrical independence test and only processing applications in a batch if they fail the test. MEIBC further suggests that the Commission review Pacific Gas & Electric's "interconnection process in California wherein a study track project is first subjected to a two-part Electrical Independence Test (EIT). If the project fails that test, it is then processed through a cluster study process. However, if the project passes the EIT, it can then be studied independently." MEIBC's comments, p. 4.

The Commission recognizes that the batch process described in (previous) R 460.956 is untested in Michigan. In light of the comments and concerns raised, the Commission finds that it is premature to include the batch process in a rule and is removing the batch study process rule

from the ruleset. While the batch study process rule is removed, a new rule, R 460.956 Alternative process, is added to provide a means for an electric utility to develop a process, such as a batch process, for inclusion in its interconnection procedures. Including the details of an alternative process in electric utility interconnection procedures allows flexibility for modification of the process through a Commission order. R 460.954 is revised to reflect the deletion of the batch study process.

Scoping meeting for interconnection applications that are to be studied individually: R 460.958 and System impact study agreement, scope, procedure, and review meeting: R 460.960

MEIBC points out that R 460.958(5)(c) contains an error in the procedural language and should be corrected to reflect that the interconnection application proceeds to R 460.964 for an interconnection agreement only if a system impact study or facilities study is not required. The Commission agrees and revises the rule accordingly. The Commission notes that the same error was present in R 460.960(j) and similarly revises the rule. R 460.960 is also revised to reflect the deletion of the batch study process.

Interconnection agreements: R 460.964

Consumers comments that R 460.964(8) is problematic because, as currently constructed, interconnection agreements do not address requirements that must be satisfied if costs exceed estimates. Consumers contends that this aspect of the interconnection process should not be addressed in the rules. Consumers also notes that the rule does not include a timeline by which an applicant must respond and provide consent to the utility prior to the cost being incurred. If the Commission opts to keep this activity in the rules, Consumers provides recommended language for the Commission to consider. Taking into account aspects of Consumers' proposal, the Commission is adopting the following language for R 460.964(8):

(8) An applicant shall pay the actual cost of the interconnection facilities and distribution upgrades. The cost to the applicant for interconnection facilities and distribution upgrades may not exceed 110% of the estimate without an itemized summary and explanation of cost increases being provided to the applicant. If the costs are expected to exceed 125% of the estimate, the electric utility shall provide further explanation to the applicant prior to the costs being incurred. If the applicant does not consent in writing to pay the additional costs within 20 business days of receiving further explanation from the electric utility, the electric utility shall initiate informal mediation pursuant to R 460.904 no later than 5 business days after the conclusion of the 20 business day applicant consent period. The applicant may dispute the expected costs pursuant to either informal mediation pursuant to R 460.904, formal mediation pursuant to R 460.906, or the complaint process pursuant to R 792.10439 to R 792.10446. If there is a dispute, the applicant shall make payment within 30 business days of final resolution of the dispute.

MEGA comments that interconnection agreements should be more agnostic to size and should focus on safe guidelines and operations. To address this comment, the Commission modified the definition of the standard level 1, 2, and 3 interconnection agreement in R 460.901b(mm) and R 460.964(1) and (2) to provide for the addition of a cover sheet listing modifications to address any special operating conditions. R 460.964(5) is also clarified to provide for modifications to the level 4 and 5 interconnection agreement to address any special operating conditions.

MEIBC comments that subrule (14) should be revised to clarify that a signed interconnection agreement cannot be modified without express Commission approval. The Commission modifies the rule to provide that unless the electric utility has the consent of the applicant or interconnection customer in writing, an electric utility shall not modify a signed interconnection agreement without Commission approval.

Inspection, testing, and commissioning: R 460.966

DTE Electric points out an error in R 460.964(4) and (7) which unintentionally omitted the necessary step after the interconnection agreement is executed to move the interconnection

application to R 460.966 for inspection, testing, and commissioning. The Commission agrees and modifies R 460.964(4) and (7) accordingly.

DTE Electric comments that subrule (1) should be revised to reflect that common items can be in the procedures, but site specific requirements may be called out in the interconnection agreement. The Commission agrees and modifies R 460.966(1) accordingly.

DTE Electric recommends that a process similar to that appearing in subrule (7)(b) be incorporated into subrule (3) to address the situation where an applicant's inspection, test reports, or configuration documents are incomplete, insufficient, or unsatisfactory. The Commission agrees and modifies R 460.966(3) accordingly.

DTE Electric points out that subrule (4)(a) only provides 10 business days for the utility to coordinate with the applicant and physically visit the project site. DTE Electric explains that "Level 1, 2, 3 projects may (especially in commercial tariffs) have required service/metering upgrades or shutdowns, replacement of equipment, installation or reconfiguring of relaying etc, or consist of multiple phases of development and may require mutual agreement as to the specific timing to accommodate customer schedules and utility operations." DTE Electric's comments, Attachment A, p. 37. MEGA also comments that additional time would be helpful for the inspection activity. The Commission agrees that it is reasonable to provide additional time for larger projects and modifies R 460.966(4) to provide a 10 business day timeframe for level 1 projects and 20 business days for level 2 and level 3 projects.

Cost allocation of interconnection facilities and distribution upgrades: R 460.970

ABATE comments that this rule should be clarified to reflect that O&M costs should be considered in cost allocation also. The Commission agrees and modifies the rule accordingly.

MEIBC and Sunrun comment that the cost allocation methodology provided in R 460.970 does not fairly allocate costs to each interconnection applicant. The Commission notes that the rule provides for the cost allocation details to be included in electric utility interconnection procedures. The Commission declines to add additional specificity about cost allocation in the rule.

Capacity of the DER: R 460.980

MEIBC, the CEOs, and Sunrun comment that the rules do not provide sufficient guidance regarding how ESS should be reviewed and evaluated during the interconnection process. The CEOs recommend that the Commission more clearly spell-out how electric utilities shall allow for limited and non-exporting DERs. They point out that this is currently a challenge for behind-the-meter solar plus storage systems with inverter-limited export and comment that "[t]he defining feature and value of energy storage is its ability to store and discharge energy in the amounts needed and at the time it is needed." CEO's comments, p. 1.[9] The CEOs state that the interconnection rules should address ESS in a way that takes into account how those systems are actually used, instead of assuming the export of full nameplate capacity at all times. They also recommend adding the Limited-Export and Non-Exporting Generating Facilities Rule from the IREC Model Interconnection Procedures 2019.[10]

Sunrun comments that "the use of certified power control systems to limit export or the leveraging of advanced grid support functions to avoid upgrades and rapidly streamline interconnection will only come to fruition if utilities are engaged through smart policy decisions." Sunrun comments, pp. 1-2. Sunrun comments that the proposed rules provide no

[9] Where comments are not paginated, conventional page numbering is used.

[10] *See,* https://irecusa.org/resources/irec-model-interconnection-procedures-2019/

clarity as to how inverter power control functions can enable customer savings through more cost effective interconnection.

MEIBC comments that the Commission should provide guidance to the utilities to enable the adoption of energy storage and the fair and accurate study of these technologies. Sunrun's and MEIBC's proposed revisions include a limited-export and non-exporting generating facilities rule. Sunrun's redline also includes new definitions necessary to implement the rule, which were discussed in the definitions section of this order.

The Commission agrees with the comments of MEIBC, the CEOs, and Sunrun and finds that it is appropriate to add a limited-export and non-exporting generating facilities rule. The Commission thus modifies R 460.980(3) to incorporate Sunrun's proposed comments so that it reads as follows: "The electric utility's interconnection procedures must include acceptable methods for power limited export DER so that the DER capacity considered by the electric utility for reviewing the interconnection application is only the amount capable of being exported." In addition, the Commission agrees with the comments from both Sunrun and MEIBC to add the Limited-Export and Non-Exporting Generating Facilities Rule from the IREC Model Interconnection Procedures 2019 and adds this as R 460.980(4). The Commission also adopts the corresponding change to the interconnection procedures in R 460.920 so that an electric utility's interconnection procedures must include, among other elements, acceptable methods or standards for power-limited export DERs in compliance with the allowances now included in R 460.980. As noted above, the Commission is also adopting Sunrun's comments to add a number of definitions to R 460.901a and 460.901b. Finally, the Commission agrees with Sunrun's comment on R 460.980(1) that an electric utility shall use the new ongoing operating

capacity of the DER for interconnection applications requesting an increase in capacity for an existing DER.

Modification of the interconnection application: R 460.982

MEIBC comments that R 460.982 is very confusing and includes terms that are unclear and undefined, such as "cursory evaluation," "acceptable," "unacceptable," and "expedite." The Commission agrees and removes those terms from the rule and adds language to more clearly explain the material modification process. The options available to the applicant based upon the findings of the electric utility's material modification review are also now clearly stated. An electric utility may choose to offer an expedited study process in the event a material modification requires further study of the interconnection application and the electric utility's process for conducting an expedited study will be provided in that electric utility's interconnection procedures. Additionally, "Replacing a component with another component that has near-identical characteristics does not constitute a material modification" is moved from R 460.982(11) to the definition of "material modification" in R 460.901b(n) based on MEIBC's recommendation.

Modifications to the DER: R 460.984

DTE Electric comments that R 460.984 should be revised to reflect that the applicant should proceed with material modifications only pursuant to an executed interconnection agreement. The Commission agrees and the rule is revised accordingly.

Insurance: R 460.986

MEIBC comments that the insurance requirements in R 460.986 should be adjusted. The proposed rule states that an applicant interconnecting a level 1 or 2 project may not be required

to obtain additional liability insurance. Level 3, level 4, and level 5 have general liability insurance minimums of $1,000,000, $2,000,000, and $3,000,000, respectively. MEIBC proposes that an applicant interconnecting a level 1, 2, or 3 project should not have any insurance requirements and that the minimum general liability insurance for level 4 and level 5 projects should be $1,000,000 and $2,000,000, respectively. The Commission finds the requirements, as written, to be reasonable and declines to modify the general liability insurance amounts.

MEGA comments that proof of insurance should be required for all levels of interconnection projects and that the utility should have the option to review insurance policies at any time. The Commission agrees that electric utilities should have the option to describe insurance specifications in interconnection procedures and to review insurance policies for level 3, level 4, and level 5 projects, and R 460.920 and R 460.986 are modified accordingly.

Easements and rights-of-way: R 460.988

Consumers and MEIBC comment that R 460.988 should be revised to reflect that the utility needs to be responsible for procuring the right-of-way while the applicant is responsible for the costs. The Commission agrees and R 460.988 is modified accordingly.

Electric Utility Interconnection Procedures and Interconnection Rules

MEIBC and the CEOs comment that they have concerns with moving too much detail governing the implementation of interconnection to electric utility interconnection procedures. The CEOs recognize that there are rapidly changing technologies and that the flexibility to change interconnection procedures by Commission order is desirable. However, they comment that administrative rules have the effect of law and they posit that the interconnection procedures will not be binding on the public and will create no legal obligations for utilities or customers. The Commission notes that Commission orders also have the effect of law, and noncompliance

with Commission orders may result in penalties. MCL 460.558. Considering the modifications made to the rules in response to the comments, the Commission finds that the rules strike an appropriate balance between interconnection activities governed by the rules and those governed by the Commission-approved interconnection procedures.

Distributed Generation Program Standards

Application process: R 460.1001

DTE Electric comments that a reference to R 460.1026 should be added to subrule (9). The Commission agrees and R 460.1001(9) has been modified accordingly. MEIBC and Sunrun both comment that the language in R 960.1001(8)(c) that excludes energy storage devices from exporting stored electricity should be removed. The Commission agrees with this recommendation and is removing the language excluding energy storage devices from exporting stored energy to the grid and finds that utilities may propose tariff language addressing this matter in a rate case.

MEIBC states that the addition of energy storage should not impact a customer's participation in the DG program. The Commission agrees and modifies R 460.1001(8)(c) and R 460.920(5)(m) accordingly.

MEIBC comments that adding energy storage should not require a reapplication. The Commission declines to modify the rules to allow for the addition of energy storage to an existing project without the customer filing a new interconnection application with the electric utility. R 460.1001(9) provides for a customer adding energy storage to re-apply for interconnection and R 460.1001(8)(c) requires the electric utility to include details in interconnection procedures for adding energy storage without impacting participation in the

legacy net metering or DG programs. The Commission finds that these provisions adequately address MEIBC's concerns.

Legacy net metering program application and fees: R 460.1004

DTE Electric comments that an erroneous reference to the DG program should be revised to reflect the legacy net metering program. The Commission agrees and R 460.1004(2)(e) is modified accordingly.

Distributed generation program application and fees: R 460.1006

Consumers comments that R 460.1006 should be revised to allow the review of DG program applications and interconnection applications in sequential order rather than in parallel. The Commission agrees and has modified R 460.1006(2)(a) accordingly.

Legacy net metering program and distributed generation program size: R 460.1008

MEIBC comments that, because utilities are allowed to voluntarily increase the program caps for the DG program, the rules should be modified to include the new voluntary caps in R 460.1008(1). Currently R 460.1008 requires utilities to notify the Commission if the program size limits are reached. The Commission accepts this recommendation and has modified R 460.1008(1) accordingly.

Billing and credit for distributed generation program customers: R 460.1020

DTE Electric comments that the language in R 460.1020 should be revised to clarify that legacy net metering customers remain on the legacy net metering program for a certain time period pursuant to R 460.1026. The Commission agrees and has modified rule R 460.1020 accordingly.

Other Comments

MEGA comments that its members have small staffs and it therefore requests additional flexibility when needed for effective review and management of the interconnection process. The Commission finds it appropriate to add a new rule providing an additional 10 business days to each timeline in the ruleset for electric utilities with less than 1,000,000 Michigan customers. This change is reflected in new rule R 460.908, Timelines for electric utilities serving fewer than 1,000,000 in-state customers.

MEIBC comments that each utility should be required to include a flow chart listing all of the processes and timelines in their interconnection procedures or on their website. The Commission agrees that this would be helpful and encourages utilities to create such flow charts but has not revised the rules to add this requirement.

MEGA recommends that all electrical diagrams should be stamped by a professional engineer regardless of size or level. R 460.936 provides for level 1 interconnection applications to include a 1-line diagram. Level 2 and level 3 applications require a 1-line diagram sealed by a professional engineer or signed by an electrical contractor, and level 4 and level 5 require a 1-line diagram sealed by a professional engineer. These requirements are unchanged from what has been in place since 2009. The Commission finds that these requirements continue to be reasonable and declines to adopt MEGA's recommendation.

The Commission notes that the rules do not address tariffs and the Commission has made no additions to address tariffs. The Commission also finds that the tariffs address what occurs when an interconnection customer leaves the distribution system or is terminated.

The Commission notes that fines addressing interconnections above 100 kW that have been prevented or delayed are governed by MCL 460.10e, and the Commission declines to otherwise change the penalty provisions in the rules.

R 460.992, which governs electric utility annual reports, states that "[a]n electric utility shall file an annual interconnection report on a date and in a format determined by the commission." In light of FMC's comments, in determining the format for these annual reports the Commission will consider requiring electric utilities, as part of the first annual reports, to describe how they intend to accommodate EVs as DER in the future.

Finally, the Commission is not persuaded that the ruleset is premature due to the existence of FERC Order 2222.

THEREFORE, IT IS ORDERED that:

A. The Interconnection and Distributed Generation Standards, attached as Exhibit B, and the Electric Interconnection and Net Metering Standards, attached as Exhibit C, are approved and shall be submitted to the Legislative Service Bureau and the Michigan Office of Administrative Hearings and Rules for their formal approvals.

B. Upon formal approval of the Interconnection and Distributed Generation Standards, attached as Exhibit B, and the Electric Interconnection and Net Metering Standards, attached as Exhibit C, by the Legislative Service Bureau and the Michigan Office of Administrative Hearings and Rules, they shall be transmitted to the Joint Committee on Administrative Rules.

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

MICHIGAN PUBLIC SERVICE COMMISSION

Daniel C. Scripps, Chair

Tremaine L. Phillips, Commissioner

Katherine L. Peretick, Commissioner

By its action of March 17, 2022.

Lisa Felice, Executive Secretary

DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS

PUBLIC SERVICE COMMISSION

INTERCONNECTION AND DISTRIBUTED GENERATION STANDARDS

Filed with the secretary of state on

These rules take effect immediately upon filing with the secretary of state unless adopted under section 33, 44, or 45a(9) of the administrative procedures act of 1969, 1969 PA 306, MCL 24.233, 24.244, or 24.245a. Rules adopted under these sections become effective 7 days after filing with the secretary of state.

(By authority conferred on the public service commission by section 7 of 1909 PA 106, MCL 460.557, section 5 of 1919 PA 419, MCL 460.55, sections 4, 6, and 10e of 1939 PA 3, MCL 460.4, 460.6, and 460.10e, and section 173 of the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1173)

R 460.901a, R 460.901b, R 460.902, R 460.904, R 460.906, R 460.908, R 460.910, R 460.911, ~~R 460.914, R 460.916, R 460.918,~~ R 460.920, R 460.922, R 460.924, R 460.926, R 460.928, R 460.930, R 460.932, R 460.934, R 460.936, R 460.938, R 460.940, R 460.942, R 460.944, R 460.946, R 460.948, R 460.950, R 460.952, R 460.954, R 460.956, R 460.958, R 460.960, R 460.962, R 460.964, R 460.966, R 460.968, R 460.970, R 460.974, R 460.976, R 460.978, R 460.980, R 460.982, R 460.984, R 460.986, R 460.988, R 460.990, R 460.991, R 460.992, R 460.1001, R 460.1004, R 460.1006, R 460.1008, R 460.1010, R 460.1012, R 460.1014, R 460.1016, R 460.1018, R 460.1020, R 460.1022, R 460.1024, and R 460.1026 are added to the Michigan Administrative Code, as follows:

PART 1. GENERAL PROVISIONS

R 460.901a Definitions; A-I.

Rule 1a. As used in these rules:

(a) "AC" means alternating current at 60 Hertz.

(b) "Affected system" means another electric utility's distribution system, a municipal electric utility's distribution system, the transmission system, or transmission system-connected generation which may be affected by the proposed interconnection.

(c) "Affiliate" means that term as defined in R 460.10102(1)(a).

(d) "Aggregate capacity" or "Aggregate generation capacity" means the aggregated ongoing operating capacities of all DER across multiple points of common coupling, within a defined portion of the distribution system.

(~~d~~**e**) "Alternative electric supplier" means that term as defined in section 10g of 1939 PA 3, MCL 460.10g.

(~~e~~**f**) "Alternative electric supplier distributed generation program plan" means a document supplied by an alternative electric supplier that provides detailed information to an applicant about the alternative electric supplier's distributed generation program.

(~~f~~**g**) "Alternative electric supplier legacy net metering program plan" means a document supplied by an alternative electric supplier that provides detailed information to an applicant about the alternative electric supplier's legacy net metering program.

(~~g~~**h**) "Applicant" means the person or entity submitting an interconnection application, a legacy net metering program application, or a distributed generation program application. An applicant is not required to be an existing customer of an electric utility. An electric utility is considered an applicant when it submits an interconnection application for a DER that is not a temporary DER.

(~~h~~**i**) "Application" means an interconnection application, a legacy net metering program application, or a distributed generation program application.

(~~i~~**j**) "Area network" means a location on the distribution system served by multiple transformers interconnected in an electrical network circuit.

(~~j~~**k**) "Business day" means Monday through Friday, starting at 12:00:00 a.m. and ending at 11:59:59 p.m., excluding ~~the following holidays: New Year's Day, Martin Luther King Jr. Day, Presidents Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, Christmas Eve, Christmas Day, and New Year's Eve. Election Day, the day after Thanksgiving,~~ **electric utility holidays** and any day ~~that meets the criteria of catastrophic conditions as defined in R 460.702(f)~~ **in which electric service is interrupted for 10% or more of an electric utility's customers. A list of electric utility holidays shall be provided in the electric utility's interconnection procedures.**

(l) "Calendar day" means every day including Saturdays, Sundays, and holidays.

(~~k~~**m**) "Certified" means an inverter-based system has met acceptable safety and reliability standards by a nationally recognized testing laboratory in conformance with IEEE 1547.1-2020 and the UL 1741 ~~2020~~ **September 28, 2021** edition except that prior to January 1, 202~~2~~**3**, inverter-based systems which conform to the UL 1741**SA September 7, 2016** ~~January 28, 2010~~ edition are acceptable.

(~~l~~**n**) "Commission" means the Michigan public service commission.

(~~m~~**o**) "Commissioning test" means the test and verification procedure that is performed on a device or combination of devices forming a system to confirm that the device or system, as designed, delivered, and installed, meets the interconnection and interoperability requirements of IEEE 1547-2018. A commissioning test must include visual inspections and may include, as applicable, an operability and functional performance test and functional tests to verify interoperability of a combination of devices forming a system.

(~~n~~**p**) "Conforming" means the information in an interconnection application is consistent with the general principles of distribution system operation and DER characteristics.

~~(o) "Construction agreement" means an agreement, pursuant to the interconnection standards superseded by R 460.901a to R 460.992, between an interconnection customer and an electric utility that contains timelines and cost estimates for construction of facilities and distribution upgrades to interconnect a DER into the distribution system,~~

~~and identifies design, procurement, installation, and construction requirements associated with installation of the DER.~~

(~~p~~**q**) "Customer" means a person or entity who receives electric service from an electric utility's distribution system or a person who participates in a legacy net metering or distributed generation program through an alternative electric supplier or electric utility.

(~~q~~**r**) "DC" means "direct current."

(~~r~~**s**) "Distributed energy resource" or "DER" means a source of electric power and its associated facilities that is connected to a distribution system. DER includes both generators and energy storage devices capable of exporting active power to a distribution system.

(~~s~~**t**) "Distributed generation program" means the distributed generation program approved by the commission and included in an electric utility's tariff pursuant to section 6a(14) of 1939 PA 3, MCL 460.6a, or established in an alternative electric supplier distributed generation program plan.

(~~t~~**u**) "Distribution system" means the structures, equipment, and facilities owned and operated by an electric utility to deliver electricity to end users, not including transmission and generation facilities that are subject to the jurisdiction of the federal energy regulatory commission.

~~(u) "Distribution system study" means a study, conducted under the interconnection standards superseded by R 460.901a to R 460.992, that determined whether a distribution system upgrade was needed to accommodate the proposed project and the cost of a distribution upgrade if required.~~

(v) "Distribution upgrades" mean the additions, modifications, or improvements to the distribution system necessary to accommodate a DER's connection to the distribution system.

(w) **"**Electric utility" means any person or entity whose rates are regulated by the commission for selling electricity to retail customers in this state. For purposes of R 460.901a through R 460.992 only, "electric utility" includes cooperative electric utilities that are member regulated as provided in section 4 of the electric cooperative member-regulation act, 2008 PA 167, MCL 460.34.

(x) "Electrically coincident" means that 2 or more proposed DERs associated with pending interconnection applications have operating characteristics and nameplate capacities which require that distribution upgrades will be necessary if the DERs are installed in electrical proximity with each other on a distribution system.

(y) "Electrically remote" means a proposed DER is not electrically coincident with a DER that is associated with a pending interconnection application.

(z) "Eligible electric generator" means a methane digester or renewable energy system with a generation capacity limited to a customer's electric need and that does not exceed either of the following:

(i) 150 kWac of aggregate generation at a single site for a renewable energy system.

(ii) 550 kWac of aggregate generation at a single site for a methane digester.

(aa) "Energy storage device" means a device that captures energy produced at one time, stores that energy for a period of time, and delivers that energy as electricity for use at a future time. For purposes of these rules, an energy storage device may be considered a DER.

(bb) "Export capacity" means the maximum possible simultaneous generation of the DER, and is calculated as the maximum amount of export as permitted by limiting the amount of the DER's export at the point of common coupling.

~~(bb) "Engineering review" means a study, conducted under the interconnection standards superseded by R 460.901a to R 460.992, that determined the suitability of the interconnection equipment including any safety and reliability complications arising from equipment saturation, multiple technologies, and proximity to synchronous motor loads.~~

(cc) "Facilities study" means a study to specify and estimate the cost of the equipment, engineering, procurement, and construction work if distribution upgrades or interconnection facilities are required.

(dd) "Fast track" means the procedure used for evaluating a proposed interconnection that makes use of screening processes, as described in R 460.944 to R 460.950.

(ee) "Force majeure event" means an act of God; labor disturbance; act of the public enemy; war; insurrection; riot; fire, storm, or flood; explosion, breakage, or accident to machinery or equipment; an emergency order, regulation or restriction imposed by governmental, military, or lawfully established civilian authorities; or another cause beyond a party's control. A force majeure event does not include an act of negligence or intentional wrongdoing.

(ff) "Full retail rate" means the power supply and distribution components of the cost of electric service. Full retail rate does not include a system access charge, service charge, or other charge that is assessed on a per meter, premise, or customer basis.

(gg) "Generating capacity" means the maximum nameplate rating of a DER in alternating current, except that where such capacity is limited by any of the methods of limiting electrical export; generating capacity shall be the net capacity as limited though the use of such methods not including inadvertent export.

(~~gg~~**hh**) "Good standing" means an applicant has paid in full all undisputed bills rendered by the interconnecting electric utility and any alternative electric supplier in a timely manner and none of these bills are in arrears.

(~~hh~~**ii**) "Governmental authority" means any federal, state, local, or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that this term does not include the applicant, interconnection customer, electric utility, or any affiliate thereof.

(~~ii~~**jj**) "GPS" means global positioning system.

(~~jj~~**kk**) "Grid network" means a configuration of a distribution system or an area of a distribution system in which each customer is supplied electric energy at the secondary voltage by more than 1 transformer.

(~~kk~~**ll**) "High voltage distribution" means those parts of a distribution system that operate within a voltage range specified in the electric utility's interconnection procedures. For purposes of these rules, the term "subtransmission" means the same as high voltage distribution.

(~~ll~~**mm**) "IEEE" means institute of electrical and electronics engineers.

(~~mm~~**nn**) "IEEE 1547-2018" means "IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems Interfaces," as adopted by reference in R 460.902.

(~~nn~~**oo**) "IEEE 1547.1-2020" means IEEE "Standard Conformance Test Procedures for Equipment Interconnecting Distributed Energy Resources with Electric Power Systems and Associated Interfaces," as adopted by reference in R 460.902.

(pp) "Inadvertent export" means the potential condition in which a normally non-exporting or limited-exporting DER experiences an unscheduled export that does not exceed limitations in terms of magnitude or duration as specified in UL 1741 CRD for PCS.

(~~oo~~**qq**) "Independent system operator" means an independent, federally-regulated entity established to coordinate regional transmission in a non-discriminatory manner and to ensure the safety and reliability of the transmission and distribution systems.

(~~pp~~**rr**) "Initial review" means the fast track initial review screens described in R 460.946.

(~~qq~~**ss**) "Interconnection" means the process undertaken by an electric utility to construct the electrical facilities necessary to connect a DER with a distribution system so that parallel operation can occur.

(~~rr~~**tt**) "Interconnection agreement" means an agreement containing the terms and conditions governing the electrical interconnection between the electric utility and the applicant or interconnection customer. Where construction of interconnection facilities or distribution upgrades are necessary, the agreement shall specify timelines, cost estimates, and payment milestones for construction of facilities and distribution upgrades to interconnect a DER into the distribution system, and shall identify design, procurement, installation, and construction requirements associated with installation of the DER. Standard level 1, 2, and 3 interconnection agreements and level 4 and 5 interconnection agreements are types of interconnection agreements.

(~~ss~~**uu**) "Interconnection coordinator" means a person or persons designated by the electric utility who shall serve as the point of contact from which general information on the application process and on the affected system or systems can be obtained through informal request by the applicant or interconnection customer.

(~~tt~~**vv**) "Interconnection customer" means the person or entity, which may include the electric utility, responsible for ensuring a DER is operated and maintained in compliance with all local, state, and federal laws, as well as with all rules, standards, and interconnection procedures.

(~~uu~~**ww**) "Interconnection facilities" mean any equipment required for the sole purpose of connecting a DER with a distribution system.

(~~vv~~**xx**) "Interconnection procedures" mean the requirements that govern project interconnection adopted by each electric utility and approved by the commission.

(yy) "Interconnection study agreement" means an agreement between an applicant and an electric utility for the electric utility to study a proposed DER.

R 460.901b Definitions; J-Z.

Rule 1b. As used in these rules:

(a) "kW" means kilowatt.

(b) “kWac” means the electric power, in kilowatts, associated with the alternating current output of a DER at unity power factor.

(c) “kWh” means kilowatt-hours.

(d) “Legacy net metering program” means the true net metering or modified net metering programs in place prior to commission approval of a distributed generation program tariff pursuant to section 6a(14) of 1939 PA 3, MCL 460.6a, and prior to the establishment of an alternative electric supplier distributed generation plan.

(e) “Level 1” means a certified project of 20 kWac or less.

(f) “Level 2” means a certified project of greater than 20 kWac and not more than 150 kWac.

(g) “Level 3” means a project of 150 kWac or less that is not certified, or a project greater than 150 kWac and not more than 550 kWac.

(h) “Level 4” means a project of greater than 550 kWac and not more than 1 MWac.

(i) “Level 5” means a project of greater than 1 MWac.

(j) “Level 4 and 5 interconnection agreement” means an interconnection agreement applicable to level 4 and 5 interconnection applications.

(k) “Limited export” means the exporting capability of a DER whose generating capacity is limited by the use of any configuration or operating mode.

(~~k~~**l**) “Low voltage distribution” means those parts of a distribution system that operate with a voltage range specified in the electric utility’s interconnection procedures.

(~~l~~**m**) “Mainline” means a conductor that serves as the three-phase backbone of a low voltage distribution circuit.

(~~m~~**n**) “Material modification” means a modification to the DER ~~nameplate rating~~ **generating capacity**, electrical size of components, bill of materials, machine data, equipment configuration, or the interconnection site of the DER at any time after receiving notification by the electric utility of a complete interconnection application. **Replacing a component with another component that has near-identical characteristics does not constitute a material modification.** For the proposed modification to be considered material, it shall have been reviewed and been determined to have or anticipated to have a material impact on 1 or more of the following:

(i) The cost, timing, or design of any equipment located between the point of common coupling and the DER.

(ii) The cost, timing, or design of any other application.

(iii) The electric utility’s distribution system or an affected system.

(iv) The safety or reliability of the distribution system.

(~~n~~**o**) “Methane digester” means a renewable energy system that uses animal or agricultural waste for the production of fuel gas that can be burned for the generation of electricity or steam.

(~~o~~**p**) “Modified net metering” means an electric utility billing method that applies the power supply component of the full retail rate to the net of the bidirectional flow of kWh across the customer interconnection with the electric utility’s distribution system during a billing period or time-of-use pricing period.

(~~p~~**q**) “MW” means megawatt.

(~~q~~**r**) “MWac” means the electric power, in megawatts, associated with the alternating current output of a DER at unity power factor.

(~~r~~**s**) "Nameplate capacity" means the maximum active power, in kWac or MWac, at which a DER is capable of sustained operation.

(~~s~~**t**) "Nameplate rating" means all of the following at which a DER is capable of sustained operation:

(i) Nominal voltage (V).

(ii) Current (A).

(iii) Maximum active power (kWac).

(iv) Apparent power (kVA).

(v) Reactive power (kvar).

(~~t~~**u**) "Nationally recognized testing laboratory" means any testing laboratory recognized by the accreditation program of the United States Department of Labor Occupational Safety and Health Administration.

(~~u~~**v**) "Network protector" means those devices associated with a secondary network used to automatically disconnect a transformer when reverse power flow occurs.

(~~v~~**w**) "Non-export track" means the procedure for evaluating a proposed interconnection that will not inject electric energy into an electric utility's distribution system, as described in R 460.942.

(x) "Ongoing operating capacity" means the actual simultaneous generating capacity, taking into account the operational differences of load offset and export. If the contribution of energy storage to the total contribution is limited by programing of the maximum active power output, use of a power control system, use of a power relay, or some other mutually agreeable, on-site limiting element, only the capacity that is designed to inject electricity to the utility's distribution system, other than inadvertent exports and fault contribution, will be used within certain technical screens and evaluations.

(~~w~~**y**) "Parallel operation" means the operation, for longer than 100 milliseconds, of a DER while connected to the energized distribution system.

(~~x~~**z**) "Party" or "parties" means an electric utility, applicant, or interconnection customer.

(~~y~~**aa**) "Point of common coupling" means the point where the DER connects with the electric utility's distribution system.

(bb) "Power control system" means systems or devices which electronically limit or control steady state currents to a programmable limit and certified under UL 1741 CRD for Power Control Systems by a nationally recognized testing laboratory.

(~~z~~**cc**) "Radial supply" means a configuration of a distribution system or an area of a distribution system in which each customer can only be supplied electric energy by 1 substation transformer and distribution line at a time.

(~~aa~~**dd**) "Readily available" means no creation of data is required, and little or no computation or analysis of data is required.

(~~bb~~**ee**) "Reasonable efforts" mean, with respect to an action required to be attempted or taken by a party under these interconnection rules, efforts that are as timely as possible and consistent with those a party would take to protect its own interests.

(~~cc~~**ff**) "Regional transmission operator" means a voluntary organization of electric transmission owners, transmission users, and other entities approved by the federal energy regulatory commission to efficiently coordinate electric transmission planning, expansion, operation, and use on a regional and interregional basis.

(~~dd~~**gg**) "Renewable energy credit" means a credit granted pursuant to the commission's renewable energy credit certification and tracking program in section 41 of the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1041.

(~~ee~~**hh**) "Renewable energy resource" means that term as defined in section 11(i) of the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1011.

(~~ff~~**ii**) "Renewable energy system" means that term as defined in section 11(k) of the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1011.

(~~gg~~**jj**) "Secondary network" means those areas of a distribution system that operate at a secondary voltage level and are networked.

~~(hh) "Simplified track" means the procedure for evaluating a level 1 or level 2 proposed interconnection, as described in R 460.940.~~

(~~ii~~**kk**) "Site" means a contiguous site, regardless of the number of meters at that site. A site that would be contiguous but for the presence of a street, road, or highway is considered to be contiguous for the purposes of these rules.

(~~jj~~**ll**) "Spot network" means a location on the distribution system that uses 2 or more inter-tied transformers to supply an electrical network circuit, such as a network circuit in a large building.

(~~kk~~**mm**) "Standard level 1, 2, and 3 interconnection agreement" means the statewide interconnection agreement approved by the commission and applicable to levels 1, 2 and 3 interconnection applications. **A cover sheet including modifications to address any special operating conditions may be added.**

(~~ll~~**nn**) "Study track" means the procedure used for evaluating a proposed interconnection as described in R 460.952 to R 460.962.

(~~mm~~**oo**) "Supplemental review" means the fast track supplemental review screens described in R 460.950.

(~~nn~~**pp**) "System impact study" means a study to identify and describe the impacts to the electric utility's distribution system that would occur if the proposed DER were interconnected exactly as proposed and without any modifications to the electric utility's distribution system. A system impact study also identifies affected systems.

(~~oo~~**qq**) "Temporary DER" means a DER that is installed on the distribution system by the electric utility with the intention of not operating at the site permanently.

~~(pp) "Transition batch" means the group of interconnection applications processed pursuant to R 460.918.~~

(~~qq~~**rr**) "True net metering" means an electric utility billing method that applies the full retail rate to the net of the bidirectional flow of kWh across the customer interconnection with the electric utility's distribution system, during a billing period or time-of-use pricing period.

(~~rr~~**ss**) "UL" means underwriters laboratory.

(~~ss~~**tt**) "UL 1741" means the ~~August 3, 2020~~**September 28, 2021 edition** ~~revision~~ of "Standard for Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources," as adopted by reference in R 460.902.

(uu) "UL 1741 CRD for PCS" means the Certification Requirement Decision for Power Control Systems for the standard titled Inverters, Converters, Controllers

and Interconnection System Equipment for Use With Distributed Energy Resources, March 8, 2019, as adopted by reference in R 460.902.

R 460.902 Adoption of standards by reference.

Rule 2. (1) The standards specified in these rules are adopted by reference as follows:

(a) UL 1741 Standard for Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources, ~~August 3, 2020 revision~~**September 28, 2021 edition**, is available from Underwriters Laboratories at the internet website: ~~https://~~**https://standardscatalog.ul.com/ProductDetail.aspx?productId=UL1741**~~standardscatalog.ul.com/Catalog.aspx~~ at a cost of $**798**~~395~~.00 at the time of adoption of these rules.

(b) UL 1741 Certification Requirement Decision for Power Control Systems for the standard titled Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources, March 8, 2019, is available from Underwriters Laboratories Inc., 333 Pfingsten Road, Northbrook IL 60062-2096.

(~~b~~**c**) ANSI C84.1 – 2016 Electric Power Systems and Equipment – Voltage Ratings (60 Hz), June 9, 2016, is available from the American National Standards Institute, Inc. at the internet website https://webstore.ansi.org/ at a cost of $111.24 at the time of adoption of these rules.

(~~c~~**d**) The following standards adopted by reference are available from IEEE at the internet website https://standards.ieee.org at the time of adoption of these rules.

(i) The IEEE 1453-2015, IEEE Recommended Practice for the Analysis of Fluctuating Installations on Power Systems, October 30, 2015, is available at a cost of $99.00 - $147.00 at the time of adoption of these rules.

(ii) The IEEE 1547 - 2018, IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power System Interfaces, April 6, 2018, is available at a cost of $149.00 - $224.00 at the time of adoption of these rules.

(iii) The IEEE 1547.1-2020 IEEE Standard Conformance Test Procedures for Equipment Interconnecting Distributed Energy Resources with Electric Power Systems and Associated Interfaces, May 21, 2020, is available at a cost of $197.00 - $296.00 at the time of adoption of these rules.

(iv) The IEEE 519-2014 IEEE Recommended Practice and Requirements for Harmonic Control in Electric Power Systems, June 11, 2014, is available at a cost of $52.00 - $66.00 at the time of adoption of these rules.

(2) The commission has copies of the standards specified in subrule (1) of this rule available for review at its offices located at 7109 W. Saginaw Hwy., Lansing, Michigan 48917-1120. The mailing address is Michigan Public Service Commission, P.O. Box 30221, Lansing, Michigan 48909-0221.

R 460.904 Informal mediation.

Rule 4. (1) The parties shall attempt to resolve all disputes arising out of the interconnection process, as defined by R 460.901a through R 460.992, according to the provisions of this rule.

(2) Prior to formal mediation under R 460.906, the parties shall attempt to resolve any conflict without commission intervention through direct discussion and informal negotiation.

(3) In the event that parties are unable to resolve the dispute privately, the parties may, by mutual agreement, make a written request for informal mediation to the commission staff. The informal mediation shall be conducted by an interconnection ombudsperson who shall be a member of the commission staff and designated by the commission. Both parties may choose to have attorneys or appropriate representation present.

(4) During informal mediation, the parties shall discuss relevant facts pertaining to the dispute and the relief being sought. The interconnection ombudsperson and relevant commission staff shall be present to facilitate the discussion and provide guidance among the parties. Parties shall operate in good faith and use best efforts to resolve the dispute.

(5) If a resolution is reached by the end of the meeting or meetings, the parties may draft a resolution of the dispute.

(6) If the parties reach impasse and are unable to resolve the dispute, the parties shall proceed to the formal mediation process described in R 460.906.

R 460.906 Formal mediation.

Rule 6. (1) If the parties have been unable to resolve a dispute through the informal mediation process under R 460.904, the parties shall then attempt to resolve the dispute in the following manner:

(a) The complaining party shall file a written notice of dispute with the commission. The notice of dispute must state the specific grounds for the dispute, sufficient facts to support the allegations, the relief requested, and must contain all information, testimony, exhibits, or other documents and information within the party's possession on which the party intends to rely to support the party's position.

(b) The complaining party shall give notice that it is invoking the procedures in this rule. The complaining party shall send the notice to the non-complaining party's email address and file the notice with the commission.

(c) The non-complaining party shall acknowledge the notice of dispute within 10 business days of its receipt and identify a representative with the authority to make decisions on its behalf with respect to the dispute.

(d) An administrative law judge shall serve as the mediator in these proceedings. The administrative law judge may request and receive assistance from commission staff.

(e) Within 60 business days from the date the non-complaining party acknowledges the dispute, the mediator shall issue a recommended settlement.

(f) Within 5 business days after the date the recommended settlement is issued, each party shall file with the commission a written acceptance or rejection of the recommended settlement. If the parties accept the recommendation, then the recommendation shall become an order. If a party rejects or fails to respond within 5 business days to the recommended settlement, then the dispute may proceed to a contested case hearing before the commission as provided in R 792.10415.

(2) Nothing in these rules precludes a disputing party from filing a formal complaint with the commission, either instead of or after pursuing informal mediation or formal mediation pursuant to these rules.

(3) The initiation of any form of dispute resolution by a party tolls any applicable deadlines under these rules until the dispute is resolved.

~~R 460.908 Appointment of experts.~~

~~Rule 8. (1) If a complaint is filed against an electric utility regarding a technical issue, the commission may, at its discretion, appoint 1 to 3 independent experts to investigate the complaint and report findings to the commission.~~

~~(2) The experts shall submit a report to the commission with the results and conclusions of their inquiry and may suggest corrective measures for resolving the complaint. The reports of the experts must be received in evidence and the experts made available for cross-examination by the parties at any hearing.~~

~~(3) The reasonable expenses of experts appointed pursuant to subrule (1) of this rule, including a reasonable hourly fee or fee determined by the commission, must be submitted by these experts to the commission for approval and, if approved, must be funded under subrule (4) of this rule.~~

~~(4) An electric utility or alternative electric supplier shall reimburse the experts appointed by the commission for the reasonable expenses incurred in the course of investigating the complaint.~~

R 460.908 Timelines for electric utilities serving fewer than 1,000,000 in-state customers

Rule 8. An electric utility serving fewer than 1,000,000 in-state customers shall have an additional 10 business days to comply with the timelines in R 460.911 - R 460.1026. This rule does not apply to applicants or interconnection customers.

R 460.910 Waivers.

Rule 10. An electric utility, customer, alternative electric supplier, applicant, or interconnection customer may apply to the commission for a waiver from 1 or more provisions of these rules and may request expeditious processing. The commission may grant a waiver upon a showing of good cause and a finding that the waiver is in the public interest.

PART 2. INTERCONNECTION STANDARDS

R 460.911 Applicability.

Rule 11. These rules apply to all interconnection applications filed on or after the effective date of these rules**. The electric utility shall complete work on any interconnection study agreement executed prior to the effective date of these rules in accordance with the terms and conditions of that interconnection study agreement. Any new studies or other additional work will be completed pursuant to these rules**~~and interconnection applications filed prior to the effective date of these rules that~~

~~do not have an executed construction or interconnection agreement. Interconnection applications with a construction agreement or interconnection agreement executed prior to the effective date of these rules are governed by their construction or interconnection agreement.~~ **An electric utility or an alternative electric supplier shall not restrict access to interconnection for level 1, level 2, and level 3 DERs that are not participants in the legacy net metering or distributed generation programs.**

~~R 460.914 Transition non-study group.~~

~~Rule 14. (1) Interconnection applications that were filed before the effective date of these rules and that do not meet the eligibility criteria for transition batch study must be placed into the transition non-study group.~~

~~(2) An electric utility shall determine whether an interconnection application in the transition non-study group is eligible to go through the simplified track, non-export track, or fast track within 30 business days of the effective date of these rules. Within 30 business days of making the eligibility determination, an electric utility shall commence processing the interconnection application according to the applicable timelines in these rules.~~

~~(3) An electric utility shall process incomplete or non-conforming interconnection applications according to R 460.936(7)(a) and (b).~~

~~R 460.916 Legacy applications.~~

~~Rule 16. (1) For applicants with interconnection applications that have complete distribution system studies and that have entered into a construction or interconnection agreement with an electric utility as of the effective date of these rules, the interconnection must be completed according to existing contractual arrangements.~~

~~(2) For applicants that have distribution system studies which were completed by an electric utility within the 6 months prior to the effective date of these rules, but have not entered into a construction or interconnection agreement with an electric utility as of the effective date of these rules, the interconnection application must proceed to an interconnection agreement under R 460.964.~~

~~(3) For applicants that have distribution system studies that were conducted and completed more than 6 months before the effective date of these rules, the electric utility may require a facilities study within the transition batch upon a showing that a new study is necessary based on changed circumstances affecting the location of interconnection.~~

~~R 460.918 Transition batch study process.~~

~~Rule 18. (1) An electric utility shall begin its transition batch 80 business days after the effective date of these rules.~~

~~(2) Interconnection applications are eligible to join the transition batch if all of the following requirements are met:~~

~~(a) The application does not qualify for simplified track, non-export track, or fast track.~~

~~(b) The application was accepted at any time prior to the start of the transition batch, including prior to the effective date of these rules.~~

~~(c) A distribution study on the interconnection application was not completed at any time prior to the effective date of these rules, or a distribution study was completed more than 6 months before the effective date of these rules and an electric utility decided a facilities study was necessary pursuant to R 460.916(3).~~

~~(3) An applicant with an eligible interconnection application pursuant to subrule (2) of this rule may join the transition batch by signing a transition batch agreement and paying any required fees before the start of the transition batch.~~

~~(4) Pre-application reports may not be required for interconnection applications accepted before the effective date of these rules.~~

~~(5) If an applicant with an interconnection application that is pending as of the effective date of these rules and that is otherwise eligible to join the transition batch has not submitted a complete and conforming application, an electric utility shall process the incomplete or non-conforming interconnection application according to R 460.936(7)(a) and (b). If the interconnection application is not deemed complete and conforming prior to an electric utility beginning its interconnection studies, the electric utility shall determine whether the interconnection application may be included in the transition batch study.~~

~~(6) The interconnection applications in the transition batch must be studied as a group by an electric utility. DERs in the transition batch that are electrically remote may be studied on an expedited schedule, generally in the order the interconnection applications were deemed complete, but this expedited scheduling may not cause unreasonable delays in the evaluation of the other DERs in the transition batch.~~

~~(7) An electric utility shall process the transition batch and provide facilities study results to interconnection applicants within 1 year of the start date. The start date for the transition batch must be specified in an electric utility's draft interconnection procedures and published on an electric utility's public website.~~

~~(8) An electric utility shall offer to hold a scoping meeting, either in-person or via telecommunications, with every applicant in the transition batch. The scoping meetings must meet the following requirements:~~

~~(a) All meetings must, to the extent feasible, take place within the first 30 days of the transition batch.~~

~~(b) An electric utility shall not begin studies within the transition batch until it has held a scoping meeting with every applicant that had agreed to participate in a meeting. An electric utility may begin the batch study if 1 or more applicants is unreasonably delaying a meeting.~~

~~(c) Scoping meetings are limited to 1 hour per application. Multiple applications by the same applicant may be addressed in the same meeting. An electric utility may meet with multiple applicants in the same meeting if agreed to by the electric utility and all the applicants that will attend the meeting.~~

~~(d) During the scoping meeting, an electric utility shall identify and communicate to each applicant the studies it plans to perform and provide the cost of the transition batch study using either fees that comply with R 460.926, or, if interconnection procedures have been approved by the commission, fees that comply with the interconnection~~

~~procedures. The cost estimate must assume that all applicants will stay in the transition batch throughout the batch study.~~

~~(9) The transition batch process must include a system impact study and a facilities study. An electric utility may specify additional studies it may perform on the transition batch in its interconnection procedures.~~

~~(10) Electrically coincident DERs within the transition batch are considered to have equal priority with each other.~~

~~(11) An electric utility shall comply with R 460.960(1) and (2) when conducting a system impact study. However, applicants with interconnection applications that have had an engineering review completed within the 6 months prior to the effective date of these rules may not be required to pay for a new system impact study.~~

~~(12) An electric utility shall comply with R 460.962(1) when conducting a facilities study.~~

~~(13) An electric utility shall provide written study results to each applicant at the completion of each study during the transition batch. An electric utility shall offer to hold at least 1 conference call with each transition batch applicant at the completion of each study. An electric utility may choose to group the consultation regarding multiple projects by 1 applicant and its affiliates into the same conference call. This conference call must provide a summary of outcomes and respond to questions from applicants. Where possible, conferences regarding the study results should be held within 30 business days following completion of the study.~~

~~(14) Within 40 business days following completion of the study, an applicant shall choose either to continue in the transition batch or withdraw. The fee for the next study in the transition batch is due by the end of the 40 business day period, unless extended by the electric utility. Applicants that withdraw from the transition batch may reapply with a new interconnection application.~~

~~(15) Applicants may reduce the capacity of the DER by up to 20% during the decision period between studies, including up to and through the conclusion of the system impact study. If an applicant wants to increase the capacity of the DER by any amount or decrease the capacity of the DER by more than 20%, an electric utility may require the applicant to submit a new interconnection application and pay the appropriate fees.~~

~~(16) Within 45 days of receiving the final transition batch study report, an applicant shall notify the electric utility whether it intends to proceed to an interconnection agreement pursuant to R 460.964 or withdraw. Failure to notify an electric utility within the required time period shall result in the interconnection application being withdrawn.~~

~~(17) Under circumstances where an interconnection application is delayed due to an affected system issue, informal mediation pursuant to R 460.904, formal mediation pursuant to R 460.906, or a complaint, other interconnection applications in the transition batch must continue to progress. If feasible, due to the status of the transition batch study, the delayed interconnection application may rejoin the transition batch study after the affected system issue is resolved. An interconnection application that is the subject of informal mediation pursuant to R 460.904, formal mediation pursuant to R 460.906, or a complaint, may also rejoin the batch study at a later date, if feasible, due to the status of the batch study.~~

~~(18) A transition batch study is considered complete 45 business days after all transition batch applicants, except those applicants whose DERs are still causing unresolved~~

~~affected system issues, pursuing informal mediation pursuant to R 460.904, formal mediation pursuant to R 460.906, or a complaint, have withdrawn, or have received a final transition batch study report.~~

R 460.920 Electric utility interconnection procedures.

Rule 20. (1) An electric utility shall file applications for approval of interconnection procedures and forms within 30 business days of the effective date of these rules.

(2) The commission shall issue its order approving, rejecting, or modifying the proposed interconnection procedures and forms within 360 **calendar** days of the effective date of these rules. If the commission finds the procedures and forms proposed by the electric utility to be inadequate or unacceptable, the commission may either adopt procedures and forms proposed by another ~~party~~ **person** in the proceeding or modify and accept the procedures and forms proposed by the electric utility.

(3) Until the commission accepts, rejects, or modifies an electric utility's interconnection procedures and forms, the electric utility may use the proposed interconnection procedures and forms when processing interconnection applications with the exception of fixed fees and fee caps. An electric utility shall only charge fees that comply with the requirements of R 460.926 until the commission accepts, rejects, or modifies the proposed interconnection procedures and forms **unless the commission approves different fees pursuant to R 460.926(4)**.

(4) Two or more electric utilities may file a joint application proposing interconnection procedures for use by the joint applicants. The proposed interconnection procedures must ensure compliance with these rules.

(5) The proposed interconnection procedures must, at a minimum, include all of the following:

(a) All necessary applications, forms, and relevant template agreements.

(b) A schedule of all applicable fixed fees and fee caps.

(c) Voltage ranges for high voltage distribution and low voltage distribution.

(d) Required initial review screens.

(e) Required supplemental review screens.

(f) The process for conducting system impact studies and facilities studies on DERs when there is an affected system issue.

(g) Testing and certification requirements of DER telecommunications, cybersecurity, data exchange, and remote control operation.

(h) Parallel operation requirements.

(i) A method to estimate the expected annual kWh output of the generator or generators.

(j) Acceptable methods or standards for power-limited export DERs **in compliance with allowances in R 460.980.**

(k) A cost allocation methodology for study track DERs.

(l) An evaluation of an interconnection application for a project that includes single or multiple types of DERs at a site for which the applicant seeks a single point of common coupling.

(m) Details describing how an energy storage device may be integrated into an existing legacy net metering program system without impacting the 10-year grandfathering period **or participation in the distributed generation program**.

(n) For electric utilities that are member-regulated electric cooperatives, a procedure for fairly processing applications in instances in which the number of applications exceed the capacity of the electric cooperative to timely meet the deadlines in these rules.

(o) Examples of modifications that are not material modifications~~., acceptable material modifications, and unacceptable material modifications.~~

(p) The procedure for performing a material modification review **to determine if a modification is material**.

(q) Any required terms and conditions which must be specified in the general liability insurance for level 3, 4, and 5 projects.

(r) A list of the electric utility's holidays.

(s) If an electric utility uses an alternative process pursuant to R 460.956, a description of that process.

(6) An electric utility shall obtain commission approval to revise its interconnection procedures.

R 460.922 Online applications and electronic submission.

Rule 22. (1) An electric utility shall allow pre-application report requests, interconnection applications, and interconnection agreements to be submitted electronically, such as, through the electric utility's website or via email.

(2) An electric utility shall dedicate a page on its website or direct customers to a linked website with information on these rules. The relevant information available to an applicant or interconnection customer via a website must include all of the following:

(a) These rules and interconnection procedures in an electronically searchable format.

(b) The electric utility's applications and all associated forms in a format that allows for electronic entry of data.

(c) Sample documents including, at a minimum, a 1-line diagram with required labels.

(d) Contact information for the electric utility's DER interconnection coordinator, including an email address and a phone number.

(e) Directions for the submission of applications.

R 460.924 Communications.

Rule 24. (1) An electric utility shall designate 1 or more interconnection coordinators. The telephone number and e-mail address of the interconnection coordinator or coordinators must be made available on the electric utility's website. The interconnection coordinator or coordinators must be available to provide reasonable assistance to the applicant or interconnection customer but is not responsible to directly answer or resolve all of the issues that may arise in the interconnection process.

(2) An applicant may designate an application agent. An application agent may serve as the single point of contact for the applicant and may coordinate with the electric utility on the applicant's behalf. Designation of an application agent does not absolve the applicant

from signing interconnection documents or from complying with the requirements in these rules and the interconnection agreement.

(3) An electric utility must be indemnified by the applicant and its application agent with respect to assistance provided by an interconnection coordinator or coordinators.

R 460.926 ~~Initial f~~**F**ees.

Rule 26. (1) After the effective date of these rules, fees for the pre-application report, ~~the simplified track,~~ the non-export track~~,~~ **and** the fast track **shall be established as** ~~and the study track may not exceed the initial fee caps~~ listed in subrule (2) of this rule**. Initial fees for the study track shall not exceed initial fee caps as established in subrule (3) of this rule.** ~~, and~~**Fees** ~~the caps must~~**shall** remain in effect until interconnection procedures are approved by the commission under R 460.920.

(2) The ~~initial~~ fee amounts for **the pre-application report, non-export track, and fast track for** all levels of DERs are as follows:

(a) The pre-application report fee may not exceed $300.

~~(b) The simplified track fee and any applicable legacy net metering program application fee pursuant to R 460.1004(7) or distributed generation program application fee pursuant to R 460.1006(6), together, may not exceed a total of $50.~~

(~~c~~**b**) The non-export track fee may not exceed $100 + $1/kWac for certified DERs and $100 + $2/kWac for non-certified DERs.

(**c**~~d~~) The fast track initial review fee is $100 + $1/kWac for certified DERs and $100 + $2/kWac for non-certified DERs.

(d) Any applicable legacy net metering program application fee pursuant to R 460.1004(7) or distributed generation program application fee pursuant to R 460.1006(6), together, may not exceed a total of $50.

~~(e) The transition batch fee for interconnection application review and the scoping meeting may not exceed $300.~~

(3) The initial fee caps for a fast track supplemental review and the study track for all levels of DERs are as follows:

(**a**~~f~~) The fee for a fast track supplemental review including all review screens may not exceed $~~5,000~~**1,000**.

(**b**~~g~~) The study track fee for interconnection application review and the scoping meeting may not exceed $300.

(**c**~~h~~) The system impact study fee may not exceed $~~30,000~~**10,000**.

(**d**~~i~~) The facilities study fee may not exceed $~~30,000~~**15,000**.

(~~3~~**4**) The **fees listed in subrule (2) and** initial fee~~s~~ caps listed in subrule (~~2~~**3**) of this rule, ~~and any fixed fees subject to the initial fee caps charged by the electric utility,~~ must be displayed prominently on the electric utility's interconnection website.

(~~4~~**5**) An electric utility that expects to incur costs greater than the ~~initial~~ fee**s** ~~caps~~ listed in subrule (2) **or initial fee caps listed in subrule (3)** of this rule in the evaluation of an interconnection application may file a request for a waiver pursuant to R 460.910.

R 460.928 Fee and fee cap modifications.

Rule 28. (1) An electric utility shall include in its proposed interconnection procedures fixed fees to replace the ~~initial~~ fee**s** ~~caps~~ specified in R 460.926(2)(a), (b), **and** (c), ~~(d), (e), and (g),~~ and **add** any other fixed fees the electric utility considers necessary.

(2) An electric utility shall include in its proposed interconnection procedures adjusted fee caps to replace the initial fee caps specified in R 460.926(**3**~~2~~)(~~f~~**a**), (~~h~~**b**), **(c),** and (~~i~~**d**), and **add** any other fee caps the electric utility considers necessary. An electric utility may charge actual costs up to the fee caps.

(3) The fixed fees must be specific to level size and be based on estimates of reasonable costs to perform the applicable service or study. The fee caps must be specific to level size and be based on a reasonable range of costs for performing the applicable study.

(4) The most recently approved fixed fees and fee caps must be listed in the electric utility's interconnection procedures and displayed prominently on the electric utility's interconnection website.

(5) The fixed fees and fee caps that are approved for inclusion in the electric utility's interconnection procedures by the commission may be reviewed at any time by the electric utility and adjusted, if necessary, subject to commission review and approval.

(6) Any modification of fees may not be applicable to fees already paid.

(7) An electric utility that expects to incur costs greater than its prevailing fee caps in the evaluation of an interconnection application may file a request for a waiver pursuant to R 460.910.

R 460.930 Pre-application report request form.

Rule 30. (1) An applicant shall submit a completed pre-application report request form and the required fee for a pre-application report on a proposed level 4 or level 5 DER.

(2) The pre-application report request form must include all of the following information:

(a) Project contact information, including name, address, phone number, and email address.

(b) Project location, as accurately as can be identified, which may be given by any of the following:

(i) Street address with nearby cross streets and town.

(ii) An aerial map with location clearly marked.

(iii) GPS coordinates.

(c) Account number, meter number, structure number, or other equivalent information identifying the proposed point of common coupling, if available.

(d) Whether the DER is any of the following:

(i) Solar.

(ii) Wind.

(iii) Cogeneration.

(iv) Storage.

(v) Solar with storage.

(vi) Other type of DER.

(e) ~~Nameplate~~ **C**~~c~~apacity of the DER types in alternating current kW **and kVA, and kWh for storage**.

(f) Whether the DER configuration is single or 3-phase.

(g) Whether the DER will be a stand-alone generator, meaning no onsite load other than station service.

(h) Whether the DER will be certified.

(**i~~h~~**) Whether new service is requested. If there is existing service, the customer account number and site minimum and maximum current or proposed electric loads in kW, if available, must be included, and how the load is expected to change must be specified.

(**j~~i~~**) Whether the location is new construction.

R 460.932 Pre-application report.

Rule 32. (1) Using the information provided in the pre-application report request form described in R 460.930, an electric utility shall identify the substation bus, bank, or circuit most likely to serve the point of common coupling. This identification by the electric utility does not necessarily indicate that this would be the circuit to which the project ultimately connects.

(2) An applicant may request additional pre-application reports if information about multiple points of common coupling is requested. No more than 10 pre-application report requests may be submitted by an applicant and its affiliates during a 1-week period. An electric utility may reject additional pre-application report requests.

(3) The pre-application report must include all of the following information:

(a) Total capacity, in MW, of substation bus, bank, or circuit based on normal or operating ratings likely to serve the proposed point of common coupling.

(b) Existing aggregate generation capacity, in MW, interconnected to a substation bus, bank, or circuit likely to serve the proposed point of common coupling.

(c) Aggregate capacity, in MW, of generation not yet built but found in previously accepted interconnection applications, for a substation bus, bank, or circuit likely to serve the proposed point of common coupling.

(d) Available capacity, in MW, of substation bus, bank, or circuit likely to serve the proposed point of common coupling.

(e) Substation nominal distribution voltage.

(f) Nominal distribution circuit voltage at the proposed point of common coupling.

(g) Label, name, or identifier of the distribution circuit on which the proposed point of common coupling is located.

(h) Approximate circuit distance between the proposed point of common coupling and the substation.

(i) The actual or estimated peak load and minimum load data at any relevant line section or sections, including daytime minimum load and absolute minimum load, when available. If not readily available, the report must indicate whether the generator is expected to exceed minimum load on the circuit.

(j) Whether the point of common coupling is located behind a line voltage regulator and whether the substation has a load tap changer.

(k) Limiting conductor ratings from the proposed point of common coupling to the distribution substation.

(l) Number of phases available at the primary voltage level at the proposed point of common coupling, and, if a single phase, distance from the 3-phase circuit.

(m) Whether the point of common coupling is located on a spot network, area network, grid network, radial supply, or secondary network.

(n) Based on the proposed point of common coupling, the report must indicate whether power quality issues may be present on the circuit.

(o) Whether or not the area has been identified as having a prior affected system.

(p) Whether or not the site will require a system impact study for high voltage distribution based on size, location, and existing system configuration.

(4) The pre-application report may include only existing and readily available data. A request for a pre-application report does not obligate an electric utility to conduct a study or other analysis of the proposed DER if data is not readily available. The pre-application report must also indicate any information listed in subrule (3) of this rule that is not readily available. An electric utility may, at its discretion, return any portion of the pre-application report fee because some or all information does not exist.

(5) Pre-application report requests must be processed in the order in which an electric utility received the requests.

(6) An electric utility shall provide the data required in the pre-application report to the applicant within 2**0**~~5~~ business days of receipt of the completed request form and payment of the fee. The pre-application report produced by the electric utility is non-binding and does not confer any rights on the applicant.

R 460.934 Site control.

Rule 34. (1) Documentation of site control must be submitted with the application by the applicant.

(2) For level 3, 4, or 5 DERs, site control may be demonstrated by providing documentation that shows any of the following:

(a) Ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing and operating the DER.

(b) An enforceable option to purchase or acquire a leasehold site for this purpose.

(c) A legally binding agreement transferring a present real property right to specified real property along with the right to construct and operate a DER on the specified real property for a period of time not less than 5 years.

(3) For level 1 or 2 DERs, proof of site control may be demonstrated by the site owner's signature **and contact information** on the application.

(4) An applicant may redact commercially sensitive information from site control documents.

R 460.936 Interconnection applications.

Rule 36. (1) An electric utility shall provide an interconnection application for an applicant to complete, including for those applicants whose DERs will be configured to be non-exporting.

(2) All documents required for a complete interconnection application must be listed on the interconnection application. For level 4 and 5 interconnection applications, the list of required documents must include a completed pre-application report.

(3) For interconnection applications with proposed DERs that fall into level 1, an applicant shall provide a 1-line diagram and a site diagram.

(4) For interconnection applications with proposed DERs that fall into levels 2 and 3, an applicant shall provide a 1-line diagram that is either sealed by a professional engineer licensed in this state or signed by an electrical contractor who is licensed in this state with the electrical contractor's license number noted on the diagram. An applicant shall also provide a site diagram.

(5) For interconnection applications with proposed DERs that fall into levels 4 and **5**~~above~~, an applicant shall provide a 1-line diagram that is sealed by a professional engineer who is licensed in this state. An applicant shall also provide a site diagram.

(6) Applications shall be reviewed to assess whether they are complete and conforming in the order in which they were received. An application is considered received when an electric utility receives the application, the application's attachments, and the application fee. The application must be date-stamped for the first business day when the electric utility has received the interconnection application, the application attachments, and payment of the application fee. An electric utility shall notify the applicant of receipt of the application by the end of the third business day following the date of the date stamp.

(7) The electric utility shall notify the applicant that the interconnection application is either complete and conforming, or incomplete, or non-conforming, within 10 business days of the date stamp.

(a) If an interconnection application is determined to be complete and conforming by the electric utility, the applicant must be notified that the interconnection application is accepted. The electric utility shall also indicate whether the interconnection application will be processed using the ~~simplified track,~~ non-export track, fast track, or study track.

(b) If the application is incomplete or non-conforming, the electric utility shall provide to the applicant a written list of all deficiencies with the notification. The applicant shall have 60 business days from the date of electric utility notification to submit the necessary information and may provide up to 2 submissions during this time period. After each submission of information, the electric utility shall have 10 business days to notify the applicant that the interconnection application is either accepted or rejected due to continuing deficiencies. If the applicant does not meet the timelines required by this rule, the utility may withdraw the application.

(8) An electric utility shall comply with part 2 of these rules, R 460.911 to R 460.992, and its interconnection procedures when interconnecting DERs that it owns and operates onto its distribution system, with the exception of temporary DERs.

(9) An electric utility shall use the same process when processing and studying interconnection applications from all applicants, whether the DER is owned or operated by the electric utility, its subsidiaries or affiliates, or others, with the exception of temporary DERs.

(10) An electric utility shall review and update interconnection applications periodically to reflect new information required to properly review DERs, subject to commission review and approval.

R 460.938 Public interconnection list.

Rule 38. (1) An electric utility shall maintain a public**ly available** interconnection list, which is available in a sortable spreadsheet format**.**~~, and~~ **The sortable spreadsheet must be** provide**d** ~~it~~ to the public upon request. An electric utility that has received not less than 100 complete interconnection applications in a year shall publish this list on the electric utility's website. The public interconnection list must be updated monthly unless no changes to the spreadsheet have occurred in that month. The date of the most recent update must be clearly indicated.

(2) The public interconnection list must include all of the following:

(a) An application identifier.

(b) The date that the electric utility received the application.

(c) The date that the electric utility considered the application to be complete and conforming.

(d) Whether the application is on the ~~simplified track,~~ non-export track, fast track, or study track.

(e) The proposed DER nameplate capacity.

(f) The proposed DER interconnection size level.

(g) The DER technology type.

(h) The county and township in which the proposed point of common coupling will be located.

(i) The current status of the application's progress in the interconnection process.

(j) The labels, names, or identifiers of the distribution circuit and substation.

~~R 460.940 Simplified track review.~~

~~Rule 40. (1) Level 1 and 2 applications, including applications that include an energy storage device so the export of power meets the requirements of level 1 or level 2, must be processed using the simplified track.~~

~~(2) Within 10 business days after notifying an applicant that the application had been accepted, an electric utility shall perform a review by using up to all of the initial review screens specified in the electric utility's interconnection procedures and notify the applicant if any interconnection facilities, distribution upgrades, further study, or application modifications are required for safe and reliable interconnection to the electric utility's distribution system or for tariff compliance. If an electric utility chooses to perform a review by using a subset of the initial review screens, the exclusion of 1 or more screens may not be the only basis for the electric utility to require application modification or further study.~~

~~(3) If the utility review notification indicates that no further study or application modifications are required, the applicant shall proceed under R 460.964 to an interconnection agreement.~~

~~(4) If application modification is offered by the electric utility, the applicant shall either withdraw the interconnection application or provide a modified application within 60 business days from the date of electric utility notification, with up to 2 resubmissions during this time period to provide a modified application. After each submission of information, the electric utility shall notify the applicant within 10 business days that the interconnection application is either accepted or rejected due to continuing deficiencies.~~

~~If the applicant does not meet the timelines required by this subrule, the electric utility may withdraw the application. When the applicant provides a modified application, the electric utility shall follow the procedure specified in subrule (2) of this rule.~~

~~(5) If further study is required, the electric utility and the applicant shall decide whether to proceed to a supplemental review under R 460.950 or the study track under R 460.952, or to withdraw the application. The applicant shall have 20 business days to decide on a course of action and to notify the electric utility. In the absence of this notification, the electric utility may withdraw the application.~~

R 460.942 Non-export track review.

Rule 42. (1) Interconnection applications for DERs that will ~~not~~ **limit** inject**ion of** electric energy into an electric utility's distribution system are eligible for evaluation under the non-export track. Non-export eligibility requires an existing electrical service at the applicant's premise.

(2) Subject to review and approval by the commission, an electric utility may limit the eligibility of the non-export track in its interconnection procedures based on the characteristics of its distribution system.

(3) Before submitting an interconnection application, a non-export track applicant may contact the electric utility for assistance in determining whether a non-export track review will be sufficient or the study track is necessary. The electric utility shall provide the applicant assistance based on available information. If the applicant chooses to proceed, an interconnection application shall be submitted pursuant to R 460.936.

(4) Within 20 business days after being notified that the application was accepted, the electric utility shall perform an initial review by using some or all of the initial review screens specified in the electric utility's interconnection procedures and notify the applicant of the results. If an electric utility chooses to perform a review using a subset of the initial review screens, the exclusion of 1 or more screens may not be the only basis for the electric utility to require interconnection facilities, distribution upgrades, further study, or application modifications.

(a) If the notification indicates that no interconnection facilities, distribution upgrades, further study, or application modifications are required, the electric utility shall provide specifications for any equipment the applicant will be required to install within ~~10~~ **20** business days of the applicant being notified. Within 10 business days of receiving the equipment specifications, the applicant shall notify the electric utility whether it will proceed under R 460.964 to an interconnection agreement or will withdraw the application. The applicant's failure to notify the electric utility within the required time period shall result in the interconnection application being withdrawn by the electric utility.

(b) If application modification is offered by the electric utility, the applicant shall either withdraw the interconnection application or provide a modified application within 60 business days from the date of electric utility notification, with up to 2 resubmissions during this time period to provide a modified application. After each submission of information, the electric utility shall notify the applicant within 10 business day that the interconnection application is either accepted or rejected due to continuing deficiencies.

If the applicant does not meet the timelines required by this subrule, the electric utility may withdraw the application. When the applicant provides a modified application, the electric utility shall follow the procedure specified in subrule (4) of this rule.

(5) If further study is required, the electric utility shall present options and the applicant shall decide whether to proceed to a supplemental review under R 460.950, or to the study track under R 460.952, or to withdraw the application. The applicant shall have 20 business days to decide on a course of action and notify the electric utility. In the absence of this notification, the electric utility may withdraw the application within the required time period.

(6) When an applicant changes from a non-exporting system to an exporting system, the applicant shall submit a new interconnection application.

R 460.944 Fast track applicability.

Rule 44. (1) **Level 1, level 2, l**~~l~~evel 3**,** and level 4 **applications and level 5 applications as large as 5 MWac**~~applications~~ in which the DER is not proposing to interconnect with the electric utility's high voltage distribution system are eligible for the fast track. ~~These level 3 and level 4 applications may include a~~**A**pplications that provide for the use of an energy storage device so the export of power meets the requirements of **level 1, level 2,** level 3**,** ~~or~~ level 4 **or level 5 as large as 5 MWac in which the applicant is not proposing to interconnect the DER with the electric utility's high voltage distribution system are also eligible for the fast track**.

(2) An applicant that is eligible for the fast track may forgo the fast track and proceed directly to the study track.

(3) An applicant with an application that is outside the limitations specified in subrule (1) of this rule may petition the electric utility to have its application evaluated under fast track. The electric utility may approve or reject this request at its discretion.

(4) In determining fast track eligibility, an electric utility may aggregate all proposed new generation on a site regardless of the existence of a shared point of common coupling or multiple points of common coupling.

R 460.946 Fast track; initial review.

Rule 46. (1) An electric utility shall list in its interconnection procedures the initial review screens specified in subrule (~~5~~**4**) of this rule. An electric utility may add additional details to each of these screens in the interconnection procedures.

~~(2) An electric utility may include additional initial review screens in its interconnection procedures. In its application requesting approval of interconnection procedures, an electric utility shall provide a detailed technical rationale for including each additional screen. If an additional screen conflicts with or undermines any of the initial review screens specified in subrule (5) of this rule, the rationale must include an explanation of how it does so.~~

(~~3~~**2**) The electric utility may waive application of 1, some, or all of the initial review screens.

(**43**) Within **1**~~2~~0 business days after an electric utility receives a complete and conforming **level 1 or level 2** application and associated payment, **or within 20 business**

days after an electric utility receives a complete and conforming level 3, level 4, or level 5 application and associated payment, the electric utility shall perform an initial review and notify the applicant of the results. The initial review must consist of applying the initial review screens selected by the electric utility pursuant to subrule (~~3~~**2**) of this rule to the proposed DER. The electric utility shall not require a supplemental review or a system impact study if the DER passes the applied initial review screens.

(~~5~~**4**) The initial review screens are all of the following:

(a) The entire proposed DER, including all aggregated site generation and point or points of interconnection, must be located within the electric utility's service territory.

(b) For interconnection of a proposed DER to a radial distribution circuit, the aggregated generation, including the proposed DER, on the circuit may not exceed 15% of the line section annual peak load as most recently measured or calculated if measured data is not available. A line section is that portion of an electric utility's distribution system connected to a customer bounded by automatic sectionalizing devices or the end of the distribution line. The electric utility ~~may~~ **shall** consider 100% of applicable loading, if available, instead of 15% of line section peak load **for level 1 and level 2 DER. In the event daytime loading data is not available, the data must be collected by January 2023 for electric utilities with more than one million customers in this state, or by a date specified in interconnection procedures approved by the commission for electric utilities with fewer than one million customers in this state, and shall not consider as part of the aggregate generation, for purposes of this screen, DER capacity known to be already reflected in the minimum load data. This screen does not apply to level 1 and level 2 non-export DER applications.**

(c) For interconnection of a proposed DER to the load side of network protectors, the proposed DER must utilize an inverter-based equipment package and, together with the aggregated other inverter-based DERs, may not exceed the smaller of 5% of a network's maximum load or 50 kWac.

(d) The proposed DER, in aggregation with other DERs on the distribution circuit, may not contribute more than 10% to the distribution circuit's maximum fault current at the point on the primary voltage nearest the proposed point of common coupling. **This screen does not apply to level 1 applications.**

(e) The proposed DER, in aggregate with other DERs on the distribution circuit, may not cause any distribution protective devices and equipment or interconnection customer equipment on the system to exceed 87.5% of the short circuit interrupting capability. An interconnection may not be proposed for a circuit that already exceeds 87.5% of the short circuit interrupting capability. Distribution protective devices and equipment include, but are not limited to, substation breakers, fuse cutouts, and line reclosers. **This screen does not apply to level 1 applications.**

(f) The initial review screen determines the type of interconnection to a primary distribution line for the proposed DER, according to the requirements specified in the table in this subdivision. This screen includes a review of the type of electrical service provided to the applicant, including line configuration and the transformer connection to limit the potential for creating over-voltages on the electric utility's distribution system due to a loss of ground during the operating time of any anti-islanding function.

Primary Distribution Line Type	Type of Interconnection to Primary Distribution Line	Result
3-phase, 3 wire	3-phase or single phase, phase-to-phase	Pass screen
3-phase, 4 wire	Effectively-grounded 3- phase or single-phase, line-to-neutral	Pass screen

(g) If the proposed DER is to be interconnected on single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed DER **export capacity**, may not exceed 20 kWac or 65% of the transformer nameplate rating.

(h) If the proposed DER is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, its addition may not create an imbalance between the 2 sides of the 240 volt service of more than 20% of the nameplate rating of the service transformer.

(i) If the proposed DER is single-phase and is to be interconnected to a 3-phase service, its nameplate rating may not exceed 10% of the service transformer nameplate rating.

(j) If the proposed DER's point of common coupling is behind a line voltage regulator, the DER's nameplate rating must be less than 250 kWac. This screen does not include substation voltage regulators.

(~~6~~**5**) If the proposed interconnection passes the initial review screens, or if the proposed interconnection fails the screens but the electric utility determines that the DER may be interconnected consistent with safety, reliability, and power quality standards, the electric utility shall notify the applicant. If a facilities study is not required, the interconnection application must proceed under R 460.964 to an interconnection agreement. If a facilities study is required, the interconnection ~~agreement~~**application** must proceed under R 460.962.

(~~7~~**6**) If the proposed interconnection fails any of the initial review screens, and the electric utility does not or cannot determine that the DER may be interconnected consistent with safety, reliability, and power quality standards, the electric utility shall notify the applicant, provide the applicant with the results of the application of the initial review screens, and offer all of the following options:

(a) Attend a customer options meeting, as described in R 460.948.

(b) Proceed to supplemental review under R 460.950.

(c) Submit within 60 business days from the date of the electric utility notification, with up to 2 submissions during this time period, a complete and conforming revised interconnection application that includes application modifications offered or required by the electric utility. The application modifications must mitigate or eliminate the factors that caused the interconnection application to fail 1 or more of the initial review screens. After each submission of information, the electric utility has 10 business days to notify the applicant that the interconnection application is either accepted or rejected due to continuing deficiencies. If the applicant does not meet the timelines required by this subrule, the electric utility may withdraw the application. After the electric utility determines the application is accepted, the revised interconnection application must proceed under subrule (4**3**) of this rule.

(d) Withdraw the interconnection application.

(~~8~~**7**) If the applicant does not select a course of action under subrule (~~7~~**6**) of this rule within 10 business days of notice from the electric utility, the electric utility shall withdraw the interconnection application.

R 460.948 Fast track; customer options meeting.

Rule 48. (1) Upon an applicant's request, the electric utility and the applicant shall schedule a customer options meeting between the electric utility and the applicant to review possible facility modifications, screen analysis, and related results to determine what further steps are needed to permit the DER to be connected safely and reliably to the distribution system. The customer options meeting must take place within 30 business days of the date of notification pursuant to R 460.946(~~7~~**6**).

(2) At the customer options meeting, the electric utility shall offer all of the following options:

(a) Proceed to a supplemental review pursuant to R 460.950.

(b) Continue evaluating the interconnection application under the study track pursuant to R 460.952.

(c) Submit within 60 business days from the date of the customer options meeting, with up to 2 submissions during this time period, a complete and conforming revised interconnection application that includes application modifications offered or required by the electric utility, which mitigates or eliminates the factors that caused the interconnection application to fail 1 or more of the initial review screens. After each submission of information, the electric utility has 10 business days to notify the applicant that the interconnection application is either accepted or rejected due to continuing deficiencies. If the applicant does not meet the timelines required by this subrule, the electric utility may withdraw the application. After the electric utility accepts the revised interconnection application, it must proceed under R 460.946(**43**).

(d) Withdraw the interconnection application.

(3) Following the customer options meeting, the applicant has up to 20 business days to decide on a course of action and notify the electric utility. In the absence of this notification within the required time, the electric utility shall withdraw the application.

(4) The customer options meeting may take place in person or via telecommunications.

R 460.950 Fast track; supplemental review.

Rule 50. (1) An electric utility shall list in its interconnection procedures the supplemental review screens specified in subrule (~~6~~**5**) of this rule. An electric utility may add additional details to each of these screens in the interconnection procedures.

~~(2) An electric utility may include additional supplemental review screens in its interconnection procedures. In its application requesting approval of interconnection procedures, the electric utility shall provide a detailed technical rationale for the inclusion of each supplemental review screen. If an additional screen negates or undermines any of the supplemental review screens specified in subrule (6) of this rule, the rationale must include an explanation of the technical justification for the additional screen.~~

(~~3~~**2**) An electric utility may waive application of 1, some, or all of the supplemental review screens.

(**43**) To receive a supplemental review, an applicant shall submit payment of the supplemental review fee within 20 business days of agreeing to a supplemental review. If payment of the fee has not been received by the electric utility within 25 business days, the electric utility shall withdraw the interconnection application.

(**54**) Within 30 business days after the applicant pays the applicable supplemental review fee or fees, an electric utility shall perform a supplemental review and notify the applicant of the results. The supplemental review must consist of applying the initial review screens selected by the electric utility pursuant to subrule (**32**) of this rule to the proposed DER. The electric utility shall not require a system impact study if the DER passes the applied supplemental review screens.

(**65**) The supplemental review screens must include all of the following:

(a) Minimum load screen. Where 12 months of line section minimum load data, including onsite load but not station service load served by the proposed DER, are available, can be calculated, can be estimated from existing data, or can be determined from a power flow model, the aggregate DER capacity on the line section must be less than 100% of the minimum load for all line sections bounded by automatic sectionalizing devices upstream of the proposed DER. If minimum load data are not available, or cannot be calculated, estimated, or determined, an electric utility shall include the reason or reasons that it is unable to calculate, estimate, or determine minimum load in its supplemental review results notification under subrules (**76**) and (**87**) of this rule. All of the following must be applied by the electric utility:

(i) The type of generation used by the proposed DER will be considered when calculating, estimating, or determining circuit or line section minimum load relevant for the application of the minimum load screen specified in subrule (**65**)(a) of this rule. Solar photovoltaic generation systems with no battery storage must use daytime minimum load. All other generation must use absolute minimum load unless an operating schedule is provided.

(ii) When this screen is being applied to a DER that serves some station service load, only the net injection of electric energy into the electric utility's distribution system may be considered as part of the aggregate generation.

(iii) The electric utility shall not consider as part of the aggregate generation, for purposes of this supplemental screen, DER capacity known to be already reflected in the minimum load data.

(b) Voltage and power quality screen. In aggregate with existing generation on the line section, all of the following conditions must be met:

(i) The voltage regulation on the line section can be maintained in compliance with relevant requirements under all system conditions.

(ii) The voltage fluctuation is within acceptable limits as defined by the IEEE Standard 1453-2015, IEEE Recommended Practice for the Analysis of Fluctuating Installations on Power Systems.

(c) Safety and reliability screen. The location of the proposed DER and the aggregate generation capacity on the line section may not create impacts to safety or reliability that require application of the study track to address. An electric utility shall consider all of the following when determining potential impacts to safety and reliability in applying this screen:

(i) Whether the line section has significant minimum loading levels dominated by a small number of customers, such as several large commercial customers.

(ii) Whether the loading along the line section is uniform.

(iii) Whether the proposed DER is located less than 0.5 electrical circuit miles for less than 5 kV or less than 2.5 electrical circuit miles for greater than 5 kV from the substation. In addition, whether the line section from the substation to the point of common coupling is a mainline rated for normal and emergency ampacity.

(iv) Whether the proposed DER incorporates a time delay function to prevent reconnection of the DER to the distribution system until distribution system voltage and frequency are within normal limits for a prescribed time.

(v) Whether operational flexibility is reduced by the proposed DER, such that transfer of the line section or sections of the DER to a neighboring distribution circuit or substation may trigger overloads, power quality issues, or voltage issues.

(vi) Whether the proposed DER employs equipment or systems certified by a recognized standards organization to address technical issues including, but not limited to, islanding, reverse power flow, or voltage quality.

(~~7~~**6**) If the proposed interconnection passes the supplemental review, or if the proposed interconnection fails the review but the electric utility determines that the DER may be interconnected consistent with safety, reliability, and power quality standards, the electric utility shall notify the applicant and the interconnection application must proceed pursuant to both of the following:

(a) If the proposed interconnection requires a facilities study, the interconnection application must proceed under R 460.962.

(b) If the proposed interconnection does not require further study, the interconnection application must proceed under R 460.964 to an interconnection agreement.

(~~8~~**7**) If the proposed interconnection fails any of the supplemental review screens or the electrical utility is unable to perform a supplemental review screen, and the electric utility does not or cannot determine that the DER may be interconnected consistent with safety, reliability, and power quality standards, the electric utility shall notify the applicant, provide the applicant with the results of the application of the supplemental review screens, and offer both of the following options:

(a) Stop the supplemental review and continue evaluating the proposed interconnection under the study track under R 460.952.

(b) Withdraw the interconnection application.

(~~9~~**8**) For subrules (~~7~~**6**) and (~~8~~**7**) of this rule, if an applicant does not select a course of action within 10 business days of notice from the electric utility, the electric utility shall withdraw the interconnection application.

R 460.952 Study track.

Rule 52. (1) An electric utility shall use the study track to evaluate an interconnection application that has been accepted under R 460.936 if 1 or more of the following conditions is met:

(a) The DER is not eligible for the ~~simplified track, the~~ non-export track~~,~~ or fast track.

(b) The DER did not pass the initial review screens as part of the fast track and the applicant selected the study track option in the customer options meeting.

(c) The DER did not pass 1 or more supplemental review screens.

(d) The DER was evaluated under ~~the simplified track or~~ the non-export track and further study is required.

(e) The DER is eligible for the fast track, but the applicant elected the study track.

(2) If the interconnection application must be evaluated under the study track because it meets the criteria of subrule (1)(a) of this rule, within 10 business days after the electric utility notifies the applicant that the interconnection application has been accepted pursuant to R 460.936, the electric utility shall provide **to the applicant** an individual study agreement or ~~a batch study~~**an** agreement ~~to the applicant~~**for an alternative process pursuant to R 460.956.**~~, whichever is applicable under subrule (4) of this rule.~~

(3) If the interconnection application must be evaluated under the study track because it meets the criteria of subrule (1)(b), (c), **or** (d), ~~or (e)~~ of this rule, within 10 business days after the applicant has notified the electric utility to proceed to the study track, the electric utility shall provide **to the applicant** an individual study agreement or a**n agreement for an alternative process.** ~~batch study agreement to the applicant, whichever is applicable under subrule (4) of this rule.~~

~~(4) An electric utility shall study all interconnection applications that qualify for study track either individually or in a batch study process. An electric utility shall not study 1 or more applications individually and at the same time study 1 or more different applications as part of a batch.~~

(~~4~~**5**) An electric utility's interconnection procedures may include a provision for determining appropriate milestone payments to include with the system impact study fee and facilities study fee.

R 460.954 Individual study.

Rule 54. (1) An electric utility that is evaluating DERs in the study track individually shall process the interconnection applications in the order in which the applications were placed into the study track, taking into account withdrawn interconnection applications and electrically remote DERs. ~~An electrically remote DER in an individual study may be studied on an expedited schedule relative to electrically coincident DERs. Electrically remote DERs must be studied in the order the interconnection applications were considered complete.~~

(a) An electrically remote DER in an individual study may be studied on an expedited schedule relative to electrically coincident DERs. Electrically remote DERs must be studied in the order the interconnection applications were considered complete.

(2) When an interconnection application is delayed due to an affected system issue, informal mediation pursuant to R 460.904, formal mediation pursuant to R 460.906, or a complaint pursuant to R 792.10439 to R 792.10446, other interconnection applications that were placed into the study track on a later date may progress in the order in which the interconnection applications were placed into the study track.

(3) An individual study process must consist of a system impact study pursuant to R 460.960 and a facilities study pursuant to R 460.962. An electric utility may waive 1 or both studies for a particular interconnection application. An electric utility may specify additional studies it may perform on an interconnection application in its interconnection

procedures, provided the electric utility is able to meet all applicable timelines associated with an individual study process.

(4) Interconnection applications that meet all of the following requirements must be admitted into an individual study:

~~(a) An electric utility has elected to study all interconnection applications that qualify for study track individually.~~

(~~b~~**a**) An electric utility determined the application to be complete and conforming.

(~~c~~**b**) An application qualifies for study track pursuant to R 460.952.

(~~d~~**c**) An interconnection application has a pre-application report, when required by R 460.936(2).

(~~e~~**d**) An applicant has paid all required fees.

(~~f~~**e**) An applicant has signed and returned an individual study agreement.

~~(5) If an electric utility anticipated that it would use a batch study process but received only 1 interconnection application that qualified for the study track, the electric utility shall consider the first day of what would have been the batch study process to be the day the application was determined to be complete and conforming and shall use the individual study process to evaluate the application with all applicable timelines.~~

R 460.956 Alternative process

Rule 56. An electric utility may use a process to study interconnection applications that is different from the process described by R 460.954 and R 460.958 – R 460.962. If an electric utility elects to use an alternative process, this process shall be described in the electric utility's interconnection procedures.

~~R 460.956 Batch study process.~~

~~Rule 56. (1) This rule applies only to those electric utilities that have elected to study DERs that qualify for study track in a batch process.~~

~~(2) A batch consists of 2 or more interconnection applications that will be studied as a group by the electric utility. One or more DERs in the batch that are electrically remote may be studied on an expedited schedule, but expedited scheduling of 1 or more DERs may not cause unreasonable delays in the evaluation of the other DERs in the same batch.~~

~~(3) An electric utility shall process at least 1 batch per year. The start and end dates for each batch study must be published on the electric utility's public website not less than 60 days prior to the start of the batch.~~

~~(4) Interconnection applications that meet all of the following requirements must be admitted into a batch study:~~

~~(a) The electric utility elected to study all interconnection applications that qualify for study track in a batch study process.~~

~~(b) The electric utility considered the application complete and conforming within a 1-year period immediately before the batch study commences.~~

~~(c) The accepted application qualifies for study track pursuant to R 460.952.~~

~~(d) The interconnection application has a pre-application report when required by R 460.930(2).~~

~~(e) The applicant has paid all required fees including any milestone payments as described in the electric utility's interconnection procedures.~~

~~(f) The applicant has signed a batch study agreement.~~

~~(5) An electric utility shall offer to hold a scoping meeting, either in-person or via telecommunications, with every applicant in a batch. The scoping meetings and the electric utility must meet all of the following requirements:~~

~~(a) All meetings must, to the extent feasible, take place within 30 days of the batch start date.~~

~~(b) An electric utility shall not begin studies within a batch until it has held a scoping meeting with every applicant who agreed to participate in a meeting. An electric utility may begin the batch study if an applicant is unreasonably delaying a meeting.~~

~~(c) Scoping meetings are limited to 1 hour per application. Multiple applications by the same applicant may be addressed in the same meeting. An electric utility may meet with multiple applicants in the same meeting if agreed to by the electric utility and all the applicants that will attend the meeting.~~

~~(d) During the scoping meeting, the electric utility shall identify and communicate to each applicant the studies it plans to perform and estimate the cost of the batch study, using either the fees that comply with R 460.926, or, if interconnection procedures have been approved by the commission, fees that comply with the interconnection procedures. The cost estimate must assume that all applicants will stay in the batch throughout the batch study.~~

~~(6) The batch process must consist of a system impact study pursuant to R 460.960 and a facilities study pursuant to R 460.962. The electric utility may specify additional studies it may perform on a batch study in its interconnection procedures.~~

~~(7) Interconnection applications within a batch must be considered to have equal priority with each other.~~

~~(8) An electric utility shall follow R 460.960(1) and (2) when conducting a system impact study.~~

~~(9) An electric utility shall follow R 460.962(1) when conducting a facilities study.~~

~~(10) An electric utility shall provide written study results to each applicant at the completion of each study during the batch study. An electric utility shall offer to hold a conference call with each batch applicant at the completion of each study phase, with the electric utility making reasonable efforts to accommodate applicants' availability when scheduling the call. An electric utility may choose to group the consultation of multiple projects by the applicant and its affiliates into the same conference call. The conference call must provide a summary of outcomes and answer questions from applicant. All conferences regarding the study results should be held within 30 business days following completion of each study phase.~~

~~(11) Within 45 business days following the completion of each study phase, the applicant shall choose to either continue to the next study phase of the batch study or withdraw. The fee for the next study phase in the batch study is due by the end of the 45 business days, unless extended by the electric utility. An applicant that withdraws from the study may reapply with a new interconnection application.~~

~~(12) Applicants may reduce the capacity of the DER by up to 20% during the decision period between study phases until the conclusion of the system impact study. If the applicant wants to increase the capacity of the DER, the electric utility may require the applicant to submit a new interconnection application and pay the appropriate fees.~~

~~(13) Within 45 business days of the applicant receiving the final batch study report from the electric utility, the applicant shall notify the electric utility of its plan to proceed to R 460.964 for an interconnection agreement or withdraw its interconnection application. If the applicant fails to notify the electric utility within 45 business days, the electric utility may withdraw the interconnection application.~~

~~(14) If an interconnection application is delayed due to an affected system issue, informal mediation pursuant to R 460.904, formal mediation pursuant to R 460.906, or a complaint pursuant to R 792.10439 to R 792.10446, the other interconnection applications in the batch must continue to progress through the batch study process. If feasible, considering the status of the batch study, the delayed interconnection application may rejoin the batch study after the affected system issue is resolved. An interconnection application that is the subject of informal mediation pursuant to R 460.904, formal mediation pursuant to R 460.906, or a complaint pursuant to R 792.10439 to R 792.10446, may rejoin the batch study at a later date, if feasible, considering the status of the batch study.~~

~~(15) A batch study is considered complete 45 business days after all batch applicants, except those applicants whose DERs are either causing unresolved affected system issues, pursuing informal mediation pursuant to R 460.904, pursuing formal mediation under R 460.906, or pursuing a complaint under R 792.10439 to R 792.10446, have withdrawn, voluntarily or otherwise, or have received the final study results from the electric utility.~~

R 460.958 Scoping meeting for interconnection applications that are to be studied individually.

Rule 58. (1) This rule applies only **to interconnection applications proceeding pursuant an individual study agreement.** ~~to those electric utilities that have elected to individually study DERs that qualify for study track.~~

(2) Upon request of the applicant, the electric utility and the applicant shall schedule a scoping meeting between the electric utility and the applicant to discuss the interconnection application and review existing fast track results, if any. The scoping meeting must take place within 20 business days after the interconnection application is considered complete by the electric utility or, if applicable, the fast track has been completed and the applicant has elected to continue with the system impact study or facilities study.

(3) Scoping meetings are limited to 1 hour per application. Multiple applications by the same applicant may be addressed in the same meeting.

(4) The scoping meeting may occur in-person or via telecommunications.

(5) During the scoping meeting, the electric utility shall identify and communicate to the applicant whether the applicant must proceed to a system impact study, a facilities study, or an interconnection agreement and the basis for that decision, and 1 of the following must occur:

(a) If a system impact study must be performed, the interconnection application proceeds to R 460.960.

(b) If a facilities study must be performed, the interconnection application proceeds to R 460.962.

(c) **If a system impact study is not required and a facilities study is not required, t**~~T~~he interconnection application must proceed to R 460.964 for an interconnection agreement.

R 460.960 System impact study agreement, scope, procedure, and review meeting.

Rule 60. (1) For all DERs being studied individually ~~or as part of a batch~~, all of the following apply:

(a) An electric utility shall provide the applicant a system impact study agreement within 5 business days of proceeding to this rule.

(b) A system impact study agreement must include all of the following:

(i) An outline of the scope of the study.

(ii) The applicable fee **including appropriate credit for any studies previously completed pursuant to the fast track or non-export track**.

(iii) If necessary, a list of any additional and reasonable technical data needed from the applicant to perform the system impact study.

(iv) A timeline for completion of the system impact study.

(v) A list of the information that must be provided to the applicant in the system impact study report.

(c) An applicant who has requested a system impact study shall return the completed system impact study agreement, provide any additional technical data requested by the electric utility, and pay the required fee within 20 business days. An electric utility may consider the application withdrawn if the system impact study agreement, payment, and required technical data are not returned within 20 business days.

(d) A system impact study must identify and describe the electric system impacts that would result if the proposed DER was interconnected without electric system modifications. A system impact study must provide a non-binding good faith list of facilities that are required as a result of the application and non-binding estimates of costs and time to construct these facilities.

(e) An electric utility shall explain in its interconnection procedures the process for conducting system impact studies on DERs when there is an affected system issue.

~~(2) For DERs being studied as part of a batch, an electric utility may request reasonable additional data from the applicant during the system impact study. The electric utility and the applicant shall work together to resolve the additional data request so that the electric utility will be able to complete the batch study within the 1-year timeframe specified in R 460.956. An electric utility may not be found in violation of these rules when 1 or more applicants impede the batch study process through applicant delays, demands, complaints, litigation, objections, or other similar actions.~~

~~(3) For DERs being studied individually, all of the following shall apply:~~

(**fa**) ~~The electric utility shall complete the system impact study and the system impact study report.~~ **The electric utility shall complete the system impact study and transmit a system impact study report to the applicant within 60 business days of the receipt of the signed system impact study agreement study, payment of the system impact study fee, and any necessary technical data.** If necessary, the electric utility shall transmit a facilities study agreement to the applicant within 60 business days of receipt of the signed

system impact study agreement, payment of all applicable fees, and any necessary technical data.

(~~b~~**g**) An electric utility may request reasonable additional data from the applicant within 20 business days of beginning the system impact study. The electric utility and the applicant shall work together to resolve the additional data request so that the electric utility will be able to complete the system impact study within 60 business days as specified in subrule (**1**~~3~~)(**f**~~a~~) of this rule.

(~~c~~**h**) Within 15 business days of receiving the system impact study report, the applicant shall notify the electric utility that it plans to pursue a system impact study review meeting, proceed to a facilities study pursuant to R 460.962, or withdraw the application. If the applicant fails to notify the electric utility within 15 business days, the electric utility may consider the application to be withdrawn.

(~~d~~**i**) Upon request by the applicant pursuant to subrule (**1**~~3~~)(**h**~~c~~) of this rule, the electric utility and the applicant shall schedule a system impact study review meeting between the electric utility and the applicant to review system impact study results and determine what further steps are needed to permit the DER to be connected safely and reliably to the distribution system. The system impact study review meeting must take place within 25 business days of the electric utility receiving notification that the applicant plans to attend a system impact study review meeting.

~~(e)~~ **(j)** At the system impact study review meeting, the electric utility shall offer the applicant ~~all of the following options~~**the option to withdraw the interconnection application, and one of the following options**:

(i) Proceed to a facilities study pursuant to R 460.962.

(ii) Proceed directly to R 460.964 for an interconnection agreement.

~~(iii) Withdraw the interconnection application.~~

(**k**~~f~~) Following the meeting, the applicant has not more than 45 business days to decide on a course of action. If an applicant fails to notify the electric utility within 45 business days, the electric utility may consider the application to be withdrawn.

(~~g~~**l**) The system impact study review meeting may occur in-person or via telecommunications.

R 460.962 Facilities study agreement, scope, procedure; review meeting.

Rule 62. (1) For DERs being studied individually ~~or as part of a batch~~, all of the following apply:

(a) If construction of facilities is required to provide interconnection and interoperability of the DER with the electric utility's distribution system, the electric utility shall provide the applicant a facilities study agreement and the results of the applicant's system impact study pursuant to R 460.960, if applicable. If no system impact study was performed, the electric utility shall provide a facilities study agreement within 10 business days of proceeding to this rule.

(b) The facilities study agreement must include the following:

(i) An outline of the scope of the study.

(ii) The applicable fee **including appropriate credit for any studies previously completed pursuant to the fast track or non-export track**.

(iii) A timeline for completion of the facilities study.

(iv) A list of the information that will be provided to the applicant in the facilities study report.

(c) The applicant shall return the signed facilities study agreement and pay the required facilities study fee within 20 business days. The electric utility may withdraw the application if the facilities study agreement and payment are not returned within 20 business days.

(d) A facilities study must specify and estimate the cost of the required equipment, engineering, procurement, and construction work, including overheads, needed to interconnect the DER, and an estimated timeline for the completion of construction. The electric utility shall provide cost estimates that are detailed and itemized.

(e) The electric utility shall explain in its interconnection procedures the process for conducting facilities studies on DERs while there is an affected system issue.

~~(2) For DERs being studied individually, all of the following are required:~~

(**f**~~a~~) The electric utility shall complete the facilities study and transmit a facilities study report to the applicant within 80 business days of the receipt of the signed facilities study agreement and payment of the facilities study fee.

(**g**~~b~~) Within 10 business days of receiving a facilities study report from the electric utility, the applicant shall select 1 option from the following options:

(i) Request a facilities study review meeting with the electric utility.

(ii) Proceed to an interconnection agreement pursuant to R 460.964.

(iii) Withdraw the interconnection application.

If the applicant fails to inform the electric utility within 10 business days of its chosen course of action, the electric utility may consider the application withdrawn.

(**h**~~c~~) Upon request by the applicant pursuant to subrule (**1**~~2~~)(**g**~~b~~)(i) of this rule, the electric utility and the applicant shall schedule a facilities study review to review the facilities study results and determine what further steps are needed to permit the DER to be connected safely and reliably to the distribution system. The facilities study review meeting must take place within 25 business days of the electric utility receiving notification that the applicant will attend a facilities study review meeting.

(**i**~~d~~) At the facilities study review meeting, the electric utility shall offer both of the following options:

(i) Proceed to an interconnection agreement pursuant to R 460.964.

(ii) Withdraw the interconnection application.

(**j**~~e~~) Following the meeting, the applicant has no more than 20 business days to decide on a course of action and notify the electric utility of this course of action. If the applicant fails to notify the electric utility within 20 business days, the electric utility may withdraw the application.

(**k**~~f~~) The facilities study review meeting may be conducted in-person or via telecommunications.

R 460.964 Interconnection agreement.

Rule 64. (1) For level 1, 2, or 3 interconnection applications, where no construction of interconnection facilities or distribution upgrades is required, an electric utility shall provide its standard level 1, 2, and 3 interconnection agreement**, which may include**

modifications to address any special operating conditions, to an applicant within 3 business days of reaching this stage.

(2) For level 1, 2, or 3 interconnection applications, where construction of interconnection facilities or distribution upgrades is required, an electric utility shall provide its standard level 1, 2, and 3 interconnection agreement with modifications to address **any special operating conditions,** required construction activities, construction milestone timing, and cost to an applicant within 5 business days of reaching this stage. The applicant and electric utility shall mutually agree on the timing of construction milestones.

(3) For an applicant with level 1, 2, or 3 interconnection applications, the applicant shall sign and return the standard level 1, 2, and 3 interconnection agreement with payment, if applicable, within 20 business days of receiving the agreement.

(a) If the applicant did not sign and return the standard level 1, 2, and 3 interconnection agreement and payment, if applicable, within 20 business days, the electric utility shall notify the applicant of the missed deadline and grant an extension of 15 business days. If the electric utility did not receive the signed standard level 1, 2, and 3 interconnection agreement and any applicable payment during the 15-business-day extension, the electric utility may consider the interconnection application withdrawn subject to subrule 3(b) of this rule.

(b) If the applicant begins either the informal mediation pursuant to R 460.904, the formal mediation pursuant to R 460.906, or the complaint process pursuant to R 792.10439 to R 792.10446 within the 20 business days, the outcome of that process must establish a time frame for the applicant to return the signed interconnection agreement and any applicable payment.

(4) For level 1, 2, or 3 projects, the electric utility shall countersign and provide a completed copy of the standard level 1, 2, and 3 interconnection agreement within 10 business days of the applicant returning the signed standard level 1, 2, and 3 interconnection agreement **and the interconnection application shall proceed to R 460.966**.

(5) For level 4 or 5 projects, the electric utility shall provide its level 4 and 5 interconnection agreement**, which may include modifications to address any special operating conditions,** within 10 business days of reaching this stage. When construction of interconnection facilities or distribution upgrades is necessary, the level 4 and 5 interconnection agreement must contain either timelines for completion of activities and estimates of construction costs or a timetable when these requirements can be determined. The interconnection agreement must include a payment schedule that corresponds to the milestones established and must require the electric utility to refund any unspent and unobligated funds if the agreement is terminated.

(6) For an applicant with level 4 or 5 DERs, the applicant shall sign and return with payment, if applicable, a level 4 and 5 interconnection agreement within 30 business days.

(a) If the applicant does not sign and return the level 4 and 5 interconnection agreement with payment within 30 business days, an electric utility shall notify the applicant of the missed deadline and grant an extension of 15 business days. If the electric utility does not receive the signed level 4 and 5 interconnection agreement and payment, if applicable,

during the 15-business-day extension, the electric utility may consider the interconnection application withdrawn, subject to subrule (6)(b) of this rule.

(b) If the applicant begins either the informal mediation pursuant to R 460.904, formal mediation pursuant to R 460.906, or the complaint process pursuant to R 792.10439 to R 792.10446 within 30 business days, the outcome of that process must establish a time frame for the applicant to return the signed interconnection agreement and applicable payment. There is a rebuttable presumption in the complaint proceeding that the electric utility's standard construction, procurement, installation, design, and cost practices are lawful, reasonable, and prudent.

~~(i) For study track interconnection applications filed with an electric utility conducting batch studies, if either informal mediation pursuant to R 460.904, formal mediation pursuant to R 460.906, or the complaint process pursuant to R 792.10439 to R 792.10446 does not result in the applicant returning a signed interconnection agreement with any applicable payment prior to the electric utility beginning the study phase of the next batch study pursuant to R 460.956, the electric utility may not include the interconnection application in the system baseline for conducting the next batch study. If the interconnection application is electrically coincident with other interconnection applications in the next batch study, the electric utility may require the withdrawal of the interconnection application.~~

(~~i~~**ii**) For study track interconnection applications filed with an electric utility conducting individual studies, electrically coincident applications filed after the interconnection application must be placed on hold for not more than 60 business days. If either informal mediation pursuant to R 460.904, formal mediation pursuant to R 460.906, or the complaint process pursuant to R 792.10439 to R 792.10446 does not result in the applicant returning a signed interconnection agreement with any applicable payment within 60 business days and there are electrically coincident interconnection applications in progress behind this application, the electric utility may require the withdrawal of the interconnection application.

(7) For level 4 or 5 projects, an electric utility shall countersign and provide a completed copy of the level 4 and 5 interconnection agreement within 10 business days of the applicant returning a mutually agreed-upon and signed level 4 and 5 interconnection agreement **and the interconnection application shall proceed to R 460.966**.

(8) An applicant shall pay the actual cost of the interconnection facilities and distribution upgrades. The cost to the applicant for interconnection facilities and distribution upgrades may not exceed 110% of the estimate without an itemized summary and explanation of cost increases being provided to the applicant~~. prior to being incurred.~~ **If the costs are expected to exceed 125% of the estimate, the electric utility shall provide further explanation to the applicant prior to the costs being incurred. If the applicant does not consent in writing to pay the additional costs within 20 business days of receiving further explanation from the electric utility, the electric utility shall initiate informal mediation pursuant to R 460.904 no later than 5 business days after the conclusion of the 20 business day applicant consent period. The applicant may dispute the expected costs pursuant to either informal mediation pursuant to R 460.904, formal mediation pursuant to R 460.906, or the complaint process pursuant to R 792.10439 to R 792.10446. If there is a dispute, the applicant shall make payment within 30 business days of final resolution of the dispute.**

~~The cost may not exceed 125% of the estimate without the consent of the applicant prior to the costs being incurred.~~

(9) A party's obligations under the interconnection agreement may be extended by agreement. If a party anticipates that it will be unable to meet a milestone for any reason other than an unforeseen event, the party shall do all of the following:

(a) Immediately notify the other party of the reason or reasons for not meeting the milestone.

(b) Propose the earliest alternate date when it can attain this and future milestones.

(c) Request amendments to the interconnection agreement, if needed to address the changed milestones.

(10) The party affected by the failure to meet a milestone shall not withhold agreement to any amendments proposed in subrule (9)(c) of this rule unless 1 of the following applies:

(a) The party affected will suffer significant uncompensated economic or operational harm from the amendment or amendments.

(b) The milestone under question has been previously delayed.

(c) The affected party has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the party proposing the amendment.

(11) If the party affected by the failure to meet a milestone disputes the proposed extension, the affected party may pursue either informal mediation pursuant to R 460.904, formal mediation pursuant to R 460.906, or the complaint process pursuant to R 792.10439 to R 792.10446.

(12) The electric utility shall provide the applicant with a final accounting report of any difference between costs charged to the applicant and previous payments to the electric utility for interconnection facilities or distribution upgrades.

(a) If the costs charged to the applicant exceed its previous aggregate payments, the electric utility shall bill the applicant for the amount due and the applicant shall make a payment to the electric utility within 20 business days of the final accounting report. The applicant may dispute the invoice pursuant to either informal mediation pursuant to R 460.904, formal mediation pursuant to R 460.906, or the complaint process pursuant to R 792.10439 to R 792.10446. If there is a dispute, the applicant shall make payment within 30 business days of final resolution of the dispute. Failure by the applicant to pay its costs is cause for disconnection of the applicant's DER.

(b) If the applicant's previous aggregate payments exceed its costs under the ~~construction~~**interconnection** agreement, the electric utility shall refund to the applicant an amount equal to the difference within 20 business days of the final accounting report.

(13) The electric utility is responsible for specifying requirements in interconnection agreements to support independent system operator regulations or regional transmission operator regulations.

(14) The electric utility may propose to the commission that a signed interconnection agreement be modified to require compliance with changes to an independent system operator, a regional transmission operator, or the state's regulations, provided that these modifications do not alter the rights or obligations of the interconnection customer. **Unless the electric utility has the consent of the applicant or interconnection customer in**

writing, an electric utility shall not modify a signed interconnection agreement without commission approval.

R 460.966 Inspection, testing, and commissioning.

Rule 66. (1) If the interconnection application requires telecommunications, cybersecurity, data exchange or remote controls operation, successful testing and certification of these items must be completed prior to or during testing. The electric utility's interconnection procedures must describe the technical requirements of ~~these items~~**common items, but site-specific requirements may be included in the interconnection agreement**.

(2) An applicant shall notify the electric utility when installation of a DER and any required local code inspection and approval is complete. The applicant shall provide any test reports or configuration documents as defined in the standard level 1, 2, and 3 interconnection agreement or level 4 and 5 interconnection agreement.

(3) The electric utility shall review the applicant's inspection, test reports, or configuration documents, and communicate its intent to perform a witness or commissioning test, or waive its right to perform a witness test and commissioning test within 10 business days. **If the electric utility finds the applicant's inspection, test reports, or configuration documents to be incomplete, insufficient, or unsatisfactory, the electric utility shall provide its reasons for doing so in writing and the applicant shall have at least 20 business days to implement corrections to those documents. The applicant, after taking corrective action, shall request the electric utility to reconsider its inspection, test reports, or configuration documents.**

(4) If the electric utility intends to witness or perform commissioning tests required to comply with the interconnection agreement or the interconnection procedures and inspect the DER, the electric utility shall witness or perform the commissioning tests and inspect the DER within ~~either of~~ the following:

(a) Ten business days of receiving the notification from the applicant pursuant to subrule (2) of this rule~~,~~ for level 1 **applications.**~~, 2, and 3 applications.~~

(b) Twenty business days of receiving the notification from the applicant pursuant to subrule (2) of this rule for level 2 and level 3 applications.

(**c**~~b~~) A mutually-agreed upon timeframe after receiving the notification from the applicant pursuant to subrule (2) of this rule for level 4 and 5 applications.

(5) The electric utility may waive its right to visit the site and inspect the DER or perform the commissioning tests.

(a) If the electric utility waives this right, it shall provide a written waiver to the applicant within 10 business days from receiving the notification from the applicant pursuant to subrule (2) of this rule.

(b) The applicant shall provide the electric utility with the completed commissioning test report within 20 business days of receipt of the electric utility's written waiver.

(6) If the electric utility attempts to conduct the inspection and testing pursuant to subrule (4) of this rule at the arranged time and is unable to access the DER or complete the testing, the DER must remain disconnected until the applicant and the electric utility can complete the inspection and testing.

(7) If the electric utility witnessed or performed commissioning tests and inspected the DER pursuant to subrule (4) of this rule, within 5 business days of the receipt of the completed commissioning test report, the electric utility shall notify the applicant whether it has accepted or rejected the commissioning test report and found the site to be satisfactory or unsatisfactory.

(a) If the commissioning test report is accepted and the site was found satisfactory, the electric utility shall provide the notification of acceptance in writing, and the interconnection application proceeds to R 460.968.

(b) If the electric utility rejects the commissioning test report or did not find the site satisfactory, the electric utility shall provide its reasons for doing so in writing and the applicant has not less than 20 business days to implement corrections. The applicant, after taking corrective action, shall request the electric utility to reconsider its findings. The applicant may be billed the actual cost of any re-inspections.

(8) If the electric utility waived its right to witness or perform commissioning tests and inspect the DER pursuant to subrule (5) of this rule, within 5 business days of the receipt of the completed commissioning test report, the electric utility shall notify the applicant whether it has accepted or rejected the commissioning test report.

(a) If the commissioning test report is accepted, the electric utility shall provide notification of acceptance, and the interconnection application proceeds to R 460.968.

(b) If the electric utility rejects the commissioning test report, the electric utility shall provide its reasons for doing so in writing and the applicant has not less than 20 business days to implement corrections. The applicant, after taking corrective action, may then request the electric utility to reconsider its findings.

(9) The cost of testing and inspection for applicants participating in an electric utility's distributed generation program, as described in part 3 of these rules, R 460.1001 to R 460.1026, are considered a cost of operating a distributed generation program and must be recovered pursuant to section 175(1) of the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1175.

(10) If the applicant does not notify the electric utility that the DER is installed and ready to test pursuant to subrule (2) of this rule, the electric utility may, in writing, query the status of the interconnection. If the applicant does not provide a written response within 10 business days or no progress is evident, the electric utility may consider the interconnection application withdrawn.

R 460.968 Authorization required prior to parallel operation.

Rule 68. (1) The electric utility shall provide to the applicant written authorization to operate in parallel with the electric utility within 5 business days of all of the following conditions being met:

(a) The electric utility notified the interconnection applicant that the commissioning test and inspection, where applicable, are accepted.

(b) The applicant complied with all applicable parallel operation requirements as set forth in the electric utility's interconnection procedures and applicable interconnection agreement.

(c) The applicant complied with all applicable local, state, and federal requirements.

(d) The electric utility received full payments for all outstanding bills.

(2) With the written authorization, interconnection of the DER is considered approved for parallel operation, the DER may begin operating, and the applicant is considered an interconnection customer.

(3) The applicant shall not operate its DER in parallel with the electric utility's distribution system without prior written permission to operate from the electric utility.

(4) Subject to reasonable timing and other conditions, including completion of conditions in the interconnection agreement or interconnection procedures, the electric utility shall allow for reasonable but limited testing before written authorization has occurred.

R 460.970 Cost allocation of interconnection facilities**,** ~~and~~ distribution upgrades**, and associated operation and maintenance costs.**

Rule 70. Costs for interconnection facilities**,** ~~and~~ distribution upgrades**, and associated operation and maintenance costs** must be classified into 1 of the following categories:

(a) Site-specific costs, which include, but are not limited to, costs of interconnection facilities and distribution upgrades that are caused by 1 DER, whether that DER is electrically co-incident with other DERs **or not**. These costs must be assigned to the cost-causing applicant.

(b) Shared interconnection facilities costs, which are costs caused by DERs which together necessitate the construction of interconnection facilities. The interconnection facilities costs**, including any associated operation and maintenance costs,** that should be shared must be allocated to each applicant based on a methodology described in the electric utility's interconnection procedures.

(c) Shared distribution upgrade costs, which are costs caused by electrically co-incident DERs that together necessitate a distribution upgrade. The distribution upgrade costs**, including any associated operation and maintenance costs,** that should be shared must be allocated to each applicant based on a methodology described in the electric utility's interconnection procedures.

R 460.974 Interconnection metering and communications.

Rule 74. (1) Any metering and communications requirements necessitated by use of the DER must be installed at the applicant's expense. The electric utility may furnish this equipment at the applicant's expense.

(2) The electric utility may charge the interconnection customer reasonable ongoing fees to maintain the metering and communications equipment. These fees must be listed in the interconnection agreement.

R 460.976 Post commissioning remedy.

Rule 76. (1) If the electric utility finds that the DER is operating outside the terms of the interconnection agreement but does not find immediate disconnection pursuant to R 460.978(1)(f) and (g) warranted, the electric utility shall promptly inform the interconnection customer or its agent of this finding. The interconnection customer is responsible for bringing the DER into compliance within 30 business days or a mutually

agreed-upon time period. The electric utility may perform an inspection of the DER after a remedy is applied.

(2) If the DER is not brought into compliance within 30 business days or the mutually agreed-upon time period, the electric utility may apply a remedy and bill the interconnection customer. The interconnection customer shall pay this bill within 5 business days.

R 460.978 Disconnection.

Rule 78. (1) An electric utility may refuse to connect or may disconnect a project from the distribution system if any of the following conditions apply:

(a) Failure of the interconnection customer to bring a DER into compliance pursuant to R 460.976(1).

(b) Failure of the interconnection customer to pay costs of remedy pursuant to R 460.976(2).

(c) Termination of interconnection by mutual agreement.

(d) Distribution system emergency, but only for the time necessary to resolve the emergency.

(e) Routine maintenance, repairs, and modifications performed in a reasonable time and with prior notice to the interconnection customer.

(f) Noncompliance with technical or contractual requirements in the interconnection agreement that could lead to degradation of distribution system reliability, electric utility equipment, and electric customers' equipment.

(g) Noncompliance with technical or contractual requirements in the interconnection agreement that presents a safety hazard.

(h) Other material noncompliance with the interconnection agreement.

(i) Operating in parallel without prior written authorization from the electric utility as provided for in R 460.968.

(2) An electric utility may disconnect electric service, where applicable, pursuant to R 460.136.

R 460.980 Capacity of the DER.

Rule 80. (1) If the interconnection application requests an increase in capacity for an existing DER, the electric utility shall evaluate the application based on the new ~~nameplate~~ **ongoing operating** capacity of the DER. The maximum capacity of a DER is the aggregate nameplate capacity or may be limited as described in the electric utility's interconnection procedures.

(2) An interconnection application for a DER that includes single or multiple types of DERs at a site for which the applicant seeks a single point of common coupling must be evaluated as described in the electric utility's interconnection procedures.

(3) The electric utility's interconnection procedures must ~~describe~~ **include** acceptable methods for power limited export DER ~~including, but not limited to, reverse power protection and utilizing inverters or control systems~~ so that the DER capacity considered by the electric utility for reviewing the interconnection application is only the amount capable of being exported.

(4) An electric utility shall allow interconnection of limited-export or non-exporting DERs according to this subrule. If a DER uses any configuration or operating mode in this subrule to limit the export of electrical power across the point of common coupling, then the generating capacity shall be only the amount capable of being exported not including any inadvertent export. To prevent impacts on system safety and reliability, any inadvertent export from a DER must comply with the limits in subdivisions (e) or (f) of this subrule. The generating capacity specified by the applicant in the application will subsequently be included as a limitation in the interconnection agreement. Other means not listed in this subrule may be utilized to limit export if mutually agreed upon by the electric utility and applicant.

(a) To ensure power is never exported across the point of common coupling, a reverse power protective function may be provided. The default setting for this protective function shall be 0.1% export of the service transformer's rating, with a maximum 2.0 second time delay.

(b)To ensure at least a minimum amount of power is imported across the point of common coupling at all times and, therefore, that power is not exported, an under-power protective function may be provided. The default setting for this protective function shall be 5% import of the DER's total nameplate rating, with a maximum 2.0 second time delay.

(c)This option requires the nameplate rating of the DER, minus any auxiliary load, to be so small in comparison to its host facility's minimum load that the use of additional protective functions is not required to ensure that power will not be exported to the distribution system. This option requires the DER capacity to be no greater than 50% of the applicant's verifiable minimum host load over the past 12 months.

(d) A reduced output rating utilizing the power rating configuration setting may be used to ensure the DER does not generate power beyond a certain value lower than the nameplate rating.

(e) DERs may utilize, a Nationally Recognized Testing Laboratory Certified Power Control System and inverter system that results in the DER disconnecting from the distribution system, ceasing to energize the distribution system or halting energy production within 2 seconds if the period of continuous inadvertent export exceeds 30 seconds. Failure of the control or inverter system for more than 30 seconds, resulting from loss of control or measurement signal, or loss of control power, must result in the DER entering an operational mode where no energy is exported across the point of common coupling to the distribution system.

(f) DERs may be designed with other control systems and/or protective functions to limit export and inadvertent export to levels mutually agreed upon by the applicant and the electric utility. The limits may be based on technical limitations of the applicant's equipment or the distribution system's equipment. To ensure inadvertent export remains within mutually agreed-upon limits, the applicant shall use an internal transfer relay, energy management system, or other customer facility hardware or software.

R 460.982 Modification of the interconnection application.

Rule 82. (1) At any point after an interconnection application is considered accepted but before the signing of an interconnection agreement, the applicant, the electric utility, or the affected system owner may propose modifications to the interconnection application that may improve the costs and benefits of the interconnection, or that improve the ability of the electric utility to accommodate the interconnection. The applicant shall submit to the electric utility, in writing, all proposed modifications to any information provided in the interconnection application and the electric utility shall perform a**n** ~~cursory~~ evaluation to determine whether the proposed modification is a material modification and provide the results to the applicant within 10 business day**s**.

(2) The electric utility shall not be required to accept or implement a modification to the electric utility's distribution system or generation assets that is proposed by an applicant or affected system operator.

(3) The applicant may request a 1-hour consultation to discuss the results of the material modification review.

(**4**~~3~~) Neither the electric utility nor the affected system operator may unilaterally modify an accepted interconnection application. If the electric utility evaluates DERs using individual studies, the timelines specific to that interconnection application must be placed on hold while the proposed modification is being evaluated by the electric utility.

(**5**~~4~~) For a proposed modification which the electric utility has determined is a material modification **and that further study is required, the applicant shall select 1 of the following options:**~~, the applicant may request a material modification review to determine whether the material modification is an acceptable material modification or an unacceptable material modification. The electric utility shall complete the material modification review and determine which of the following options are available to the applicant:~~

~~(a) If the modification is an unacceptable material modification, the applicant may withdraw the modification or withdraw the application.~~

(a) Withdraw the modification.

(b) Withdraw the application. ~~(b) If the modification is an acceptable material modification and requires minimal or no restudy, the application study activities will resume with the modification and no change to the timing.~~

(c) **Propose a different modification to the interconnection application for electric utility review pursuant to subrule(1) to determine whether the modification is material.** ~~If the modification is an acceptable material modification but requires restudy, the electric utility shall expedite the restudy. The applicant shall pay any required fee for the expedited restudy.~~

(d) If the electric utility offers an expedited study of the application with the proposed material modification, the applicant may request the expedited study. If the electric utility offers an expedited study, the process of performing an expedited study must be described in the electric utility's interconnection procedures.

(e) initiate informal mediation pursuant to R 460.904

(f) initial formal mediation pursuant to R460.906

(g) file a complaint pursuant to R 792.10439 to R 792.10446.

~~(5) The applicant may request a 1-hour consultation to discuss the results of the material modification review.~~

(6) The applicant shall notify the electric utility of its selection pursuant to subrule (**5**4) of this rule within 10 business days of receiving the electric utility notification of the results or the modification may be considered withdrawn.

(7) For a proposed modification which the electric utility has determined is a material modification, but which does not require further study, the electric utility shall continue processing the interconnection application according to these rules.

~~(7) If the proposed modification is determined not to be a material modification or is determined to be an acceptable material modification, the electric utility shall notify the applicant that the proposed modification has been accepted.~~

~~(8) If the modification is considered an unacceptable material modification, the applicant shall withdraw the proposed modification, or initiate mediation pursuant to R 460.904 or R 460.906, or file a complaint pursuant to R 792.10439 to R 792.10446 within 10 business days of receipt of the decision, or proceed with a new interconnection application for this modification. If the applicant does not provide its determination within the 10 business days, the electric utility may consider the interconnection application withdrawn.~~

(**8**~~9~~) Any modification to the interconnection application ~~or to the DER~~ that could affect the operation of the distribution system, including but not limited to, changes to machine data, equipment configuration, or the interconnection site of the DER, not agreed to in writing by the electric utility and the applicant may be treated by the electric utility as a withdrawal of the interconnection application requiring submission of a new interconnection application.

(**9**~~10~~) At any point prior to the execution of an interconnection agreement, changes to ownership will cause the interconnection application to be put on hold until the new owner signs all necessary agreements and documents. An electric utility may not be found in violation of these rules related to the processing of the interconnection application during such a transfer of ownership.

~~(11) Replacing a component with another component that has near-identical characteristics does not constitute a material modification.~~

~~(12) The electric utility's interconnection procedures must provide examples of modification that are not material modifications, acceptable material modifications, and unacceptable material modifications.~~

(~~13~~**10**) The electric utility's interconnection procedures must provide a procedure for performing a material modification review.

R 460.984 Modifications to the DER.

Rule 84. After the execution of the interconnection agreement, the applicant shall notify the electric utility of any plans to modify the DER. The electric utility shall review the proposed modification to determine if the modification is considered a material modification. If the electric utility determines that the modification is a material modification, the electric utility shall notify the applicant, in writing of its determination and the applicant shall submit a new application and application fee along with all supporting materials that are reasonably requested by the electric utility. The applicant may not begin any material modification to the DER until **an interconnection agreement incorporating the material modification is fully executed.** ~~the electric~~

~~utility has accepted the new interconnection application and completed at least one of the following:~~

~~(a) An initial review.~~

~~(b) A supplemental review.~~

~~(c) A system impact study.~~

~~(d) A facilities study.~~

R 460.986 Insurance.

Rule 86. (1) An applicant interconnecting a level 1 or 2 project to the distribution system of an electric utility may not be required by the electric utility to obtain any additional liability insurance.

(2) An electric utility shall not require an applicant interconnecting a level 1 or 2 project to name the electric utility as an additional insured party.

(3) For a level 3 project, the applicant shall obtain and maintain general liability insurance of a minimum of $1,000,000.

(4) For a level 4 project, the applicant shall obtain and maintain general liability insurance of a minimum of $2,000,000.

(5) For a level 5 project, the applicant shall obtain and maintain general liability insurance of a minimum of $3,000,000.

(6) For level 3, 4, and 5 projects, the electric utility may describe in its interconnection procedures required terms and conditions which must be specified in the general liability insurance.

R 460.988 Easements and rights-of-way.

Rule 88. If an electric utility line extension is required to accommodate an interconnection, the ~~applicant~~ **electric utility** is responsible for **providing and** ~~procurement and the cost of providing and~~ obtaining easements or rights-of-way. **The applicant is responsible for the cost of providing and obtaining easements or rights-of-way.**

R 460.990 Interconnection penalties.

Rule 90. Pursuant to section 10e of 1939 PA 3, MCL 460.10e, an electric utility shall take all necessary steps to ensure that DERs are connected to the distribution systems within their operational control. If the commission finds, after notice and hearing, that an electric utility has prevented or unduly delayed the ability of a DER greater than 100 kW to connect to the distribution system of the electric utility, the commission may order remedies designed to make whole the applicant proposing the DER, including, but not limited to, reasonable attorney fees. If the electric utility violates this rule, the commission may order fines of not more than $50,000 per day, commensurate with the demonstrated impact of the violation.

R 460.991 ~~Catastrophic conditions~~**Business day exclusions**.

Rule 91. An electric utility shall notify the commission and all applicants that have in-process applications when timelines are being extended due to **a day in which electric service is interrupted for 10% or more of an electric utility's customers** ~~catastrophic conditions as defined in R 460.702(f)~~**pursuant to R 460.901a(k)**. The electric utility shall also notify the commission and all applicants that have in-process applications when application processing resumes.

R 460.992 Electric utility annual reports.

Rule 92. An electric utility shall file an annual interconnection report on a date and in a format determined by the commission.

PART 3. DISTRIBUTED GENERATION PROGRAM STANDARDS

R 460.1001 Application process.

Rule 101. (1) An electric utility shall file initial distributed generation program tariff sheets in the first rate case filed after June 1, 2018.

(2) Within **calendar** 30 days of a commission order approving an electric utility's initial distributed generation tariff, or within 30 **calendar** days of the effective date of these rules, whichever is later, an alternative electric supplier serving customers in that electric utility's service territory shall file an updated distributed generation program plan applicable to its customers in the affected electric utility's service territory.

(3) An electric utility and an alternative electric supplier shall annually file a legacy net metering program report and, if applicable, a distributed generation program report not later than March 31 of each year.

(4) An electric utility and an alternative electric supplier shall maintain records of all applications and up-to-date records of all eligible electric generators participating in the legacy net metering program and distribution generation program.

(5) Selection of customers for participation in the legacy net metering program or distributed generation program must be based on the order in which the applications are received.

(6) An electric utility or alternative electric supplier shall not refuse to provide or discontinue electric service to a customer solely because the customer participates in the legacy net metering program or distributed generation program.

(7) The legacy net metering program and distributed generation program provided by electric utilities and alternative electric suppliers must be designed for a period of not less than 10 years and limit each applicant to generation capacity designed to meet up to 100% of the customer's electricity consumption for the previous 12 months.

(a) The generation capacity must be determined by an estimate of the expected annual kWh output of the generator or generators as determined in an electric utility's interconnection procedures and specified on an electric utility's legacy net metering program or distributed generation program tariff sheet or in the alternative electric supplier's legacy net metering program or distributed generation program plan. For projects in which energy export controls are implemented pursuant to section R 460.980 and utilized to limit the export to 100% of the customer's electricity consumption for the

previous 12 months, an electric utility shall not add the storage capacity to generation capacity for the purpose of the study. If a customer has multiple inverters capable of exporting to the distribution grid, the inverters must be configured in a way that prevents the cumulative maximum export at any given time to exceed the approved amount in the customer's application.

(b) A customer's electric consumption must be determined by 1 of the following methods:

(i) The customer's annual energy consumption, measured in kWh, during the previous 12-month period.

(ii) If there is no data, incomplete data, or incorrect data for the customer's energy consumption or the customer is making changes on-site that will affect total consumption, the electric utility or alternative electric supplier and the customer shall mutually agree on a method to determine the customer's electric consumption.

(c) A net metering or distributed generation customer using an energy storage device in conjunction with an eligible electric generator shall not design or operate the energy storage device in a manner that results in the customer's electrical output exceeding 100% of the customer's electricity consumption for the previous 12 months. ~~Energy storage devices must be configured to prevent export of stored electricity to the distribution system.~~ The addition of an energy storage device to an existing approved legacy net metering program system or distributed generation program system is considered a material modification. The electric utility interconnection procedures must include details describing how energy storage equipment may be integrated into an existing legacy net metering program system without impacting the 10-year grandfathering period **or participation in the distributed generation program**.

(8) An applicant shall notify the electric utility of plans for any material modification to the project. An applicant shall re-apply for interconnection pursuant to part 2 of these rules, R 460.911 to R 460.992, and submit revised legacy net metering program or distributed generation program application forms and associated fees. An applicant may be eligible to continue participation in the legacy net metering program or distributed generation program when a material modification is made to a customer's previously approved system and it does not violate the requirements of subrule (7) of this rule **or Rule 460.1026**. An applicant shall not begin any material modification to the project until the electric utility has approved the revised application, including any necessary system impact study or facilities study. The application must be processed pursuant to part 2 of these rules, R 460.911 to R 460.992.

R 460.1004 Legacy net metering program application and fees.

Rule 104. (1) An electric utility or alternative electric supplier may use an online legacy net metering program application process. An electric utility or alternative electric supplier not using an online application process, may utilize a uniform legacy net metering program application form which must be approved by the commission. An electric utility's legacy net metering program application may be combined with an electric utility's interconnection application.

(2) A customer taking retail electric service from an electric utility and applying to participate in the legacy net metering program shall concurrently submit a completed

legacy net metering program application and interconnection application or indicate on the legacy net metering program application the date that the customer applied for interconnection with the electric utility and, if applicable, the date the customer received authorization to operate in parallel pursuant to R 460.968.

(a) Where a legacy net metering program application is accompanied by an associated interconnection application, an electric utility shall complete its review of the legacy net metering program application in parallel with processing the interconnection application pursuant to part 2 of these rules, R 460.911 to R 460.992.

(i) Combined with the notification of interconnection application completeness and conformance pursuant to R 460.936, the electric utility shall notify the customer whether the legacy net metering program application is accepted, and provide an opportunity for the customer to resolve any application deficiencies pursuant to the timelines in R 460.936(7)(b) or withdraw the application, or the electric utility may consider the legacy net metering program application withdrawn without refund of the application fees.

(ii) While processing the interconnection application, which may include, but is not limited to, ~~R 460.940 simplified track or~~ R 460.946 fast track initial review, the electric utility shall determine whether the appropriate meter or meters, is installed for the legacy net metering program.

(b) When a legacy net metering program application is filed with an already in-progress interconnection application, the utility may process the legacy net metering application in parallel with the interconnection application pursuant to part 2 of these rules, R 460.911 to R 460.992, and subrule (2)(a) of this rule, if practicable, or adopt the review process pursuant to subrule (2)(c) of this rule.

(c) When a legacy net metering program application is filed with an in-progress interconnection application and the electric utility determines it is not practicable to process the legacy net metering program application in parallel with the interconnection application, or when the legacy net metering application is filed subsequent to the customer receiving authorization to operate its eligible generator in parallel pursuant to R 460.968, the electric utility shall process the legacy net metering program application pursuant to both of the following:

(i) The electric utility shall review the legacy net metering program application and determine whether to accept the application pursuant to the timelines in R 460.936(6) and (7) within 10 business days. The timelines in R 460.936(7)(a) apply to electric utility notifications. The electric utility shall provide the customer an opportunity to resolve any application deficiencies pursuant to R 460.936(7)(b). If the customer fails to remedy the deficiency within the timelines pursuant to R. 460.936(7)(b), the electric utility may consider the legacy net metering application withdrawn without refund of the application fees.

(ii) Within 10 business days of notifying the customer that the legacy net metering application has been accepted, the electric utility shall determine whether the appropriate meter is installed for the legacy net metering program.

(d) If a customer approved for participation in the legacy net metering program requires a new or additional meter or meters, the electric utility shall arrange with the customer to install the meter or meters at a mutually agreed upon time.

(e) The electric utility shall complete changes to the customer's account to permit the **legacy net metering** ~~distributed generation~~ program credit to be applied to the account

no more than 10 business days after the necessary meter is installed and all necessary steps in R 460.966 are completed.

(3) A customer taking retail electric service from an alternative electric supplier shall submit a completed legacy net metering program application to the alternative electric supplier and provide a copy to the electric utility that provides distribution service.

(a) The electric utility shall process the legacy net metering program application according to the applicable timelines in subrule (2)(a) through (d) of this rule.

(b) The electric utility shall notify the alternative electric supplier when it has provided the applicant authorization to operate the eligible electric generator in parallel pursuant to R 460.968 and, if applicable, that installation of the appropriate meter or meters is completed.

(c) Within 10 business days of the electric utility's notification, the alternative electric supplier shall complete changes to the applicant's account to permit the legacy net metering program credit to be applied to the account.

(4) If a legacy net metering program application is not approved by the alternative electric supplier, the alternative electric supplier shall notify the customer and the electric utility of the reasons for the disapproval. The alternative electric supplier shall provide the customer an opportunity to remedy the deficiency pursuant to the timelines in R 460.936(7)(b) or withdraw the application. If the customer fails to remedy the deficiency within the timelines pursuant to R. 460.936(7)(b), the alternative electric supplier and electric utility may consider the legacy net metering application withdrawn without refund of the application fees.

(5) If a customer's application for the legacy net metering program is approved, the customer shall have a completed and approved installation within 6 months from the date the customer's application is considered complete, or the electric utility or alternative electric supplier may terminate the application without refund and shall have no further responsibility with respect to the application.

(6) Customers participating in a legacy net metering program approved by the commission before the commission establishes a tariff pursuant to section 6a(14) of 1939 PA 3, MCL 460.6a, may elect to continue to receive service under the terms and conditions of that program for up to 10 years from the date of initial enrollment.

(7) The legacy net metering program application fee for electric utilities and alternative electric suppliers may not exceed $50. The fee must be specified on the electric utility's legacy net metering tariff sheet or in the alternative electric supplier's legacy net metering program plan.

R 460.1006 Distributed generation program application and fees.

Rule 106. (1) An electric utility or alternative electric supplier may use an online distributed generation program application process. An electric utility or alternative electric supplier not using an online application process may utilize a uniform distributed generation program application form that must be approved by the commission. An electric utility's distributed generation program application may be combined with an electric utility's interconnection application.

(2) A customer taking retail electric service from an electric utility and applying to participate in the distributed generation program shall concurrently submit a completed

distributed generation program application and interconnection application or indicate on the distributed generation program application the date that the customer applied for interconnection with the electric utility and, if applicable, the date the customer received authorization to operate in parallel pursuant to R 460.968.

(a) When a distributed generation program application is accompanied by an associated interconnection application, an electric utility ~~shall~~ **may** complete its review of the distributed generation program application **concurrently, before, or after** processing the interconnection application pursuant to part 2 of these rules, R 460.911 to R 460.992.

(i) Combined with the notification of interconnection application completeness and conformance pursuant to R 460.936, an electric utility shall notify the customer whether the distributed generation program application is accepted, and provide an opportunity for the customer to remedy any application deficiencies pursuant to the timelines in R 460.936(7)(b) or withdraw the application. If the customer fails to remedy the application deficiencies within the timelines in R 460.936(7)(b), the electric utility may consider the distributed generation program application withdrawn without refund of the application fees.

(ii) While processing the interconnection application, which may include, but is not limited to, ~~R 460.940 simplified track or~~ R 460.946 fast track initial review, the electric utility shall determine whether the appropriate meter is installed for the distributed generation program.

(b) If a distributed generation program application is filed with an already in-progress interconnection application, the electric utility may process the distributed generation program application in parallel with the interconnection application pursuant to part 2 of these rules, R 460.911 to R 460.992, and subrule (2)(a) of this rule, if practicable, or adopt the review process pursuant to subrule (2)(c) of this rule.

(c) If a distributed generation program application is filed with an in-progress interconnection application and the electric utility determines it is not practicable to process the distributed generation program application in parallel with the interconnection application or the distributed generation application is filed subsequent to the customer receiving authorization to operate its eligible generator in parallel pursuant to R 460.968, the electric utility shall process the distributed generation program application pursuant to all of the following:

(i) The electric utility has 10 business days to review the distributed generation program application and determine whether to accept the application pursuant to the timelines in R 460.936(6) and (7). The timelines in R 460.936(7)(a) apply to utility notifications. The electric utility shall provide the customer an opportunity to remedy any application deficiencies pursuant to R 460.936(7)(b). If the customer fails to remedy the application deficiencies within the timelines in R 460.936(7)(b), the electric utility may consider the distributed generation program application withdrawn without refund of the application fees.

(ii) Within 10 business days of providing notification to the customer that the distributed generation program application has been accepted, the electric utility shall determine whether the appropriate meter, or meters, is installed for the distributed generation program.

(d) If a customer approved for participation in the distributed generation program requires a new or additional meter or meters, the electric utility shall arrange with the customer to install the meter or meters at a mutually agreed upon time.

(e) The electric utility shall complete changes to the customer's account to permit distributed generation program credit to be applied to the account no more than 10 business days after the necessary meter is installed and all necessary steps in R 460.966 are completed.

(3) A customer taking retail electric service from an alternative electric supplier shall submit a completed distributed generation program application to the alternative electric supplier and provide a copy to the electric utility that provides distribution service.

(a) The alternative electric supplier shall process the distributed generation program application according to the applicable timelines in subrule (2)(a) through (d) of this rule.

(b) The electric utility shall notify the alternative electric supplier when it has provided the applicant authorization to operate the eligible electric generator in parallel pursuant to R 460.968 and, if applicable, that installation of the appropriate meter or meters is completed.

(c) Within 10 business days of the electric utility's notification, the alternative electric supplier shall complete changes to the applicant's account to permit distributed generation program credit to be applied to the account.

(4) If a distributed generation program application is not approved by the alternative electric supplier, the alternative electric supplier shall notify the customer and the electric utility of the reasons for the disapproval. The alternative electric supplier shall provide the customer an opportunity to remedy the deficiency pursuant to the timelines in R 460.936(7)(b) or withdraw the application. If the customer fails to remedy the application deficiencies within the timelines in R 460.936(7)(b), the alternative electric supplier and electric utility may consider the distributed generation program application withdrawn without refund of the application fees.

(5) If a customer's distributed generation program application is approved, the customer shall have a completed and approved installation within 6 months from the date the customer's application is considered complete, or the electric utility or alternative electric supplier may consider the application withdrawn without refund and shall have no further responsibility with respect to the application.

(6) The distributed generation program application fee for electric utilities and alternative electric suppliers shall not exceed $50. The electric utility shall specify the fee on the electric utility's distributed generation program tariff sheet or in the alternative electric supplier's distributed generation program plan.

(7) The customer shall pay all interconnection costs pursuant to part 2 of these rules, R 460.911 to R 460.992, which include all electric utility costs associated with the customer's interconnection that are not a distributed generation program application fee, excluding meter costs as described in R 460.1012 and R 460.1014.

R 460.1008 Legacy net metering program and distributed generation program size.

Rule 108. (1) If an electric utility or alternative electric supplier reaches the program sizes as defined in section 173(3) of the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1173 **or a voluntarily expanded program above**

the requirements defined in section 173(3) of the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1173, as determined by combining both the distributed generation program and the legacy net metering program customer enrollments, the electric utility or alternative electric supplier shall notify the commission.

(2) The electric utility or alternative electric supplier shall notify the commission of its plans to either close the program to new applicants or expand the program.

(3) The electric utility shall file corresponding revised legacy net metering program or distributed generation program tariff sheets.

(4) The alternative electric supplier shall file a revised legacy net metering program plan or distributed generation program plan.

R 460.1010 Generation and legacy net metering program or distributed generation program equipment.

Rule 110. New legacy net metering program or distributed generation program equipment and its installation must meet all current local and state electric and construction code requirements, and other standards as specified in part 2 of these rules, R 460.911 to R 460.992.

R 460.1012 Meters for legacy net metering program.

Rule 112. (1) For a customer with a generation system capable of generating 20 kWac or less, an electric utility may determine the customer's net usage using the customer's existing meter if it is capable of reverse registration or may install a single meter with separate registers measuring power flow in each direction. If the electric utility uses the customer's existing meter, the electric utility shall test and calibrate the meter to assure accuracy in both directions. If the customer's meter is not capable of reverse registration and if meter upgrades or modifications are required, the following apply:

(a) An electric utility serving 1,000,000 or more customers in this state shall provide a meter or meters capable of measuring the flow of energy in both directions at no additional charge to the legacy net metering program customer. The cost of the meter or meter modification is considered a cost of operating the legacy net metering program.

(b) An electric utility serving fewer than 1,000,000 customers in this state shall provide a meter or meters capable of measuring the flow of energy in both directions to customers at cost. Only the incremental cost above that for the meter provided by the electric utility to similarly situated non-generating customers shall be paid by the eligible customer.

(c) An electric utility shall provide a generator meter, if requested by the customer, at cost.

(2) For a customer with a generation system capable of generating more than 20 kWac and not more than 150 kWac, the electric utility shall utilize a meter or meters capable of measuring the flow of energy in both directions and the generator output. If meter upgrades are necessary to provide this functionality, all of the following apply:

(a) An electric utility serving 1,000,000 or more customers in this state shall provide a meter or meters capable of measuring the flow of energy in both directions at no

additional charge to a legacy net metering program customer. The cost of the meter or meters is considered a cost of operating the legacy net metering program.

(b) An electric utility serving fewer than 1,000,000 customers in this state shall provide a meter or meters capable of measuring the flow of energy in both directions to customers at cost. Only the incremental cost above that for meters provided by the electric utility to similarly situated non-generating customers shall be paid by the eligible customer.

(c) An electric utility shall provide a generator meter. The cost of the meter is considered a cost of operating the legacy net metering program.

(3) For a customer with a generation system capable of generating more than 150 kWac, the electric utility shall utilize a meter or meters capable of measuring the flow of energy in both directions and the generator output. If meter upgrades are necessary to provide this functionality, the customer shall pay the cost of providing any new meters.

(4) An electric utility deploying advanced metering infrastructure shall not charge the cost of advanced meters to a legacy net metering program participant or the legacy net metering program.

R 460.1014 Meters for distributed generation program.

Rule 114. (1) For a customer with a generation system capable of generating 20 kWac or less, an electric utility shall determine the customer's power flow in each direction using the customer's existing meter if it is capable of measuring and recording power flow in each direction. If the customer's meter is not capable of measuring and recording the customer's power flow in each direction and if meter upgrades or modifications are required, all of the following apply:

(a) An electric utility serving 1,000,000 or more customers in this state shall provide a meter or meters capable of measuring and recording the customer's power flow in each direction at no additional charge to the distributed generation program customer. The cost of the meter or meter modification is considered a cost of operating the distributed generation program.

(b) An electric utility serving fewer than 1,000,000 customers in this state shall provide a meter or meters capable of measuring and recording the power flow in each direction to customers at cost. Only the incremental cost above the cost for the meter provided by the electric utility to similarly situated non-generating customers shall be paid by the eligible customer.

(c) An electric utility shall provide a generator meter at cost, if requested by the customer.

(2) For a customer with a generation system capable of generating more than 20 kWac and not more than 150 kWac, an electric utility shall utilize a meter or meters capable of measuring and recording power flow in each direction and the generator output. If the customer's meter is not capable of measuring and recording the customer's power flow in each direction along with the generator output, and if meter upgrades or modifications are required, all of the following apply:

(a) An electric utility serving 1,000,000 or more customers in this state shall provide a meter or meters capable of measuring the flow of energy in both directions at no additional charge to a distributed generation program customer. If the electric utility

provides the upgraded meter at no additional charge to the customer, the cost of the meter is considered a cost of operating the distributed generation program.

(b) An electric utility serving fewer than 1,000,000 customers in this state shall provide a meter or meters capable of measuring the flow of energy in both directions to customers at cost. Only the incremental cost above the cost for the meter provided by the electric utility to similarly situated non-generating customers shall be paid by the eligible customer.

(c) An electric utility shall provide a generator meter. The cost of the meter shall be considered a cost of operating the distributed generation program.

(3) For a customer with a methane digester generation system capable of generating more than 150 kWac, an electric utility shall utilize a meter or meters capable of measuring the flow of energy in both directions and the generator output. If meter upgrades are necessary to provide such functionality, the customer shall pay the cost of providing any new meters.

(4) An electric utility deploying advanced metering infrastructure shall not charge the cost of advanced meters to a distributed generation program customer or the distributed generation program.

R 460.1016 Billing and credit for legacy net metering program customers taking service under true net metering.

Rule 116. (1) Legacy net metering program customers with a system capable of generating 20 kWac or less qualify for true net metering. For customers qualifying for true net metering, the net of the bidirectional flow of kWh across the customer interconnection with the electric utility distribution system during the billing period or during each time-of-use pricing period within the billing period, including excess generation, shall be credited at the full retail rate.

(2) The credit for excess generation, if any, shall appear on the next bill. Any excess credit not used to offset current charges must be carried forward for use in subsequent billing periods.

R 460.1018 Billing and credit for legacy net metering program customers taking service under modified net metering.

Rule 118. (1) Legacy net metering program customers with a system capable of generating more than 20 kWac qualify for modified net metering. A negative net metered quantity during the billing period or during each time-of-use pricing period within the billing period reflects net excess generation for which the customer is entitled to receive credit. Standby charges for customers on an energy rate schedule must equal the retail distribution charge applied to the imputed customer usage during the billing period. The imputed customer usage is calculated as the sum of the metered on-site generation and the net of the bidirectional flow of power across the customer interconnection during the billing period. The commission shall establish standby charges for customers on demand-based rate schedules that provide an equivalent contribution to electric utility system costs. Standby charges may not be applied to customers with systems capable of generating 150 kWac or less.

(2) The credit for excess generation must appear on the next bill. Any excess kWh not used to offset current charges must be carried forward for use in subsequent billing periods.

(3) A customer qualifying for modified net metering shall not have legacy net metering program credits applied to distribution charges.

(4) The credit per kWh for kWh delivered into the electric utility's distribution system must be either of the following as determined by the commission:

(a) The monthly average real-time locational marginal price for energy at the commercial pricing node within the electric utility's distribution service territory or for a legacy net metering program customer on a time-based rate schedule, the monthly average real time locational marginal price for energy at the commercial pricing node within the electric utility's distribution service territory during the time-of-use pricing period.

(b) The electric utility's or alternative electric supplier's power supply component, excluding transmission charges, of the full retail rate during the billing period or time-of-use pricing period.

R 460.1020 Billing and credit for distributed generation program customers.

Rule 120. As part of an electric utility's rate case filed after June 1, 2018, the commission shall approve a tariff for a distributed generation program under the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1001 to 460.1211. A tariff established under this rule does not apply to customers participating in a legacy net metering program under the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1001 to 460.1211, before the date that the commission establishes a tariff under this rule, who continue to participate in the program at their current site or facility **as described by Rule R 460.1026**.

R 460.1022 Renewable energy credits.

Rule 122. (1) An eligible electric generator shall own any renewable energy credits granted for electricity generated under the legacy net metering program and distributed generation program.

(2) An electric utility may purchase or trade renewable energy credits from a legacy net metering program or distributed generation program customer if agreed to by the customer.

(3) The commission may develop a program for aggregating renewable energy credits from legacy net metering program and distributed generation program customers.

R 460.1024 Penalties.

Rule 124. Upon a complaint or on the commission's own motion, if the commission finds after notice and hearing that an electric utility has not complied with a provision or order issued under part 5 of the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1171 to 460.1185, the commission shall order remedies and

penalties as necessary to make whole a customer or other person who has suffered damages as a result of the violation.

R 460.1026 Legacy net metering grandfathering clause.

Rule 126. A customer participating in a legacy net metering program approved by the commission before the commission establishes the initial distributed generation program tariff pursuant to R 460.1020 may elect to continue to receive service under the terms and conditions of that program for up to 10 years from the date of initial enrollment. "Initial enrollment," as used in this rule, means the date a customer or site initially enrolled in a legacy net metering program as described in the electric utility's tariff. A customer participating in a legacy net metering program who increases the nameplate capacity of its generation system after the effective date of an electric utility's distributed generation program tariff is no longer eligible to participate in the legacy net metering program.

DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS

PUBLIC SERVICE COMMISSION

INTERCONNECTION AND DISTRIBUTED GENERATION STANDARDS

Filed with the secretary of state on

These rules take effect immediately upon filing with the secretary of state unless adopted under section 33, 44, or 45a(9) of the administrative procedures act of 1969, 1969 PA 306, MCL 24.233, 24.244, or 24.245a. Rules adopted under these sections become effective 7 days after filing with the secretary of state.

(By authority conferred on the public service commission by section 7 of 1909 PA 106, MCL 460.557, section 5 of 1919 PA 419, MCL 460.55, sections 4, 6, and 10e of 1939 PA 3, MCL 460.4, 460.6, and 460.10e, and section 173 of the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1173)

R 460.901a, R 460.901b, R 460.902, R 460.904, R 460.906, R 460.908, R 460.910, R 460.911, R 460.920, R 460.922, R 460.924, R 460.926, R 460.928, R 460.930, R 460.932, R 460.934, R 460.936, R 460.938, R 460.940, R 460.942, R 460.944, R 460.946, R 460.948, R 460.950, R 460.952, R 460.954, R 460.956, R 460.958, R 460.960, R 460.962, R 460.964, R 460.966, R 460.968, R 460.970, R 460.974, R 460.976, R 460.978, R 460.980, R 460.982, R 460.984, R 460.986, R 460.988, R 460.990, R 460.991, R 460.992, R 460.1001, R 460.1004, R 460.1006, R 460.1008, R 460.1010, R 460.1012, R 460.1014, R 460.1016, R 460.1018, R 460.1020, R 460.1022, R 460.1024, and R 460.1026 are added to the Michigan Administrative Code, as follows:

PART 1. GENERAL PROVISIONS

R 460.901a Definitions; A-I.

Rule 1a. As used in these rules:

(a) "AC" means alternating current at 60 Hertz.

(b) "Affected system" means another electric utility's distribution system, a municipal electric utility's distribution system, the transmission system, or transmission system-connected generation which may be affected by the proposed interconnection.

(c) "Affiliate" means that term as defined in R 460.10102(1)(a).

(d) "Aggregate capacity" or "Aggregate generation capacity" means the aggregated ongoing operating capacities of all DER across multiple points of common coupling, within a defined portion of the distribution system.

(e) "Alternative electric supplier" means that term as defined in section 10g of 1939 PA 3, MCL 460.10g.

(f) “Alternative electric supplier distributed generation program plan” means a document supplied by an alternative electric supplier that provides detailed information to an applicant about the alternative electric supplier's distributed generation program.

(g) “Alternative electric supplier legacy net metering program plan” means a document supplied by an alternative electric supplier that provides detailed information to an applicant about the alternative electric supplier's legacy net metering program.

(h) “Applicant” means the person or entity submitting an interconnection application, a legacy net metering program application, or a distributed generation program application. An applicant is not required to be an existing customer of an electric utility. An electric utility is considered an applicant when it submits an interconnection application for a DER that is not a temporary DER.

(i) “Application” means an interconnection application, a legacy net metering program application, or a distributed generation program application.

(j) “Area network” means a location on the distribution system served by multiple transformers interconnected in an electrical network circuit.

(k) “Business day” means Monday through Friday, starting at 12:00:00 a.m. and ending at 11:59:59 p.m., excluding electric utility holidays and any day in which electric service is interrupted for 10% or more of an electric utility’s customers. A list of electric utility holidays shall be provided in the electric utility’s interconnection procedures.

(l) “Calendar day” means every day including Saturdays, Sundays, and holidays.

(m) “Certified” means an inverter-based system has met acceptable safety and reliability standards by a nationally recognized testing laboratory in conformance with IEEE 1547.1-2020 and the UL 1741 September 28, 2021 edition except that prior to January 1, 2023, inverter-based systems which conform to the UL 1741SA September 7, 2016 edition are acceptable.

(n) “Commission” means the Michigan public service commission.

(o) “Commissioning test” means the test and verification procedure that is performed on a device or combination of devices forming a system to confirm that the device or system, as designed, delivered, and installed, meets the interconnection and interoperability requirements of IEEE 1547-2018. A commissioning test must include visual inspections and may include, as applicable, an operability and functional performance test and functional tests to verify interoperability of a combination of devices forming a system.

(p) “Conforming” means the information in an interconnection application is consistent with the general principles of distribution system operation and DER characteristics.

(q) “Customer” means a person or entity who receives electric service from an electric utility’s distribution system or a person who participates in a legacy net metering or distributed generation program through an alternative electric supplier or electric utility.

(r) “DC” means “direct current.”

(s) “Distributed energy resource” or “DER” means a source of electric power and its associated facilities that is connected to a distribution system. DER includes both generators and energy storage devices capable of exporting active power to a distribution system.

(t) “Distributed generation program” means the distributed generation program approved by the commission and included in an electric utility’s tariff pursuant to section

6a(14) of 1939 PA 3, MCL 460.6a, or established in an alternative electric supplier distributed generation program plan.

(u) "Distribution system" means the structures, equipment, and facilities owned and operated by an electric utility to deliver electricity to end users, not including transmission and generation facilities that are subject to the jurisdiction of the federal energy regulatory commission.

(v) "Distribution upgrades" mean the additions, modifications, or improvements to the distribution system necessary to accommodate a DER's connection to the distribution system.

(w) "Electric utility" means any person or entity whose rates are regulated by the commission for selling electricity to retail customers in this state. For purposes of R 460.901a through R 460.992 only, "electric utility" includes cooperative electric utilities that are member regulated as provided in section 4 of the electric cooperative member-regulation act, 2008 PA 167, MCL 460.34.

(x) "Electrically coincident" means that 2 or more proposed DERs associated with pending interconnection applications have operating characteristics and nameplate capacities which require that distribution upgrades will be necessary if the DERs are installed in electrical proximity with each other on a distribution system.

(y) "Electrically remote" means a proposed DER is not electrically coincident with a DER that is associated with a pending interconnection application.

(z) "Eligible electric generator" means a methane digester or renewable energy system with a generation capacity limited to a customer's electric need and that does not exceed either of the following:

(i) 150 kWac of aggregate generation at a single site for a renewable energy system.

(ii) 550 kWac of aggregate generation at a single site for a methane digester.

(aa) "Energy storage device" means a device that captures energy produced at one time, stores that energy for a period of time, and delivers that energy as electricity for use at a future time. For purposes of these rules, an energy storage device may be considered a DER.

(bb) "Export capacity" means the maximum possible simultaneous generation of the DER, and is calculated as the maximum amount of export as permitted by limiting the amount of the DER's export at the point of common coupling.

(cc) "Facilities study" means a study to specify and estimate the cost of the equipment, engineering, procurement, and construction work if distribution upgrades or interconnection facilities are required.

(dd) "Fast track" means the procedure used for evaluating a proposed interconnection that makes use of screening processes, as described in R 460.944 to R 460.950.

(ee) "Force majeure event" means an act of God; labor disturbance; act of the public enemy; war; insurrection; riot; fire, storm, or flood; explosion, breakage, or accident to machinery or equipment; an emergency order, regulation or restriction imposed by governmental, military, or lawfully established civilian authorities; or another cause beyond a party's control. A force majeure event does not include an act of negligence or intentional wrongdoing.

(ff) "Full retail rate" means the power supply and distribution components of the cost of electric service. Full retail rate does not include a system access charge, service charge, or other charge that is assessed on a per meter, premise, or customer basis.

(gg) “Generating capacity” means the maximum nameplate rating of a DER in alternating current, except that where such capacity is limited by any of the methods of limiting electrical export; generating capacity shall be the net capacity as limited though the use of such methods not including inadvertent export.

(hh) “Good standing” means an applicant has paid in full all undisputed bills rendered by the interconnecting electric utility and any alternative electric supplier in a timely manner and none of these bills are in arrears.

(ii) “Governmental authority” means any federal, state, local, or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that this term does not include the applicant, interconnection customer, electric utility, or any affiliate thereof.

(jj) “GPS” means global positioning system.

(kk) “Grid network” means a configuration of a distribution system or an area of a distribution system in which each customer is supplied electric energy at the secondary voltage by more than 1 transformer.

(ll) “High voltage distribution” means those parts of a distribution system that operate within a voltage range specified in the electric utility’s interconnection procedures. For purposes of these rules, the term “subtransmission” means the same as high voltage distribution.

(mm) “IEEE” means institute of electrical and electronics engineers.

(nn) “IEEE 1547-2018” means “IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems Interfaces,” as adopted by reference in R 460.902.

(oo) “IEEE 1547.1-2020” means IEEE “Standard Conformance Test Procedures for Equipment Interconnecting Distributed Energy Resources with Electric Power Systems and Associated Interfaces,” as adopted by reference in R 460.902.

(pp) “Inadvertent export” means the potential condition in which a normally non-exporting or limited-exporting DER experiences an unscheduled export that does not exceed limitations in terms of magnitude or duration as specified in UL 1741 CRD for PCS.

(qq) “Independent system operator” means an independent, federally-regulated entity established to coordinate regional transmission in a non-discriminatory manner and to ensure the safety and reliability of the transmission and distribution systems.

(rr) “Initial review” means the fast track initial review screens described in R 460.946.

(ss) “Interconnection” means the process undertaken by an electric utility to construct the electrical facilities necessary to connect a DER with a distribution system so that parallel operation can occur.

(tt) “Interconnection agreement” means an agreement containing the terms and conditions governing the electrical interconnection between the electric utility and the applicant or interconnection customer. Where construction of interconnection facilities or distribution upgrades are necessary, the agreement shall specify timelines, cost estimates, and payment milestones for construction of facilities and distribution upgrades to interconnect a DER into the distribution system, and shall identify design, procurement,

installation, and construction requirements associated with installation of the DER. Standard level 1, 2, and 3 interconnection agreements and level 4 and 5 interconnection agreements are types of interconnection agreements.

(uu) "Interconnection coordinator" means a person or persons designated by the electric utility who shall serve as the point of contact from which general information on the application process and on the affected system or systems can be obtained through informal request by the applicant or interconnection customer.

(vv) "Interconnection customer" means the person or entity, which may include the electric utility, responsible for ensuring a DER is operated and maintained in compliance with all local, state, and federal laws, as well as with all rules, standards, and interconnection procedures.

(ww) "Interconnection facilities" mean any equipment required for the sole purpose of connecting a DER with a distribution system.

(xx) "Interconnection procedures" mean the requirements that govern project interconnection adopted by each electric utility and approved by the commission.

(yy) "Interconnection study agreement" means an agreement between an applicant and an electric utility for the electric utility to study a proposed DER.

R 460.901b Definitions; J-Z.

Rule 1b. As used in these rules:

(a) "kW" means kilowatt.

(b) "kWac" means the electric power, in kilowatts, associated with the alternating current output of a DER at unity power factor.

(c) "kWh" means kilowatt-hours.

(d) "Legacy net metering program" means the true net metering or modified net metering programs in place prior to commission approval of a distributed generation program tariff pursuant to section 6a(14) of 1939 PA 3, MCL 460.6a, and prior to the establishment of an alternative electric supplier distributed generation plan.

(e) "Level 1" means a certified project of 20 kWac or less.

(f) "Level 2" means a certified project of greater than 20 kWac and not more than 150 kWac.

(g) "Level 3" means a project of 150 kWac or less that is not certified, or a project greater than 150 kWac and not more than 550 kWac.

(h) "Level 4" means a project of greater than 550 kWac and not more than 1 MWac.

(i) "Level 5" means a project of greater than 1 MWac.

(j) "Level 4 and 5 interconnection agreement" means an interconnection agreement applicable to level 4 and 5 interconnection applications.

(k) "Limited export" means the exporting capability of a DER whose generating capacity is limited by the use of any configuration or operating mode.

(l) "Low voltage distribution" means those parts of a distribution system that operate with a voltage range specified in the electric utility's interconnection procedures.

(m) "Mainline" means a conductor that serves as the three-phase backbone of a low voltage distribution circuit.

(n) "Material modification" means a modification to the DER generating capacity, electrical size of components, bill of materials, machine data, equipment configuration, or

the interconnection site of the DER at any time after receiving notification by the electric utility of a complete interconnection application. Replacing a component with another component that has near-identical characteristics does not constitute a material modification. For the proposed modification to be considered material, it shall have been reviewed and been determined to have or anticipated to have a material impact on 1 or more of the following:

(i) The cost, timing, or design of any equipment located between the point of common coupling and the DER.

(ii) The cost, timing, or design of any other application.

(iii) The electric utility's distribution system or an affected system.

(iv) The safety or reliability of the distribution system.

(o) "Methane digester" means a renewable energy system that uses animal or agricultural waste for the production of fuel gas that can be burned for the generation of electricity or steam.

(p) "Modified net metering" means an electric utility billing method that applies the power supply component of the full retail rate to the net of the bidirectional flow of kWh across the customer interconnection with the electric utility's distribution system during a billing period or time-of-use pricing period.

(q) "MW" means megawatt.

(r) "MWac" means the electric power, in megawatts, associated with the alternating current output of a DER at unity power factor.

(s) "Nameplate capacity" means the maximum active power, in kWac or MWac, at which a DER is capable of sustained operation.

(t) "Nameplate rating" means all of the following at which a DER is capable of sustained operation:

(i) Nominal voltage (V).

(ii) Current (A).

(iii) Maximum active power (kWac).

(iv) Apparent power (kVA).

(v) Reactive power (kvar).

(u) "Nationally recognized testing laboratory" means any testing laboratory recognized by the accreditation program of the United States Department of Labor Occupational Safety and Health Administration.

(v) "Network protector" means those devices associated with a secondary network used to automatically disconnect a transformer when reverse power flow occurs.

(w) "Non-export track" means the procedure for evaluating a proposed interconnection that will not inject electric energy into an electric utility's distribution system, as described in R 460.942.

(x) "Ongoing operating capacity" means the actual simultaneous generating capacity, taking into account the operational differences of load offset and export. If the contribution of energy storage to the total contribution is limited by programing of the maximum active power output, use of a power control system, use of a power relay, or some other mutually agreeable, on-site limiting element, only the capacity that is designed to inject electricity to the utility's distribution system, other than inadvertent exports and fault contribution, will be used within certain technical screens and evaluations.

(y) “Parallel operation” means the operation, for longer than 100 milliseconds, of a DER while connected to the energized distribution system.

(z) “Party” or “parties” means an electric utility, applicant, or interconnection customer.

(aa) “Point of common coupling” means the point where the DER connects with the electric utility’s distribution system.

(bb) “Power control system” means systems or devices which electronically limit or control steady state currents to a programmable limit and certified under UL 1741 CRD for Power Control Systems by a nationally recognized testing laboratory.

(cc) “Radial supply” means a configuration of a distribution system or an area of a distribution system in which each customer can only be supplied electric energy by 1 substation transformer and distribution line at a time.

(dd) “Readily available” means no creation of data is required, and little or no computation or analysis of data is required.

(ee) “Reasonable efforts” mean, with respect to an action required to be attempted or taken by a party under these interconnection rules, efforts that are as timely as possible and consistent with those a party would take to protect its own interests.

(ff) “Regional transmission operator” means a voluntary organization of electric transmission owners, transmission users, and other entities approved by the federal energy regulatory commission to efficiently coordinate electric transmission planning, expansion, operation, and use on a regional and interregional basis.

(gg) “Renewable energy credit” means a credit granted pursuant to the commission's renewable energy credit certification and tracking program in section 41 of the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1041.

(hh) “Renewable energy resource” means that term as defined in section 11(i) of the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1011.

(ii) “Renewable energy system” means that term as defined in section 11(k) of the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1011.

(jj) “Secondary network” means those areas of a distribution system that operate at a secondary voltage level and are networked.

(kk) “Site” means a contiguous site, regardless of the number of meters at that site. A site that would be contiguous but for the presence of a street, road, or highway is considered to be contiguous for the purposes of these rules.

(ll) “Spot network” means a location on the distribution system that uses 2 or more inter-tied transformers to supply an electrical network circuit, such as a network circuit in a large building.

(mm) “Standard level 1, 2, and 3 interconnection agreement” means the statewide interconnection agreement approved by the commission and applicable to levels 1, 2 and 3 interconnection applications. A cover sheet including modifications to address any special operating conditions may be added.

(nn) “Study track” means the procedure used for evaluating a proposed interconnection as described in R 460.952 to R 460.962.

(oo) “Supplemental review” means the fast track supplemental review screens described in R 460.950.

(pp) “System impact study” means a study to identify and describe the impacts to the electric utility’s distribution system that would occur if the proposed DER were

interconnected exactly as proposed and without any modifications to the electric utility's distribution system. A system impact study also identifies affected systems.

(qq) "Temporary DER" means a DER that is installed on the distribution system by the electric utility with the intention of not operating at the site permanently.

(rr) "True net metering" means an electric utility billing method that applies the full retail rate to the net of the bidirectional flow of kWh across the customer interconnection with the electric utility's distribution system, during a billing period or time-of-use pricing period.

(ss) "UL" means underwriters laboratory.

(tt) "UL 1741" means the September 28, 2021 edition of "Standard for Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources," as adopted by reference in R 460.902.

(uu) "UL 1741 CRD for PCS" means the Certification Requirement Decision for Power Control Systems for the standard titled Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources, March 8, 2019, as adopted by reference in R 460.902.

R 460.902 Adoption of standards by reference.

Rule 2. (1) The standards specified in these rules are adopted by reference as follows:

(a) UL 1741 Standard for Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources, September 28, 2021 edition, is available from Underwriters Laboratories at the internet website: https://standardscatalog.ul.com/ProductDetail.aspx?productId=UL1741 at a cost of $798.00 at the time of adoption of these rules.

(b) UL 1741 Certification Requirement Decision for Power Control Systems for the standard titled Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources, March 8, 2019, is available from Underwriters Laboratories Inc., 333 Pfingsten Road, Northbrook IL 60062-2096.

(c) ANSI C84.1 – 2016 Electric Power Systems and Equipment – Voltage Ratings (60 Hz), June 9, 2016, is available from the American National Standards Institute, Inc. at the internet website https://webstore.ansi.org/ at a cost of $111.24 at the time of adoption of these rules.

(d) The following standards adopted by reference are available from IEEE at the internet website https://standards.ieee.org at the time of adoption of these rules.

(i) The IEEE 1453-2015, IEEE Recommended Practice for the Analysis of Fluctuating Installations on Power Systems, October 30, 2015, is available at a cost of $99.00 - $147.00 at the time of adoption of these rules.

(ii) The IEEE 1547 - 2018, IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power System Interfaces, April 6, 2018, is available at a cost of $149.00 - $224.00 at the time of adoption of these rules.

(iii) The IEEE 1547.1-2020 IEEE Standard Conformance Test Procedures for Equipment Interconnecting Distributed Energy Resources with Electric Power Systems and Associated Interfaces, May 21, 2020, is available at a cost of $197.00 - $296.00 at the time of adoption of these rules.

(iv) The IEEE 519-2014 IEEE Recommended Practice and Requirements for Harmonic Control in Electric Power Systems, June 11, 2014, is available at a cost of $52.00 - $66.00 at the time of adoption of these rules.

(2) The commission has copies of the standards specified in subrule (1) of this rule available for review at its offices located at 7109 W. Saginaw Hwy., Lansing, Michigan 48917-1120. The mailing address is Michigan Public Service Commission, P.O. Box 30221, Lansing, Michigan 48909-0221.

R 460.904 Informal mediation.

Rule 4. (1) The parties shall attempt to resolve all disputes arising out of the interconnection process, as defined by R 460.901a through R 460.992, according to the provisions of this rule.

(2) Prior to formal mediation under R 460.906, the parties shall attempt to resolve any conflict without commission intervention through direct discussion and informal negotiation.

(3) In the event that parties are unable to resolve the dispute privately, the parties may, by mutual agreement, make a written request for informal mediation to the commission staff. The informal mediation shall be conducted by an interconnection ombudsperson who shall be a member of the commission staff and designated by the commission. Both parties may choose to have attorneys or appropriate representation present.

(4) During informal mediation, the parties shall discuss relevant facts pertaining to the dispute and the relief being sought. The interconnection ombudsperson and relevant commission staff shall be present to facilitate the discussion and provide guidance among the parties. Parties shall operate in good faith and use best efforts to resolve the dispute.

(5) If a resolution is reached by the end of the meeting or meetings, the parties may draft a resolution of the dispute.

(6) If the parties reach impasse and are unable to resolve the dispute, the parties shall proceed to the formal mediation process described in R 460.906.

R 460.906 Formal mediation.

Rule 6. (1) If the parties have been unable to resolve a dispute through the informal mediation process under R 460.904, the parties shall then attempt to resolve the dispute in the following manner:

(a) The complaining party shall file a written notice of dispute with the commission. The notice of dispute must state the specific grounds for the dispute, sufficient facts to support the allegations, the relief requested, and must contain all information, testimony, exhibits, or other documents and information within the party's possession on which the party intends to rely to support the party's position.

(b) The complaining party shall give notice that it is invoking the procedures in this rule. The complaining party shall send the notice to the non-complaining party's email address and file the notice with the commission.

(c) The non-complaining party shall acknowledge the notice of dispute within 10 business days of its receipt and identify a representative with the authority to make decisions on its behalf with respect to the dispute.

(d) An administrative law judge shall serve as the mediator in these proceedings. The administrative law judge may request and receive assistance from commission staff.

(e) Within 60 business days from the date the non-complaining party acknowledges the dispute, the mediator shall issue a recommended settlement.

(f) Within 5 business days after the date the recommended settlement is issued, each party shall file with the commission a written acceptance or rejection of the recommended settlement. If the parties accept the recommendation, then the recommendation shall become an order. If a party rejects or fails to respond within 5 business days to the recommended settlement, then the dispute may proceed to a contested case hearing before the commission as provided in R 792.10415.

(2) Nothing in these rules precludes a disputing party from filing a formal complaint with the commission, either instead of or after pursuing informal mediation or formal mediation pursuant to these rules.

(3) The initiation of any form of dispute resolution by a party tolls any applicable deadlines under these rules until the dispute is resolved.

R 460.908 Timelines for electric utilities serving fewer than 1,000,000 in-state customers

Rule 8. An electric utility serving fewer than 1,000,000 in-state customers shall have an additional 10 business days to comply with the timelines in R 460.911 - R 460.1026. This rule does not apply to applicants or interconnection customers.

R 460.910 Waivers.

Rule 10. An electric utility, customer, alternative electric supplier, applicant, or interconnection customer may apply to the commission for a waiver from 1 or more provisions of these rules and may request expeditious processing. The commission may grant a waiver upon a showing of good cause and a finding that the waiver is in the public interest.

PART 2. INTERCONNECTION STANDARDS

R 460.911 Applicability.

Rule 11. These rules apply to all interconnection applications filed on or after the effective date of these rules. The electric utility shall complete work on any interconnection study agreement executed prior to the effective date of these rules in accordance with the terms and conditions of that interconnection study agreement. Any new studies or other additional work will be completed pursuant to these rules. An electric utility or an alternative electric supplier shall not restrict access to interconnection for level 1, level 2, and level 3 DERs that are not participants in the legacy net metering or distributed generation programs.

R 460.920 Electric utility interconnection procedures.

Rule 20. (1) An electric utility shall file applications for approval of interconnection procedures and forms within 30 business days of the effective date of these rules.

(2) The commission shall issue its order approving, rejecting, or modifying the proposed interconnection procedures and forms within 360 calendar days of the effective date of these rules. If the commission finds the procedures and forms proposed by the electric utility to be inadequate or unacceptable, the commission may either adopt procedures and forms proposed by another person in the proceeding or modify and accept the procedures and forms proposed by the electric utility.

(3) Until the commission accepts, rejects, or modifies an electric utility's interconnection procedures and forms, the electric utility may use the proposed interconnection procedures and forms when processing interconnection applications with the exception of fixed fees and fee caps. An electric utility shall only charge fees that comply with the requirements of R 460.926 until the commission accepts, rejects, or modifies the proposed interconnection procedures and forms unless the commission approves different fees pursuant to R 460.926(4).

(4) Two or more electric utilities may file a joint application proposing interconnection procedures for use by the joint applicants. The proposed interconnection procedures must ensure compliance with these rules.

(5) The proposed interconnection procedures must, at a minimum, include all of the following:

(a) All necessary applications, forms, and relevant template agreements.

(b) A schedule of all applicable fixed fees and fee caps.

(c) Voltage ranges for high voltage distribution and low voltage distribution.

(d) Required initial review screens.

(e) Required supplemental review screens.

(f) The process for conducting system impact studies and facilities studies on DERs when there is an affected system issue.

(g) Testing and certification requirements of DER telecommunications, cybersecurity, data exchange, and remote control operation.

(h) Parallel operation requirements.

(i) A method to estimate the expected annual kWh output of the generator or generators.

(j) Acceptable methods or standards for power-limited export DERs in compliance with allowances in R 460.980.

(k) A cost allocation methodology for study track DERs.

(l) An evaluation of an interconnection application for a project that includes single or multiple types of DERs at a site for which the applicant seeks a single point of common coupling.

(m) Details describing how an energy storage device may be integrated into an existing legacy net metering program system without impacting the 10-year grandfathering period or participation in the distributed generation program.

(n) For electric utilities that are member-regulated electric cooperatives, a procedure for fairly processing applications in instances in which the number of applications exceed the capacity of the electric cooperative to timely meet the deadlines in these rules.

(o) Examples of modifications that are not material modifications.

(p) The procedure for performing a material modification review to determine if a modification is material.

(q) Any required terms and conditions which must be specified in the general liability insurance for level 3, 4, and 5 projects.

(r) A list of the electric utility's holidays.

(s) If an electric utility uses an alternative process pursuant to R 460.956, a description of that process.

(6) An electric utility shall obtain commission approval to revise its interconnection procedures.

R 460.922 Online applications and electronic submission.

Rule 22. (1) An electric utility shall allow pre-application report requests, interconnection applications, and interconnection agreements to be submitted electronically, such as, through the electric utility's website or via email.

(2) An electric utility shall dedicate a page on its website or direct customers to a linked website with information on these rules. The relevant information available to an applicant or interconnection customer via a website must include all of the following:

(a) These rules and interconnection procedures in an electronically searchable format.

(b) The electric utility's applications and all associated forms in a format that allows for electronic entry of data.

(c) Sample documents including, at a minimum, a 1-line diagram with required labels.

(d) Contact information for the electric utility's DER interconnection coordinator, including an email address and a phone number.

(e) Directions for the submission of applications.

R 460.924 Communications.

Rule 24. (1) An electric utility shall designate 1 or more interconnection coordinators. The telephone number and e-mail address of the interconnection coordinator or coordinators must be made available on the electric utility's website. The interconnection coordinator or coordinators must be available to provide reasonable assistance to the applicant or interconnection customer but is not responsible to directly answer or resolve all of the issues that may arise in the interconnection process.

(2) An applicant may designate an application agent. An application agent may serve as the single point of contact for the applicant and may coordinate with the electric utility on the applicant's behalf. Designation of an application agent does not absolve the applicant from signing interconnection documents or from complying with the requirements in these rules and the interconnection agreement.

(3) An electric utility must be indemnified by the applicant and its application agent with respect to assistance provided by an interconnection coordinator or coordinators.

R 460.926 Fees.

Rule 26. (1) After the effective date of these rules, fees for the pre-application report, the non-export track and the fast track shall be established as listed in subrule (2) of this rule. Initial fees for the study track shall not exceed initial fee caps as established in subrule (3) of this rule. Fees shall remain in effect until interconnection procedures are approved by the commission under R 460.920.

(2) The fee amounts for the pre-application report, non-export track, and fast track for all levels of DERs are as follows:

(a) The pre-application report fee may not exceed $300.

(b) The non-export track fee may not exceed $100 + $1/kWac for certified DERs and $100 + $2/kWac for non-certified DERs.

(c) The fast track initial review fee is $100 + $1/kWac for certified DERs and $100 + $2/kWac for non-certified DERs.

(d) Any applicable legacy net metering program application fee pursuant to R 460.1004(7) or distributed generation program application fee pursuant to R 460.1006(6), together, may not exceed a total of $50.

(3) The initial fee caps for a fast track supplemental review and the study track for all levels of DERs are as follows:

(a) The fee for a fast track supplemental review including all review screens may not exceed $1,000.

(b) The study track fee for interconnection application review and the scoping meeting may not exceed $300.

(c) The system impact study fee may not exceed $10,000.

(d) The facilities study fee may not exceed $15,000.

(4) The fees listed in subrule (2) and initial fee caps listed in subrule (3) of this rule, must be displayed prominently on the electric utility's interconnection website.

(5) An electric utility that expects to incur costs greater than the fees listed in subrule (2) or initial fee caps listed in subrule (3) of this rule in the evaluation of an interconnection application may file a request for a waiver pursuant to R 460.910.

R 460.928 Fee and fee cap modifications.

Rule 28. (1) An electric utility shall include in its proposed interconnection procedures fixed fees to replace the fees specified in R 460.926(2)(a), (b), and (c), and add any other fixed fees the electric utility considers necessary.

(2) An electric utility shall include in its proposed interconnection procedures adjusted fee caps to replace the initial fee caps specified in R 460.926(3)(a), (b), (c), and (d), and add any other fee caps the electric utility considers necessary. An electric utility may charge actual costs up to the fee caps.

(3) The fixed fees must be specific to level size and be based on estimates of reasonable costs to perform the applicable service or study. The fee caps must be specific to level size and be based on a reasonable range of costs for performing the applicable study.

(4) The most recently approved fixed fees and fee caps must be listed in the electric utility's interconnection procedures and displayed prominently on the electric utility's interconnection website.

(5) The fixed fees and fee caps that are approved for inclusion in the electric utility's interconnection procedures by the commission may be reviewed at any time by the electric utility and adjusted, if necessary, subject to commission review and approval.

(6) Any modification of fees may not be applicable to fees already paid.

(7) An electric utility that expects to incur costs greater than its prevailing fee caps in the evaluation of an interconnection application may file a request for a waiver pursuant to R 460.910.

R 460.930 Pre-application report request form.

Rule 30. (1) An applicant shall submit a completed pre-application report request form and the required fee for a pre-application report on a proposed level 4 or level 5 DER.

(2) The pre-application report request form must include all of the following information:

(a) Project contact information, including name, address, phone number, and email address.

(b) Project location, as accurately as can be identified, which may be given by any of the following:

(i) Street address with nearby cross streets and town.

(ii) An aerial map with location clearly marked.

(iii) GPS coordinates.

(c) Account number, meter number, structure number, or other equivalent information identifying the proposed point of common coupling, if available.

(d) Whether the DER is any of the following:

(i) Solar.

(ii) Wind.

(iii) Cogeneration.

(iv) Storage.

(v) Solar with storage.

(vi) Other type of DER.

(e) Capacity of the DER types in alternating current kW and kVA, and kWh for storage.

(f) Whether the DER configuration is single or 3-phase.

(g) Whether the DER will be a stand-alone generator, meaning no onsite load other than station service.

(h) Whether the DER will be certified.

(i) Whether new service is requested. If there is existing service, the customer account number and site minimum and maximum current or proposed electric loads in kW, if available, must be included, and how the load is expected to change must be specified.

(j) Whether the location is new construction.

R 460.932 Pre-application report.

Rule 32. (1) Using the information provided in the pre-application report request form described in R 460.930, an electric utility shall identify the substation bus, bank, or circuit most likely to serve the point of common coupling. This identification by the

electric utility does not necessarily indicate that this would be the circuit to which the project ultimately connects.

(2) An applicant may request additional pre-application reports if information about multiple points of common coupling is requested. No more than 10 pre-application report requests may be submitted by an applicant and its affiliates during a 1-week period. An electric utility may reject additional pre-application report requests.

(3) The pre-application report must include all of the following information:

(a) Total capacity, in MW, of substation bus, bank, or circuit based on normal or operating ratings likely to serve the proposed point of common coupling.

(b) Existing aggregate generation capacity, in MW, interconnected to a substation bus, bank, or circuit likely to serve the proposed point of common coupling.

(c) Aggregate capacity, in MW, of generation not yet built but found in previously accepted interconnection applications, for a substation bus, bank, or circuit likely to serve the proposed point of common coupling.

(d) Available capacity, in MW, of substation bus, bank, or circuit likely to serve the proposed point of common coupling.

(e) Substation nominal distribution voltage.

(f) Nominal distribution circuit voltage at the proposed point of common coupling.

(g) Label, name, or identifier of the distribution circuit on which the proposed point of common coupling is located.

(h) Approximate circuit distance between the proposed point of common coupling and the substation.

(i) The actual or estimated peak load and minimum load data at any relevant line section or sections, including daytime minimum load and absolute minimum load, when available. If not readily available, the report must indicate whether the generator is expected to exceed minimum load on the circuit.

(j) Whether the point of common coupling is located behind a line voltage regulator and whether the substation has a load tap changer.

(k) Limiting conductor ratings from the proposed point of common coupling to the distribution substation.

(l) Number of phases available at the primary voltage level at the proposed point of common coupling, and, if a single phase, distance from the 3-phase circuit.

(m) Whether the point of common coupling is located on a spot network, area network, grid network, radial supply, or secondary network.

(n) Based on the proposed point of common coupling, the report must indicate whether power quality issues may be present on the circuit.

(o) Whether or not the area has been identified as having a prior affected system.

(p) Whether or not the site will require a system impact study for high voltage distribution based on size, location, and existing system configuration.

(4) The pre-application report may include only existing and readily available data. A request for a pre-application report does not obligate an electric utility to conduct a study or other analysis of the proposed DER if data is not readily available. The pre-application report must also indicate any information listed in subrule (3) of this rule that is not readily available. An electric utility may, at its discretion, return any portion of the pre-application report fee because some or all information does not exist.

(5) Pre-application report requests must be processed in the order in which an electric utility received the requests.

(6) An electric utility shall provide the data required in the pre-application report to the applicant within 20 business days of receipt of the completed request form and payment of the fee. The pre-application report produced by the electric utility is non-binding and does not confer any rights on the applicant.

R 460.934 Site control.

Rule 34. (1) Documentation of site control must be submitted with the application by the applicant.

(2) For level 3, 4, or 5 DERs, site control may be demonstrated by providing documentation that shows any of the following:

(a) Ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing and operating the DER.

(b) An enforceable option to purchase or acquire a leasehold site for this purpose.

(c) A legally binding agreement transferring a present real property right to specified real property along with the right to construct and operate a DER on the specified real property for a period of time not less than 5 years.

(3) For level 1 or 2 DERs, proof of site control may be demonstrated by the site owner's signature and contact information on the application.

(4) An applicant may redact commercially sensitive information from site control documents.

R 460.936 Interconnection applications.

Rule 36. (1) An electric utility shall provide an interconnection application for an applicant to complete, including for those applicants whose DERs will be configured to be non-exporting.

(2) All documents required for a complete interconnection application must be listed on the interconnection application. For level 4 and 5 interconnection applications, the list of required documents must include a completed pre-application report.

(3) For interconnection applications with proposed DERs that fall into level 1, an applicant shall provide a 1-line diagram and a site diagram.

(4) For interconnection applications with proposed DERs that fall into levels 2 and 3, an applicant shall provide a 1-line diagram that is either sealed by a professional engineer licensed in this state or signed by an electrical contractor who is licensed in this state with the electrical contractor's license number noted on the diagram. An applicant shall also provide a site diagram.

(5) For interconnection applications with proposed DERs that fall into levels 4 and 5, an applicant shall provide a 1-line diagram that is sealed by a professional engineer who is licensed in this state. An applicant shall also provide a site diagram.

(6) Applications shall be reviewed to assess whether they are complete and conforming in the order in which they were received. An application is considered received when an electric utility receives the application, the application's attachments, and the application fee. The application must be date-stamped for the first business day when the electric

utility has received the interconnection application, the application attachments, and payment of the application fee. An electric utility shall notify the applicant of receipt of the application by the end of the third business day following the date of the date stamp.

(7) The electric utility shall notify the applicant that the interconnection application is either complete and conforming, or incomplete, or non-conforming, within 10 business days of the date stamp.

(a) If an interconnection application is determined to be complete and conforming by the electric utility, the applicant must be notified that the interconnection application is accepted. The electric utility shall also indicate whether the interconnection application will be processed using the non-export track, fast track, or study track.

(b) If the application is incomplete or non-conforming, the electric utility shall provide to the applicant a written list of all deficiencies with the notification. The applicant shall have 60 business days from the date of electric utility notification to submit the necessary information and may provide up to 2 submissions during this time period. After each submission of information, the electric utility shall have 10 business days to notify the applicant that the interconnection application is either accepted or rejected due to continuing deficiencies. If the applicant does not meet the timelines required by this rule, the utility may withdraw the application.

(8) An electric utility shall comply with part 2 of these rules, R 460.911 to R 460.992, and its interconnection procedures when interconnecting DERs that it owns and operates onto its distribution system, with the exception of temporary DERs.

(9) An electric utility shall use the same process when processing and studying interconnection applications from all applicants, whether the DER is owned or operated by the electric utility, its subsidiaries or affiliates, or others, with the exception of temporary DERs.

(10) An electric utility shall review and update interconnection applications periodically to reflect new information required to properly review DERs, subject to commission review and approval.

R 460.938 Public interconnection list.

Rule 38. (1) An electric utility shall maintain a publicly available interconnection list, which is available in a sortable spreadsheet format. The sortable spreadsheet must be provided to the public upon request. An electric utility that has received not less than 100 complete interconnection applications in a year shall publish this list on the electric utility's website. The public interconnection list must be updated monthly unless no changes to the spreadsheet have occurred in that month. The date of the most recent update must be clearly indicated.

(2) The public interconnection list must include all of the following:

(a) An application identifier.

(b) The date that the electric utility received the application.

(c) The date that the electric utility considered the application to be complete and conforming.

(d) Whether the application is on the non-export track, fast track, or study track.

(e) The proposed DER nameplate capacity.

(f) The proposed DER interconnection size level.

(g) The DER technology type.

(h) The county and township in which the proposed point of common coupling will be located.

(i) The current status of the application's progress in the interconnection process.

(j) The labels, names, or identifiers of the distribution circuit and substation.

R 460.942 Non-export track review.

Rule 42. (1) Interconnection applications for DERs that will limit injection of electric energy into an electric utility's distribution system are eligible for evaluation under the non-export track. Non-export eligibility requires an existing electrical service at the applicant's premise.

(2) Subject to review and approval by the commission, an electric utility may limit the eligibility of the non-export track in its interconnection procedures based on the characteristics of its distribution system.

(3) Before submitting an interconnection application, a non-export track applicant may contact the electric utility for assistance in determining whether a non-export track review will be sufficient or the study track is necessary. The electric utility shall provide the applicant assistance based on available information. If the applicant chooses to proceed, an interconnection application shall be submitted pursuant to R 460.936.

(4) Within 20 business days after being notified that the application was accepted, the electric utility shall perform an initial review by using some or all of the initial review screens specified in the electric utility's interconnection procedures and notify the applicant of the results. If an electric utility chooses to perform a review using a subset of the initial review screens, the exclusion of 1 or more screens may not be the only basis for the electric utility to require interconnection facilities, distribution upgrades, further study, or application modifications.

(a) If the notification indicates that no interconnection facilities, distribution upgrades, further study, or application modifications are required, the electric utility shall provide specifications for any equipment the applicant will be required to install within 20 business days of the applicant being notified. Within 10 business days of receiving the equipment specifications, the applicant shall notify the electric utility whether it will proceed under R 460.964 to an interconnection agreement or will withdraw the application. The applicant's failure to notify the electric utility within the required time period shall result in the interconnection application being withdrawn by the electric utility.

(b) If application modification is offered by the electric utility, the applicant shall either withdraw the interconnection application or provide a modified application within 60 business days from the date of electric utility notification, with up to 2 resubmissions during this time period to provide a modified application. After each submission of information, the electric utility shall notify the applicant within 10 business day that the interconnection application is either accepted or rejected due to continuing deficiencies. If the applicant does not meet the timelines required by this subrule, the electric utility may withdraw the application. When the applicant provides a modified application, the electric utility shall follow the procedure specified in subrule (4) of this rule.

(5) If further study is required, the electric utility shall present options and the applicant shall decide whether to proceed to a supplemental review under R 460.950, or to the study track under R 460.952, or to withdraw the application. The applicant shall have 20 business days to decide on a course of action and notify the electric utility. In the absence of this notification, the electric utility may withdraw the application within the required time period.

(6) When an applicant changes from a non-exporting system to an exporting system, the applicant shall submit a new interconnection application.

R 460.944 Fast track applicability.

Rule 44. (1) Level 1, level 2, level 3, and 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. Applications that provide for the use of an energy storage device so the export of power meets the requirements of level 1, level 2, level 3, level 4 or level 5 as large as 5 MWac in which the applicant is not proposing to interconnect the DER with the electric utility's high voltage distribution system are also eligible for the fast track.

(2) An applicant that is eligible for the fast track may forgo the fast track and proceed directly to the study track.

(3) An applicant with an application that is outside the limitations specified in subrule (1) of this rule may petition the electric utility to have its application evaluated under fast track. The electric utility may approve or reject this request at its discretion.

(4) In determining fast track eligibility, an electric utility may aggregate all proposed new generation on a site regardless of the existence of a shared point of common coupling or multiple points of common coupling.

R 460.946 Fast track; initial review.

Rule 46. (1) An electric utility shall list in its interconnection procedures the initial review screens specified in subrule (4) of this rule. An electric utility may add additional details to each of these screens in the interconnection procedures.

(2) The electric utility may waive application of 1, some, or all of the initial review screens.

(3) Within 10 business days after an electric utility receives a complete and conforming level 1 or level 2 application and associated payment, or within 20 business days after an electric utility receives a complete and conforming level 3, level 4, or level 5 application and associated payment, the electric utility shall perform an initial review and notify the applicant of the results. The initial review must consist of applying the initial review screens selected by the electric utility pursuant to subrule (2) of this rule to the proposed DER. The electric utility shall not require a supplemental review or a system impact study if the DER passes the applied initial review screens.

(4) The initial review screens are all of the following:

(a) The entire proposed DER, including all aggregated site generation and point or points of interconnection, must be located within the electric utility's service territory.

(b) For interconnection of a proposed DER to a radial distribution circuit, the aggregated generation, including the proposed DER, on the circuit may not exceed 15% of the line section annual peak load as most recently measured or calculated if measured data is not available. A line section is that portion of an electric utility's distribution system connected to a customer bounded by automatic sectionalizing devices or the end of the distribution line. The electric utility shall consider 100% of applicable loading, if available, instead of 15% of line section peak load for level 1 and level 2 DER. In the event daytime loading data is not available, the data must be collected by January 2023 for electric utilities with more than one million customers in this state, or by a date specified in interconnection procedures approved by the commission for electric utilities with fewer than one million customers in this state, and shall not consider as part of the aggregate generation, for purposes of this screen, DER capacity known to be already reflected in the minimum load data. This screen does not apply to level 1 and level 2 non-export DER applications.

(c) For interconnection of a proposed DER to the load side of network protectors, the proposed DER must utilize an inverter-based equipment package and, together with the aggregated other inverter-based DERs, may not exceed the smaller of 5% of a network's maximum load or 50 kWac.

(d) The proposed DER, in aggregation with other DERs on the distribution circuit, may not contribute more than 10% to the distribution circuit's maximum fault current at the point on the primary voltage nearest the proposed point of common coupling. This screen does not apply to level 1 applications.

(e) The proposed DER, in aggregate with other DERs on the distribution circuit, may not cause any distribution protective devices and equipment or interconnection customer equipment on the system to exceed 87.5% of the short circuit interrupting capability. An interconnection may not be proposed for a circuit that already exceeds 87.5% of the short circuit interrupting capability. Distribution protective devices and equipment include, but are not limited to, substation breakers, fuse cutouts, and line reclosers. This screen does not apply to level 1 applications.

(f) The initial review screen determines the type of interconnection to a primary distribution line for the proposed DER, according to the requirements specified in the table in this subdivision. This screen includes a review of the type of electrical service provided to the applicant, including line configuration and the transformer connection to limit the potential for creating over-voltages on the electric utility's distribution system due to a loss of ground during the operating time of any anti-islanding function.

Primary Distribution Line Type	Type of Interconnection to Primary Distribution Line	Result
3-phase, 3 wire	3-phase or single phase, phase-to-phase	Pass screen
3-phase, 4 wire	Effectively-grounded 3- phase or single-phase, line-to-neutral	Pass screen

(g) If the proposed DER is to be interconnected on single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed DER export capacity, may not exceed 20 kWac or 65% of the transformer nameplate rating.

(h) If the proposed DER is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, its addition may not create an imbalance between the 2 sides of the 240 volt service of more than 20% of the nameplate rating of the service transformer.

(i) If the proposed DER is single-phase and is to be interconnected to a 3-phase service, its nameplate rating may not exceed 10% of the service transformer nameplate rating.

(j) If the proposed DER's point of common coupling is behind a line voltage regulator, the DER's nameplate rating must be less than 250 kWac. This screen does not include substation voltage regulators.

(5) If the proposed interconnection passes the initial review screens, or if the proposed interconnection fails the screens but the electric utility determines that the DER may be interconnected consistent with safety, reliability, and power quality standards, the electric utility shall notify the applicant. If a facilities study is not required, the interconnection application must proceed under R 460.964 to an interconnection agreement. If a facilities study is required, the interconnection application must proceed under R 460.962.

(6) If the proposed interconnection fails any of the initial review screens, and the electric utility does not or cannot determine that the DER may be interconnected consistent with safety, reliability, and power quality standards, the electric utility shall notify the applicant, provide the applicant with the results of the application of the initial review screens, and offer all of the following options:

(a) Attend a customer options meeting, as described in R 460.948.

(b) Proceed to supplemental review under R 460.950.

(c) Submit within 60 business days from the date of the electric utility notification, with up to 2 submissions during this time period, a complete and conforming revised interconnection application that includes application modifications offered or required by the electric utility. The application modifications must mitigate or eliminate the factors that caused the interconnection application to fail 1 or more of the initial review screens. After each submission of information, the electric utility has 10 business days to notify the applicant that the interconnection application is either accepted or rejected due to continuing deficiencies. If the applicant does not meet the timelines required by this subrule, the electric utility may withdraw the application. After the electric utility determines the application is accepted, the revised interconnection application must proceed under subrule (3) of this rule.

(d) Withdraw the interconnection application.

(7) If the applicant does not select a course of action under subrule (6) of this rule within 10 business days of notice from the electric utility, the electric utility shall withdraw the interconnection application.

R 460.948 Fast track; customer options meeting.

Rule 48. (1) Upon an applicant's request, the electric utility and the applicant shall schedule a customer options meeting between the electric utility and the applicant to review possible facility modifications, screen analysis, and related results to determine what further steps are needed to permit the DER to be connected safely and reliably to the distribution system. The customer options meeting must take place within 30 business days of the date of notification pursuant to R 460.946(6).

(2) At the customer options meeting, the electric utility shall offer all of the following options:

(a) Proceed to a supplemental review pursuant to R 460.950.

(b) Continue evaluating the interconnection application under the study track pursuant to R 460.952.

(c) Submit within 60 business days from the date of the customer options meeting, with up to 2 submissions during this time period, a complete and conforming revised interconnection application that includes application modifications offered or required by the electric utility, which mitigates or eliminates the factors that caused the interconnection application to fail 1 or more of the initial review screens. After each submission of information, the electric utility has 10 business days to notify the applicant that the interconnection application is either accepted or rejected due to continuing deficiencies. If the applicant does not meet the timelines required by this subrule, the electric utility may withdraw the application. After the electric utility accepts the revised interconnection application, it must proceed under R 460.946(3).

(d) Withdraw the interconnection application.

(3) Following the customer options meeting, the applicant has up to 20 business days to decide on a course of action and notify the electric utility. In the absence of this notification within the required time, the electric utility shall withdraw the application.

(4) The customer options meeting may take place in person or via telecommunications.

R 460.950 Fast track; supplemental review.

Rule 50. (1) An electric utility shall list in its interconnection procedures the supplemental review screens specified in subrule (5) of this rule. An electric utility may add additional details to each of these screens in the interconnection procedures.

(2) An electric utility may waive application of 1, some, or all of the supplemental review screens.

(3) To receive a supplemental review, an applicant shall submit payment of the supplemental review fee within 20 business days of agreeing to a supplemental review. If payment of the fee has not been received by the electric utility within 25 business days, the electric utility shall withdraw the interconnection application.

(4) Within 30 business days after the applicant pays the applicable supplemental review fee or fees, an electric utility shall perform a supplemental review and notify the applicant of the results. The supplemental review must consist of applying the initial review screens selected by the electric utility pursuant to subrule (2) of this rule to the proposed DER. The electric utility shall not require a system impact study if the DER passes the applied supplemental review screens.

(5) The supplemental review screens must include all of the following:

(a) Minimum load screen. Where 12 months of line section minimum load data, including onsite load but not station service load served by the proposed DER, are available, can be calculated, can be estimated from existing data, or can be determined from a power flow model, the aggregate DER capacity on the line section must be less than 100% of the minimum load for all line sections bounded by automatic sectionalizing devices upstream of the proposed DER. If minimum load data are not available, or cannot be calculated, estimated, or determined, an electric utility shall include the reason or

reasons that it is unable to calculate, estimate, or determine minimum load in its supplemental review results notification under subrules (6) and (7) of this rule. All of the following must be applied by the electric utility:

(i) The type of generation used by the proposed DER will be considered when calculating, estimating, or determining circuit or line section minimum load relevant for the application of the minimum load screen specified in subrule (5)(a) of this rule. Solar photovoltaic generation systems with no battery storage must use daytime minimum load. All other generation must use absolute minimum load unless an operating schedule is provided.

(ii) When this screen is being applied to a DER that serves some station service load, only the net injection of electric energy into the electric utility's distribution system may be considered as part of the aggregate generation.

(iii) The electric utility shall not consider as part of the aggregate generation, for purposes of this supplemental screen, DER capacity known to be already reflected in the minimum load data.

(b) Voltage and power quality screen. In aggregate with existing generation on the line section, all of the following conditions must be met:

(i) The voltage regulation on the line section can be maintained in compliance with relevant requirements under all system conditions.

(ii) The voltage fluctuation is within acceptable limits as defined by the IEEE Standard 1453-2015, IEEE Recommended Practice for the Analysis of Fluctuating Installations on Power Systems.

(c) Safety and reliability screen. The location of the proposed DER and the aggregate generation capacity on the line section may not create impacts to safety or reliability that require application of the study track to address. An electric utility shall consider all of the following when determining potential impacts to safety and reliability in applying this screen:

(i) Whether the line section has significant minimum loading levels dominated by a small number of customers, such as several large commercial customers.

(ii) Whether the loading along the line section is uniform.

(iii) Whether the proposed DER is located less than 0.5 electrical circuit miles for less than 5 kV or less than 2.5 electrical circuit miles for greater than 5 kV from the substation. In addition, whether the line section from the substation to the point of common coupling is a mainline rated for normal and emergency ampacity.

(iv) Whether the proposed DER incorporates a time delay function to prevent reconnection of the DER to the distribution system until distribution system voltage and frequency are within normal limits for a prescribed time.

(v) Whether operational flexibility is reduced by the proposed DER, such that transfer of the line section or sections of the DER to a neighboring distribution circuit or substation may trigger overloads, power quality issues, or voltage issues.

(vi) Whether the proposed DER employs equipment or systems certified by a recognized standards organization to address technical issues including, but not limited to, islanding, reverse power flow, or voltage quality.

(6) If the proposed interconnection passes the supplemental review, or if the proposed interconnection fails the review but the electric utility determines that the DER may be interconnected consistent with safety, reliability, and power quality standards, the electric

utility shall notify the applicant and the interconnection application must proceed pursuant to both of the following:

(a) If the proposed interconnection requires a facilities study, the interconnection application must proceed under R 460.962.

(b) If the proposed interconnection does not require further study, the interconnection application must proceed under R 460.964 to an interconnection agreement.

(7) If the proposed interconnection fails any of the supplemental review screens or the electrical utility is unable to perform a supplemental review screen, and the electric utility does not or cannot determine that the DER may be interconnected consistent with safety, reliability, and power quality standards, the electric utility shall notify the applicant, provide the applicant with the results of the application of the supplemental review screens, and offer both of the following options:

(a) Stop the supplemental review and continue evaluating the proposed interconnection under the study track under R 460.952.

(b) Withdraw the interconnection application.

(8) For subrules (6) and (7) of this rule, if an applicant does not select a course of action within 10 business days of notice from the electric utility, the electric utility shall withdraw the interconnection application.

R 460.952 Study track.

Rule 52. (1) An electric utility shall use the study track to evaluate an interconnection application that has been accepted under R 460.936 if 1 or more of the following conditions is met:

(a) The DER is not eligible for the non-export track or fast track.

(b) The DER did not pass the initial review screens as part of the fast track and the applicant selected the study track option in the customer options meeting.

(c) The DER did not pass 1 or more supplemental review screens.

(d) The DER was evaluated under the non-export track and further study is required.

(e) The DER is eligible for the fast track, but the applicant elected the study track.

(2) If the interconnection application must be evaluated under the study track because it meets the criteria of subrule (1)(a) of this rule, within 10 business days after the electric utility notifies the applicant that the interconnection application has been accepted pursuant to R 460.936, the electric utility shall provide to the applicant an individual study agreement or an agreement for an alternative process pursuant to R 460.956.

(3) If the interconnection application must be evaluated under the study track because it meets the criteria of subrule (1)(b), (c), or (d), of this rule, within 10 business days after the applicant has notified the electric utility to proceed to the study track, the electric utility shall provide to the applicant an individual study agreement or an agreement for an alternative process.

(4) An electric utility’s interconnection procedures may include a provision for determining appropriate milestone payments to include with the system impact study fee and facilities study fee.

R 460.954 Individual study.

Rule 54. (1) An electric utility that is evaluating DERs in the study track individually shall process the interconnection applications in the order in which the applications were placed into the study track, taking into account withdrawn interconnection applications and electrically remote DERs.

(a) An electrically remote DER in an individual study may be studied on an expedited schedule relative to electrically coincident DERs. Electrically remote DERs must be studied in the order the interconnection applications were considered complete.

(2) When an interconnection application is delayed due to an affected system issue, informal mediation pursuant to R 460.904, formal mediation pursuant to R 460.906, or a complaint pursuant to R 792.10439 to R 792.10446, other interconnection applications that were placed into the study track on a later date may progress in the order in which the interconnection applications were placed into the study track.

(3) An individual study process must consist of a system impact study pursuant to R 460.960 and a facilities study pursuant to R 460.962. An electric utility may waive 1 or both studies for a particular interconnection application. An electric utility may specify additional studies it may perform on an interconnection application in its interconnection procedures, provided the electric utility is able to meet all applicable timelines associated with an individual study process.

(4) Interconnection applications that meet all of the following requirements must be admitted into an individual study:

(a) An electric utility determined the application to be complete and conforming.

(b) An application qualifies for study track pursuant to R 460.952.

(c) An interconnection application has a pre-application report, when required by R 460.936(2).

(d) An applicant has paid all required fees.

(e) An applicant has signed and returned an individual study agreement.

R 460.956 Alternative process

Rule 56. An electric utility may use a process to study interconnection applications that is different from the process described by R 460.954 and R 460.958 – R 460.962. If an electric utility elects to use an alternative process, this process shall be described in the electric utility's interconnection procedures.

R 460.958 Scoping meeting for interconnection applications that are to be studied individually.

Rule 58. (1) This rule applies only to interconnection applications proceeding pursuant an individual study agreement.

(2) Upon request of the applicant, the electric utility and the applicant shall schedule a scoping meeting between the electric utility and the applicant to discuss the interconnection application and review existing fast track results, if any. The scoping meeting must take place within 20 business days after the interconnection application is considered complete by the electric utility or, if applicable, the fast track has been

completed and the applicant has elected to continue with the system impact study or facilities study.

(3) Scoping meetings are limited to 1 hour per application. Multiple applications by the same applicant may be addressed in the same meeting.

(4) The scoping meeting may occur in-person or via telecommunications.

(5) During the scoping meeting, the electric utility shall identify and communicate to the applicant whether the applicant must proceed to a system impact study, a facilities study, or an interconnection agreement and the basis for that decision, and 1 of the following must occur:

(a) If a system impact study must be performed, the interconnection application proceeds to R 460.960.

(b) If a facilities study must be performed, the interconnection application proceeds to R 460.962.

(c) If a system impact study is not required and a facilities study is not required, the interconnection application must proceed to R 460.964 for an interconnection agreement.

R 460.960 System impact study agreement, scope, procedure, and review meeting.

Rule 60. (1) For all DERs being studied individually, all of the following apply:

(a) An electric utility shall provide the applicant a system impact study agreement within 5 business days of proceeding to this rule.

(b) A system impact study agreement must include all of the following:

(i) An outline of the scope of the study.

(ii) The applicable fee including appropriate credit for any studies previously completed pursuant to the fast track or non-export track.

(iii) If necessary, a list of any additional and reasonable technical data needed from the applicant to perform the system impact study.

(iv) A timeline for completion of the system impact study.

(v) A list of the information that must be provided to the applicant in the system impact study report.

(c) An applicant who has requested a system impact study shall return the completed system impact study agreement, provide any additional technical data requested by the electric utility, and pay the required fee within 20 business days. An electric utility may consider the application withdrawn if the system impact study agreement, payment, and required technical data are not returned within 20 business days.

(d) A system impact study must identify and describe the electric system impacts that would result if the proposed DER was interconnected without electric system modifications. A system impact study must provide a non-binding good faith list of facilities that are required as a result of the application and non-binding estimates of costs and time to construct these facilities.

(e) An electric utility shall explain in its interconnection procedures the process for conducting system impact studies on DERs when there is an affected system issue.

(f) The electric utility shall complete the system impact study and transmit a system impact study report to the applicant within 60 business days of the receipt of the signed system impact study agreement study, payment of the system impact study fee, and any necessary technical data. If necessary, the electric utility shall transmit a facilities study

agreement to the applicant within 60 business days of receipt of the signed system impact study agreement, payment of all applicable fees, and any necessary technical data.

(g) An electric utility may request reasonable additional data from the applicant within 20 business days of beginning the system impact study. The electric utility and the applicant shall work together to resolve the additional data request so that the electric utility will be able to complete the system impact study within 60 business days as specified in subrule (1)(f) of this rule.

(h) Within 15 business days of receiving the system impact study report, the applicant shall notify the electric utility that it plans to pursue a system impact study review meeting, proceed to a facilities study pursuant to R 460.962, or withdraw the application. If the applicant fails to notify the electric utility within 15 business days, the electric utility may consider the application to be withdrawn.

(i) Upon request by the applicant pursuant to subrule (1)(h) of this rule, the electric utility and the applicant shall schedule a system impact study review meeting between the electric utility and the applicant to review system impact study results and determine what further steps are needed to permit the DER to be connected safely and reliably to the distribution system. The system impact study review meeting must take place within 25 business days of the electric utility receiving notification that the applicant plans to attend a system impact study review meeting.

(j) At the system impact study review meeting, the electric utility shall offer the applicant the option to withdraw the interconnection application, and one of the following options:

(i) Proceed to a facilities study pursuant to R 460.962.

(ii) Proceed directly to R 460.964 for an interconnection agreement.

(k) Following the meeting, the applicant has not more than 45 business days to decide on a course of action. If an applicant fails to notify the electric utility within 45 business days, the electric utility may consider the application to be withdrawn.

(l) The system impact study review meeting may occur in-person or via telecommunications.

R 460.962 Facilities study agreement, scope, procedure; review meeting.

Rule 62. (1) For DERs being studied individually, all of the following apply:

(a) If construction of facilities is required to provide interconnection and interoperability of the DER with the electric utility's distribution system, the electric utility shall provide the applicant a facilities study agreement and the results of the applicant's system impact study pursuant to R 460.960, if applicable. If no system impact study was performed, the electric utility shall provide a facilities study agreement within 10 business days of proceeding to this rule.

(b) The facilities study agreement must include the following:

(i) An outline of the scope of the study.

(ii) The applicable fee including appropriate credit for any studies previously completed pursuant to the fast track or non-export track.

(iii) A timeline for completion of the facilities study.

(iv) A list of the information that will be provided to the applicant in the facilities study report.

(c) The applicant shall return the signed facilities study agreement and pay the required facilities study fee within 20 business days. The electric utility may withdraw the application if the facilities study agreement and payment are not returned within 20 business days.

(d) A facilities study must specify and estimate the cost of the required equipment, engineering, procurement, and construction work, including overheads, needed to interconnect the DER, and an estimated timeline for the completion of construction. The electric utility shall provide cost estimates that are detailed and itemized.

(e) The electric utility shall explain in its interconnection procedures the process for conducting facilities studies on DERs while there is an affected system issue.

(f) The electric utility shall complete the facilities study and transmit a facilities study report to the applicant within 80 business days of the receipt of the signed facilities study agreement and payment of the facilities study fee.

(g) Within 10 business days of receiving a facilities study report from the electric utility, the applicant shall select 1 option from the following options:

(i) Request a facilities study review meeting with the electric utility.

(ii) Proceed to an interconnection agreement pursuant to R 460.964.

(iii) Withdraw the interconnection application.

If the applicant fails to inform the electric utility within 10 business days of its chosen course of action, the electric utility may consider the application withdrawn.

(h) Upon request by the applicant pursuant to subrule (1)(g)(i) of this rule, the electric utility and the applicant shall schedule a facilities study review to review the facilities study results and determine what further steps are needed to permit the DER to be connected safely and reliably to the distribution system. The facilities study review meeting must take place within 25 business days of the electric utility receiving notification that the applicant will attend a facilities study review meeting.

(i) At the facilities study review meeting, the electric utility shall offer both of the following options:

(i) Proceed to an interconnection agreement pursuant to R 460.964.

(ii) Withdraw the interconnection application.

(j) Following the meeting, the applicant has no more than 20 business days to decide on a course of action and notify the electric utility of this course of action. If the applicant fails to notify the electric utility within 20 business days, the electric utility may withdraw the application.

(k) The facilities study review meeting may be conducted in-person or via telecommunications.

R 460.964 Interconnection agreement.

Rule 64. (1) For level 1, 2, or 3 interconnection applications, where no construction of interconnection facilities or distribution upgrades is required, an electric utility shall provide its standard level 1, 2, and 3 interconnection agreement, which may include modifications to address any special operating conditions, to an applicant within 3 business days of reaching this stage.

(2) For level 1, 2, or 3 interconnection applications, where construction of interconnection facilities or distribution upgrades is required, an electric utility shall

provide its standard level 1, 2, and 3 interconnection agreement with modifications to address any special operating conditions, required construction activities, construction milestone timing, and cost to an applicant within 5 business days of reaching this stage. The applicant and electric utility shall mutually agree on the timing of construction milestones.

(3) For an applicant with level 1, 2, or 3 interconnection applications, the applicant shall sign and return the standard level 1, 2, and 3 interconnection agreement with payment, if applicable, within 20 business days of receiving the agreement.

(a) If the applicant did not sign and return the standard level 1, 2, and 3 interconnection agreement and payment, if applicable, within 20 business days, the electric utility shall notify the applicant of the missed deadline and grant an extension of 15 business days. If the electric utility did not receive the signed standard level 1, 2, and 3 interconnection agreement and any applicable payment during the 15-business-day extension, the electric utility may consider the interconnection application withdrawn subject to subrule 3(b) of this rule.

(b) If the applicant begins either the informal mediation pursuant to R 460.904, the formal mediation pursuant to R 460.906, or the complaint process pursuant to R 792.10439 to R 792.10446 within the 20 business days, the outcome of that process must establish a time frame for the applicant to return the signed interconnection agreement and any applicable payment.

(4) For level 1, 2, or 3 projects, the electric utility shall countersign and provide a completed copy of the standard level 1, 2, and 3 interconnection agreement within 10 business days of the applicant returning the signed standard level 1, 2, and 3 interconnection agreement and the interconnection application shall proceed to R 460.966.

(5) For level 4 or 5 projects, the electric utility shall provide its level 4 and 5 interconnection agreement, which may include modifications to address any special operating conditions, within 10 business days of reaching this stage. When construction of interconnection facilities or distribution upgrades is necessary, the level 4 and 5 interconnection agreement must contain either timelines for completion of activities and estimates of construction costs or a timetable when these requirements can be determined. The interconnection agreement must include a payment schedule that corresponds to the milestones established and must require the electric utility to refund any unspent and unobligated funds if the agreement is terminated.

(6) For an applicant with level 4 or 5 DERs, the applicant shall sign and return with payment, if applicable, a level 4 and 5 interconnection agreement within 30 business days.

(a) If the applicant does not sign and return the level 4 and 5 interconnection agreement with payment within 30 business days, an electric utility shall notify the applicant of the missed deadline and grant an extension of 15 business days. If the electric utility does not receive the signed level 4 and 5 interconnection agreement and payment, if applicable, during the 15-business-day extension, the electric utility may consider the interconnection application withdrawn, subject to subrule (6)(b) of this rule.

(b) If the applicant begins either the informal mediation pursuant to R 460.904, formal mediation pursuant to R 460.906, or the complaint process pursuant to R 792.10439 to R 792.10446 within 30 business days, the outcome of that process must establish a time

frame for the applicant to return the signed interconnection agreement and applicable payment. There is a rebuttable presumption in the complaint proceeding that the electric utility's standard construction, procurement, installation, design, and cost practices are lawful, reasonable, and prudent.

(i) For study track interconnection applications filed with an electric utility conducting individual studies, electrically coincident applications filed after the interconnection application must be placed on hold for not more than 60 business days. If either informal mediation pursuant to R 460.904, formal mediation pursuant to R 460.906, or the complaint process pursuant to R 792.10439 to R 792.10446 does not result in the applicant returning a signed interconnection agreement with any applicable payment within 60 business days and there are electrically coincident interconnection applications in progress behind this application, the electric utility may require the withdrawal of the interconnection application.

(7) For level 4 or 5 projects, an electric utility shall countersign and provide a completed copy of the level 4 and 5 interconnection agreement within 10 business days of the applicant returning a mutually agreed-upon and signed level 4 and 5 interconnection agreement and the interconnection application shall proceed to R 460.966.

(8) An applicant shall pay the actual cost of the interconnection facilities and distribution upgrades. The cost to the applicant for interconnection facilities and distribution upgrades may not exceed 110% of the estimate without an itemized summary and explanation of cost increases being provided to the applicant.If the costs are expected to exceed 125% of the estimate, the electric utility shall provide further explanation to the applicant prior to the costs being incurred. If the applicant does not consent in writing to pay the additional costs within 20 business days of receiving further explanation from the electric utility, the electric utility shall initiate informal mediation pursuant to R 460.904 no later than 5 business days after the conclusion of the 20 business day applicant consent period. The applicant may dispute the expected costs pursuant to either informal mediation pursuant to R 460.904, formal mediation pursuant to R 460.906, or the complaint process pursuant to R 792.10439 to R 792.10446. If there is a dispute, the applicant shall make payment within 30 business days of final resolution of the dispute.

(9) A party's obligations under the interconnection agreement may be extended by agreement. If a party anticipates that it will be unable to meet a milestone for any reason other than an unforeseen event, the party shall do all of the following:

(a) Immediately notify the other party of the reason or reasons for not meeting the milestone.

(b) Propose the earliest alternate date when it can attain this and future milestones.

(c) Request amendments to the interconnection agreement, if needed to address the changed milestones.

(10) The party affected by the failure to meet a milestone shall not withhold agreement to any amendments proposed in subrule (9)(c) of this rule unless 1 of the following applies:

(a) The party affected will suffer significant uncompensated economic or operational harm from the amendment or amendments.

(b) The milestone under question has been previously delayed. (c) The affected party has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the party proposing the amendment.

(11) If the party affected by the failure to meet a milestone disputes the proposed extension, the affected party may pursue either informal mediation pursuant to R 460.904, formal mediation pursuant to R 460.906, or the complaint process pursuant to R 792.10439 to R 792.10446.

(12) The electric utility shall provide the applicant with a final accounting report of any difference between costs charged to the applicant and previous payments to the electric utility for interconnection facilities or distribution upgrades.

(a) If the costs charged to the applicant exceed its previous aggregate payments, the electric utility shall bill the applicant for the amount due and the applicant shall make a payment to the electric utility within 20 business days of the final accounting report. The applicant may dispute the invoice pursuant to either informal mediation pursuant to R 460.904, formal mediation pursuant to R 460.906, or the complaint process pursuant to R 792.10439 to R 792.10446. If there is a dispute, the applicant shall make payment within 30 business days of final resolution of the dispute. Failure by the applicant to pay its costs is cause for disconnection of the applicant's DER.

(b) If the applicant's previous aggregate payments exceed its costs under the interconnection agreement, the electric utility shall refund to the applicant an amount equal to the difference within 20 business days of the final accounting report.

(13) The electric utility is responsible for specifying requirements in interconnection agreements to support independent system operator regulations or regional transmission operator regulations.

(14) The electric utility may propose to the commission that a signed interconnection agreement be modified to require compliance with changes to an independent system operator, a regional transmission operator, or the state's regulations, provided that these modifications do not alter the rights or obligations of the interconnection customer. Unless the electric utility has the consent of the applicant or interconnection customer in writing, an electric utility shall not modify a signed interconnection agreement without commission approval.

R 460.966 Inspection, testing, and commissioning.

Rule 66. (1) If the interconnection application requires telecommunications, cybersecurity, data exchange or remote controls operation, successful testing and certification of these items must be completed prior to or during testing. The electric utility's interconnection procedures must describe the technical requirements of common items, but site-specific requirements may be included in the interconnection agreement.

(2) An applicant shall notify the electric utility when installation of a DER and any required local code inspection and approval is complete. The applicant shall provide any test reports or configuration documents as defined in the standard level 1, 2, and 3 interconnection agreement or level 4 and 5 interconnection agreement.

(3) The electric utility shall review the applicant's inspection, test reports, or configuration documents, and communicate its intent to perform a witness or commissioning test, or waive its right to perform a witness test and commissioning test within 10 business days. If the electric utility finds the applicant's inspection, test reports, or configuration documents to be incomplete, insufficient, or unsatisfactory, the electric utility shall provide

its reasons for doing so in writing and the applicant shall have at least 20 business days to implement corrections to those documents. The applicant, after taking corrective action, shall request the electric utility to reconsider its inspection, test reports, or configuration documents.

(4) If the electric utility intends to witness or perform commissioning tests required to comply with the interconnection agreement or the interconnection procedures and inspect the DER, the electric utility shall witness or perform the commissioning tests and inspect the DER within the following:

(a) Ten business days of receiving the notification from the applicant pursuant to subrule (2) of this rule for level 1 applications.

(b) Twenty business days of receiving the notification from the applicant pursuant to subrule (2) of this rule for level 2 and level 3 applications.

(c) A mutually-agreed upon timeframe after receiving the notification from the applicant pursuant to subrule (2) of this rule for level 4 and 5 applications.

(5) The electric utility may waive its right to visit the site and inspect the DER or perform the commissioning tests.

(a) If the electric utility waives this right, it shall provide a written waiver to the applicant within 10 business days from receiving the notification from the applicant pursuant to subrule (2) of this rule.

(b) The applicant shall provide the electric utility with the completed commissioning test report within 20 business days of receipt of the electric utility's written waiver.

(6) If the electric utility attempts to conduct the inspection and testing pursuant to subrule (4) of this rule at the arranged time and is unable to access the DER or complete the testing, the DER must remain disconnected until the applicant and the electric utility can complete the inspection and testing.

(7) If the electric utility witnessed or performed commissioning tests and inspected the DER pursuant to subrule (4) of this rule, within 5 business days of the receipt of the completed commissioning test report, the electric utility shall notify the applicant whether it has accepted or rejected the commissioning test report and found the site to be satisfactory or unsatisfactory.

(a) If the commissioning test report is accepted and the site was found satisfactory, the electric utility shall provide the notification of acceptance in writing, and the interconnection application proceeds to R 460.968.

(b) If the electric utility rejects the commissioning test report or did not find the site satisfactory, the electric utility shall provide its reasons for doing so in writing and the applicant has not less than 20 business days to implement corrections. The applicant, after taking corrective action, shall request the electric utility to reconsider its findings. The applicant may be billed the actual cost of any re-inspections.

(8) If the electric utility waived its right to witness or perform commissioning tests and inspect the DER pursuant to subrule (5) of this rule, within 5 business days of the receipt of the completed commissioning test report, the electric utility shall notify the applicant whether it has accepted or rejected the commissioning test report.

(a) If the commissioning test report is accepted, the electric utility shall provide notification of acceptance, and the interconnection application proceeds to R 460.968.

(b) If the electric utility rejects the commissioning test report, the electric utility shall provide its reasons for doing so in writing and the applicant has not less than 20 business

days to implement corrections. The applicant, after taking corrective action, may then request the electric utility to reconsider its findings.

(9) The cost of testing and inspection for applicants participating in an electric utility's distributed generation program, as described in part 3 of these rules, R 460.1001 to R 460.1026, are considered a cost of operating a distributed generation program and must be recovered pursuant to section 175(1) of the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1175.

(10) If the applicant does not notify the electric utility that the DER is installed and ready to test pursuant to subrule (2) of this rule, the electric utility may, in writing, query the status of the interconnection. If the applicant does not provide a written response within 10 business days or no progress is evident, the electric utility may consider the interconnection application withdrawn.

R 460.968 Authorization required prior to parallel operation.

Rule 68. (1) The electric utility shall provide to the applicant written authorization to operate in parallel with the electric utility within 5 business days of all of the following conditions being met:

(a) The electric utility notified the interconnection applicant that the commissioning test and inspection, where applicable, are accepted.

(b) The applicant complied with all applicable parallel operation requirements as set forth in the electric utility's interconnection procedures and applicable interconnection agreement.

(c) The applicant complied with all applicable local, state, and federal requirements.

(d) The electric utility received full payments for all outstanding bills.

(2) With the written authorization, interconnection of the DER is considered approved for parallel operation, the DER may begin operating, and the applicant is considered an interconnection customer.

(3) The applicant shall not operate its DER in parallel with the electric utility's distribution system without prior written permission to operate from the electric utility.

(4) Subject to reasonable timing and other conditions, including completion of conditions in the interconnection agreement or interconnection procedures, the electric utility shall allow for reasonable but limited testing before written authorization has occurred.

R 460.970 Cost allocation of interconnection facilities, distribution upgrades, and associated operation and maintenance costs.

Rule 70. Costs for interconnection facilities, distribution upgrades, and associated operation and maintenance costs must be classified into 1 of the following categories:

(a) Site-specific costs, which include, but are not limited to, costs of interconnection facilities and distribution upgrades that are caused by 1 DER, whether that DER is electrically co-incident with other DERs or not. These costs must be assigned to the cost-causing applicant.

(b) Shared interconnection facilities costs, which are costs caused by DERs which together necessitate the construction of interconnection facilities. The interconnection

facilities costs, including any associated operation and maintenance costs, that should be shared must be allocated to each applicant based on a methodology described in the electric utility's interconnection procedures.

(c) Shared distribution upgrade costs, which are costs caused by electrically co-incident DERs that together necessitate a distribution upgrade. The distribution upgrade costs, including any associated operation and maintenance costs, that should be shared must be allocated to each applicant based on a methodology described in the electric utility's interconnection procedures.

R 460.974 Interconnection metering and communications.

Rule 74. (1) Any metering and communications requirements necessitated by use of the DER must be installed at the applicant's expense. The electric utility may furnish this equipment at the applicant's expense.

(2) The electric utility may charge the interconnection customer reasonable ongoing fees to maintain the metering and communications equipment. These fees must be listed in the interconnection agreement.

R 460.976 Post commissioning remedy.

Rule 76. (1) If the electric utility finds that the DER is operating outside the terms of the interconnection agreement but does not find immediate disconnection pursuant to R 460.978(1)(f) and (g) warranted, the electric utility shall promptly inform the interconnection customer or its agent of this finding. The interconnection customer is responsible for bringing the DER into compliance within 30 business days or a mutually agreed-upon time period. The electric utility may perform an inspection of the DER after a remedy is applied.

(2) If the DER is not brought into compliance within 30 business days or the mutually agreed-upon time period, the electric utility may apply a remedy and bill the interconnection customer. The interconnection customer shall pay this bill within 5 business days.

R 460.978 Disconnection.

Rule 78. (1) An electric utility may refuse to connect or may disconnect a project from the distribution system if any of the following conditions apply:

(a) Failure of the interconnection customer to bring a DER into compliance pursuant to R 460.976(1).

(b) Failure of the interconnection customer to pay costs of remedy pursuant to R 460.976(2).

(c) Termination of interconnection by mutual agreement.

(d) Distribution system emergency, but only for the time necessary to resolve the emergency.

(e) Routine maintenance, repairs, and modifications performed in a reasonable time and with prior notice to the interconnection customer.

(f) Noncompliance with technical or contractual requirements in the interconnection agreement that could lead to degradation of distribution system reliability, electric utility equipment, and electric customers' equipment.

(g) Noncompliance with technical or contractual requirements in the interconnection agreement that presents a safety hazard.

(h) Other material noncompliance with the interconnection agreement.

(i) Operating in parallel without prior written authorization from the electric utility as provided for in R 460.968.

(2) An electric utility may disconnect electric service, where applicable, pursuant to R 460.136.

R 460.980 Capacity of the DER.

Rule 80. (1) If the interconnection application requests an increase in capacity for an existing DER, the electric utility shall evaluate the application based on the new ongoing operating capacity of the DER. The maximum capacity of a DER is the aggregate nameplate capacity or may be limited as described in the electric utility's interconnection procedures.

(2) An interconnection application for a DER that includes single or multiple types of DERs at a site for which the applicant seeks a single point of common coupling must be evaluated as described in the electric utility's interconnection procedures.

(3) The electric utility's interconnection procedures must include acceptable methods for power limited export DER so that the DER capacity considered by the electric utility for reviewing the interconnection application is only the amount capable of being exported.

(4) An electric utility shall allow interconnection of limited-export or non-exporting DERs according to this subrule. If a DER uses any configuration or operating mode in this subrule to limit the export of electrical power across the point of common coupling, then the generating capacity shall be only the amount capable of being exported not including any inadvertent export. To prevent impacts on system safety and reliability, any inadvertent export from a DER must comply with the limits in subdivisions (e) or (f) of this subrule. The generating capacity specified by the applicant in the application will subsequently be included as a limitation in the interconnection agreement. Other means not listed in this subrule may be utilized to limit export if mutually agreed upon by the electric utility and applicant.

(a) To ensure power is never exported across the point of common coupling, a reverse power protective function may be provided. The default setting for this protective function shall be 0.1% export of the service transformer's rating, with a maximum 2.0 second time delay.

(b)To ensure at least a minimum amount of power is imported across the point of common coupling at all times and, therefore, that power is not exported, an under-power protective function may be provided. The default setting for this protective function shall be 5% import of the DER's total nameplate rating, with a maximum 2.0 second time delay.

(c)This option requires the nameplate rating of the DER, minus any auxiliary load, to be so small in comparison to its host facility's minimum load that the use of additional

protective functions is not required to ensure that power will not be exported to the distribution system. This option requires the DER capacity to be no greater than 50% of the applicant's verifiable minimum host load over the past 12 months.

(d) A reduced output rating utilizing the power rating configuration setting may be used to ensure the DER does not generate power beyond a certain value lower than the nameplate rating.

(e) DERs may utilize, a Nationally Recognized Testing Laboratory Certified Power Control System and inverter system that results in the DER disconnecting from the distribution system, ceasing to energize the distribution system or halting energy production within 2 seconds if the period of continuous inadvertent export exceeds 30 seconds. Failure of the control or inverter system for more than 30 seconds, resulting from loss of control or measurement signal, or loss of control power, must result in the DER entering an operational mode where no energy is exported across the point of common coupling to the distribution system.

(f) DERs may be designed with other control systems and/or protective functions to limit export and inadvertent export to levels mutually agreed upon by the applicant and the electric utility. The limits may be based on technical limitations of the applicant's equipment or the distribution system's equipment. To ensure inadvertent export remains within mutually agreed-upon limits, the applicant shall use an internal transfer relay, energy management system, or other customer facility hardware or software.

R 460.982 Modification of the interconnection application.

Rule 82. (1) At any point after an interconnection application is considered accepted but before the signing of an interconnection agreement, the applicant, the electric utility, or the affected system owner may propose modifications to the interconnection application that may improve the costs and benefits of the interconnection, or that improve the ability of the electric utility to accommodate the interconnection. The applicant shall submit to the electric utility, in writing, all proposed modifications to any information provided in the interconnection application and the electric utility shall perform an evaluation to determine whether the proposed modification is a material modification and provide the results to the applicant within 10 business days.

(2) The electric utility shall not be required to accept or implement a modification to the electric utility's distribution system or generation assets that is proposed by an applicant or affected system operator.

(3) The applicant may request a 1-hour consultation to discuss the results of the material modification review.

(4) Neither the electric utility nor the affected system operator may unilaterally modify an accepted interconnection application. If the electric utility evaluates DERs using individual studies, the timelines specific to that interconnection application must be placed on hold while the proposed modification is being evaluated by the electric utility.

(5) For a proposed modification which the electric utility has determined is a material modification and that further study is required, the applicant shall select 1 of the following options:

(a) Withdraw the modification.

(b) Withdraw the application.

(c) Propose a different modification to the interconnection application for electric utility review pursuant to subrule(1) to determine whether the modification is material.

(d) If the electric utility offers an expedited study of the application with the proposed material modification, the applicant may request the expedited study. If the electric utility offers an expedited study, the process of performing an expedited study must be described in the electric utility's interconnection procedures.

(e) initiate informal mediation pursuant to R 460.904

(f) initial formal mediation pursuant to R460.906

(g) file a complaint pursuant to R 792.10439 to R 792.10446.

(6) The applicant shall notify the electric utility of its selection pursuant to subrule (5) of this rule within 10 business days of receiving the electric utility notification of the results or the modification may be considered withdrawn.

(7) For a proposed modification which the electric utility has determined is a material modification, but which does not require further study, the electric utility shall continue processing the interconnection application according to these rules.

(8) Any modification to the interconnection application that could affect the operation of the distribution system, including but not limited to, changes to machine data, equipment configuration, or the interconnection site of the DER, not agreed to in writing by the electric utility and the applicant may be treated by the electric utility as a withdrawal of the interconnection application requiring submission of a new interconnection application.

(9) At any point prior to the execution of an interconnection agreement, changes to ownership will cause the interconnection application to be put on hold until the new owner signs all necessary agreements and documents. An electric utility may not be found in violation of these rules related to the processing of the interconnection application during such a transfer of ownership.

(10) The electric utility's interconnection procedures must provide a procedure for performing a material modification review.

R 460.984 Modifications to the DER.

Rule 84. After the execution of the interconnection agreement, the applicant shall notify the electric utility of any plans to modify the DER. The electric utility shall review the proposed modification to determine if the modification is considered a material modification. If the electric utility determines that the modification is a material modification, the electric utility shall notify the applicant, in writing of its determination and the applicant shall submit a new application and application fee along with all supporting materials that are reasonably requested by the electric utility. The applicant may not begin any material modification to the DER until an interconnection agreement incorporating the material modification is fully executed.

R 460.986 Insurance.

Rule 86. (1) An applicant interconnecting a level 1 or 2 project to the distribution system of an electric utility may not be required by the electric utility to obtain any additional liability insurance.

(2) An electric utility shall not require an applicant interconnecting a level 1 or 2 project to name the electric utility as an additional insured party.

(3) For a level 3 project, the applicant shall obtain and maintain general liability insurance of a minimum of $1,000,000.

(4) For a level 4 project, the applicant shall obtain and maintain general liability insurance of a minimum of $2,000,000.

(5) For a level 5 project, the applicant shall obtain and maintain general liability insurance of a minimum of $3,000,000.

(6) For level 3, 4, and 5 projects, the electric utility may describe in its interconnection procedures required terms and conditions which must be specified in the general liability insurance.

R 460.988 Easements and rights-of-way.

Rule 88. If an electric utility line extension is required to accommodate an interconnection, the electric utility is responsible for providing and obtaining easements or rights-of-way. The applicant is responsible for the cost of providing and obtaining easements or rights-of-way.

R 460.990 Interconnection penalties.

Rule 90. Pursuant to section 10e of 1939 PA 3, MCL 460.10e, an electric utility shall take all necessary steps to ensure that DERs are connected to the distribution systems within their operational control. If the commission finds, after notice and hearing, that an electric utility has prevented or unduly delayed the ability of a DER greater than 100 kW to connect to the distribution system of the electric utility, the commission may order remedies designed to make whole the applicant proposing the DER, including, but not limited to, reasonable attorney fees. If the electric utility violates this rule, the commission may order fines of not more than $50,000 per day, commensurate with the demonstrated impact of the violation.

R 460.991 Business day exclusions.

Rule 91. An electric utility shall notify the commission and all applicants that have in-process applications when timelines are being extended due to a day in which electric service is interrupted for 10% or more of an electric utility's customers pursuant to R 460.901a(k). The electric utility shall also notify the commission and all applicants that have in-process applications when application processing resumes.

R 460.992 Electric utility annual reports.

Rule 92. An electric utility shall file an annual interconnection report on a date and in a format determined by the commission.

PART 3. DISTRIBUTED GENERATION PROGRAM STANDARDS

R 460.1001 Application process.

Rule 101. (1) An electric utility shall file initial distributed generation program tariff sheets in the first rate case filed after June 1, 2018.

(2) Within calendar 30 days of a commission order approving an electric utility's initial distributed generation tariff, or within 30 calendar days of the effective date of these rules, whichever is later, an alternative electric supplier serving customers in that electric utility's service territory shall file an updated distributed generation program plan applicable to its customers in the affected electric utility's service territory.

(3) An electric utility and an alternative electric supplier shall annually file a legacy net metering program report and, if applicable, a distributed generation program report not later than March 31 of each year.

(4) An electric utility and an alternative electric supplier shall maintain records of all applications and up-to-date records of all eligible electric generators participating in the legacy net metering program and distribution generation program.

(5) Selection of customers for participation in the legacy net metering program or distributed generation program must be based on the order in which the applications are received.

(6) An electric utility or alternative electric supplier shall not refuse to provide or discontinue electric service to a customer solely because the customer participates in the legacy net metering program or distributed generation program.

(7) The legacy net metering program and distributed generation program provided by electric utilities and alternative electric suppliers must be designed for a period of not less than 10 years and limit each applicant to generation capacity designed to meet up to 100% of the customer's electricity consumption for the previous 12 months.

(a) The generation capacity must be determined by an estimate of the expected annual kWh output of the generator or generators as determined in an electric utility's interconnection procedures and specified on an electric utility's legacy net metering program or distributed generation program tariff sheet or in the alternative electric supplier's legacy net metering program or distributed generation program plan. For projects in which energy export controls are implemented pursuant to section R 460.980 and utilized to limit the export to 100% of the customer's electricity consumption for the previous 12 months, an electric utility shall not add the storage capacity to generation capacity for the purpose of the study. If a customer has multiple inverters capable of exporting to the distribution grid, the inverters must be configured in a way that prevents the cumulative maximum export at any given time to exceed the approved amount in the customer's application.

(b) A customer's electric consumption must be determined by 1 of the following methods:

(i) The customer's annual energy consumption, measured in kWh, during the previous 12-month period.

(ii) If there is no data, incomplete data, or incorrect data for the customer's energy consumption or the customer is making changes on-site that will affect total consumption, the electric utility or alternative electric supplier and the customer shall mutually agree on a method to determine the customer's electric consumption.

(c) A net metering or distributed generation customer using an energy storage device in conjunction with an eligible electric generator shall not design or operate the energy storage device in a manner that results in the customer's electrical output exceeding 100% of the customer's electricity consumption for the previous 12 months. The addition of an energy storage device to an existing approved legacy net metering program system or distributed generation program system is considered a material modification. The electric utility interconnection procedures must include details describing how energy storage equipment may be integrated into an existing legacy net metering program system without impacting the 10-year grandfathering period or participation in the distributed generation program.

(8) An applicant shall notify the electric utility of plans for any material modification to the project. An applicant shall re-apply for interconnection pursuant to part 2 of these rules, R 460.911 to R 460.992, and submit revised legacy net metering program or distributed generation program application forms and associated fees. An applicant may be eligible to continue participation in the legacy net metering program or distributed generation program when a material modification is made to a customer's previously approved system and it does not violate the requirements of subrule (7) of this rule or Rule 460.1026. An applicant shall not begin any material modification to the project until the electric utility has approved the revised application, including any necessary system impact study or facilities study. The application must be processed pursuant to part 2 of these rules, R 460.911 to R 460.992.

R 460.1004 Legacy net metering program application and fees.

Rule 104. (1) An electric utility or alternative electric supplier may use an online legacy net metering program application process. An electric utility or alternative electric supplier not using an online application process, may utilize a uniform legacy net metering program application form which must be approved by the commission. An electric utility's legacy net metering program application may be combined with an electric utility's interconnection application.

(2) A customer taking retail electric service from an electric utility and applying to participate in the legacy net metering program shall concurrently submit a completed legacy net metering program application and interconnection application or indicate on the legacy net metering program application the date that the customer applied for interconnection with the electric utility and, if applicable, the date the customer received authorization to operate in parallel pursuant to R 460.968.

(a) Where a legacy net metering program application is accompanied by an associated interconnection application, an electric utility shall complete its review of the legacy net metering program application in parallel with processing the interconnection application pursuant to part 2 of these rules, R 460.911 to R 460.992.

(i) Combined with the notification of interconnection application completeness and conformance pursuant to R 460.936, the electric utility shall notify the customer whether the legacy net metering program application is accepted, and provide an opportunity for the customer to resolve any application deficiencies pursuant to the timelines in R 460.936(7)(b) or withdraw the application, or the electric utility may consider the legacy net metering program application withdrawn without refund of the application fees.

(ii) While processing the interconnection application, which may include, but is not limited to, R 460.946 fast track initial review, the electric utility shall determine whether the appropriate meter or meters, is installed for the legacy net metering program.

(b) When a legacy net metering program application is filed with an already in-progress interconnection application, the utility may process the legacy net metering application in parallel with the interconnection application pursuant to part 2 of these rules, R 460.911 to R 460.992, and subrule (2)(a) of this rule, if practicable, or adopt the review process pursuant to subrule (2)(c) of this rule.

(c) When a legacy net metering program application is filed with an in-progress interconnection application and the electric utility determines it is not practicable to process the legacy net metering program application in parallel with the interconnection application, or when the legacy net metering application is filed subsequent to the customer receiving authorization to operate its eligible generator in parallel pursuant to R 460.968, the electric utility shall process the legacy net metering program application pursuant to both of the following:

(i) The electric utility shall review the legacy net metering program application and determine whether to accept the application pursuant to the timelines in R 460.936(6) and (7) within 10 business days. The timelines in R 460.936(7)(a) apply to electric utility notifications. The electric utility shall provide the customer an opportunity to resolve any application deficiencies pursuant to R 460.936(7)(b). If the customer fails to remedy the deficiency within the timelines pursuant to R. 460.936(7)(b), the electric utility may consider the legacy net metering application withdrawn without refund of the application fees.

(ii) Within 10 business days of notifying the customer that the legacy net metering application has been accepted, the electric utility shall determine whether the appropriate meter is installed for the legacy net metering program.

(d) If a customer approved for participation in the legacy net metering program requires a new or additional meter or meters, the electric utility shall arrange with the customer to install the meter or meters at a mutually agreed upon time.

(e) The electric utility shall complete changes to the customer’s account to permit the legacy net metering program credit to be applied to the account no more than 10 business days after the necessary meter is installed and all necessary steps in R 460.966 are completed.

(3) A customer taking retail electric service from an alternative electric supplier shall submit a completed legacy net metering program application to the alternative electric supplier and provide a copy to the electric utility that provides distribution service.

(a) The electric utility shall process the legacy net metering program application according to the applicable timelines in subrule (2)(a) through (d) of this rule.

(b) The electric utility shall notify the alternative electric supplier when it has provided the applicant authorization to operate the eligible electric generator in parallel pursuant to R 460.968 and, if applicable, that installation of the appropriate meter or meters is completed.

(c) Within 10 business days of the electric utility’s notification, the alternative electric supplier shall complete changes to the applicant's account to permit the legacy net metering program credit to be applied to the account.

(4) If a legacy net metering program application is not approved by the alternative electric supplier, the alternative electric supplier shall notify the customer and the electric utility of the reasons for the disapproval. The alternative electric supplier shall provide the customer an opportunity to remedy the deficiency pursuant to the timelines in R 460.936(7)(b) or withdraw the application. If the customer fails to remedy the deficiency within the timelines pursuant to R. 460.936(7)(b), the alternative electric supplier and electric utility may consider the legacy net metering application withdrawn without refund of the application fees.

(5) If a customer's application for the legacy net metering program is approved, the customer shall have a completed and approved installation within 6 months from the date the customer's application is considered complete, or the electric utility or alternative electric supplier may terminate the application without refund and shall have no further responsibility with respect to the application.

(6) Customers participating in a legacy net metering program approved by the commission before the commission establishes a tariff pursuant to section 6a(14) of 1939 PA 3, MCL 460.6a, may elect to continue to receive service under the terms and conditions of that program for up to 10 years from the date of initial enrollment.

(7) The legacy net metering program application fee for electric utilities and alternative electric suppliers may not exceed $50. The fee must be specified on the electric utility's legacy net metering tariff sheet or in the alternative electric supplier's legacy net metering program plan.

R 460.1006 Distributed generation program application and fees.

Rule 106. (1) An electric utility or alternative electric supplier may use an online distributed generation program application process. An electric utility or alternative electric supplier not using an online application process may utilize a uniform distributed generation program application form that must be approved by the commission. An electric utility's distributed generation program application may be combined with an electric utility's interconnection application.

(2) A customer taking retail electric service from an electric utility and applying to participate in the distributed generation program shall concurrently submit a completed distributed generation program application and interconnection application or indicate on the distributed generation program application the date that the customer applied for interconnection with the electric utility and, if applicable, the date the customer received authorization to operate in parallel pursuant to R 460.968.

(a) When a distributed generation program application is accompanied by an associated interconnection application, an electric utility may complete its review of the distributed generation program application concurrently, before, or after processing the interconnection application pursuant to part 2 of these rules, R 460.911 to R 460.992.

(i) Combined with the notification of interconnection application completeness and conformance pursuant to R 460.936, an electric utility shall notify the customer whether the distributed generation program application is accepted, and provide an opportunity for the customer to remedy any application deficiencies pursuant to the timelines in R 460.936(7)(b) or withdraw the application. If the customer fails to remedy the application deficiencies within the timelines in R 460.936(7)(b), the electric utility may consider the

distributed generation program application withdrawn without refund of the application fees.

(ii) While processing the interconnection application, which may include, but is not limited to, R 460.946 fast track initial review, the electric utility shall determine whether the appropriate meter is installed for the distributed generation program.

(b) If a distributed generation program application is filed with an already in-progress interconnection application, the electric utility may process the distributed generation program application in parallel with the interconnection application pursuant to part 2 of these rules, R 460.911 to R 460.992, and subrule (2)(a) of this rule, if practicable, or adopt the review process pursuant to subrule (2)(c) of this rule.

(c) If a distributed generation program application is filed with an in-progress interconnection application and the electric utility determines it is not practicable to process the distributed generation program application in parallel with the interconnection application or the distributed generation application is filed subsequent to the customer receiving authorization to operate its eligible generator in parallel pursuant to R 460.968, the electric utility shall process the distributed generation program application pursuant to all of the following:

(i) The electric utility has 10 business days to review the distributed generation program application and determine whether to accept the application pursuant to the timelines in R 460.936(6) and (7). The timelines in R 460.936(7)(a) apply to utility notifications. The electric utility shall provide the customer an opportunity to remedy any application deficiencies pursuant to R 460.936(7)(b). If the customer fails to remedy the application deficiencies within the timelines in R 460.936(7)(b), the electric utility may consider the distributed generation program application withdrawn without refund of the application fees.

(ii) Within 10 business days of providing notification to the customer that the distributed generation program application has been accepted, the electric utility shall determine whether the appropriate meter, or meters, is installed for the distributed generation program.

(d) If a customer approved for participation in the distributed generation program requires a new or additional meter or meters, the electric utility shall arrange with the customer to install the meter or meters at a mutually agreed upon time.

(e) The electric utility shall complete changes to the customer's account to permit distributed generation program credit to be applied to the account no more than 10 business days after the necessary meter is installed and all necessary steps in R 460.966 are completed.

(3) A customer taking retail electric service from an alternative electric supplier shall submit a completed distributed generation program application to the alternative electric supplier and provide a copy to the electric utility that provides distribution service.

(a) The alternative electric supplier shall process the distributed generation program application according to the applicable timelines in subrule (2)(a) through (d) of this rule.

(b) The electric utility shall notify the alternative electric supplier when it has provided the applicant authorization to operate the eligible electric generator in parallel pursuant to R 460.968 and, if applicable, that installation of the appropriate meter or meters is completed.

(c) Within 10 business days of the electric utility's notification, the alternative electric supplier shall complete changes to the applicant's account to permit distributed generation program credit to be applied to the account.

(4) If a distributed generation program application is not approved by the alternative electric supplier, the alternative electric supplier shall notify the customer and the electric utility of the reasons for the disapproval. The alternative electric supplier shall provide the customer an opportunity to remedy the deficiency pursuant to the timelines in R 460.936(7)(b) or withdraw the application. If the customer fails to remedy the application deficiencies within the timelines in R 460.936(7)(b), the alternative electric supplier and electric utility may consider the distributed generation program application withdrawn without refund of the application fees.

(5) If a customer's distributed generation program application is approved, the customer shall have a completed and approved installation within 6 months from the date the customer's application is considered complete, or the electric utility or alternative electric supplier may consider the application withdrawn without refund and shall have no further responsibility with respect to the application.

(6) The distributed generation program application fee for electric utilities and alternative electric suppliers shall not exceed $50. The electric utility shall specify the fee on the electric utility's distributed generation program tariff sheet or in the alternative electric supplier's distributed generation program plan.

(7) The customer shall pay all interconnection costs pursuant to part 2 of these rules, R 460.911 to R 460.992, which include all electric utility costs associated with the customer's interconnection that are not a distributed generation program application fee, excluding meter costs as described in R 460.1012 and R 460.1014.

R 460.1008 Legacy net metering program and distributed generation program size.

Rule 108. (1) If an electric utility or alternative electric supplier reaches the program sizes as defined in section 173(3) of the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1173 or a voluntarily expanded program above the requirements defined in section 173(3) of the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1173, as determined by combining both the distributed generation program and the legacy net metering program customer enrollments, the electric utility or alternative electric supplier shall notify the commission.

(2) The electric utility or alternative electric supplier shall notify the commission of its plans to either close the program to new applicants or expand the program.

(3) The electric utility shall file corresponding revised legacy net metering program or distributed generation program tariff sheets.

(4) The alternative electric supplier shall file a revised legacy net metering program plan or distributed generation program plan.

R 460.1010 Generation and legacy net metering program or distributed generation program equipment.

Rule 110. New legacy net metering program or distributed generation program equipment and its installation must meet all current local and state electric and construction code requirements, and other standards as specified in part 2 of these rules, R 460.911 to R 460.992.

R 460.1012 Meters for legacy net metering program.

Rule 112. (1) For a customer with a generation system capable of generating 20 kWac or less, an electric utility may determine the customer's net usage using the customer's existing meter if it is capable of reverse registration or may install a single meter with separate registers measuring power flow in each direction. If the electric utility uses the customer's existing meter, the electric utility shall test and calibrate the meter to assure accuracy in both directions. If the customer's meter is not capable of reverse registration and if meter upgrades or modifications are required, the following apply:

(a) An electric utility serving 1,000,000 or more customers in this state shall provide a meter or meters capable of measuring the flow of energy in both directions at no additional charge to the legacy net metering program customer. The cost of the meter or meter modification is considered a cost of operating the legacy net metering program.

(b) An electric utility serving fewer than 1,000,000 customers in this state shall provide a meter or meters capable of measuring the flow of energy in both directions to customers at cost. Only the incremental cost above that for the meter provided by the electric utility to similarly situated non-generating customers shall be paid by the eligible customer.

(c) An electric utility shall provide a generator meter, if requested by the customer, at cost.

(2) For a customer with a generation system capable of generating more than 20 kWac and not more than 150 kWac, the electric utility shall utilize a meter or meters capable of measuring the flow of energy in both directions and the generator output. If meter upgrades are necessary to provide this functionality, all of the following apply:

(a) An electric utility serving 1,000,000 or more customers in this state shall provide a meter or meters capable of measuring the flow of energy in both directions at no additional charge to a legacy net metering program customer. The cost of the meter or meters is considered a cost of operating the legacy net metering program.

(b) An electric utility serving fewer than 1,000,000 customers in this state shall provide a meter or meters capable of measuring the flow of energy in both directions to customers at cost. Only the incremental cost above that for meters provided by the electric utility to similarly situated non-generating customers shall be paid by the eligible customer.

(c) An electric utility shall provide a generator meter. The cost of the meter is considered a cost of operating the legacy net metering program.

(3) For a customer with a generation system capable of generating more than 150 kWac, the electric utility shall utilize a meter or meters capable of measuring the flow of energy in both directions and the generator output. If meter upgrades are necessary to provide this functionality, the customer shall pay the cost of providing any new meters.

(4) An electric utility deploying advanced metering infrastructure shall not charge the cost of advanced meters to a legacy net metering program participant or the legacy net metering program.

R 460.1014 Meters for distributed generation program.

Rule 114. (1) For a customer with a generation system capable of generating 20 kWac or less, an electric utility shall determine the customer's power flow in each direction using the customer's existing meter if it is capable of measuring and recording power flow in each direction. If the customer's meter is not capable of measuring and recording the customer's power flow in each direction and if meter upgrades or modifications are required, all of the following apply:

(a) An electric utility serving 1,000,000 or more customers in this state shall provide a meter or meters capable of measuring and recording the customer's power flow in each direction at no additional charge to the distributed generation program customer. The cost of the meter or meter modification is considered a cost of operating the distributed generation program.

(b) An electric utility serving fewer than 1,000,000 customers in this state shall provide a meter or meters capable of measuring and recording the power flow in each direction to customers at cost. Only the incremental cost above the cost for the meter provided by the electric utility to similarly situated non-generating customers shall be paid by the eligible customer.

(c) An electric utility shall provide a generator meter at cost, if requested by the customer.

(2) For a customer with a generation system capable of generating more than 20 kWac and not more than 150 kWac, an electric utility shall utilize a meter or meters capable of measuring and recording power flow in each direction and the generator output. If the customer's meter is not capable of measuring and recording the customer's power flow in each direction along with the generator output, and if meter upgrades or modifications are required, all of the following apply:

(a) An electric utility serving 1,000,000 or more customers in this state shall provide a meter or meters capable of measuring the flow of energy in both directions at no additional charge to a distributed generation program customer. If the electric utility provides the upgraded meter at no additional charge to the customer, the cost of the meter is considered a cost of operating the distributed generation program.

(b) An electric utility serving fewer than 1,000,000 customers in this state shall provide a meter or meters capable of measuring the flow of energy in both directions to customers at cost. Only the incremental cost above the cost for the meter provided by the electric utility to similarly situated non-generating customers shall be paid by the eligible customer.

(c) An electric utility shall provide a generator meter. The cost of the meter shall be considered a cost of operating the distributed generation program.

(3) For a customer with a methane digester generation system capable of generating more than 150 kWac, an electric utility shall utilize a meter or meters capable of measuring the flow of energy in both directions and the generator output. If meter

upgrades are necessary to provide such functionality, the customer shall pay the cost of providing any new meters.

(4) An electric utility deploying advanced metering infrastructure shall not charge the cost of advanced meters to a distributed generation program customer or the distributed generation program.

R 460.1016 Billing and credit for legacy net metering program customers taking service under true net metering.

Rule 116. (1) Legacy net metering program customers with a system capable of generating 20 kWac or less qualify for true net metering. For customers qualifying for true net metering, the net of the bidirectional flow of kWh across the customer interconnection with the electric utility distribution system during the billing period or during each time-of-use pricing period within the billing period, including excess generation, shall be credited at the full retail rate.

(2) The credit for excess generation, if any, shall appear on the next bill. Any excess credit not used to offset current charges must be carried forward for use in subsequent billing periods.

R 460.1018 Billing and credit for legacy net metering program customers taking service under modified net metering.

Rule 118. (1) Legacy net metering program customers with a system capable of generating more than 20 kWac qualify for modified net metering. A negative net metered quantity during the billing period or during each time-of-use pricing period within the billing period reflects net excess generation for which the customer is entitled to receive credit. Standby charges for customers on an energy rate schedule must equal the retail distribution charge applied to the imputed customer usage during the billing period. The imputed customer usage is calculated as the sum of the metered on-site generation and the net of the bidirectional flow of power across the customer interconnection during the billing period. The commission shall establish standby charges for customers on demand-based rate schedules that provide an equivalent contribution to electric utility system costs. Standby charges may not be applied to customers with systems capable of generating 150 kWac or less.

(2) The credit for excess generation must appear on the next bill. Any excess kWh not used to offset current charges must be carried forward for use in subsequent billing periods.

(3) A customer qualifying for modified net metering shall not have legacy net metering program credits applied to distribution charges.

(4) The credit per kWh for kWh delivered into the electric utility's distribution system must be either of the following as determined by the commission:

(a) The monthly average real-time locational marginal price for energy at the commercial pricing node within the electric utility's distribution service territory or for a legacy net metering program customer on a time-based rate schedule, the monthly average real time locational marginal price for energy at the commercial pricing node

within the electric utility's distribution service territory during the time-of-use pricing period.

(b) The electric utility's or alternative electric supplier's power supply component, excluding transmission charges, of the full retail rate during the billing period or time-of-use pricing period.

R 460.1020 Billing and credit for distributed generation program customers.

Rule 120. As part of an electric utility's rate case filed after June 1, 2018, the commission shall approve a tariff for a distributed generation program under the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1001 to 460.1211. A tariff established under this rule does not apply to customers participating in a legacy net metering program under the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1001 to 460.1211, before the date that the commission establishes a tariff under this rule, who continue to participate in the program at their current site or facility as described by Rule R 460.1026.

R 460.1022 Renewable energy credits.

Rule 122. (1) An eligible electric generator shall own any renewable energy credits granted for electricity generated under the legacy net metering program and distributed generation program.

(2) An electric utility may purchase or trade renewable energy credits from a legacy net metering program or distributed generation program customer if agreed to by the customer.

(3) The commission may develop a program for aggregating renewable energy credits from legacy net metering program and distributed generation program customers.

R 460.1024 Penalties.

Rule 124. Upon a complaint or on the commission's own motion, if the commission finds after notice and hearing that an electric utility has not complied with a provision or order issued under part 5 of the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1171 to 460.1185, the commission shall order remedies and penalties as necessary to make whole a customer or other person who has suffered damages as a result of the violation.

R 460.1026 Legacy net metering grandfathering clause.

Rule 126. A customer participating in a legacy net metering program approved by the commission before the commission establishes the initial distributed generation program tariff pursuant to R 460.1020 may elect to continue to receive service under the terms and conditions of that program for up to 10 years from the date of initial enrollment. "Initial enrollment," as used in this rule, means the date a customer or site initially enrolled in a legacy net metering program as described in the electric utility's tariff. A customer participating in a legacy net metering program who increases the nameplate capacity of

its generation system after the effective date of an electric utility's distributed generation program tariff is no longer eligible to participate in the legacy net metering program.

~~DEPARTMENT OF ENERGY, LABOR AND ECONOMIC GROWTH~~
DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS

PUBLIC SERVICE COMMISSION

ELECTRIC INTERCONNECTION AND NET METERING STANDARDS

Filed with the secretary of state on

These rules take effect immediately upon filing with the secretary of state unless adopted under section 33, 44, or 45a(6) of the administrative procedures act of 1969, 1969 PA 306, MCL 24.233, 24.244, or 24.245a. Rules adopted under these sections become effective 7 days after filing with the secretary of state.

(By authority conferred on the public service commission by section 6 of 1909 PA 106, MCL 460.556, section 5 of 1919 PA 419, MCL 460.55, sections 4, 6, and 10e of 1939 PA 3, MCL 460.4, 460.6, and 460.10e, and section 173 of the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1173)

R 460.601a, R 460.601b, R 460.602, R 460.604, R 460.606, R 460.608, R 460.610, R 460.612, R 460.615, R 460.618, R 460.620, R 460.622, R 460.624, R 460.626, R 460.628, R 460.640, R 460.642, R 460.644, R 460.646, R 460.648, R 460.650, R 460.652, R 460.654, and R 460.656 of the Michigan Administrative Code are rescinded, as follows:

~~PART 1. GENERAL PROVISIONS~~

R 460.601a ~~Definitions; A-I.~~ **Rescinded.**

~~Rule 1a. As used in these rules:~~

~~(a) "Alternative electric supplier" means that term as defined in section 10g of 2000 PA 141, MCL 460.10g.~~

~~(b) "Alternative electric supplier net metering program plan" means a document supplied by an alternative electric supplier that provides detailed information to an applicant about the alternative electric supplier's net metering program.~~

~~(c) "Applicant" means the legally responsible person applying to an electric utility to interconnect a project with the electric utility's distribution system or a person applying for a net metering program. An applicant shall be a customer of an electric utility and may be a customer of an alternative electric supplier.~~

~~(d) "Application review" means a review by the electric utility of the completed application for interconnection to determine if an engineering review is required.~~

~~(e) "Area network" means a location on the distribution system served by multiple transformers interconnected in an electrical network circuit.~~

~~(f) "Category 1" means an inverter based project of 20 kW or less that uses equipment certified by a nationally recognized testing laboratory to IEEE 1547.1 testing standards and in compliance with UL 1741 scope 1.1A.~~

~~(g) "Category 2" means a project of greater than 20 kW and not more than 150 kW.~~

~~(h) "Category 3" means a project of greater than 150 kW and not more than 550 kW.~~

~~(i) "Category 4" means a project of greater than 550 kW and not more than 2 MW.~~

~~(j) "Category 5" means a project of greater than 2 MW.~~

~~(k) "Certified equipment" means a generating, control, or protective system that has been certified as meeting acceptable safety and reliability standards by a nationally recognized testing laboratory in conformance with UL 1741.~~

~~(l) "Commission" means the Michigan public service commission.~~

~~(m) "Commissioning test" means the procedure, performed in compliance with IEEE 1547.1, for documenting and verifying the performance of a project to confirm that the project operates in conformity with its design specifications.~~

~~(n) "Customer" means a person who receives electric service from an electric utility's distribution system or a person who participates in a net metering program through an alternative electric supplier or electric utility.~~

~~(o) "Customer-generator" means a person that uses a project on-site that is interconnected to an electric utility distribution system.~~

~~(p) "Distribution system" means the structures, equipment, and facilities operated by an electric utility to deliver electricity to end users, not including transmission facilities that are subject to the jurisdiction of the federal energy regulatory commission.~~

~~(q) "Distribution system study" means a study to determine if a distribution system upgrade is needed to accommodate the proposed project and to determine the cost of an upgrade if required.~~

~~(r) "Electric provider" means any person or entity whose rates are regulated by the commission for selling electricity to retail customers in this state.~~

~~(s) "Electric utility" means as that term is defined in section 2 of 1995 PA 30, MCL 460.562.~~

~~(t) "Eligible electric generator" means a methane digester or renewable energy system with a generation capacity limited to the customer's electric need and that does not exceed the following:~~

~~(i) 150 kW of aggregate generation at a single site for a renewable energy system.~~

~~(ii) 550 kW of aggregate generation at a single site for a methane digester.~~

~~(u) "Engineering review" means a study to determine the suitability of the interconnection equipment including any safety and reliability complications arising from equipment saturation, multiple technologies, and proximity to synchronous motor loads.~~

~~(v) "Full retail rate" means the power supply and distribution components of the cost of electric service. Full retail rate does not include a system access charge, service charge, or other charge that is assessed on a per meter basis.~~

~~(w) "IEEE" means institute of electrical and electronics engineers.~~

~~(x) "IEEE 1547" means IEEE "Standard for Interconnecting Distributed Resources with Electric Power Systems."~~

~~(y) "IEEE 1547.1" means IEEE "Standard Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems."~~

~~(z) "Interconnection" means the process undertaken by an electric utility to construct the electrical facilities necessary to connect a project with a distribution system so that parallel operation can occur.~~

~~(aa) "Interconnection procedures" mean the requirements that govern project interconnection adopted by each electric utility and approved by the commission.~~

R 460.601b ~~Definitions; J-Z.~~ **Rescinded.**

~~Rule 1b. As used in these rules~~

~~(a) "kW" means kilowatt.~~

~~(b) "kWh" means kilowatt-hours.~~

~~(c) "Material modification" means a modification that changes the maximum electrical output of a project or changes the interconnection equipment, including either of the following:~~

~~(i) Changing from certified to noncertified equipment.~~

~~(ii) Replacing a component with a component of different functionality or UL listing.~~

~~(d) "Methane digester" means a renewable energy system that uses animal or agricultural waste for the production of fuel gas that can be burned for the generation of electricity or steam.~~

~~(e) "Modified net metering" means a utility billing method that applies the power supply component of the full retail rate to the net of the bidirectional flow of kWh across the customer interconnection with the utility distribution system during a billing period or time-of-use pricing period.~~

~~(f) "MW" means megawatt.~~

~~(g) "Nationally recognized testing laboratory" means any testing laboratory recognized by the accreditation program of the U.S. department of labor occupational safety and health administration.~~

~~(h) "Parallel operation" means the operation, for longer than 100 milliseconds, of a project while connected to the energized distribution system.~~

~~(i) "Project" means electric generating equipment and associated facilities that are not owned or operated by an electric utility.~~

~~(j) "Renewable energy credit" means a credit granted pursuant to the commission's renewable energy credit certification and tracking program in section 41 of 2008 PA 295, MCL 460.1041.~~

~~(k) "Renewable energy resource" means that term as defined in section 11(i) of 2008 PA 295, MCL 460.1011(i).~~

~~(l) "Renewable energy system" means that term as defined in section 11(k) of 2008 PA 295, MCL 460.1011(k).~~

~~(m) "Spot network" means a location on the distribution system that uses 2 or more inter-tied transformers to supply an electrical network circuit.~~

~~(n) "True net metering" means a utility billing method that applies the full retail rate to the net of the bidirectional flow of kW hours across the customer interconnection with the utility distribution system, during a billing period or time-of-use pricing period.~~

~~(o) "UL" means underwriters laboratory.~~

~~(p) "UL 1741" means the "Standard for Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources."~~

~~(q) "UL 1741 scope 1.1A" means paragraph 1.1A contained in chapter 1, section 1 of UL 1741.~~

~~(r) "Uniform interconnection application form" means the standard application forms, approved by the commission under R 460.615, to be used for category 1, category 2, category 3, category 4, and category 5 projects.~~

~~(s) "Uniform interconnection agreement" means the standard interconnection agreements, approved by the commission under R 460.615 and used for all category 1, category 2, category 3, category 4, and category 5 projects.~~

~~(t) "Uniform net metering application" means the net metering application form approved by the commission under R 460.642 and used by all electric utilities and alternative electric suppliers.~~

~~(u) "Working days" means days excluding Saturdays, Sundays, and other days when the offices of the electric utility are not open to the public.~~

R 460.602 ~~Adoption of standards by reference.~~ **Rescinded.**

~~Rule 2. (1) The standards specified in these rules are adopted in these rules by reference.~~

~~(a) UL 1741 Standard for Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources, November 7, 2005 revision, is available from COMM 2000, 1414 Brook Drive, Downers Grove, IL 60515, USA, telephone number: 1-888-853-3503 or via the internet website: www.comm-2000.com at a cost of $385.00 at the time of adoption of these rules.~~

~~(b) The following standards are available from IEEE by telephone at 1-800-678-4333 or from the internet website www.standards.ieee.org.~~

~~(i) The IEEE 1547, IEEE Standard for Interconnecting Distributed Resources with Electric Power Systems, 1/1/2003, is available at a cost of $70.00 at the time of adoption of these rules.~~

~~(ii) The IEEE 1547.1, IEEE Standard Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems, 1/1/2005, is available at a cost of $55.00 at the time of adoption of these rules.~~

~~(2) The standards specified in subrule (1) of this rule are also available for inspection and distribution at cost plus $25.00 shipping and handling from the Public Service Commission at 6545 Mercantile Way, Suite 7 Lansing, MI 48911.~~

R 460.604 ~~Prohibited practices.~~ **Rescinded.**

~~Rule 4. (1) An electric provider shall not charge an applicant or customer-generator any fee or charge or require additional equipment, insurance, or any other requirement not specifically authorized by the interconnection standards in Part 2 of these rules or under the net metering standards in Part 3 of these rules, unless the fee, charge or other requirement would apply to other similarly situated customers who are not customer-generators.~~

~~(2) An electric provider or alternative electric supplier shall provide to net metering customers electric service at nondiscriminatory rates that are identical, with respect to~~

~~rate structure, retail rate components and any monthly charges, to the rates that the net metering customer would be charged if the net metering customer were not participating in the net metering program.~~

R 460.606 ~~Designated points of contact.~~ **Rescinded.**

~~Rule 6. (1) Within 30 days of the effective date of these rules, each electric utility shall designate and maintain an initial point of contact for all customer inquiries related to interconnection and net metering from which interested parties may obtain information about interconnection and net metering procedures and applications and agreement forms.~~

~~(2) Within 30 days of the effective date of these rules, each alternative electric supplier shall designate 1 initial point of contact for all customer inquiries related to net metering from which interested parties may obtain information about net metering programs, applications, and processing. Each electric utility and alternative electric supplier shall have current information concerning its initial point of contact on file with the commission.~~

~~(3) Each electric utility shall designate and maintain a point of contact for each applicant to address applicant inquiries about technical issues or interconnection status that may arise during the interconnection process.~~

~~(4) Each interconnection applicant or net metering customer shall designate a point of contact with sufficient technical expertise to address any questions regarding a proposed interconnection or net metering application.~~

R 460.608 ~~Alternative dispute resolution.~~ **Rescinded.**

~~Rule 8. (1) If there is a dispute between an interconnection applicant and an electric utility or between a net metering applicant and an electric utility or alternative electric supplier, and with consent of all parties, the parties shall attempt alternative means of resolving the dispute.~~

~~(2) Any alternative means that will result in a settlement may be used including, but not limited to, settlement conferences, mediation, and other informal dispute resolution methods.~~

~~(3) If a party is dissatisfied with a recommended settlement resulting from the alternative dispute resolution process, the party may file a complaint with the commission as provided under R 460.17101 to R 460.17701.~~

R 460.610 ~~Appointment of experts.~~ **Rescinded.**

~~Rule 10. (1) If a complaint is filed against an electric utility regarding a technical issue, the commission may appoint from 1 to 3 independent experts to investigate the complaint and report findings to the commission.~~

~~(2) The experts shall submit a report to the commission with the results and conclusions of their inquiry and may suggest corrective measures for resolving the complaint. The reports of the experts shall be received in evidence and the experts shall be made available for cross examination by the parties at any hearing.~~

~~(3) The reasonable expenses of experts, including a reasonable hourly fee or fee determined by the commission, shall be submitted to the commission for approval and, if approved, shall be funded under subrule (4) of this rule.~~

~~(4) The electric utility or alternative electric supplier shall reimburse the experts appointed by the commission for the reasonable expenses incurred in the course of investigating the complaint.~~

R 460.612 ~~Waivers.~~ **Rescinded.**

~~Rule 12. An electric utility, alternative electric supplier, or applicant may apply for a waiver from 1 or more provisions of these rules. The commission may grant a waiver upon a showing of good cause and a finding that the waiver is in the public interest.~~

~~PART 2. INTERCONNECTION STANDARDS~~

R 460.615 ~~Electric utility interconnection procedures.~~ **Rescinded.**

~~Rule 15. (1) Each electric utility shall file applications for approval of proposed interconnection procedures and forms within 90 days of the effective date of these rules or by August 3, 2009, whichever date is sooner. Two or more electric utilities may file a joint application proposing interconnection procedures for use by the joint applicants. All procedures and forms shall be written in plain English.~~

~~(2) The application for interconnection of a category 1 project shall contain all of the following:~~

~~(a) A description of the proposed procedure for an applicant to apply for interconnection of a category 1 project.~~

~~(b) A uniform interconnection application form for category 1 projects.~~

~~(c) A uniform interconnection agreement for category 1 projects.~~

~~(3) The application for interconnection of category 2 to category 5 projects shall contain all of the following:~~

~~(a) Uniform interconnection application forms for each of category 2 to category 5 projects.~~

~~(b) Uniform interconnection agreements for each of category 2 to category 5 projects.~~

~~(c) A description of the steps for processing an application for category 2 to category 5 projects that complies with R 460.620.~~

~~(d) Specific technical, engineering, and operational requirements that are suitable for the electric utility's distribution system.~~

~~(e) A schedule of application review fees, engineering review fees, distribution system study fees, and testing and site inspection fees that conforms to R 460.618(1).~~

~~(f) A timeline for notifications as required under R 460.620.~~

~~(4) The interconnection procedures shall include all of the following, if applicable:~~

~~(a) For projects interconnecting to a spot network circuit where the project or aggregate of total generation exceeds 5 percent of the spot network's maximum load, a requirement that the project must utilize a protective scheme that will ensure that its current flow will not affect the network protective devices, including reverse power relays or a comparable function.~~

~~(b) For projects that use inverter-based protective functions for an interconnection to an area network, a requirement that the project, in aggregate with~~

~~other projects interconnected on the load side of network protective devices, shall not exceed the lesser of 10 percent of the minimum annual load on the network or 500 kW. For a photovoltaic project without batteries, the 10 percent minimum shall be determined as a function of the minimum load occurring during an off-peak daylight period.~~

~~(c) For projects interconnecting to area networks that do not use inverter-based protective functions or inverter-based projects that do not meet the requirements of subrule 4(b) of this rule, a requirement that the project use reverse power relays or other protection devices or methods that ensure no export of power from the customer's site including any inadvertent export (e.g. under fault conditions) that could adversely affect protective devices on the network circuit.~~

~~(5) The proposed procedures shall ensure all of the following:~~

~~(i) Consistency with generally accepted industry practices and guidelines.~~

~~(ii) Reliability of electric service and safety of customers, utility employees, and the general public.~~

~~(iii) Suitability for the size and capacity of a project as it affects the technical and engineering complexity of the interconnection.~~

~~(iv) Compliance with these rules.~~

~~(6) The proposed interconnection procedures may include an informal process for obtaining a waiver to technical requirements described in the interconnection procedures for a specific project provided compliance with these rules is ensured.~~

~~(7) The Commission shall provide a 30-day period for comment before approving the applications for interconnection procedures.~~

R 460.618 ~~Interconnection fees.~~ **Rescinded.**

~~Rule 18. (1) Interconnection application and engineering review, distribution study, distribution upgrade, and testing and inspection fees shall not exceed the following amounts for projects that that do not participate in the net metering program:~~

~~-~~	~~Application review~~	~~Engineering review~~	~~Distribution study~~	~~Distribution upgrades~~	~~Testing & inspection~~
~~Category 1~~	~~$75~~	~~$0~~	~~$0~~	~~$0~~	~~$0~~
~~Category 2~~	~~$100~~	~~$0~~	~~Actual or maximum approved by commission~~	~~Actual or maximum approved by commission~~	~~Actual or maximum approved by commission~~
~~Category 3~~	~~$150~~	~~$0~~	~~Actual or maximum approved by commission~~	~~Actual or maximum approved by commission~~	~~Actual or maximum approved by commission~~ ~~-~~
~~Category~~	~~$250~~	~~Actual or~~	~~Actual or~~	~~Actual or~~	~~Actual or~~

~~y 4~~		~~maximum approved by commission~~	~~maximum approved by commission~~	~~maximum approved by commission~~	~~maximum approved by commission~~
~~Categor y 5~~	~~$500~~	~~Actual or maximum approved by commission~~	~~Actual or maximum approved by commission~~	~~Actual or maximum approved by commission~~	~~Actual or maximum approved by commission~~

~~(2) Net metering application fees for category 1 to category 3 projects that participate in the net metering program shall not exceed $25. Interconnection application and engineering review, distribution study, distribution upgrade, and testing and inspection fees shall not exceed the following amounts for projects that participate in the net metering program:~~

~~-~~	~~Applicati on review~~	~~Engineeri ng review~~	~~Distributi on study~~	~~Distributi on upgrades~~	~~Testing & inspection~~
~~Categor y 1~~	~~$75~~	~~$0~~	~~$0~~	~~$0~~	~~$0~~
~~Categor y 2~~	~~$75~~	~~$0~~	~~Actual or maximum approved by commission~~	~~Actual or maximum approved by commission~~	~~$0~~
~~Categor y 3~~	~~$75~~	~~$0~~	~~Actual or maximum approved by commission~~	~~Actual or maximum approved by commission~~	~~$0~~

R 460.620 ~~Application and interconnection process.~~ **Rescinded.**

~~Rule 20. (1) If requested by the applicant before or during the application process, an electric utility shall provide up to 2 hours of technical consultation at no additional cost to the applicant. Consultation may be limited to providing information concerning the utility system operating characteristics and location of system components.~~

~~(2) For category 2 and category 3 project applications, the applicant shall provide a one-line diagram that is signed and sealed by a licensed professional engineer, licensed in the State of Michigan or by an electrical contractor licensed by the state of Michigan with the electrical contractor's license number noted on the diagram.~~

~~(3) For category 4 and category 5 project applications, the applicant shall provide a one-line diagram that is sealed by a professional engineer licensed by the state of Michigan.~~

~~(4) Within 10 working days of receiving a new or revised interconnection application, the electric utility shall notify the applicant whether the interconnection application is complete. If the application is incomplete, the electric utility shall advise the applicant of the deficiency.~~

~~(5) Within 10 working days of determining that an application is complete, the electric utility shall complete its application review. For category 1 projects or if the application review shows that an engineering review is not required, the interconnection process shall proceed to subrule (11) of this rule. If the electric utility determines that an engineering review is required, it shall notify the applicant of the need for and cost of that review except for projects that are exempt for engineering review costs under R 460.618. An applicant shall have 6 months in which to request, in writing, that the utility proceed with an engineering review at the cost indicated. The applicant shall provide any changes or updates to the application before the engineering review begins.~~

~~(6) Upon receiving applicant's written notification to proceed with the engineering review and applicable payment, the electric utility shall complete an engineering review and notify the applicant of the results within the following time periods:~~

~~(a) Category 2 applications, 10 working days.~~

~~(b) Category 3 application, 15 working days.~~

~~(c) Category 4 application, 25 working days.~~

~~(d) Category 5 application, 45 working days.~~

~~(7) If the engineering review indicates that a distribution system study is necessary, the electric utility shall provide, in writing, the cost of the study in its engineering review findings, except for projects that are exempt from distribution study costs under R 460.618. The utility shall also provide the applicant with a list of distribution system upgrades that may be required for interconnection with an estimated cost of each system component if such information is reasonably ascertainable upon completion of the engineering study. This estimate shall be provided to assist the applicant in determining whether to proceed with the project and the utility shall not be bound by the estimate. The distribution system study cost is valid for 6 months and the applicant shall have 6 months from receipt of the engineering review findings in which to notify the electric utility to proceed with the distribution system study. Upon receiving written notification to proceed and payment of the applicable fee, the electric utility shall conduct the distribution system study.~~

~~(8) The electric utility shall complete the distribution system study and provide study results to the applicant within the following time periods:~~

~~(a) Category 2 applications, 10 working days.~~

~~(b) Category 3 application, 15 working days.~~

~~(c) Category 4 application, 45 working days unless a different time period is mutually agreed upon.~~

~~(d) Category 5 application, 60 working days unless a different time period is mutually agreed upon.~~

~~(9) The electric utility shall notify the applicant of its completed distribution system study findings along with any distribution system construction or modification costs to be paid by the applicant. The cost may include a contingency fee of not more than 10%. Any payment made in excess of actual costs shall be refunded to the applicant.~~

~~(10) If the applicant agrees, in writing, to pay the cost identified in subrule (9) of this rule, the electric utility shall complete the distribution system upgrades and the applicant shall pay for the upgrades and install the project within a mutually agreed upon time period.~~

~~(11) The applicant shall notify the electric utility when an installation and any required local code inspection and approval is complete and provide an opportunity for the electric utility to schedule a site visit to witness or perform commissioning tests required by IEEE 1547.1 and inspect the~~

~~project. The electric utility may provide a written waiver of its right to visit the site to inspect the project and witness or perform the commissioning tests. The utility shall notify the applicant of its intent to visit the site, inspect the project, witness or perform the commissioning tests, or of its intent to waive inspection within 10 working days after notification that the installation and inspections are complete.~~

~~(12) Within 5 working days of the receipt of the completed commissioning test report, the electric utility shall notify the applicant of its acceptance of the commissioning test report and shall notify the applicant of its approval or disapproval of the interconnection. If approved, the electric utility shall also provide to the applicant a written statement of final approval, cost reconciliation, and an interconnection agreement. The applicant shall sign and return the interconnection agreement to the electric utility before beginning parallel operation. If the electric utility does not approve the interconnection, the electric utility shall notify the applicant of the necessary corrective actions required for approval. The applicant, after taking corrective action, may request the electric utility to reconsider the interconnection request.~~

~~(13) An applicant for interconnection who receives generation service from an alternative electric supplier and who intends to participate in the alternative electric supplier's net metering program shall provide a copy of the complete interconnection application with the applicant's net metering application to the alternative electric supplier. The alternative electric supplier shall notify the applicant within 10 business days whether the applicant is accepted into the alternative electric supplier's net metering program.~~

R 460.622 ~~Modifications to project.~~ **Rescinded.**

~~Rule 22. The applicant shall notify the electric utility of plans for any material modification to the project. The applicant shall provide this notification by submitting a revised uniform application form and application fee along with all supporting materials that are reasonably requested by the electric utility. The applicant may not begin any material modification to the project until the electric utility has approved the revised application, including any necessary engineering review or distribution system study. The application shall be processed in accordance with R 460.620.~~

R 460.624 ~~Insurance.~~ **Rescinded.**

~~Rule 24. (1) An applicant interconnecting a category 1 or category 2 project to the distribution system of an electric utility shall not be required by the utility to obtain any additional liability insurance.~~

~~(2) An electric utility shall not require an applicant interconnecting a category 1 or category 2 project to name the utility as an additional insured party.~~

~~(3) For category 3 to category 5 projects, the applicant shall obtain and maintain general liability insurance of a minimum of $1,000,000.~~

R 460.626 ~~Disconnection.~~ **Rescinded.**

~~Rule 26. An electric utility may refuse to connect or may disconnect a project from the distribution system if any of the following conditions apply:~~

~~(a) Lack of a fully executed interconnection agreement.~~

~~(b) Termination of interconnection by mutual agreement.~~

~~(c) Noncompliance with technical or contractual requirements in the interconnection agreement after notice is provided to the applicant of the technical or contractual deficiency.~~

~~(d) Distribution system emergency.~~

~~(e) Routine maintenance, repairs, and modifications, but only for a reasonable length of time necessary to perform the required work and upon reasonable notice.~~

R 460.628 ~~Easements and rights-of-way.~~ **Rescinded.**

~~Rule 28. If an electric utility line extension is required to accommodate an interconnection, the applicant is responsible for the cost of providing or obtaining easements or rights-of-way.~~

~~PART 3. NET METERING STANDARDS~~

R 460.640 ~~Application process.~~ **Rescinded.**

~~Rule 40. (1) Each electric provider shall file initial net metering program tariff sheets within 30 days of the effective date of these rules or by June 30, 2009, whichever date is sooner.~~

~~(2) Each alternative electric supplier shall file an alternative electric supplier net metering program plan within 30 days of the effective date of these rules or by June 30, 2009, whichever date is sooner.~~

~~(3) Electric providers and alternative electric suppliers shall file annual net metering program reports in a form to be determined by the commission, not later than March 31 of each year.~~

~~(4) Each electric provider shall maintain records of all applications and up-to-date records of all active eligible electric generators located within its service area. Each alternative electric supplier shall maintain records of all applications and up-to-date records of all eligible electric generators participating in its net metering program.~~

~~(5) Selection of customers for participation in the net metering program shall be based on the order in which the applications for the net metering program are received by the electric provider or alternative electric supplier.~~

~~(6) An electric provider or alternative electric supplier shall not refuse to provide or discontinue electric service to a customer solely for the reason that the customer participates in the net metering program.~~

~~(7) Net metering programs provided by electric providers and alternative electric suppliers shall limit each applicant to generation capacity designed to meet the customer's electric needs.~~

~~(a) At the customer's option, the generation capacity shall be determined by 1 of the following methods:~~

~~(i) Aggregate nameplate capacity of the generator(s).~~

~~(ii) An estimate of the expected annual kWh output of the generator(s) determined in a manner approved by the commission and specified on the electric provider's net metering tariff sheet or in the alternative electric supplier's net metering program plan.~~

~~(b) At the customer's option, the customer's electric needs shall be determined by 1 of the following methods:~~

~~(i) The customer's annual energy usage, measured in kWh, during the previous 12-month period.~~

~~(ii) For a customer with metered demand data available, the maximum integrated hourly demand measured in kW during the previous 12-month period.~~

~~(iii) In cases where there is no data, incomplete data, or incorrect data for the customer's energy usage or the customer is making changes on-site that will affect total usage, the electric provider or alternative electric supplier and the customer shall mutually agree on a method to determine the customer's electric needs.~~

R 460.642 ~~Net metering application and fees.~~ **Rescinded.**

~~Rule 42. (1) A uniform net metering application form and process shall be used by all electric providers and alternative electric suppliers. The uniform net metering application form shall be approved by the commission.~~

~~(2) Net metering application processing for electric providers shall be conducted in the following manner:~~

~~(a) An applicant applying for net metering shall at the same time apply for an electric provider interconnection or shall indicate on the net metering application that the applicant has applied for interconnection with the electric provider.~~

~~(b) If an applicant has an executed interconnection agreement at the time of filing the net metering application, the electric provider shall have 10 working days to complete its review of the net metering application. All other net metering applications shall be processed within 10 days after the applicant's interconnection agreement is executed.~~

~~(c) As part of the review, the electric provider shall determine whether the appropriate meter(s) are installed for net metering.~~

~~(d) After completing the review, the electric provider shall notify the customer whether the net metering application is approved or disapproved.~~

~~(e) If an applicant approved for net metering requires new or additional meters, the electric provider shall make arrangements with the customer to install the meters at a mutually agreed upon time.~~

~~(f) Within 10 working days after the necessary meters are installed, the electric provider shall complete changes to the applicant's account to permit net metering credit to be applied to the account.~~

~~(3) Net metering application processing for alternative electric suppliers shall be conducted in the following manner:~~

~~(a) A customer receiving retail electric service from an alternative electric supplier shall submit the completed net metering application form to the alternative~~

~~electric supplier and a copy of the form to the electric provider that provides distribution services.~~

~~(b) Within the time periods in subrule (2) of this rule, the electric provider shall determine whether the appropriate meter(s) are installed for net metering and, if necessary, contact the customer to arrange for meter installation.~~

~~(c) The electric provider shall notify the alternative electric supplier when the interconnection agreement for the eligible generator is executed and installation of the appropriate meter(s) is completed.~~

~~(d) Within 10 working days of notification, the alternative electric supplier shall complete changes to the applicant's account to permit net metering credit to be applied to the account.~~

~~(4) If a net metering application is disapproved, the electric provider or alternative electric supplier shall notify the customer of the reasons for the disapproval. The customer shall have an opportunity to correct the net metering application. If the application is withdrawn by the customer, the electric provider or alternative electric supplier shall refund the net metering application fee to the customer.~~

~~(5) Customers participating in the net metering program under the commission's March 29, 2005 order in case no. U-14346 shall be transferred to the statewide net metering program established under these rules within 30 days of commission approval of the electric provider's net metering tariff. Any remaining net excess generation credits shall be credited to the customer in accordance with R 460.652. Additional application, interconnection, installation fees, or system requirements are waived for customers who transfer to the net metering program authorized by these rules.~~

~~(6) The net metering application fee for electric providers and alternative electric suppliers shall not exceed $25. The fee shall be specified on the electric provider's net metering tariff sheet or in the alternative electric supplier's net metering program plan. The combined total of net metering application fees and interconnection application review fees shall not exceed $100.~~

R 460.644 ~~Net metering program size.~~ **Rescinded.**

~~Rule 44. If an electric provider or alternative electric supplier reaches the net metering program size limits in section 173(2) of 2008 PA 295, MCL 460.1173(2), the electric provider or alternative electric supplier shall provide notice to the commission and to all customers that its net metering program is closed and that no new applications will be accepted. All completed applications that are pending at the time the net metering program closes shall be processed and the applicants shall be allowed to participate in the net metering program.~~

R 460.646 ~~Generation and net metering equipment.~~ **Rescinded.**

~~Rule 46. (1) New generation and net metering equipment and its installation must meet all current local and state electric and construction code requirements. Any equipment that is certified by a nationally recognized testing laboratory to IEEE 1547.1 testing standards and in compliance with UL 1741 scope 1.1A and installed in compliance with this part is considered eligible equipment. Within the time provided by the commission in R 460.620 and consistent with good provider practice, protection~~

~~of electric provider workers, protection of electric provider equipment, and protection of the general public, an electric provider may study, confirm, and ensure that an eligible electric generator installation at the customer's site meets the IEEE 1547 anti-islanding requirements.~~

~~(2) Customers with executed interconnection agreements on the effective date of these rules shall be considered eligible generators provided the customer's project complies with R 460.601a(t) and R 460.640(7).~~

R 460.648 ~~Meters.~~ **Rescinded.**

~~Rule 48. (1) For a customer with a generation system capable of generating 20 kW or less, the provider may determine the customer's net usage using the customer's existing meter if it is capable of reverse registration or may install a single meter with separate registers measuring power flow in each direction. If the provider uses the customer's existing meter, the provider shall test and calibrate the meter to assure accuracy in both directions. If the customer's meter is not capable of reverse registration and if meter upgrades or modifications are required, the following apply:~~

~~(a) An electric provider serving over 1,000,000 customers in this state shall provide a meter or meters capable of measuring the flow of energy in both directions at no additional charge to the net metering customer. The cost of the meter(s) or meter modification shall be considered a cost of operating the net metering program.~~

~~(b) An electric provider serving fewer than 1,000,000 customers in this state shall provide a meter or meters capable of measuring the flow of energy in both directions to customers at cost. Only the incremental cost above that for meter(s) provided by the electric provider to similarly situated nongenerating customers shall be paid by the eligible customer.~~

~~(c) An electric provider shall provide a generator meter, if requested by the customer, at cost.~~

~~(2) For a customer with a generation system capable of generating more than 20 kW and up to 150 kW, the provider shall utilize a meter or meters capable of measuring the flow of energy in both directions and the generator output. If meter upgrades are necessary to provide such functionality, the following applies:~~

~~(a) An electric provider serving over 1,000,000 customers in this state shall provide a meter or meters capable of measuring the flow of energy in both directions at no additional charge to a net metering customer. If the provider provides the upgraded meter(s) at no additional charge to the customer, the cost of the meter(s) shall be considered a cost of operating the net metering program.~~

~~(b) An electric provider serving fewer than 1,000,000 customers in this state shall provide a meter or meters capable of measuring the flow of energy in both directions to customers at cost. Only the incremental cost above that for meters provided by the electric provider to similarly situated nongenerating customers shall be paid by the eligible customer.~~

~~(c) An electric provider shall provide a generator meter. The cost of the meter shall be considered a cost of operating a net metering program.~~

~~(3) For a customer with a generation system capable of generating more than 150 kW, the provider shall utilize a meter or meters capable of measuring the flow of~~

~~energy in both directions and the generator output. If meter upgrades are necessary to provide such functionality the customer shall pay the cost of providing any new meters.~~

~~(4) An electric provider deploying advanced metering infrastructure shall not charge the cost of advanced meters to a net metering customer or the net metering program.~~

R 460.650 ~~Billing and credit for true net metering customers.~~ **Rescinded.**

~~Rule 50. (1) Net metering customers with a system capable of generating 20 kW or less shall qualify for true net metering. For customers who qualify for true net metering, the net of the bidirectional flow of kWh across the customer interconnection with the utility distribution system during the billing period or during each time-of-use pricing period within the billing period, including excess generation, shall be credited at the full retail rate.~~

~~(2) The credit for excess generation, if any, shall appear on the next bill. Any excess credit not used to offset current charges shall be carried forward for use in subsequent billing periods.~~

~~(3) If a customer leaves the provider's system or service is terminated for any reason, an electric provider or alternative electric supplier shall refund to the customer the remaining credit amount.~~

R 460.652 ~~Billing and credit for modified net metering customers.~~ **Rescinded.**

~~Rule 52. (1) Net metering customers with a system capable of generating more than 20 kW qualify for modified net metering. For customers who qualify for modified net metering, a negative net metered quantity during the billing period or during each time-of-use pricing period within the billing period reflects net excess generation for which the customer is entitled to receive credit. Standby charges for modified net metering customers on an energy rate schedule shall equal the retail distribution charge applied to the imputed customer usage during the billing period. The imputed customer usage is calculated as the sum of the metered on-site generation and the net of the bidirectional flow of power across the customer interconnection during the billing period. The commission shall establish standby charges for modified net metering customers on demand-based rate schedules that provide an equivalent contribution to provider system costs. Standby charges shall not be applied to customers with systems capable of generating 150 kW or less.~~

~~(2) The credit for excess generation shall appear on the next bill. Any excess kWh not used to offset current charges shall be carried forward for use in subsequent billing periods.~~

~~(3) A customer qualifying for modified net metering shall not have net metering credits applied to distribution charges.~~

~~(4) If a customer leaves the provider's system or service is terminated for any reason, an electric provider or alternative electric supplier shall refund to the customer the remaining credit amount.~~

~~(5) The credit per kWh for kWh delivered into the provider's distribution system shall be 1 of the following as determined by the commission:~~

~~(a) The monthly average real-time locational marginal price for energy at the commercial pricing node within the electric provider's distribution service territory, or~~

~~for a net metering customer on a time-based rate schedule, the monthly average real-time locational marginal price for energy at the commercial pricing node within the electric provider's distribution service territory during the time-of-use pricing period.~~

~~(b) The electric provider or alternative electric supplier's power supply component of the full retail rate during the billing period or time-of-use pricing period.~~

R 460.654 ~~Renewable energy credits.~~ **Rescinded.**

~~Rule 54. (1) An eligible electric generator shall own any renewable energy credits granted for electricity generated under the net metering program.~~

~~(2) An electric provider may purchase or trade renewable energy certificates from a net metering customer if agreed to by the net metering customer.~~

~~(3) The commission may develop a program for aggregating renewable energy certificates from net metering customers.~~

R 460.656 ~~Penalties.~~ **Rescinded.**

~~Rule 56. Upon a complaint or on the commission's own motion, if the commission finds after notice and hearing that an electric provider has not complied with a provision or order issued under part 5 of 2008 PA 295, the commission shall order remedies and penalties as necessary to make whole a customer or other person who has suffered damages as a result of the violation.~~

PROOF OF SERVICE

STATE OF MICHIGAN)

Case No. U-20890

County of Ingham)

Brianna Brown being duly sworn, deposes and says that on March 17, 2022 A.D. she electronically notified the attached list of this **Commission Order via e-mail transmission**, to the persons as shown on the attached service list (Listserv Distribution List).

Brianna Brown

Subscribed and sworn to before me
this 17th day of March 2022.

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

Service List for Case: U-20890

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