

**[STAFF STRAWMAN PROPOSAL – SUBJECT TO CHANGE-
AUGUST 28, 2019]**

DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS

PUBLIC SERVICE COMMISSION

**INTERCONNECTION, DISTRIBUTED GENERATION, AND LEGALLY
ENFORCEABLE OBLIGATION STANDARDS**

(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 2008 PA 295, MCL 460.1173.)

PART 1. GENERAL PROVISIONS

R 460.901a Definitions; A-I.

Rule 1a. As used in these rules:

(a) "AC" means alternating current.

~~(a)(b)~~ "Affiliate" means, with respect to a specified Person, another Person that directly, or indirectly through one or more intermediaries, Controls or is Controlled by or is under common Control with the Person specified.

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

~~(b)(d)~~ "Agent" means Officer appointed by a corporation to receive legal notices or act on the corporation's behalf.

~~(e)(e)~~ "Alternative electric supplier" means that term as defined in section 10g of 2000 PA 141, MCL 460.10g.

~~(d)(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.

~~(e)(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.

~~(f)(h)~~ "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. ~~means the person or entity applying to participate in a legacy net metering program or distributed generation program.~~

~~(g)(i)~~ "Application" means a fast track application, a study track application, a legacy net metering program application or a distributed generation program application.

Commented [A1]: This is consistent with FERC NOPR of 19 September 2019

Commented [A2]: The proposed language excludes co-ops that could be impacted by networked high voltage distribution system interconnections.

Commented [A3]: The generator point of interconnection does not limit if they will be impacted

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

~~(i)~~(k) "Avoided cost" means the incremental cost to an electric utility of electric energy or capacity which, but for the purchase from the qualifying facility, such utility would generate itself or purchase from another source.

~~(j)~~(l) "Business day" means Monday through Friday, excluding the following holidays: New Year's Day, Martin Luther King Jr. Day, Presidents Day, Fourth of July, Labor Day, Election Day, Veterans Day, Thanksgiving Day, Day after Thanksgiving, Christmas Eve, Christmas Day, and New Year's Eve. Any day in which the number of electric customers experiencing an outage equals or exceeds 10% of the utility's total number of customers or where the utility notifies the commission, a defined event period may also be excluded.

~~(k)~~(m) "Level 1" means an inverter-based project of 20 kVA~~W~~~~dcae~~ or less that uses equipment certified by a nationally-recognized testing laboratory to IEEE 1547.1 testing standards and in compliance with UL 1741 SA scope 1.1A.

~~(l)~~(n) "Level 2" means a project of greater than 20 kVA~~W~~~~dcae~~ and not more than 150 kVA~~W~~~~dcae~~.

~~(m)~~(o) "Level 3" means a project of greater than 150 kVA~~W~~~~dcae~~ and not more than 550 kVA~~W~~~~dcae~~.

~~(n)~~(p) "Level 4" means a project of greater than 550 kVA~~W~~~~dcae~~ and not more than 12 MVA~~W~~~~dc,ae~~.

(q) "Level 5" means a project of greater than 12 MVA~~W~~~~dcae~~ and not more than 3 MVA~~dc-~~

~~(o)~~(r) Level 6 are projects greater than 3MVA~~dc-~~

~~(p)~~(s) "Certified" means a generating, control, or protective system has met acceptable safety and reliability standards by a nationally recognized testing laboratory in conformance with IEEE 1547.1 (2018) and the associated UL standard UL 1741SA.

~~(q)~~(t) "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 IEEE 1547.1 (2018) and the Associated UL standard.

~~(r)~~(u) "Cogeneration facility" means a generating facility that sequentially produces electricity and another form of useful thermal energy, such as heat or steam, in a way that is more efficient than the separate production of both forms of energy.

~~(s)~~(v) "Commission" means the Michigan public service commission.

~~(t)~~(w) "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 and the utility. A commissioning test shall include visual inspections and may include, as applicable, an operability and functional performance test.

~~(u)~~(x) "Construction agreement" means an a contract between the utility and a general contractor that outlines the details of work that is to be completed on the property and any upgrades necessary to the electrical system. agreement 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

Commented [A4]: Provisions for flexibility are needed here. If members of the interconnection team are ultimately needed for storm duty, the responsibility to restore power and protect public safety cannot be made a secondary priority to interconnection work.

Commented [A5]: Level 4 size changed to match FERC PURPA NOPR, Level 5 to match 13.2KV maximum size Level 6 created for 40KV and up. Changed all from kW to kVA and from ac to dc. More dc loads and storage is going to make the determination of actual ac very difficult. kVA is a more accurate measure of the power produced by the system (playing with power angles can move a system by 10-15% of the total output in kW, and the power angle can be changed at any time thru software)

Commented [A6]: This will be superseded in 2020 by (2018) 1547.1 prior to issuance of the rules. By adopting the Interim standard in the rules there are entire capabilities that are not testable under the rules and devices will be immediately non compliant with the rules even though they will meet national testing standards. If this is not resolved DTE will file a waiver to correct the standards reference immediately upon rule execution.

Commented [A7]: The utility's requirements must also be met.

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

(y) “Customer” means a person who receives and pays for electric service from an electric provider’s distribution system or a person who participates in a legacy net metering or distributed generation program through an alternative electric supplier or electric provider.

(z) “DC” means “direct current.”

~~“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 technologies capable of exporting active power to a distribution system. A source of electric power that is not directly connected to a bulk power system. DER includes both generators and energy storage technologies capable of exporting active power to an distribution system. An interconnection system or a supplemental DER device that is necessary for compliance with IEEE 1547 (2018) is part of a DER~~

(a) “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 PA3, or established in an alternative electric supplier distributed generation program plan.

(b) "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.

(c) “Distribution upgrades” means the additions, modifications, and upgrades to the distribution system at or beyond the point of interconnection that are necessary to accommodate the DER’s connection to the distribution system.

(d) “Electric utility” means any person or entity whose rates are regulated by the commission for selling electricity to retail customers in this state.

(e) "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 kVAdc Wae~~ of aggregate generation at a single site for a renewable energy system.
- (ii) ~~550 kVA dcWae~~ of aggregate generation at a single site for a methane digester.

(dd) “Facilities study” means a study to specify and estimate the cost of the equipment, engineering, procurement and construction work if distribution upgrades are required.

(ee) “Fast track” means the procedure used for evaluating applications that makes use of ~~a standardized~~ screening processes.

(ff) “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 order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities; or another cause beyond a party’s reasonable control. ~~A force majeure event does not include an act of negligence or intentional wrongdoing.~~

Commented [A8]: Contracts are negotiated agreements and there is no reason to overprescribe their contents.

Commented [A9]: These are tariffs.

Commented [A10]: Use a definition consistent with IEEE

Commented [A11]: Consistency with the levels

Commented [A12]: This is inconsistent with the utility’s ability to provide its own screens, as described later in the rules.

~~(gg)~~ "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.

Commented [A13]: All 3 types of charges appear in the rate book

~~(gg)(hh)~~ "Good Standing" means that an Applicant and all affiliated companies have paid in full all bills rendered by the interconnecting electric utility and any alternative electric supplier in a timely manner and no such 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 such term does not include the applicant interconnection customer, electric utility, or any affiliate thereof. The Michigan public service commission is the authority governing interconnection requirements in the state of Michigan .

~~(ii)(jj)~~ "GPS" mean global positioning system.

~~(jj)(kk)~~ "High voltage distribution" means those parts of a distribution system that operate at or greater than 24 kilovolts, but which are not part of the transmission system.

Commented [A14]: This is a utility specific definition.

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

~~(ll)(mm)~~ "IEEE 1547-2018" means "IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems Interfaces.

~~(mm)(nn)~~ "IEEE 1547.1" means IEEE "Standard Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems."

~~(nn)(oo)~~ "Inspected" means that a local permit for the system and all of its components has been issued by the local governing agency and that the inspection for that project has been completed successfully.

~~(oo)(pp)~~ "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.

~~(pp)(qq)~~ "Interconnection agreement" means the terms and conditions governing the electrical interconnection between the electric utility and the interconnection customer.

Commented [A15]: It's unclear what this is intended to be.

~~(qq)(rr)~~ "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 affected system(s) can be obtained through informal request from the interconnection customer.

~~(rr)(ss)~~ "Interconnection customer" means the person or entity, which may include the electric utility, responsible for ensuring the DER(s) is designed, operated and maintained in compliance with all local, state and federal laws, as well as with all rules and standards.

Commented [A16]: The historical legal term has been applicant. Utilization of Interconnection customer would unnecessarily create interpretative confusion.

~~(ss)(tt)~~ "Interconnection procedures" means the requirements that govern project interconnection adopted by each electric utility and approved by the commission.

Commented [A17]: Reasonable flexibility to address dynamic circumstances consistent with the law and Administrative Rules is required.

R 460.901b Definitions; J-Z.

Rule 1b. As used in these rules

- (a) "~~kVAW~~" means kilo volt-amp watt.
- (b) "kWac" means the electric power, in kilowatts, associated with the alternating current output of a DER at unity power factor.
- ~~(c)~~ kVAdc means the electric power, in kilo-volt-amps, associated with the direct current output of a DER.
- (d) "kWh" means kilowatt-hours.
- ~~(e)~~ "kVA" means the Kilo-volt-amp hours
- ~~(e)~~(f) "kVar" means Kilo-volt-amp reactive
- ~~(g)~~ "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 and prior to the establishment of an alternative electric supplier distributed generation plan.
- ~~(e)~~(h) "Mainline" means the three-phase backbone, up to the first electrical branch of a circuit.
- ~~(i)~~ "Material modification" means among other things, modification of-facility nameplate rating, electrical size of components, the bill of materials, ~~to~~ machine data, equipment configuration or the interconnection site of the DER at any time after receiving notification by the electric utility of a complete fast track or study track application that has a material impact on one or more of the following: 1) the cost, timing, or design of any equipment located between the point of interconnection and the DER; 2) the cost, timing or design of any application with a later queue position; 3) the impact to the distribution system or an affected system, or ~~4~~ the safety or reliability of the distribution system.
- ~~(j)~~ "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.
- ~~(k)~~ "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.
- (l) "MW" means megawatt at unity power factor.
- ~~(m)~~ MVA means mega-volt-amp
- (n) "MWac" means the electric power, in megawatts, associated with the alternating current output of a DER.
- (o) MVAdc means the electric power, in kilo-volt-amps, associated with the direct current output of a DER.
- (p) "MVar" means Mega-volt-amp reactive
- (q)
- ~~(r)~~ "Nameplate rating" means nominal voltage (V), current (A), maximum active power (kWac), apparent power (kVA), and reactive power (kvar) at which ~~at~~ the equipment ~~DER~~ is capable of sustained operation.
- ~~(s)~~ "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.

Commented [A18]: Mainline should not include all three-phase backbone

Commented [A19]: This is not a generally accepted definition and is inconsistent with the FERC definition that specifically defined wire sizes.

Commented [A20]: Definition should include all equipment and not just the DER. This is not the proper definition of nameplate for the site as a whole, since they are a rating given by the equipment for safe operation by the manufacturer. Exceeding nameplate ratings shorten equipment life and increase the likelihood of failure.

~~(t)~~ "Parallel operation" means the operation, for longer than 100 milliseconds, of a project while connected to the energized distribution system.

(u) "Party" or "parties" means the electric utility or the interconnection customer.

~~(v)~~ "Point of Common Coupling" means a point in the electrical system where multiple customers or multiple electrical loads may be connected

~~(w)~~ "Point of interconnection" means the point where the DER connects with the electric utility's distribution system.

~~(x)~~ "Qualifying facility" means a generating facility of 80 MW or less whose primary energy source is flowing water, wind, solar, biomass, waste, or geothermal resources, subject to applicable electric utility and alternative electric supplier exemptions under law.

~~(y)~~ "Queue" means a chronological list of study track applications.

~~(z)~~ "Queue position" means the position of a valid study track application, relative to all other pending valid study track applications.

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

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

~~(cc)~~ "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.

~~(dd)~~ "Renewable energy resource" means that term as defined in section 11(i) of 2008 PA 295, MCL 460.1011(i).

~~(ee)~~ "Renewable energy system" means that term as defined in section 11(k) of 2008 PA 295, MCL 460.1011(k).

~~(ff)~~ "Spot network" means a location on the distribution system that uses 2 or more inter-tied transformers to supply an electrical network circuit.

~~(gg)~~ "Standard offer power purchase agreement" means a template contract for qualifying facilities of less than 3 MW that need not include terms for either price or duration of the contract.

~~(y)~~ "Standard offer rate" means a tariffed rate paid to qualifying facilities through a standard contract with the utility.

~~(hh)~~ "Study track" means the procedure for evaluating an application that includes a scoping meeting, system impact study, and facilities study.

~~(ii)~~ "System impact study" means a study to identify and describe the electric system impacts that would result if the proposed DER were interconnected exactly as proposed and without any modifications to the transmission or distribution system.

~~(jj)~~ "Transmission owner" means the entity that owns, leases, or otherwise possesses an interest in the portion of the transmission system relevant to the interconnection.

~~(kk)~~ "Transmission provider" means the entity, or its designated agent, that owns, leases, controls, or operates transmission facilities used for the transmission of electricity. The transmission provider includes the transmission owner when the transmission owner is separate from the transmission provider. The transmission

Commented [A21]: The "point of common coupling" should be defined, since it is different than the point of interconnection electrically.

Commented [A22]: This is inconsistent with a circumstance where there is more than one queue.

Commented [A23]: This definition does not solve many known problems.

Commented [A24]: There is no clear definition of reasonable as it is dependent on the circumstances. For example, the proposed definition incorrectly assumes that efforts that are not timely are always unreasonable, which is not accurate and is inconsistent with the concept of a waiver.

Commented [A25]: A standard offer PPA is not the same thing as a template contract under the law. All rules must be based on clear statutory authority. Furthermore, MCL 460.6v(e) speaks for itself and does not require a definition.

Commented [A26]: All rules must be based on clear statutory authority.

Commented [A27]: The transmission owner and provider definitions overlap and are unclear. In the case of Michigan, this definition would imply that that MISO and ITC are both transmission providers, but ITC is also a transmission owner.

provider may include the independent system operator or regional transmission operator.

~~(dd)~~(ll) "True net metering" means an electric 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 utility's distribution system, during a billing period or time-of-use pricing period.

~~(ee)~~(mm) "UL" means underwriters laboratory.

~~(ff)~~(nn) "UL 1741 SA" means the "Standard for Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources."

~~(gg)~~ "UL 1741 scope 1.1A" means paragraph 1.1A contained in chapter 1, section 1 of UL 1741.

R 460.902 Adoption of standards by reference.

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, January 28, 2010 revision, is available from COMM 2000, 151 Eastern Avenue, Bensenville, IL 60106, USA, telephone number: 1-888-853-3512 or via the internet website: www.shopulstandards.com at a cost of \$716.00 - \$897.00 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 <https://standards.ieee.org>.

(i) The IEEE 1547 - 2018, IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power System Interfaces, 4/6/2018, is available at a cost of \$149.00 - \$224.00 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, 7/1/2005, is available at a cost of \$81.00 - \$95.00 at the time of adoption of these rules.

~~(iii)~~(iii) The IEEE 519-2014 IEEE Recommended Practice and Requirements for Harmonic Control in Electric Power Systems

(2) The standards specified in subrule (1) of this rule are available for inspection at the Michigan Public Service Commission at 7109 West Saginaw Highway, Lansing, MI 48917.

(3) The standards specified in subrule (1) are available at cost plus \$25.00 shipping and handling from the Michigan Public Service Commission at 7109 West Saginaw Highway, Lansing, MI 48917.

R 460.904 Alternative dispute resolution.

Rule 4. (1) If there is a dispute between the parties, and with consent of all parties, the parties shall attempt alternative means of resolving the dispute.

Commented [A28]: This will be superseded in 2020 by (2018) 1547.1 prior to issuance of the rules. By adopting the Interim standard in the rules, there are entire capabilities that are not testable under the rules and devices will be immediately non compliant with the rules, even though they will meet national testing standards.

Commented [A29]: This will be superseded in 2020 by (2018) 1547.1 prior to issuance of the rules. By adopting the Interim standard in the rules there are entire capabilities that are not testable under the rules and devices will be immediately non compliant with the rules even though they will meet national testing standards.

Commented [A30]: Should also include ANSI C84 (voltage standards),

Commented [A31]: This will be superseded in 2020 by (2018) 1547.1 prior to issuance of the rules. By adopting the Interim standard in the rules there are entire capabilities that are not testable under the rules and devices will be immediately non compliant with the rules even though they will meet national testing standards.

Commented [A32]: Harmonics standard

(2) Any alternative means that could result in a settlement may be used including, but not limited to, settlement conferences, mediation, and other informal dispute resolution methods.

(3) If any 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.

~~(3)(4)~~ With respect to each timeline set forth in these rules, an electric utility shall have a 30 day cure period subsequent to expiration of a time deadline without liability, penalty or other obligation.

~~(4)(5)~~ No party may file a complaint pursuant to these rules and no complaint shall be accepted by the commission and determined to be prima facie later than 180 days after successful commissioning of the project.

R 460.906 Appointment of experts.

Rule 6. (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 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 appointed pursuant to subrule (1), including a reasonable hourly fee or fee determined by the commission, shall be submitted by such experts 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 460.908 Waivers.

Rule 8. (1) An electric utility, ~~qualifying facility, customer,~~ alternative electric supplier, ~~or applicant or interconnection customer~~ may apply for a waiver from 1 or more provisions of these rules and may request expeditious processing. The commission ~~shall~~ may grant a waiver upon a showing of good cause ~~and a finding that the waiver is in the public interest.~~

(2) ~~In the event an electric utility is experiencing an inordinate volume of applications receives more than 100 level 1 or level 2 applications, or 5 level 3 or greater applications in a week such event shall be good cause and,~~ the electric utility ~~may apply for~~ shall receive a waiver ~~and the from the~~ from the Commission until the appropriate interim relief is determined. ~~may consider such a waiver in an expeditious manner including granting interim relief as appropriate.~~

Commented [A33]: The use of "interconnection customer" is inappropriate and there is no reason to distinguish a QF from an applicant.

Commented [A34]: This improves transparency for utilities and applicants around when waivers will be granted.

PART 2. INTERCONNECTION STANDARDS

R 460.914 Applicability

Rule 14. Rules governing interconnection standards do not apply to DERs interconnected and DERs approved for interconnection prior to the effective date of these rules. These rules also do not apply to applications submitted to the electric utility prior to the effective date of these rules if the application is later deemed complete, with any needed revisions to the application being completed within twenty (20) business days after notification by the electric utility. These rules apply to applications to modify existing DERs if the application to modify is submitted on or after the effective date of these rules.

R 460.916 Electric utility interconnection procedures.

Rule 16. (1) Each electric utility shall file applications for approval of proposed interconnection procedures and forms, ~~following input from interested parties~~, within 180 days of the effective date of these rules. Two or more electric utilities may file a joint application proposing interconnection procedures for use by the joint applicants. The proposed procedures shall ensure compliance with these rules.

(2) The proposed procedures shall include:

- (i) Pre-application report request form and fee.
- (ii) ~~Fast track~~ application and initial screen review fees
- (iii) Fast track supplemental review fee
- ~~(iv) Study track application and fee~~
- ~~(v) System impact study agreement and fees~~
- ~~(vi) Facilities study agreement and fees~~

Interconnection operating agreement

(3) The commission shall provide a 60-day period for comment before approving the applications for interconnection procedures.

~~(4) An electric utility must obtain commission approval to revise its interconnection procedures.~~

R 460.918 Online applications and electronic submission

Rule 18. (1) Each electric utility shall allow pre-application report requests and applications to be submitted electronically; such as, through the electric utility's website or via email. The electric utility shall allow the interconnection agreement to be submitted electronically.

(2) The electric utility shall allow for electronic signatures to be used for all documents to be signed by the ~~applicant interconnection customer~~.

(3) Each electric utility shall dedicate a page on their website or direct customers to a website with generic information on these rules. The relevant information that shall be available to the interconnection customer via a website includes:

- (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) Example documents; including, at a minimum, a one-line diagram with required labels;
- (d) ~~Contact information for the electric utility's DER interconnection~~

Commented [A35]: The rules shall become effective only upon the approval of the fees and procedures. Otherwise, there could be inconsistencies between the rules and the procedures.

Commented [A36]: All rules must be based on clear statutory authority.

Commented [A37]: Pre-application reports should be folded into the application process. Otherwise, it will not be possible to track material coming in from 2 different sources and determine what was submitted first. Additionally, a separate pre-application process will shift the utility's limited resources away from more committed applicants to speculative developers.

There needs to be a throttling mechanism on timelines for pre-applications. Utilities have limitations on how many pre-applications, applications, engineering reviews, distributions studies, etc. that can be processed at any point in time. Unreasonable timelines will not overcome these limitations and instead will increase litigation.

~~department~~ ~~coordinator(s)~~, including email and phone number.

(e) Directions for the submission of applications.

(4) The electric utility or alternative electric supplier shall allow agents to act for applicants and their affiliates. The agent shall provide proper credentials and proof of agency for each application as part of the application.

(5) Electric utility or alternative electric supplier shall allow submission of applications from any applicant in good standing.

Commented [A38]: Generic contact information will be provided to reach the interconnection coordinator.

R 460.920 Communications

Rule 20. (1) The electric utility or AES shall designate one or more DER interconnection coordinators. ~~The name,~~ telephone number, and e-mail address of interconnection department ~~such contact employee(s)~~ shall be made available on the electric utility's website. ~~The DER interconnection coordinator(s) shall be available to provide assistance to the Applicant interconnection customer,~~ but is not responsible to directly answer or resolve all of the issues that may arise in the interconnection process. In no event shall the DER interconnection coordinator(s) role involve DER engineering, technical development of the project, or project site location or configuration. The electric utility shall be indemnified by the Applicant and Applicant's agent with respect to any and all assistance provided by DER interconnection coordinator(s).

Commented [A39]: All rules must be based on clear statutory authority.

(2) The ~~applicant interconnection customer~~ may designate, on the application, an application agent. An application agent may serve as the single point of contact for the ~~applicant interconnection customer~~ and may coordinate with the electric utility on the ~~applicant interconnection customer's~~ behalf. Designation of an application agent does not absolve the ~~applicant interconnection customer~~ from signing interconnection documents and from the responsibilities outlined in these rules and interconnection agreement.

R 460.922 Pre-application report request form

Rule 22. An interconnection ~~applicant customer~~ may submit a completed pre-application report request electronic form along with an associated fee for a pre-application report on a proposed project. The electric utility shall provide the data required in the pre-application report to the interconnection ~~customer applicant~~ within twenty-five (25) 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, does not confer any rights, and the interconnection ~~customer applicant~~ must still successfully apply to interconnect to the electric utility's distribution system. ~~The written~~ pre-application report request form shall include the following information:

Commented [A40]: Do not want to process forms on paper if an electronic means are made available to all

- (a) Project contact information, including name, address, phone number, and email address.
- (b) Project location, which may be given by street address with nearby cross streets and town; an aerial map with location clearly marked; or GPS coordinates.
- (c) Meter number, structure number, or other equivalent information identifying the proposed point of interconnection, if available.
- (d) Whether the DER is solar, wind, cogeneration, storage, solar with storage, or some other type.

- (e) Nameplate rating of the DER in alternating current ~~kVA and if applicable, dc KVAW.~~
- (f) Whether the DER configuration is single or three phase.
- (g) Whether the DER will be a stand-alone generator, meaning no onsite load other than station service.
- (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, shall be included. In addition, how the load is expected to change shall be specified.

R 460.924 Pre-application report fees

Rule 24. Pre-application report fees shall be specified in the electric utility’s interconnection procedures. ~~The fees shall be specific to level size and be based on the actual average cost of processing a pre-application report within a level size, over the previous year, or be based on another method approved by the commission.~~ The fees shall be reviewed annually by the electric utility and adjusted, if necessary, ~~subject to commission review and approval. Fees shall be adjusted after a contested case before the commission.~~ Fees will be placed in the rate books as a rider and follow the rate book procedures as defined in R460.xxx.

- (a) ~~After adoption of these rules, the initial set of fees shall be based on estimates of reasonable administrative costs to process pre application reports. These initial fees may be contested by other parties, and shall be reviewed and approved by the commission.~~
- (b) ~~The fees may be reviewed at any time and adjusted, if necessary, subject to commission review and approval.~~
- (c) The fees shall reflect the actual cost of processing.

Commented [A41]: Using an average cost method would result in unlawful subsidization. Applicants shall be responsible for the actual cost of the pre-application, consistent with the law. DTE recommends a flat fee paid by any applicant based on the actual cost to process the pre-application.

Commented [A42]: This is an established process to set rates and fees. The MPSC has years of accumulated experience with the rate book.

Commented [A43]: The MPSC is the appropriate entity to audit the company’s costs. For example, if the utility issues an RFP to solicit vendors and determine the cost, the MPSC may audit the process. A contested case is inappropriate.

R 460.926 Pre-application report

Rule 26. (1) Using the information provided in the pre-application report request form described in R 460.922, the electric utility will identify the substation bus, bank or circuit ~~best suited likely~~ to serve the point of interconnection. This selection by the electric utility does not necessarily indicate that this would be the circuit to which the project ultimately connects. ~~The applicant interconnection customer~~ may request additional pre-application reports if information about multiple points of interconnection is desired. No more than ten (10) pre-application report requests ~~or applications~~ may be submitted by a single ~~interconnection customer applicant and its affiliates~~ during a one-week period, ~~additional pre-applications report requests will be rejected by the electric utility or AES.~~ The pre-application report shall include 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 interconnection.~~
- (b)(a) Existing aggregate generation capacity, in MW, interconnected to a substation bus, bank or circuit likely to serve the proposed point of interconnection.
- (c)(b) Aggregate queued generation capacity, in MW, for a substation bus, bank or circuit likely to serve the proposed point of interconnection.

Commented [A44]: This implies that work was done to determine the ideal point between multiple options and is inconsistent with the ‘readily available’ definition.

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

Commented [A45]: Provide this information in the level of detail requested is a security risk. As an alternative, DTE can provide the available capacity number.

All rules must be based on clear statutory authority.

(e) Substation nominal distribution voltage and/or transmission nominal voltage if applicable.

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

(g) Feeder identifier and feeder voltage.

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

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

Commented [A46]: It is very likely that this is not available, it requires extensive analysis to get this information since until this request there has been no reason to collect anything other than peak feeder load for a given year.

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

Commented [A47]: Data Disclosure Concerns

(k) Number of phases available on the electric utility medium voltage system at the proposed point of interconnection. If a single phase, distance from the three-phase circuit.

(l) Whether the point of interconnection is located on a spot network, grid network, radial supply, secondary network, or transmission supply.

(m) Based on the proposed point of interconnection, ~~whether or not if there are~~ power quality issues ~~may be present~~ on the circuit.

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

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

~~(2)~~ ~~(2)~~ The pre-application report need only include existing and readily available data. A request for a pre-application report does not obligate the electric utility to conduct a study or other analysis of the proposed DER in the event that data is not readily available. If the electric utility cannot complete all or some of a pre-application report due to lack of available data, the electric utility shall provide the applicant interconnection customer with a pre-application report that includes the data that is readily available. ~~The electric utility may, at its discretion, return any of the pre-application report fee on the basis that some or all information does not exist. There will be no refund for a pre-application report if data does not exist.~~

Commented [A48]: This will become administratively impossible to accomplish and is not in the spirit of having defined fees and will unnecessarily shift limited company resources entirely to speculative applicants.

~~(2)~~(3) Should the electric utility see a pattern that suggests mapping the electrical system without supporting applications being filed, the electric utility shall report the activity to the Commission and may stop providing reports.

Commented [A49]: Provides for stopping the activity if it looks suspicious

(4) The electric utility has the right to limit the information it provides applicants if a new cyber security risk arises that puts the electric utility at risk of security compromise by providing specific confidential information. In such cases, the electric utility will provide the applicant with alternative information.

Commented [A50]: Language based on SGIP.

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

R 460.928 Site control.

- Rule 28. (1) Documentation of site control must be submitted with the application.
- (2) For DERs with greater than 150 kV~~Adc~~~~Wae~~ nameplate capacity, site control may be demonstrated through providing documentation showing 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; or
 - (b) An option to purchase or acquire a leasehold site for such purpose; or
 - (c) A legally binding business arrangement 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 DERs with 150 kV~~Adc~~ ~~Wae~~ or less nameplate capacity, proof of site control may be demonstrated by the site owner's signature on the application.

Commented [A51]: Not fully consistent with the FERC NOPR of 19 Sept 2019 on LEO.

R 460.930. Public interconnection list.

Rule 30. (1) Each electric utility that has received at least forty (40) complete applications in a year shall maintain a public interconnection list, available in a sortable spreadsheet format on its website, which it shall update on at least a monthly basis unless no changes to the spreadsheet have occurred in that month. The date of the most recent update shall be clearly indicated.

- (2) At a minimum, the following shall be included in the public interconnection list:
- (a) application identifier
 - (b) date of application receipt
 - (c) ~~date application deemed complete~~
 - (d) whether the application is fast track or study track
 - (e) proposed DER nameplate capacity
 - (f) proposed DER interconnection size level
 - (g) DER type
 - (h) proposed DER location including county and ~~township~~ ~~and may include feeder and substation identifier~~
 - (i) current status of the application's progress in the interconnection process

Commented [A52]: Township of the actual interconnection or all the townships involved in the site? Wind farms can cover several township, as can large solar farms.

R 460.932. Queue position.

Rule 32. (1) Each electric utility shall manage at least one queue. This queue shall consist of DERs undergoing a system impact study or a facilities study.

(2) Within the queue, the electric utility shall process the applications in the order in which the applications entered ~~that~~ ~~queue~~ unless slipping occurs pursuant to subrule (4).

(3) ~~Within that~~ ~~queue~~, those applications requiring information from transmission providers or transmission owners may be placed outside ~~that~~ ~~queue~~ and shall re-enter ~~that~~ ~~queue~~ when the information is provided to the electric utility and the study can proceed. Prior to placing the application outside ~~that~~ ~~queue~~, the electric utility shall notify the interconnection customer and describe its information request. While outside ~~that~~ ~~queue~~, the application's former queue position within ~~that~~ ~~queue~~ shall be allowed to slip.

Commented [A53]: Applicants that are committed and willing to pay should move forward. To the extent an applicant does not wish to move forward, other applicants with a later "queue" position should not be held up.

Commented [A54]: Since there is more than one queue possible, "that" is correct, not "the"

Commented [A55]: This is unclear.

(4) Within ~~that~~ ~~queue~~, those applications that result in an affected system may be placed outside ~~that~~ ~~e~~-~~queue~~. Subject to verification from the owner or operator of the affected system that its distribution system, transmission system, or ~~transmission system-~~ ~~connected~~ generation is in fact an affected system, the electric utility shall notify the

Commented [A56]: What happens with projects that are dependent on this project? There is no restudy process in the rules. If specific upgrades are required from affected system that impact the upgrades of the next project how is that communicated as the project slips?

interconnection customer that its application is being placed outside that queue. The application may then be placed outside the at queue until necessary information is provided, analysis completed, or a strategy for resolution of any adverse impact is agreed upon. While outside the queue, the application's former queue position within that queue shall be allowed to slip.

(5) ~~The electric utility shall cause applications to exit that queue in the same order in which the applications entered that queue, unless the application's position in the queue slipped due to waiting on information from a the applicant, transmission provider or transmission owner.~~

(6) Within that queue, an electric utility may study applications in geographic clusters or time-delineated batches.

(7) The electric utility must explain in its interconnection procedures, in plain English, how that queue operates.

R 460.934. Fast track applicability.

Rule 34. (1) The fast track is available to an ~~applicant interconnection customer~~ proposing to interconnect a certified, inverter-based DER with the electric utility's distribution system if the DER capacity falls within the following constraints:

Fast track eligibility for certified, inverter-based systems			
Line voltage	Fast track eligibility regardless of location	Fast track eligibility on a mainline and ≤ 2.5 electrical circuit miles from substation	aggregate total interconnection on the circuit over which study is required
< 5 kV	<u>Level 3</u>	≤ 500 kWac	<u>1 MVA_{dc}</u>
≥ 5 kV and < 15 kV	<u>Level 4</u>	≤ 2 MWac	<u>2 MVA_{dc}</u>
≥ 15 kV and < 30 kV	<u>Level 4</u>	≤ 4 MWac	<u>3 MVA_{dc}</u>
≥ 30 kV and ≤ 69 kV	<u>Level 5</u>	≤ 5 MWac	<u>5 MVA_{dc}</u>

Fast track shall be available to interconnection customers proposing to interconnect synchronous and induction generators if the generator is configured in a non-export operating mode.

(2) The eligibility criteria in subrule (1) may be modified in an electric utility's interconnection procedures to incorporate unique characteristics of the electric utility's

Commented [A57]: This would prevent committed projects from moving forward, while speculative projects took no action.

Commented [A58]: Failure to provide information to the electric utility by the applicant can hold up the whole queue.

Commented [A59]: This clause will invariably cause timelines to be exceeded when both the applicant and utility follow all other rules. It also makes alternative queue management such as batch or restudy impossible.

Commented [A60]: This conflicts with the idea of projects being processed only in the order that they applied.

Commented [A61]: The rules, especially (5) make defining batches, unless submitted at the same time, impossible.

Commented [A62]: Numbers 1-6 above prescribe an unworkable queue process, so it's unclear what level of explanation can be accomplished in the procedures.

Commented [A63]: All rules must be based on clear statutory authority. Rules must be clarified and made internally consistent in order to consider implementing a Queue process and requiring electric utility Queue accountability.

Commented [A65]: Similar approach is in New Jersey where there is substantial amounts of solar penetration

Commented [A64]: Criteria in SGIP supporting documentation is for the first larger interconnection on a feeder and exceeds or references wire sizes and equipment that are larger than DTEs nominal system and do not represent safe or reliable criteria. Adopting the table verbatim will result in a significant number of applications that fail fast track, wasting time and dissatisfying applicants.

Commented [A66]: This table should be by level as defined in the definitions.

distribution system. The interconnection procedures may also take into account export limitation and energy storage.

(3) Fast track eligibility does not imply or indicate that a DER will pass the fast track initial review screens or the supplemental review screens. In determining fast track eligibility, an electric utility may aggregate all generation on a site regardless of the existence of a shared point of interconnection or multiple points of interconnection. For applications outside the limitations set forth in subrule (1), an electric utility may, at its discretion, deem such applications eligible for fast track.

(4) In addition to the size threshold, the interconnection customer's proposed DER must meet the codes, standards, and certification requirements of these rules, or the electric utility has reviewed the design of or tested the proposed DER and is satisfied that it is safe to operate.

~~(5) Interconnections that affect the electric utility system from the MISO or ITC process will not be eligible for fast track and will follow the study application and study processes. Because these interconnections are already approved for interconnect to transmission any impact will be factored into any study that has not started as of the electric utility is notified of it being affected.~~

R 460.936 Fast track application

Rule 36. (1) The fast track application fee shall be specified in the electric utility's interconnection procedures.

~~(2) The applicant can forgo the fast track process and proceed to the study process if they chose. If the application is outside the rule 34 eligibility, the electric utility shall inform the applicant and place the application in the study process, pending applicant approval.~~

(2) For applications with proposed DERs that fall into level 1, the ~~interconnection customer~~applicant shall provide a one-line diagram and site diagram.

(3) For applications with proposed DERs that fall into levels 2 and 3, the ~~interconnection customer~~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. The ~~interconnection customer~~applicant shall also provide a site diagram.

(4) For applications with proposed DERs that fall into levels 4 and ~~above 5~~, the ~~interconnection customer~~applicant shall provide a one-line diagram that is sealed by a professional engineer licensed by the state of Michigan. The ~~interconnection customer~~applicant shall also provide a site diagram.

~~(5) The electric utility shall update their application to reflect information required to:~~

~~(5) The fast track application shall be date- and time-stamped upon receipt of the application or payment of the fast track application fee, whichever is later. The ~~interconnection customer~~applicant shall be notified electronically of receipt by the electric utility within three (3) business days of this time stamp a complete application submission in a timely fashion.~~

(6) The electric utility shall notify the ~~interconnection customer~~applicant as to whether the fast track application is complete ~~and consistent~~ or incomplete within the following time periods:

(i) Level 1-~~5~~ applications, within ~~240~~ business days of the ~~time-date~~ stamp.

Commented [A67]: Need to account for the ITC and MISO queue processes.

Commented [A68]: The applications are the same for either process from a technical level. To eliminate duplication and confusion, the decision between fast track and study application should be a decision on what to do once the application is complete, not two separate sets of rules

Commented [A69]: If the application cannot be consolidated in the rules this saves everyone time, rule 34 defines who is fast track eligible – this allows skipping fast track.

Commented [A70]: Time stamping of applications and payments should not be used in the rules, instead the date should be used for the rule timelines. Checks received by mail are received once a day and time stamping implies an order which does not exist

Commented [A71]: This must be included as submitting documentation that is still unclear makes it impossible to move to the next step of review

- ~~(ii) Level 2 applications, within 210 business days of the time stamp.~~
- ~~(iii) Level 3 applications, within 2105 business days of the time stamp.~~
- ~~(iv) Level 4 applications, within 20 business days of the time stamp.~~
- ~~(v) Level 5 applications, within 20 business days of the time stamp.~~
- ~~(iii)(iv) Level 6 applications, within 30 business days of the time stamp~~

(7) If the fast track application is incomplete, the electric utility shall provide, with the notice that the application is incomplete, ~~a written list and notify the applicant of all~~ known information that must be provided to complete the fast track application.

(8) Upon receipt of the notice that the fast track application is incomplete or additional information not originally requested on the fast track application but necessary to determine completeness, the interconnection customer applicant will then have twentyten (20+0) business days to submit all of the missing listed information. An interconnection customer may request one extension of up to ten (10) business days, and the electric utility may or may not grant such an extension. If the interconnection customer applicant does not provide the listed information within the applicable time period, the fast track application shall be deemed withdrawn.

(9) The electric utility will have twenty-ten (2+0) business days to review the additional material and notify the interconnection customer applicant if the fast track application is deemed complete. If the fast track application is still not complete, the application may be deemed withdrawn.

(10) All required documents required for a complete fast track application must be listed on the fast track application itself. The time limits in subrule (8) shall be doubled in the event the electric utility, at any point, requests information that is not listed on the fast track application.

(11) The electric utility shall use the same reasonable efforts when processing and studying fast track applications from all interconnection customers, whether the DER is owned or operated by the electric utility, its subsidiaries or affiliates, or others.

(12) he electric utility shall review and update their application periodically to reflect information required to properly review projects.

~~(11)~~

R 460.938. Fast track - initial review of DERs

Rule 38. (1) Within ~~the following timelines~~ 20 business days after the electric utility notifies the interconnection customer applicant it has received a complete and consistent fast track application, the electric utility shall perform an initial review using some or all of the initial review screens set forth in subrule (2) and notify the interconnection customer applicant of the results.:

- ~~(a) Level 1 applications, within 210 business days.~~
- ~~(b) Level 2 applications, within 210 business days.~~
- ~~(c) Level 3 applications, within 2105 business days.~~
- ~~(d) Level 4 applications, within 20 business days.~~
- ~~(e) Level 5 applications, within 20 business days.~~

The electric utility may exclude some or all of the initial review screens based on the size of the DER or other parameters.

Based on the specific operating characteristics of the electric utility's distribution system, the electric utility may include additional screens in its interconnection

Commented [A72]: PowerClerk identifies missing info with a red asterisk and will prohibit submission of missing information. However, an application may submit inconsistent, erroneous or blank material which must then be reviewed for completeness

Commented [A73]: Provision to allow utility to request additional information if new information provided is incomplete or inconsistent.

Commented [A74]: Since they are not in a queue yet just allow the 20 days and remove the complexity of tracking and communicating multiple timelines

Commented [A75]: This discourages back and forth communication and follow-up, and is unreasonable. If the process needs to evolve going forward, the utility may need more information than what is on the application.

Commented [A76]: This precludes the use of DER (energy storage) from resolving DER (Generator) issues because of the required first in first out processing.

Commented [A77]: In general for screens, specific numbers should be in the procedures as technology will change and the factors will have to adjust and tools will evolve.

procedures that are distinct from the initial review screens and the supplemental review screens.

(2) Initial review screens include the following:

- (a) The proposed DER in its entirety, including all aggregated site generation and point(s) 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 shall not exceed a percentage as defined in the utility procedures ~~15%~~ of the line section annual peak load as most recently measured. 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 a percentage as defined in the utility procedures ~~100%~~ of applicable loading, if available, instead of 15% of line section peak load.
- (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, shall not exceed a percentage as defined in the utility procedures of the buildings load, or minimum load if the data exists. 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, shall not contribute more than 10% a percentage as determined in the utility procedures to the distribution circuit's maximum fault current and shall not reduce fault current below detectable levels at the point on the primary voltage nearest the proposed point of interconnection.
- (e) The proposed DER, in aggregate with other DERs on the distribution circuit, shall not cause any distribution protective devices and equipment or ~~interconnection customer applicant~~ equipment on the system to exceed 87.5% a percentage as determined in the utility procedures of the short circuit interrupting capability; nor shall the interconnection be proposed for a circuit that already exceeds 87.5% that threshold of the short circuit interrupting capability. Distribution protective devices and equipment includes, but is not limited to, substation breakers, fuse cutouts, and line reclosers.
- (f) ~~Using the table below~~ As defined in the utility procedures, transformer connections and grounding, shall be used to determine the type of interconnection allowed to a primary distribution line. This screen includes a review of the type of electrical service provided to the interconnection customer, including line configuration and the transformer connection to limit the potential for creating over-voltages on the electric utility's distribution system and other customers equipment due to a loss of ground during the operating time of any anti-islanding function or fault.

Commented [A78]: For some circuits this can be more than 100% of minimum load, if the interconnection is single phase it may cause enough phase imbalance to burn out 3 phase motors and stop production at 3-phase manufacturing customers. The protection system will have to be reset to allow this, and a small manufacturing company may have to spend substantially on motor generator sets to fix this. It should apply only to 3 phase customers or be 15% of minimum load for single phase connections.

Commented [A79]: Applicable is undefined, how is this determined if there is existing generation on the circuit that reduces this load?

Commented [A80]: If the interconnect exceeds the buildings' load at any time, it will cause circulating currents which cause losses in the network protectors and in old network protectors (like Pontiac and Detroit) which can cause failure of the network protector and a potential of a fire.

If the connection is single phase, then the circulating current will occur at even lower levels – single phase interconnections should not be allowed at all in low voltage networks. Ideally, until the DOE finishes their work on a new network protector design in 2024 or 2025, no interconnections should be allowed in low voltage networks or they shall utilize reverse power schemes that are coordinated with the network protector rating.

Commented [A81]: It should also not get to levels where there is effectively no fault current on the circuit. In this situation, interconnections balance the load on the circuits, so the protection system does not see the fault and live wires exist on the ground for hours at a time until a patrol finds them.

Commented [A82]: There is no option to fail the screen. This does not provide real guidance on anything other than transmission and was originally based off of rotating generation and not calculated for inverter based generation, and should be replaced with the proposed language, there are working groups to appropriately define effective grounding which is what this intending to address and the industry will develop appropriate procedures to model the screen off of that can be incorporated.

Primary Distribution Line Type	Type of Interconnection to Primary Distribution Line	Result/Criteria
--------------------------------	------------------------------------------------------	-----------------

Three phase, three wire	Three phase or single phase, phase-to-phase	Pass screen
Three phase, four wire	Effectively grounded three 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, shall not exceed ~~a limit as determined in the utility procedures 20 kVA or 365% 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 shall not create an imbalance between the two sides of the 240 volt service of more than 20% of the nameplate rating of the service transformer. ~~Aggregate generation on the circuit shall not cause a phase imbalance of more than 8% across the phases the circuit based on lowest daylight load.~~
- (i) If the proposed DER is single-phase and is to be interconnected to a three-phase service, its nameplate rating shall not exceed 10% of the service transformer nameplate rating. ~~Aggregate generation on the circuit shall not cause a phase imbalance of more than 8% across the phases the circuit based on lowest daylight load.~~
- (j) ~~If the DER's point of interconnection is behind a line voltage regulator, the DER's shall nameplate rating shall be 1 a level 1 or 2 interconnection, less than 250 kW.~~ This screen does not include substation voltage regulators.

(3) If the proposed interconnection passes the screens, ~~or if the proposed interconnection fails the screens but the electric utility determines that the DER may nevertheless be interconnected consistent with safety, reliability, and power quality standards,~~ the fast track application shall proceed as follows:

- (a) If the proposed interconnection requires no construction of facilities by the electric utility, the interconnection process shall proceed to R 460.976.
- (b) If the proposed interconnection does require construction of facilities by the electric utility but the interconnection does not require a facilities study, the fast track application shall proceed to R 460.974.
- (c) If the proposed interconnection does require construction of facilities by the electric utility on its own system and the interconnection does require a facilities study, the interconnection process shall proceed to R 460.966.
- (d) If the ~~interconnection customer~~ applicant decides not to proceed, its application shall be deemed withdrawn.

(4) If the proposed interconnection fails any of the initial review screens in subsection (2), ~~and the electric utility does not or cannot determine from the initial review that the DER may nevertheless be interconnected consistent with safety, reliability, and power quality standards,~~ the electric utility shall provide the ~~interconnection customer~~ applicant with: ~~(1) the results of the application of the initial review screens; and (2) the option of one of the following:~~

Commented [A83]: DTEs territory the average number of customers is 4 – to give 1 customer who moves first most of the capacity of the transformer – means the other customers are blocked from installing an interconnection without paying to upgrade the transformer.

Commented [A84]: The rule is fine for the first interconnection on a circuit. However, it is not fine with multiple interconnections on the same circuit on a typical single phase lateral into a new high end neighborhood.

Commented [A85]: The rule if fine for the first interconnection on a circuit, it is not fine with multiple interconnections on the same circuit on a typical single phase lateral into a new high end neighborhood.

Commented [A86]: Language updated to match Michigan levels of generation. Voltage regulators come in different sizes and it is circuit dependent on which one is installed, the Level 1 and 2 should not produce an issue given the smallest regulators that may be encountered.

- (a) ~~to attend a customer options meeting,~~ as described in R 460.940;
- (b) to proceed to supplemental review under R 460.942 along with a non-binding estimate of the costs of such review.
- (c) to withdraw the application.

Commented [A87]: The decision for the customer options meeting may exceed the 20 day timeline for response. This will need to get corrected or there will be an inconsistency.

(5) If the DER passes all the initial review screens but the electric utility does not or cannot determine that the DER may be interconnected safely and reliably unless the ~~interconnection customer applicant~~ is willing to consider further study or modifications acceptable to the electric utility, the electric utility shall provide the ~~interconnection customer applicant~~ the option of either:

- 1) undergoing a supplemental review pursuant to R 460.942;
- ~~or~~ 2) commencing the study track beginning at R 460.948.

~~The electric utility shall provide copies of all directly pertinent results and reasoning, if requested by the applicant, data and analyses underlying its conclusions. If the interconnection customer applicant wishes to proceed to either a supplemental review or the study track, it shall notify the electric utility within twenty (20) business days or the application shall be deemed withdrawn.~~

Commented [A88]: This should be sufficient to properly protect information and provide the applicant with enough information to understand the situation.

R 460.940. Fast track – customer options meeting

Rule 40. (1) ~~If the electric utility determines the fast track application cannot be approved without either 1) supplemental review, other additional studies or actions; or 2) incurring significant cost to address safety, reliability, or power quality problems, the electric utility shall notify the interconnection customer applicant of that determination and provide copies of all directly pertinent results and reasoning data and analyses underlying its conclusion, if requested by the applicant, and Upon request by the interconnection customer applicant, and when the electric utility determines the fast track application cannot be approved, the electric utility shall applicant may schedule a customer options meeting between the electric utility and the interconnection customer 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. At the time of notification of the electric utility's determination, or At the customer options meeting, the electric utility shall provide the following options to the applicant:~~

Commented [A89]: This section provides additional preconditions, requirements and repeats part of other rules - suggest simplifying it to address just the customer options meeting

Commented [A90]: If this section cannot be removed, then only results and reasoning should be provided if requested. This addresses the data security concerns and does not cause the utility to unnecessarily prepare additional documentation, driving up costs.

- (a) Offer to perform a supplemental review in accordance with R 460.942 and provide a non-binding good faith estimate of the costs of such review; or
- (b) Obtain the ~~interconnection customer applicant~~'s agreement to continue evaluating the fast track application under the study track, beginning at R 460.948; or
- (c) Obtain the ~~interconnection customer applicant~~'s agreement for withdrawal.
- (2) Should the meeting be inconclusive, the ~~interconnection customer applicant~~ shall have no more than ten (10) business days to decide on a course of action. Failure to inform the electric utility within ten (10) business days will deem the application withdrawn. No refunds shall be granted upon withdrawal.
- (3) The meeting shall be scheduled as soon as reasonably possible within thirty (30) business days of after the date of notification.
- (4) Meetings may happen in person or via telecommunications.

Commented [A91]: This section should be exclusive to the customer options meeting, this is needlessly repetitive and handled in the fast track section.

Commented [A92]: The applicant may not be immediately available or key individuals may be out of the office. That should not result in a violation.

R 460.942. Fast track - supplemental review

Rule 42. (1) To accept the offer of a supplemental review, the ~~interconnection customer~~ applicant shall agree in writing and submit payment equivalent to the total estimated costs of the supplemental review in the amount of the electric utility’s good faith estimate of the costs of such review, both within twenty (20) business days of the offer. If the written agreement and payment have not been received by the electric utility within that timeframe, the fast track application shall be deemed withdrawn unless the ~~interconnection customer~~ applicant has requested the application continue to be evaluated under the study track beginning at R 460.948.

~~(2) Upon written agreement and payment, the interconnection customer may specify the order in which the electric utility will complete the supplemental review screens as required in subrule (4) and specified in the electric utility’s interconnection procedures.~~

(3) Within thirty (30) business days following receipt of the payment, ~~and a signed agreement,~~ for a supplemental review, the electric utility shall: 1) perform a supplemental review as required by subrule (4); 2) notify, in writing, the ~~interconnection customer~~ applicant of the results at the end of the supplemental review. The electric utility shall notify the ~~interconnection customer~~ applicant following the failure of any of the screens ~~when the electric utility does not or cannot determine that the DER may nevertheless be interconnected consistent with safety, reliability, and power quality standards,~~ or if it is unable to perform a screen in this subrule. The ~~interconnection customer~~ applicant shall respond within five (5) business days of notification from the electric utility with its choice of the following options: ~~1) continue evaluating the proposed interconnection under this subrule;~~ 1) terminate the supplemental review and continue evaluating the proposed interconnection under the study track; or 2) terminate the supplemental review by withdrawing the application. If the ~~interconnection customer~~ applicant does not respond within five (5) business days, the application shall be deemed withdrawn.

(4) The supplemental review ~~screens~~ shall be specified in the electric utility’s interconnection procedures and shall address, ~~but not be limited to,~~ minimum load, voltage and power quality, ~~and~~ safety and reliability.

(5) If the proposed interconnection passes the supplemental ~~screens,~~ review, or if the proposed interconnection fails the ~~screens,~~ review but the electric utility determines that the DER may nevertheless be interconnected consistent with safety, reliability, and power quality standards, the interconnection shall proceed as follows:

(a) If the proposed interconnection requires no construction of facilities by the electric utility on its own system, the interconnection process shall proceed to R 460.976.

(b) If the proposed interconnection does require construction of facilities by the electric utility on its own system but the interconnection does not require a facilities study, the application shall proceed to R 460.974.

(c) If the proposed interconnection does require construction of facilities by the electric utility on its own system and the interconnection does require a facilities study, the interconnection process shall proceed to R 460.966.

(d) If the ~~interconnection customer~~ applicant decides not to proceed, its application shall be deemed withdrawn.

Commented [A93]: This creates undo chaos in the processing and assumes that the applicant is familiar with the tools and techniques used for study. While it may be reasonable for larger installers, and independent power producers, it is not for the bulk of the applications. To change the order of the process, means that each step has to be priced based on the step order specified by the applicant and may add additional time and cost to the effort. It also means that junior engineers cannot be trained in a routine process to do the work in, and a more senior engineer will have to do the work, raising the overall costs.

Commented [A94]: Need the agreement to go with the payment.

Commented [A95]: Added to be consistent with the below options

Commented [A96]: If a project fails the screen, what is the intent of having the project continue in the process if it doesn’t lead to a useful outcome?

This would lead to long delays in the fast track with every screen in the supplemental review having a 5 day to respond time – and the utility only having 30 days to complete. If there are 5 or 6 things that are in the supplemental – then the 30 day limit is an invitation to create complaints. The project should exit the fast track at this point.

Commented [A97]: Screen is inaccurate here, most of the applications that will fail the initial fast track screens will need one or more studies done, that do not rise to the level of full study, but are serious engineering work, not just a quick look up. Making this say “screen” devalues the work that is done, and may result in additional complaints because people don’t think a screen should cost what the actual work is.

(6) If the proposed interconnection fails the screens, and the electric utility does not or cannot determine that the DER may nevertheless be interconnected consistent with safety, reliability, and power quality standards, the electric utility shall provide the ~~interconnection customer applicant~~ the option of commencing the study track beginning at R 460.948. If the ~~interconnection customer applicant~~ wishes to proceed it shall notify the electric utility within twenty (20) business days or the application shall be deemed withdrawn.

(7) If the DER passes all the supplemental screens but the electric utility does not or cannot determine that the DER may be interconnected safely and reliably unless the ~~interconnection customer applicant~~ is willing to consider further study or modifications acceptable to the electric utility, the electric utility shall provide the ~~interconnection customer applicant~~ the option of commencing the study track beginning at R 460.948. The electric utility shall provide copies of all ~~directly pertinent data and analyses results and reasoning~~ underlying its conclusions. If the ~~interconnection customer applicant~~ wishes to proceed it shall notify the electric utility within twenty (20) business days or the application shall be deemed withdrawn.

R 460.944. Fast track – initial review screens fees

Rule 44. (1) Fast track initial review screens fees shall be specified in the electric utility's interconnection procedures ~~via rider in the rate book~~. The fees shall be specific to level size and be based on the ~~actual average cost of undertaking a review within a level size over the previous year~~, unless the provisions of subrule (2) of this rule apply. ~~These initial review screens fees shall be calculated using methods approved by the commission. The fees shall be reviewed annually by the electric utility and adjusted, if necessary, subject to commission review and approval. Fees shall be adjusted after a contested case before the commission.~~

~~(a) After adoption of these rules, the initial set of fees shall be based on the average cost of undertaking a review within a level size over the previous year, unless the provisions of subrule (2) of this rule apply. If no historical costs exist, or historical cost data are insufficient, initial fees shall be based on reasonable estimates of the costs to perform the review. These initial review screens fees shall be reviewed and approved by the commission after a contested case.~~

~~(b) The fees may be reviewed at any time and adjusted, if necessary, subject to commission review and approval. Fees shall be adjusted after a contested case before the commission. Via the existing rider process that the commission has specified.~~

~~(2) For applications that are participating in the distributed generation program pursuant to Part 3 of these rules, the fast track initial review screens fee shall not exceed \$50.~~

R 460.946. Fast track – supplemental review screens fees.

Rule 46. The ~~interconnection customer applicant~~ shall be responsible for the electric utility's actual costs for conducting the supplemental review, ~~not to exceed 120% of the estimated costs without prior approval of the interconnection customer applicant. The interconnection customer applicant shall pay any review costs that exceed the initial payment within twenty (20) business days of receipt of the invoice or resolution of any dispute. If the initial payment exceeds the invoiced costs, the electric utility will return such excess within twenty (20) business days of the invoice without interest.~~

Commented [A98]: This provides sufficient information without releasing sensitive information

Commented [A99]: There should be no subsidization of costs. The developer shall pay actual costs.

Commented [A100]: It is unnecessary and inefficient to establish an elaborate process when actual costs is the standard and it can be verified.

Commented [A101]: How is the time lag of the contested case taken into account? What if the fee modifications are not approved in the contested case? Additionally, where are the costs of the contested case recovered?

Commented [A102]: The MPSC is the appropriate entity to audit electric utility costs.

Commented [A103]: This is not cost based recovery. MCL 460.1175 provides that "An electric utility or alternative electric supplier may charge a fee not to exceed \$50 to process an application to participate in the distributed generation program." This \$50 limit does not apply to interconnection applications. MCL 460.1175 provides that "The customer shall pay all interconnection costs."

Commented [A104]: It is proposed that the supplemental review would have a fixed cost schedule. In general why is fast track different from the other fee based rules? This is one of the only locations where there is a refund. This will make communicating standard costs impossible. The contested case process, if adopted, would have to accommodate this variation.

R 460.948. Applicability of study track

Rule 48. (1) The study track, which shall consist of the system impact study and the facilities study, shall be used by an ~~interconnection customer~~ applicant proposing to interconnect its DER with the electric utility’s distribution system if the DER is not eligible for, decided to skip, or did not pass, the initial review of the fast track beginning at R 460.934, or did not pass the supplemental review of the fast track described in R 460.942.

Commented [A105]: The applicant should have a choice to skip the fast track process.

~~**R 460.950 Study track application**~~

~~Rule 50. (1) For applications with proposed DERs that fall into level 1, the interconnection customer shall provide a one line diagram and site diagram.
(2) For applications with proposed DERs that fall into levels 2 and 3, the interconnection customer 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. The interconnection customer shall also provide a site diagram.
(3) For applications with proposed DERs that fall into levels 4 and 5, the interconnection customer shall provide a one line diagram that is sealed by a professional engineer licensed by the state of Michigan. The interconnection customer shall also provide a site diagram.
(4) The study track application shall be date and time stamped upon receipt of the application or payment of the application fee, whichever is later. The interconnection customer shall be notified of receipt by the electric utility within three (3) business days of this time stamp.
(5) The electric utility shall notify the interconnection customer as to whether the study track application is complete or incomplete within the following time periods:
—— (i) Level 1 applications, within 10 business days of the time stamp.
—— (ii) Level 2 applications, within 10 business days of the time stamp.
—— (iii) Level 3 applications, within 15 business days of the time stamp.
—— (iv) Level 4 applications, within 20 business days of the time stamp.
—— (v) Level 5 applications, within 20 business days of the time stamp.
(6) If the study track application is incomplete, the electric utility shall provide, with the notice that the study track application is incomplete, a written list of all information that must be provided to complete the study track application.
(7) Upon receipt of the notice that the study track application is incomplete, the interconnection customer will then have ten (10) business days to submit all of the listed information. An interconnection customer may request one extension of up to ten (10) business days, and the electric utility may or may not grant such an extension. If the study track customer does not provide the listed information within the applicable time period, the study track application shall be deemed withdrawn.
(8) The electric utility will have ten (10) business days to review the additional material and notify the interconnection customer if the study track application is deemed complete. If the application is still not complete, the application may be deemed withdrawn.~~

Commented [A106]: This is redundant to rule 36 and should be combined with rule 36 - Rule 36 as modified allows the applicant to choose which track they are in. Otherwise, as the rules read, the applicant, once they fail out of fast track has to re-apply all over again from scratch and pay the application fee, go thru submission review, completeness review, and other overhead work as if it were a new application – is that what is intended?

~~(9) All required documents required for a complete study track application must be listed on the study track application itself. The time limits in subrule (8) shall be doubled in the event the electric utility, at any point, requests information that is not on the study track application.~~

~~(10) The electric utility shall use the same reasonable efforts when processing and studying study track applications from all interconnection customers, whether the DER is owned or operated by the electric utility, its subsidiaries or affiliates, or others.~~

R 460.952 Study track fees

Rule 52. The study track fees shall be specified in the electric utility's interconnection procedures. The fees may be specific to level size and shall be based on the actual average cost of processing a study track application over the previous year, or be based on another method approved by the commission. The fees shall be reviewed annually by the electric utility and adjusted, if necessary, ~~subject to commission review and approval.~~ Fees shall be adjusted after a contested case before the approved by the commission.

(a) After adoption of these rules, the initial set of fees shall be based on reasonable estimates of the administrative costs to process study track applications. ~~These initial study track fees shall be reviewed and approved by the commission after a contested case.~~

(b) ~~The fees may be reviewed at any time and adjusted, if necessary, subject to commission review and approval. Fees shall be adjusted after a contested case before the commission.~~

(c) the fees will be place in a rider in the rate book, and will follow the rate book procedures as defined elsewhere in these rules by the Commission.

Commented [A107]: Applicants shall pay actual costs. All rules must be based on clear statutory authority.

R 460.954. Scoping meeting before study track

Rule 54. (1) A scoping meeting may be held at the request of interconnection customer applicant as soon as reasonably possible within twenty (20) business days after the application is deemed complete by the electric utility or, if applicable, the fast track has been completed and the interconnection customer applicant has elected to continue with the system impact study or facilities study, or as mutually agreed to by the parties. The scoping meeting may be held via telecommunications. Scoping meetings are limited to two (2) hours per application. Multiple applications by the same interconnection customer applicant may be addressed in the same meeting.

(2) The purpose of the scoping meeting is to discuss the application and review existing fast track study results, if any. ~~The parties shall further discuss whether the electric utility should perform a system impact study, proceed to a facilities study, or proceed to an interconnection agreement.~~

(a) If the parties agree at a scoping meeting that a system impact study should be performed, the electric utility shall provide the interconnection customer applicant, as soon as possible, but not later than ten five (105) business days after the scoping meeting, a system impact study agreement.

(b) If the parties agree at a scoping meeting that a facilities study should be performed, the electric utility shall provide the interconnection customer applicant, as soon as possible, but not later than ten five (105) business days after the scoping meeting, a facilities study agreement.

Commented [A108]: Care must be taken to not create additional costs by having excessive meetings in the process. Additional contractors and employees must be brought on board to be available for these activities in addition to those doing studies

Commented [A109]: Provide a consistent time line for providing agreements to the customer in this section – say 10 days regardless of the circumstances, “regardless of the scoping meeting, within 10 days the electric utility shall provide the following to the applicant:” Then the sub-sections can be shortened to “if a system impact study is needed, the electric utility will provide the applicant with a system impact study agreement” And carry on in that fashion, dropping about a page out of these rules.

(c) If the parties agree at a scoping meeting that the ~~interconnection customer~~ applicant should proceed directly to an interconnection agreement, the electric utility shall provide the ~~interconnection customer~~ applicant an interconnection agreement and, if necessary, a construction agreement within five ~~(30)~~ business days.

(3) The scoping meeting may be omitted by mutual agreement.

(a) If the scoping meeting is omitted by mutual agreement, the fast track has been completed and the ~~interconnection customer~~ applicant has elected in writing to continue with a system impact study, the electric utility shall provide the ~~interconnection customer~~ applicant a system impact study agreement within ten (10) business days from receiving the ~~interconnection customer~~ applicant's written election.

(b) If the scoping meeting is omitted by mutual agreement, the fast track has been completed and the ~~interconnection customer~~ applicant has elected in writing to continue with a facilities study, the electric utility shall provide the ~~interconnection customer~~ applicant a facilities study agreement within ten (10) business days from receiving the ~~interconnection customer~~ applicant's written election.

(c) If the scoping meeting is omitted by mutual agreement, the fast track has been completed and the ~~interconnection customer~~ applicant has elected in writing to continue to an interconnection agreement, the electric utility shall provide the ~~interconnection customer~~ applicant an interconnection agreement and, if necessary, a construction agreement within ~~thirty~~ ~~twenty~~ (30) business days from receiving the ~~interconnection customer~~ applicant's written election.

R 460.956 System impact study agreement

Rule 56. (1) The system impact study agreement shall include an outline of the scope of the study and the applicable fee. If applicable, the agreement shall list any additional and reasonable technical data needed from the ~~interconnection customer~~ applicant in order to perform the system impact study.

(2) Additional and reasonable technical data, if applicable, shall be returned to the utility with the system impact study agreement and fee. ~~Upon interconnection customer request, the electric utility shall grant a time frame extension of up to five (5) business days without changing the queue position. After five (5) business days, the interconnection customer's queue position in the queue will incur a day for day slip until the data is provided. After thirty (30) business days the electric utility will terminate the application and send an invoice for any costs incurred which shall be paid promptly by the interconnection customer or its affiliates.~~

(3) ~~In order to remain in consideration for interconnection, an interconnection customer who has requested a system impact study must return the executed system impact study agreement and pay the required fee within twenty (20) business days. The electric utility shall terminate the application if the system impact study agreement and payment are not returned within twenty (20) business days.~~

R 460.958. System impact study scope

Commented [A110]: This should be a re-direct to the construction agreement section. This may include estimating of the costs of construction and an on-site visit for verification, to say that a construction agreement will come directly out of this meeting with almost no work, is mis-leading and invites complaints. More reasonable would be to point at the right portion of the construction agreement rules.

Commented [A111]: This should be a re-direct to the construction agreement section. This may include estimating of the costs of construction and an on-site visit for verification, to say that a construction agreement will come directly out of this meeting with almost no work, is mis-leading and invites complaints. More reasonable would be to point at the right portion of the construction agreement rules.

Commented [A112]: Just make it 30 days and simplify the process.

Commented [A113]: Terminate is undefined

Commented [A114]: Redundant to (2), Simplify the process.

Rule 58. (1) A system impact study shall identify and detail the electric system impacts that would result if the proposed DER(s) were interconnected without electric system modifications, including, but not limited to, those impacts identified in the scoping meeting. A system impact study shall provide a non-binding good faith estimate of the list of facilities that are required as a result of the application and ~~non-binding good faith estimates~~ of costs and time to construct.

(2) The scope of the system impact study shall be described in the interconnection procedures.

(3) The system impact study may be broken up into multiple phases.

Commented [A115]: Timelines may need to be adjusted to allow for this to work well and to give proper cost transparency.

R 460.960 System impact study procedure

Rule 60. (1) for levels 1 to 5 ~~the~~ electric utility shall complete a system impact study within forty-five (45) business days of obtaining, from the interconnection customer applicant, a signed system impact study agreement, payment of all applicable fees, and any necessary technical data for levels 1 to 5. ~~For level 6 applications, timelines will vary with the required scope of work and the electric utility will make best efforts to complete the study as soon as reasonable possible.~~

(2) Additional data may be requested from the interconnection customer applicant by the electric utility during the system impact study. The electric utility shall have an additional five (5) business days to complete the system impact study if a data request is sent to the interconnection customer applicant, and the application shall maintain its queue position during these five business days. Should an interconnection customer applicant's response to a data request cause the system impact study to take longer than fifty (50) business days to complete, the queue position of the application shall be permitted to slip after the 50th day of the system impact study.

Commented [A116]: The scope of study for larger projects vary and will likely require longer than 45 days to complete.

(3) If, during the system impact study process, the study shows an affected system, the electric utility shall notify the affected system and the interconnection customer applicant. The electric utility shall make all reasonable efforts to facilitate the resolution of the issue or issues involving the affected system. The study timelines shall be placed on hold if an affected system is identified and waiting for resolution of the affected system status. The timeline for the study shall be extended for the time spent in affected system status. The electric utility shall not knowingly utilize outdated affected system information in the system impact study. Should the results of the affected system's study change the study parameters for the electric utility, the electric utility may choose to reset the study to the beginning and for no additional fee, repeat the study with the new parameters and a new time limit based on the level of the project.

Commented [A117]: There is no exit from this condition.

(4) The electric utility shall notify the interconnection customer applicant of the results of the system impact study, and provide the report and, if needed, a facilities study agreement within ~~ten~~ ten (10) business days of receipt of any money due the electric utility, completing the study. Upon request by the interconnection customer applicant, the electric utility shall provide the interconnection customer applicant supporting documentation and workpapers developed in the preparation of the system impact study.

Commented [A118]: If the results of the affected system change the point of interconnection or the configuration off the transmission system this would come into effect.

(5) Within fifteen (15) business days of receiving the system impact study report, the interconnection customer applicant shall either notify the electric utility that it plans to pursue a customer options meeting pursuant to R 460.964 or withdraw the application. Failure to select a course of action will deem the application withdrawn.

Commented [A119]: The study scope should provide consistent levels of information, otherwise costs will increase as custom reports have to be written.

R 460.962. System impact study fees

Rule 62. (1) System impact study fees shall be specified in the electric utility’s interconnection procedures. The fees shall be specific to level size and be based on the ~~actual~~ average cost of undertaking a study within a level ~~size over the previous year, or be based on another method approved by the commission.~~ The fees shall be reviewed annually by the electric utility and adjusted, if necessary, subject to commission review and approval. ~~Fees shall be adjusted after a contested case before the commission. For applications transitioning from the fast track supplemental to the system impact study, savings resulting from work performed in the fast track may be applied to the system impact study fee.~~

Commented [A120]: Redundant - should be one rule up front covering all fees

(a) ~~After adoption of these rules, the initial set of fees shall be based on the actual~~ average cost of undertaking a study within a level ~~size over the previous~~ year. If no historical costs exist, or historical cost data are insufficient, initial fees shall be based on reasonable estimates of the costs to perform the study. ~~These initial fees shall be reviewed and approved by the commission after a contested case.~~

Commented [A121]: The fast track fee is the application fee, this should refer to supplemental. This only makes sense if the supplemental is not refundable and a fixed fee.

(b) ~~The fees may be reviewed at any time and adjusted, if necessary, subject to commission review and approval. Fees shall be adjusted after a contested case before the commission.~~

Commented [A122]: Not every project is the same – developer shall pay actual costs.

(2) If the system impact study is split into multiple phases, each phase shall separately comply with subrule (1).

(3) If two or more applications undergo a system impact study as part of a cluster or batch, the fee for each ~~interconnection customer~~ applicant in the cluster or batch shall be specified in the electric utility’s interconnection procedures and shall be calculated using a method approved by the commission.

Commented [A123]: This is the only part of the rule that is new, the rest is redundant and should be covered in 1 overall fees rule up front.

R 460.964 Customer options meeting after system impact study.

Rule 64. (1) The electric utility shall schedule a ~~customer options~~ System Impact Study review meeting between the electric utility and the ~~interconnection customer~~ 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 meeting shall be scheduled as soon as reasonably possible after within twenty five (25) business days of the electric utility receiving notification that the interconnection customer applicant plans to attend a customer options meeting.~~ The meeting may happen in-person or via telecommunications. At the ~~customer options~~ System impact review meeting, the electric utility shall offer one of the following options:

Commented [A124]: The developer may not be ready to move forward and key individuals may be unable to attend. A meeting cannot be forced if reasonably negotiated

(a) Offer to perform a facilities study and provide a facilities study agreement to the ~~interconnection customer~~ applicant with the applicable fee.

(b) Provide the ~~interconnection customer~~ applicant an interconnection agreement and, if necessary, a draft construction agreement.

Commented [A125]: Clarity of the fact that options are mutually exclusive.

(c) Obtain the ~~interconnection customer~~ applicant’s agreement for withdrawal.

Commented [A126]: These are negotiated

(2) At the conclusion of the meeting, the ~~interconnection customer~~ applicant shall have no more than twenty (20) business days to decide on a course of action. Failure to inform the electric utility within twenty (20) business days will deem the application withdrawn. No refunds shall be granted upon withdrawal.

R 460.966. Facilities study agreement.

- Rule 66. (1) If construction of facilities is required to provide interconnection and interoperability of the DER with electric utility’s distribution system, the electric utility shall provide the ~~interconnection customer~~applicant a facilities study agreement in tandem with the results of the ~~interconnection customer~~applicant’s system impact study.
- (2) ~~If a facilities study is require, the electric utility shall provide an agreement and the associated estimated fee for the study within 10 day-s of completion of the system impact study, request of the customer, or triggering event. If no system impact study is required, and a scoping meeting has been requested and a facilities study is required, then the electric utility shall provide as soon as possible, but not later than five (5) business days after the scoping meeting, a facilities study agreement.~~
- (3) ~~If the scoping meeting is omitted by mutual agreement and no system impact study is required, but a facilities study is required, the electric utility shall provide the interconnection customer a facilities study agreement within ten (10) business days after the study track application is deemed complete and, if applicable, the fast track has been completed.~~
- (4) The scope of, and fee for, the facilities study shall be described in the facilities study agreement.
- (5) The ~~interconnection customer~~applicant shall return the executed facilities study agreement, pay the required facilities study fee, and provide any documents required by the facilities study within twenty (20) business days.

Commented [A127]: This is overly complicated and time consuming - the proposed change makes it clear to everyone what the next step will be.

R 460.968. Facilities study scope.

Rule 68. A facilities study shall specify and estimate the cost of the required equipment, engineering, procurement and construction work, including overheads, needed to implement the conclusions of the system impact study. Any additional detail to be provided in the facilities study shall be specified in the electric utility’s interconnection procedures.

R 460.970. Facilities study procedure.

- Rule 70. (1) ~~For level 1 through 5 interconnections, t~~he facilities study must be completed within forty-five (45) business days of the receipt of the executed facilities study agreement, supporting documents and payment. ~~for level 1 through 5 interconnections; Level 6 interconnections timelines will be a minimum of sixty business days or as negotiated between the utility and the applicant following the receipt of the executed facilities study agreement, supporting documents and payment. -~~
- (2) ~~If there are changes that impact the facilities study from an affected system, the facilities study will start when the information is received from the affected system.~~

Once the facilities study is completed, a draft facilities study report shall be prepared and transmitted to the ~~interconnection customer~~applicant. Upon request, the electric utility shall provide the ~~interconnection customer~~applicant supporting documentation ~~and workpapers developed - created~~ in the preparation of the facilities study report.

- (3) Within ten (10) business days of providing a draft facilities study report to the ~~interconnection customer~~applicant, the electric utility and ~~interconnection~~

Commented [A128]: Need to remove the timeline from potentially unlimited size interconnections – you would never expect the facilities study on a nuclear power plant to happen in 45 business days.

Commented [A129]: Need to account for changes that the affected system might make. It is prudent to wait, since otherwise the study will have to be redone.

Commented [A130]: This reduces release of sensitive information.

~~customer~~applicant shall meet to discuss the results of the facilities study unless the meeting is omitted by mutual agreement. This meeting may occur in-person or via telecommunications.

(4) The ~~interconnection~~ ~~customer~~applicant may, within twenty (20) business days after receipt of the draft report, provide written comments to the electric utility, which the electric utility shall address in the final report.

(5) The electric utility shall issue the final facilities study report and a draft construction agreement within fifteen (15) business days of receiving the ~~interconnection~~ ~~customer~~applicant's comments or within five (5) business days upon receiving the ~~interconnection~~ ~~customer~~applicant's written statement that no comments will be provided. The electric utility may reasonably extend the time frame upon notice to the ~~interconnection~~ ~~customer~~applicant in order to address the ~~interconnection~~ ~~customer~~applicant's comments with additional analyses or if significant modifications to the facilities study are determined to be necessary by the electric utility prior to issuance of the final facilities study report. The ~~interconnection~~ ~~customer~~applicant is responsible for reasonable additional costs incurred by the electric utility in responding to the ~~interconnection~~ ~~customer~~applicant's comments.

R 460.972. Facilities study fee

Rule 72. (1) The facilities study fee shall be specified in the electric utility's interconnection procedures. The fee shall be specific to level size and be based on the ~~actual~~average cost of undertaking a study within a level size ~~over the previous year, or be based on another method approved by the commission.~~ The fees shall be reviewed annually by the electric utility and adjusted, if necessary, subject to commission review and approval. ~~Fees shall be adjusted after a contested case before the commission.~~ For applications transitioning from the fast track to the facilities study, savings resulting from work performed in the fast track shall be applied to the facilities study fee.

(a) After adoption of these rules, the initial set of fees shall be based on the average cost of undertaking a study within a level size over the previous year. If no such historical costs exist, or historical cost data are insufficient, initial fees shall be based on reasonable estimates of the costs to perform the study. These initial fees shall be reviewed and approved by the commission ~~after a contested case.~~

(b) The fees may be reviewed at any time and adjusted, if necessary, subject to commission review and approval. Fees shall be adjusted after ~~a contested case before the commission.~~ commission approval

(2) If two or more applications undergo a facilities study as part of a cluster or batch, the fee for each ~~interconnection~~ ~~customer~~applicant in the cluster or batch shall be specified in the electric utility's interconnection procedures and shall be calculated using a method approved by the commission.

R 460.974. Construction agreement.

Rule 74. (1) Within twenty (20) business days following the receipt of a draft construction agreement by the ~~interconnection~~ ~~customer~~applicant, the ~~interconnection~~ ~~customer~~applicant and the electric utility shall execute a final construction agreement.

Commented [A131]: Again this is largely redundant and should be handled in one rule up front before the steps of the process are detailed.

Commented [A132]: The fast track fee is the application fee, this should refer to supplemental. This only makes sense if the supplemental is not refundable and a fixed fee.

- (a) ~~If the interconnection customer applicant and the electric utility fail to execute a final construction agreement, the interconnection customer applicant shall, within sixty (60) business days following receipt of the draft construction agreement, either file an unexecuted construction agreement with the commission pursuant to the complaint process under R 460.17101—R 460.17701 or withdraw the application. Failure to select a course of action will deem the application withdrawn.~~
- (2) ~~The construction agreement shall contain timelines for completion of activities and estimates of construction costs. The construction agreement shall include a payment schedule that corresponds to the milestones established.~~
- (3) To ~~a commercially reasonable extent~~ the greatest extent possible, the construction agreement will identify all design, procurement, installation and construction requirements associated with installation of the DER or establish a timetable for when these requirements can be determined.
- (4) ~~During the construction of any facilities, the electric utility and the interconnection customer applicant shall adhere to the requirements and timelines set forth in the construction agreement.~~
- (5) The ~~interconnection customer applicant~~ shall pay for the actual cost of the interconnection facilities and distribution upgrades.
- (6) A party's obligations under this provision may be extended by agreement. If a party anticipates that it will be unable to meet a milestone for any reason other than a force majeure event, it shall immediately notify the other party of the reason(s) for not meeting the milestone and 1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and 2) request appropriate amendments to the construction agreement. ~~The party affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless 1) it will suffer significant uncompensated economic or operational harm from the delay, 2) attainment of the same milestone has previously been delayed, or 3) it 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. If the party affected by the failure to meet a milestone disputes the proposed extension, the affected party may pursue alternative dispute resolution as described in R 460.904.~~
- The electric utility shall provide the ~~interconnection customer applicant~~ with a final accounting report of any difference between 1) the ~~interconnection customer applicant~~'s cost responsibility for the actual cost of such facilities or upgrades, and 2) the ~~interconnection customer applicant~~'s previous aggregate payments to the electric utility for such facilities or upgrades. If the ~~interconnection customer applicant~~'s cost responsibility exceeds its previous aggregate payments, the electric utility shall invoice the ~~interconnection customer applicant~~ for the amount due and the ~~interconnection customer applicant~~ shall make payment to the electric utility within twenty (20) business days. If the ~~interconnection customer applicant~~'s previous aggregate payments exceed its cost responsibility under the construction agreement, the electric utility shall refund to the ~~interconnection customer applicant~~ an amount equal to the difference within

Commented [A133]:

An existing complaint process with well-defined Administrative Rules already exists.

Commented [A134]:

All rules must be based on clear statutory authority.

Commented [A135]:

All rules must be based on clear statutory authority.

twenty (20) business days of the final accounting report. Failure of the ~~interconnection customer~~applicant to promptly pay the ~~interconnection customer~~applicant's cost responsibility shall be cause for disconnection of ~~interconnection customer~~applicant.

R 460.976. Inspection, testing, and commissioning.

Rule 76. (1) The ~~interconnection customer~~applicant shall notify the electric utility when installation of a DER and any required local code inspection and approval is complete. ~~The applicant shall also provide any test reports or configuration documents as defined in the utility procedures or in the construction agreement. This and~~ provides an opportunity for the electric utility to ~~review the site configuration prior to scheduling~~ a site visit to witness or perform commissioning tests required ~~by to meet compliance with IEEE 1547.1, electrical utility~~ procedures and inspect the DER. 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 electric utility shall notify the ~~interconnection customer~~applicant of its intent to visit the site, inspect the DER, witness or perform the commissioning tests, or of its intent to waive inspection within ten (10) business days after notification that the DER installation and inspections are complete ~~and, if applicable, conditions in the construction agreement are met. The utility shall have (15) Business days to schedule and complete the witness test as per the procedures, unless otherwise agreed to by mutual agreement or as detailed in the construction agreement.~~

(2) Within five (5) business days of the receipt of the completed commissioning test report, ~~and as needed, the witness test,~~ the electric utility shall notify the ~~interconnection customer~~applicant of its acceptance of ~~that it has received the~~ commissioning test report and shall notify the ~~interconnection customer~~applicant of its approval or disapproval of the interconnection. If approved, the electric utility shall provide to the ~~interconnection customer~~applicant an interconnection agreement. If the electric utility does not approve the interconnection, the electric utility shall notify the ~~interconnection customer~~applicant of the necessary corrective actions required for approval. The ~~interconnection customer~~applicant, after taking corrective action, may request the electric utility to reconsider the interconnection request.

R 460.978. Interconnection agreement

Rule 78. (1) After receiving an interconnection agreement from the electric utility, the ~~interconnection customer~~applicant shall have thirty (30) business days to sign and return the interconnection agreement.

(2) If the ~~interconnection customer~~applicant does not sign the interconnection agreement ~~or file a complaint with the commission~~ within thirty (30) business days, the application shall be deemed withdrawn.

(3) The electric utility shall provide the ~~interconnection customer~~applicant a ~~fully executed interconnection agreement~~ within fifteen (15) business days after receiving a signed interconnection agreement from the ~~interconnection customer~~applicant.

R 460.980. Authorization required prior to parallel operation.

Rule 80. (1) The ~~interconnection customer~~applicant shall not operate its DER in parallel with the electric utility's distribution system without prior written permission to operate

Commented [A136]: The original language was copied from net metering rules, as smart inverters become more common there will be additional requirements as seen in other states. These rules will not be sufficient for large interconnections without these changes.

Preconditions must be met. Utility work may need to be completed, the site must be constructed, site access must be available to and all settings should be set for electric utility to perform a site visit.

Commented [A137]: IEEE 1547.1 is specifically about the operation of DER hardware and the point of common coupling and not the interaction of the DER to the larger utility system. See section 1.4 in IEEE 1547 2018.

Coordination with other utility systems may be required.

Commented [A138]: For larger sites, the interconnection may have to wait for utility construction.

Commented [A139]: Time to do the testing and witness testing was not defined.

Commented [A140]: This is not guaranteed.

Commented [A141]: It's unclear what the interconnection agreement is supposed to be.

Commented [A142]: How can a fully executed agreement be processed before the project has met its requirements?

authorization from the electric utility. For levels 1 and 2, notification and permission requirements shall be established in the electric utility's interconnection procedures. For levels 3 through 5, notification and permission requirements shall be set forth by the electric utility in the construction agreement or interconnection procedures. Subject to reasonable timing and other conditions, including completion of conditions in the construction agreement, permission will be granted by the electric utility for reasonable, but limited, non-revenue testing as required for the interconnection customer applicant.

(2) Once the interconnection customer applicant and the electric utility have signed an interconnection agreement; the interconnection customer applicant has complied with all applicable parallel operation requirements as set forth in the electric utility's interconnection procedures; the interconnection customer applicant has complied with all relevant local, state and federal requirements; and the electric utility has received full payments for any and all outstanding bills, the electric utility shall provide written authorization to operate in parallel with the electric utility. With this written authorization, interconnection of the DER shall be considered approved for parallel operation and the DER may begin operating.

(3) Failure of the interconnection customer applicant to meet any of the responsibilities set forth in subrule (2) is sufficient cause for refusal to grant permission for parallel operation.

Commented [A143]: Provisions can be agreed to allow testing when specific steps of construction have completed, testing before may create an unsafe operating condition.

R 460.982. Time frames and extensions

Rule 82. (1) ~~If the electric utility cannot meet a deadline in these rules, it must notify the interconnection customer applicant in writing within three (3) business days after the deadline to explain the reason for the failure to meet the deadline, and provide an estimated time by which it will complete the applicable activity associated with the deadline. If the electric utility cannot complete the activity within ten (10) business days after the deadline, it must notify the Michigan public service commission with the reason for non-compliance and provide an estimated time by which the activity will be completed.~~

~~(a) For applicable time frames described in these rules, the interconnection customer applicant may request in writing one extension equivalent to half of the time originally allotted which the electric utility may not unreasonably refuse. No further extensions for the applicable time frame shall be granted absent a force majeure event or other similarly extraordinary circumstances.~~

~~(b)(a) The electric utility must notify the commission and all interconnection customer applicants that have in process applications that timelines are being extended due to 10% or more of its customers not receiving electric service. The electric utility must also notify the commission and all interconnection customer applicants that have in process applications when application processing resumes.~~

Commented [A144]: The logistics of this notification negate any benefit of the timeline extension. There may be hundreds of projects in flight at any time.

R 460.984. Interconnection metering and communications

Rule 84. Any metering and communications requirements necessitated by the use of the DER shall be installed at the interconnection customer applicant's expense. The electric utility may furnish this equipment at the applicants expense.

Commented [A145]: This is to be consistent with communications requirement for IEEE 1547 2018

R 460.986. Post commissioning remedy.

Rule 86. (1) Should the electric utility find that the DER is operating outside the terms of the interconnection agreement but does not warrant immediate disconnection pursuant to R 460.988 parts (f) and (g), the electric utility shall inform the ~~interconnection customer~~ applicant or their agent of this finding as soon as possible. The ~~interconnection customer~~ applicant is then responsible for bringing the DER into compliance within thirty (30) business days or a mutually agreed-upon time period. The electric utility may perform inspection of the DER after a remedy is applied.

(2) Should the DER not be brought into compliance within thirty (30) business days or the mutually agreed-upon time period, the electric utility may apply a remedy and bill the ~~interconnection customer~~ applicant. The ~~interconnection customer~~ applicant shall pay any such bill within five (5) business days.

R 460.988 Disconnection.

Rule 88. 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~~ applicant to bring a DER into compliance pursuant to R 460.986 subrule (1).
- (b) Failure of the ~~interconnection customer~~ applicant to pay costs of remedy pursuant to R 460.986 subrule (2).
- (c) Termination of interconnection by mutual agreement.
- (d) Distribution system emergency, but only for a reasonable length of time necessary to resolve the 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.
- (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.
- ~~(e)~~(h) Non compliance with the power purchase agreement or the parallel operating agreement.

R 460.990. Increasing the Capacity of the distributed energy resource.

Rule 90. (1) If the application is for an increase in capacity for an existing DER, the application shall be evaluated on the basis of the new total ~~direct alternating current~~ capacity of the DER. The maximum capacity of a DER shall be the aggregate nameplate rating or may be limited as described in the electric utility's interconnection procedures.

(2) An application for a DER that includes a single or multiple energy production devices at a site for which the ~~interconnection customer~~ applicant seeks a single point of interconnection shall be evaluated on the basis of the aggregate nameplate rating of the multiple DERs or as described in the utility's interconnection procedures.

~~(2)~~(3) If one or more affiliates propose interconnections the FERC rules for single site determination will apply

Commented [A146]: FERC NOPR 19 September 2019

R 460.992 Non-export provision.

Rule 92. A non-export operating mode shall be available to any ~~interconnection customer~~ applicant, and the ~~interconnection customer~~ applicant must agree to install export limiting equipment on their site to the satisfaction of the utility, and/or agree to the electric utility installing protective equipment that prevents export. The electric utility may elect to forgo some or all studies once a non-export agreement is reached. Changing from non-export to an exporting or other modification of the non-export generation will be considered a material modification.

R 460.994 Modification of the fast track or study track application.

Rule 94. (1) At any point after a fast track or study track application is deemed complete, but before the execution of an interconnection agreement, the ~~interconnection customer~~ applicant, the electric utility, or the affected system owner may propose ~~non-material~~ modifications to the fast track or study track application that may improve the costs and benefits of the interconnection, and/or the ability of the electric utility to accommodate the interconnection. The ~~interconnection customer~~ applicant shall submit to the electric utility, in writing, all proposed modifications to any information provided in the fast track or study track application and the utility shall evaluate the impacts of the modification. Notwithstanding the foregoing, in no event shall the electric utility be required to accept or implement a modification to the electric utility's distribution system or generation assets that is proposed by an ~~interconnection customer~~ applicant or affected system. Neither the ~~applicant~~, electric utility nor the affected system operator may unilaterally modify the fast track or study track application. Utility timelines are suspended while the modification is being processed

- (a) If the proposed modification is determined to be a material modification, then the electric utility shall notify the ~~interconnection customer~~ applicant in writing that the ~~interconnection customer~~ applicant may: 1) withdraw the proposed modification; 2) proceed with a new fast track or study track application for such modification; ~~or 3) request a one-hour consultation to discuss the proposed modification.~~ The interconnection ~~customer~~ applicant shall provide its determination in writing to the electric utility within ten (10) business days after being provided the material modification determination results, during which time the application's queue position may slip if other application processing dates become due. ~~If the interconnection customer applicant chooses the one-hour consultation, the electric utility shall reconsider whether the modification is a material modification. Within three (3) business days, the electric utility shall notify the interconnection customer applicant its determination of whether the modification is no longer considered a material modification or is still considered a material modification. If the modification is determined to no longer be a material modification, then the application remains in that queue in either its original position or a new position if any application processing dates have passed in the interim. If the modification is still considered a material modification, the interconnection customer applicant must either withdraw the proposed modification within five (5) business days or proceed with a new fast track or study track application for such~~

Commented [A147]: Any modification introduces delays and issues with restudy of dependencies.

Modifications should be measured on their impact to results of studies already performed and to the dependent projects in the queue.

Commented [A148]: This considers them non-material before the content can be reviewed.

Commented [A149]: This is overly complex. Modifications can be continually proposed causing chaos in the queue and any dependent projects.

~~modification.~~ If the interconnection ~~customer~~applicant does not provide its determination within the appropriate timeframe, the fast track or study track application shall be deemed withdrawn.

(b) If the proposed modification is determined not to be a material modification, then the electric utility shall notify the ~~interconnection customer~~applicant in writing that the modification has been accepted and that the ~~interconnection customer~~applicant shall retain its eligibility for interconnection, including its place in the queue.

- (2) Any modification 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 ~~interconnection customer~~applicant may be deemed a withdrawal of the fast track or study track application and may require submission of a new fast track or study track application.
- (3) At any point prior to the execution of an interconnection agreement, changes to ownership will cause the fast track or study track application to be put on hold until the new owner signs all necessary agreements and documents. If the application is in a queue, its position may slip while on hold.

Commented [A150]: Inconsistent with the process in a) timelines are in a) but no mention of timelines in b)

R 460.996 Modifications to project.

Rule 96. The ~~interconnection customer~~applicant shall notify the electric utility of plans for any material modification to the DER subsequent to execution of the interconnection agreement. The ~~interconnection customer~~applicant shall provide this notification by submitting a new application and application fee along with all supporting materials that are reasonably requested by the electric utility. The ~~interconnection customer~~applicant shall not begin any material modification to the DER until the electric utility has approved the new application and completed any necessary system impact study or facilities study.

Commented [A151]: This will affect other studies performed that are dependent on the project

R 460.998 Insurance.

Rule 98. (1) An ~~interconnection customer~~applicant interconnecting a level 1 or level 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 ~~interconnection customer~~applicant interconnecting a level 1 or level 2 project to name the utility as an additional insured party.

(3) For level 3 to level 65 projects, the ~~interconnection customer~~applicant shall obtain and maintain general liability insurance of a minimum of \$1,000,000.

~~(3)(4)~~ Should the insurance expire at any point the application shall be placed on hold until insurance is renewed. Should a renewal not be made in 60 business days, the application shall be deemed withdrawn.

Commented [A152]: Correcting the fact that allowing insurance to lapse is not covered in the rules.

R 460.1000 Easements and rights-of-way.

Rule 100. If an electric utility line extension is required to accommodate an interconnection, the ~~interconnection customer~~applicant is responsible for procuring and the cost of providing or obtaining easements or rights-of-way.

Commented [A153]: The company does not procure right of way

R 460.1001 Interconnection penalties.

Rule 101. Pursuant to 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 shall order remedies designed to make whole the interconnection customer proposing the DER, including, but not limited to, reasonable attorney fees. The commission may also order fines of not more than \$50,000.00 per day that the electric utility is in violation of this rule.~~

Commented [A154]: The DER site needs to conform with standard operating practices and safe and reliable operation

Commented [A155]: By stating this in the rules, the chance that 460.10e and this provision are out of sync is likely. Reference to the rule should be enough to enforce this provision and prevent confusion should the two get out of sync.

PART 3. DISTRIBUTED GENERATION PROGRAM STANDARDS

R 460.1002 Application process.

Rule 102. (1) Each electric utility shall file initial distributed generation program tariff sheets in the first rate case filed after June 1, 2018.

(2) Each alternative electric supplier shall file an alternative electric supplier distributed generation plan within 90 days of the effective date of these rules.

(3) Using report formats to be determined by the Commission, each electric utility and 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) Each electric utility and 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 distributed generation program.

(5) Selection of customers for participation in the legacy net metering program or distributed generation program shall 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 for the reason that 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 shall 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 shall be determined by an estimate of the expected annual kWh output of the generator(s) as determined in the electric utility's interconnection procedures and specified on the 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.

(b) The customer's electric consumption shall be determined by one (1) of the following methods:

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

(ii) In cases where 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 shall use a method

Commented [A156]: Has Staff confirmed consistency between this section and with the fast track process and other interconnection rules and procedures?

Commented [A157]: Provision should be added stating customers who begin operation before utility approval to operate through a fully executed parallel operating agreement shall not receive credit for any energy generated. The customer shall be subject to disconnect from the electric utility for unauthorized and/or unsafe operation until the unauthorized interconnection is approved.

Commented [A158]: The lack of generation metering makes this difficult if not impossible for an existing DER or storage site

determined in the utility procedures and/or the customer shall mutually agree on a method to determine the customer's electric consumption.

(c) Any net metering or distributed generation customer using energy storage equipment in conjunction with an eligible electric generator must not design or operate the energy storage equipment in a manner that results in the customer's electrical output exceeding 100% of the customer's electricity consumption for the previous 12 months and the battery system must not export from the premise. Any addition of energy storage equipment to an existing approved legacy net metering program system or distributed generation program system is considered a material modification as defined in these rules. ~~The electric utility interconnection procedures shall 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.~~

(8) The applicant shall notify the electric utility of plans for any material modification to the project. The applicant shall re-apply for interconnection pursuant to Part 2 of these rules and submit revised legacy net metering program or distributed generation program application forms and associated fees. ~~The 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 which does not violate the requirements of subrule (7).~~ Additionally 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 and R460.640.

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. For electric utilities and alternative electric suppliers not using an online application process, a uniform legacy net metering program application form shall be utilized which shall be approved by the Commission.

(2) Legacy net metering program application processing for electric utilities shall be conducted in the following manner:

(a) An applicant applying for the legacy net metering program shall at the same time apply for an electric utility interconnection or shall indicate on the legacy net metering program application that the applicant has applied for interconnection with the electric utility.

(b) If an applicant has an executed interconnection agreement at the time of filing the legacy net metering program application, the electric utility shall have ten (10) business days to complete its review of the legacy net metering program application. All other legacy net metering program applications shall be processed within ten (10) days after the applicant's interconnection agreement is executed.

(c) As part of the review, the electric utility shall determine whether the appropriate meter(s) is installed for the legacy net metering program.

(d) After completing the review, the electric utility shall notify the customer whether the legacy net metering program application is approved or disapproved.

Commented [A159]:

In general, the Company notes adding provisions addressing emerging technologies in administrative rules needs to be done with extreme caution. Given the inherent potential for change regarding emerging technologies, addressing specifics in administrative rules is difficult, in that the administrative rules will presumably remain fixed for a long period of time.

Commented [A160]: Change to allow non-grid connected batteries that meet utility requirements for their connection method for example UPS (uninterruptable power supply systems). Utilizing autotransfer switches

Commented [A161]: Language is extremely inconsistent with prior sentence and provides no justification of why that should be the case.

Commented [A162]: Unsure of when this would ever happen this implies there is a separate net metering application from the interconnection?

Commented [A163]:
What is the definition of processed?

(e) If an applicant approved for the legacy net metering program requires new or additional meters, the electric utility shall make arrangements with the customer to install the meters at a mutually agreed upon time.

(f) Within ten (10) business days after the necessary meters are installed, the electric utility shall complete changes to the applicant's account to permit legacy net metering program credit to be applied to the account.

(g) The applicant has thirty (30) business days to respond to any additional follow-up necessary to complete application. Failure to respond within thirty (30) business days will result in the application being deemed withdrawn without refund of the application fee.

(3) Legacy net metering program 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 legacy net metering program application form to the alternative electric supplier and a copy of the form to the electric utility that provides distribution services.

(b) Within the time periods in subrule (2) of this rule, the electric utility shall determine whether the appropriate equipment and meter(s) is installed for the legacy net metering program and, if necessary, contact the customer to arrange for meter installation and necessary construction.

(c) The electric utility shall notify the alternative electric supplier when the interconnection agreement for the eligible generator is executed and installation of the appropriate equipment and meter(s) is completed.

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

(4) If an legacy net metering program application is not approved, the electric utility or alternative electric supplier shall notify the customer of the reasons. The customer shall have thirty (30) days from the date of electric utility notification to cure the deficiency within the legacy net metering program application. The application will be deemed withdrawn without refund of the application fees if not cured within the time frame above.

(5) If a customer's application for the legacy net metering program is deemed complete the customer shall have a completed and approved installation within 6 months from the date the customer's application is deemed complete, or else the electric utility 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 ten (10) years from the date of enrollment. Customers whom have reached ten (10) years of enrollment may continue on the legacy net metering program until the electric utility has a Commission approved distributed generation program tariff and as directed by the Commission.

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

Commented [A164]: Make consistent with Fast Track, R 460.950

This and the following provisions could be ordered after (b) to describe what needs to be done in a way that can be followed better

Commented [A165]: They still need to file an interconnection request with the host utility, this is not stated. Host utility should do interconnect and the AES shall provide the NEM certification.

Commented [A166]: Added if there is construction required. This needs a better reference to the interconnection process

Commented [A167]: Make consistent with Fast Track, R 460.950

Commented [A168]: Make consistent with Fast Track, R 460.950

Commented [A169]: Terminate not defined in the rest of the rules. This provision must be with consistent to the other portions of the rules.

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. For electric utilities and alternative electric suppliers not using an online application process, a uniform distributed generation program application form shall be utilized which shall be approved by the Commission.

(2) Distributed generation program application processing for electric utilities shall be conducted in the following manner:

(a) An applicant applying for the distributed generation program shall at the same time apply for an electric utility interconnection or shall indicate on the distributed generation program application that the applicant has applied for interconnection with the electric utility.

(b) If an applicant has an executed interconnection agreement at the time of filing the distributed generation program application, the electric utility shall have ten (10) business days to complete its review of the distributed generation program application. All other distributed generation program applications shall be processed within ten (10) days after the applicant's interconnection agreement is executed.

(c) As part of the review, the electric utility shall determine whether the appropriate meter(s) is installed for the distributed generation program.

(d) After completing the review, the electric utility shall notify the customer whether the distributed generation program application is approved or disapproved.

(e) If an applicant approved for the distributed generation program requires new or additional meters, the electric utility shall make arrangements with the customer to install the meters at a mutually agreed upon time.

(f) Within ten (10) business days after the necessary meters are installed, the electric utility shall complete changes to the applicant's account to permit distributed generation program credit to be applied to the account.

(g) The applicant has thirty (30) business days from electric utility notification to respond to any additional follow-up necessary to complete the application. Failure to respond within thirty (30) business days will result in the application being deemed withdrawn without refund of the application fee.

(3) Distributed generation program 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 distributed generation program application form to the alternative electric supplier and a copy of the form to the electric utility that provides distribution services.

(b) Within the time periods in subrule (2) of this rule, the electric utility shall determine whether the appropriate meter(s) is installed for the distributed generation program and, if necessary, contact the customer to arrange for meter installation.

(c) The electric utility 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 ten (10) business days of 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.

Commented [A170]: This should be consolidated with the legacy net metering application and fees, there are almost no differences and it will be confusing for those that are navigating the rules.

Commented [A171]: Make consistent with Fast Track, R 460.950

(4) If a distributed generation program application is not approved, the electric utility or alternative electric supplier shall notify the customer of the reasons. The customer shall have thirty (30) business days from electric utility notification to cure the deficiency within the distributed generation program application. The application will be deemed withdrawn without refund of the application fees if not cured within the time frame above.

Commented [A172]: Make consistent with Fast Track, R 460.950

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

(6) The customer shall pay all interconnection costs pursuant to Part 2 of these rules which shall include all electric utility costs associated with that customer's interconnection that are not a distributed generation program application fee, excluding meter costs as described in Rule 460.1012 and Rule 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 2008 PA 295, MCL 460.1173(3), 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 provide notice to the Commission.

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

(3) The electric utility shall file correct corresponding tariff sheets for either revised legacy net metering program or distributed generation program tariff sheets if necessary.

(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.

Commented [A173]: Refer to Fast Track R 460.984 Interconnections metering which states any metering equipment necessitated by use of DER is customer's expense

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, the 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 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 legacy net metering program customer. The cost of the meter(s) or meter modification shall be 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 meter(s) 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 up to 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 such functionality, the following applies:

(a) An electric utility 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 legacy net metering program customer. The cost of the meter(s) shall be 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 shall be 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 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 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, the 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, the following apply:

(a) An electric utility serving over 1,000,000 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(s) or meter modification shall be 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 that for meter(s) provided by the electric utility to similarly situated non-generating customers shall be paid by the eligible customer.

Commented [A174]: Refer to Fast Track R 460.984 Interconnections meter which states any metering equipment necessitated by use of DER is customer's expense

Commented [A175]: Refer to Fast Track R 460.984 Interconnections metering which states any metering equipment necessitated by use of DER is customer's expense

Commented [A176]: Refer to Fast Track R 460.984 Interconnections metering Page 28 which states any metering equipment necessitated by use of DER is customer's expense

Commented [A177]: DTE Electric suggests the Staff combine 460.1012 and 460.1014, as they appear largely repetitive in nature.

Commented [A178]: Refer to Fast Track R 460.984 Interconnections metering Page 28 which states any metering equipment necessitated by use of DER is customer's expense

(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 up to 150 kWac, the 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 and the generator output and if meter upgrades or modifications are required, the following apply:

(a) An electric utility 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 distributed generation program customer. If the electric utility 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 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 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 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, the 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.

Commented [A179]: Refer to Fast Track R 460.984 Interconnections metering which states any metering equipment necessitated by use of DER is customer's expense

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 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 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 shall be carried forward for use in subsequent billing periods.

(3) If a customer leaves the electric utility's distribution system or service is terminated for any reason, an electric utility or alternative electric supplier shall refund to the customer the remaining credit amount.

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 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 customers on demand-based rate schedules that provide an equivalent contribution to utility system costs. Standby charges shall not be applied to customers with systems capable of generating 150 kWac 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 legacy net metering program credits applied to distribution charges.

(4) If a customer leaves the utility's system or service is terminated for any reason, an electric utility or alternative electric supplier shall refund to the customer the remaining credit amount.

(5) The credit per kWh for kWh delivered into the utility's distribution system shall be one (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 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 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 section 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 section, who continue to participate in the program at their current site or facility.

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 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.

R 460.1026 Legacy Net Metering Grandfathering Provision

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 referred to in Rule 40 may elect to continue to receive service under the terms and conditions of that program for up to ten (10) years from the date of initial enrollment. Initial enrollment as used in this section means the date a customer or site initially enrolled in a legacy net metering program as described in the electric utility's tariff. The enrollment date shall not change if a new customer assumes ownership of the site from a customer already in a legacy net metering program. Any customer participating in a legacy net metering program who expands their generation system after the effective date of an electric utility's distributed generation program tariff will no longer be eligible to participate in the legacy net metering program.

PART 4. LEGALLY ENFORCABLE OBLIGATION

460.1050 Applicability.

Rule 50. The rules in this subpart apply to an electric utility and alternative electric supplier that has an avoided cost basis and associated capacity need established by the Commission, alternative electric supplier and to a proposed qualifying facility eligible for standard offer service to connect to the electric utility's distribution system, whose rates are regulated by the Commission. ~~If a proposed qualifying facility is to be connected at a transmission level these rules do not apply. There shall be no legally enforceable obligation other than a fully executed power purchase agreement for energy only at the appropriate MISO LMP, in the event that an electric utility or alternative electric supplier has no need for generation capacity.~~

Commented [A180]: The Commission should note the LEO related criteria set forth in the NERCNOPR of 19 September 2019

460.1052 Requirements for the creation of a legally enforceable obligation.

Rule 52. (1) A legally enforceable obligation is established between the proposed qualifying facility and the electric utility or alternative electric supplier when a proposed qualifying facility has:

(a) Provided an electric utility or alternative electric supplier with documentation demonstrating that, under 18 C.F.R. § 292:

(i) The proposed facility is a "qualifying facility;" and

- (ii) The proposed facility has been certified as a qualifying facility with or by the Federal Energy Regulatory Commission.
- (b) Provided the electric utility or alternative electric supplier all of the following:
 - (i) A description of the location of the project and its proximity to other projects within one (1) mile of the project, which are owned or controlled by the same developer including but not limited to developer affiliates, and
 - (ii) A forecasted energy production profile for the project that includes the kilowatt-hours to be produced by the qualifying facility for each month and year of the entire term of the project’s anticipated power purchase agreement.
- (c) Obtained and provided to the electric utility written documents confirming control of the site for the entire term of the project’s anticipated power purchase agreement and permission to construct the qualifying facility. Proof of site control can include ownership, leasehold interest, and/or an option to purchase or lease the site that allows construction and operation of the proposed facility.
- (d) Provided satisfactory evidence that the project is creditworthy financeable.
- (e) Provided the electric utility or alternative electric supplier with written proof of a steam host that is willing to contract for steam over the full term of the project’s anticipated power purchase agreement for a cogeneration facility.
- (f) Returned the signed facilities study agreement and associated payment.
- (g) Executed a construction agreement with the electric utility or alternative electric supplier and remitted the full payment of the good faith estimated cost of the distribution upgrades or is in good standing with all milestone payments pursuant to the agreement.

460.1054 Power purchase agreement template.

Rule 54. (1) Pursuant to MCL 460.6v(e), ~~upon approval by the Commission,~~ the electric utility must publish on its website templates for power purchase agreements for qualifying facilities of less than 3 MW that need not include terms for either price or duration of the power purchase agreement.

(2) Within ~~a reasonable period of time consistent with good faith~~ five (5) business days of the qualifying facility returning a signed facilities study agreement and associated payment, the electric utility shall provide a draft power purchase agreement without terms for either price or duration.

(3) Within ten (10) business days of the qualifying facility signing a construction agreement, the electric utility must update rates in the power purchase agreement, required pursuant to subrule (2), to reflect the currently effective rates.

(4) A qualifying facility has six (6) months from the receipt of the power purchase agreement, pursuant to subrule (3), to negotiate and sign the final power purchase agreement. During this six (6) month period, the qualifying facility must continue making milestone payments pursuant to the construction agreement and remain in good standing ~~with the terms of the construction agreement~~. If a final power purchase agreement is not executed within the six (6) month period:

~~(a) The qualifying facility or the electric utility may file an unexecuted power purchase agreement with the Commission within forty (40) business days of the expiration of the six (6) month period, pursuant to the complaint process under R 460.17101 to R 460.17701, or~~

Commented [A181]: DTE Electric reserves its right to determine the terms and conditions of its contracts. The statement “upon approval by the Commission” is not pursuant to MCL 460.6v(e). The actual language is presented below:

“(e) Require electric utilities to publish on their websites template contracts for power purchase agreements for qualifying facilities of less than 3 megawatts that need not include terms for either price or duration of the contract. The terms of a template contract published under this subsection are not binding on either an electric utility or a qualifying facility and may be negotiated and altered upon agreement between an electric utility and a qualifying facility.”

Commented [A182]: Project variability requires flexible timelines.

Commented [A183]: An existing complaint process with well-defined Administrative Rules already exists.

(b) The legally enforceable obligation terminates.

(i) All provisions of termination in the construction agreement are enforced.

(i) Upon termination of the legally enforceable obligation, the distribution utility shall have 30 business days to determine what work needs to be done to provide safe electric delivery on the impacted circuits.

(iv)(v) The utility shall subtract, from the unspent portion of the milestone payments, the cost to make the circuit safe and the balance of unspent portion of the milestone payments shall be refunded to the qualifying facility.

460.1056 Standard offer tariff.

Rule 56. ~~Upon approval by the Commission, [T]~~the electric utility or alternative electric supplier must publish on its website a standard offer tariff applicable to qualifying facilities corresponding to the standard offer project size approved by the commission.

Commented [A184]: If the incomplete construction has left the system in an inoperable, unsafe or incomplete state, this must be corrected immediately. Interconnection upgrades, which could be left partially complete, could include substation controls, temporary overhead construction, items under traffic control, or long lead time items such as transformers or switchgear that would be stranded.