

**[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 at 60 Hertz.

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

~~(c)~~(d) "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.

~~(d)~~(e) "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.

~~(e)~~(f) "Applicant" means the person or entity applying to participate in submitting a fast track application, a study track application, a legacy net metering program application or distributed generation program application.

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

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

~~(h)~~(i) "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.

~~(i)~~(j) "Business day" means Monday through Friday, excluding the following holidays: New Year's Day, Martin Luther King Jr. Day, Presidents Day, Memorial Day, Fourth of July, Labor Day, Election Day, Veterans Day, Thanksgiving Day, Day after

Commented [A1]: Isn't an Applicant also a person or entity applying for an interconnection agreement?

Thanksgiving, Christmas Eve, Christmas Day, and New Year's Eve. Any day in which the number of the utility's electric customers experiencing an outage equals or exceeds 10% of the utility's total number of customers may also be excluded.

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

~~(l)(l)~~ "Level 2" means a project of 20 kWac or less that does not meet Level 1 qualification requirements or a project of greater than 20 kWac and not more than 150 kWac.

~~(m)(m)~~ "Level 3" means a project of greater than 150 kWac and not more than 550 kWac.

~~(n)(n)~~ "Level 4" means a project of greater than 550 kWac and not more than 2 MWac.

~~(o)(o)~~ "Level 5" means a project of greater than 2 MWac.

~~(p)(p)~~ "Certified" means an generating, control, or protective inverter system has met acceptable safety and reliability standards by a nationally recognized testing laboratory in conformance with UL 1741SA.

~~(p)~~ "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.

(q) "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.

(r) "Commission" means the Michigan public service commission.

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

(t) "Construction agreement" means an agreement between an interconnection customer and an electric utility that contains timelines and cost estimates for construction of interconnection facilities and distribution upgrades to interconnect a DER into the distribution system, and identifies design, procurement, installation and construction requirements associated with installation of the DER.

(u) "Customer" means a person or entity who receives 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.

~~(v)~~ "DC" means "direct current."

~~(w)(w)~~ "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.

~~(w)(x)~~ "Distributed generation program" means the distributed generation program approved by the Commission and included in an electric utility's tariff pursuant

Commented [A2]: This definition can be simplified now that "certified" is a defined term.

Note: The reference to "*IEEE 1547.1 testing standards and in compliance with UL 1741 scope 1.1A*" comes from language specified in PA 342. The PA 342 language states that projects are eligible / *compliant* for the Net Metering / *Distributed Generation* program when they are certified to the standards listed.

Commented [A3]: All projects should fall into some Level. The existing procedures handled what to do for synchronous, induction, and non-certified inverter projects that are 20kW or less by stating they are covered by Level 2 procedures.

Commented [A4]: The term "Certified Equipment" is not used in the rules.

Commented [A5]: An application can be made by a person or entity.

to Section 6a(14) of 1939 PA3, or established in an alternative electric supplier distributed generation program plan.

~~(x)~~(y) "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.

~~(y)~~(z) "Distribution upgrades" means the additions, modifications, ~~and upgrades, changes, and/or improvements~~ to the distribution system ~~at or beyond the point of interconnection that are necessary to accommodate the a~~ DER's connection to the distribution system.

~~(z)~~(aa) "Electric utility" means any person or entity whose rates are regulated by the commission for selling electricity to retail customers in this state.

~~(aa)~~(bb) "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 kWac of aggregate generation at a single site for a renewable energy system.

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

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

(ee) "Fast track" means the procedure used for evaluating applications that makes use of 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 control. A force majeure event does not include an act of negligence or intentional wrongdoing.

(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 basis.

(hh) "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 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) "GPS" means global positioning system.

(jj) "High voltage distribution" means those parts of a distribution system that operate at or greater than 24 kilovolts, or above 30 kilovolts ~~but which are not part of the transmission system~~.

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

Commented [A6]: The definition uses the term "distribution system" which excludes transmission. There is no need to add "but which are not part of the transmission system".

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

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

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

(qq) "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) "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, and Interconnection procedures.

(ss) "Interconnection facilities" means any electrical facilities required for the sole purpose of connecting a DER with a distribution system.

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

R 460.901b Definitions; J-Z.

Rule 1b. As used in these rules

(a) "kW" means kilowatt.

~~(b)~~ "kWac" means the electric power, in kilowatts, associated with the alternating current output of a DER.

~~(b)~~~~(c)~~ "kWdc" means the electric power, in kilowatts, associated with the direct current output of a DER.

~~(e)~~~~(d)~~ "kWh" means kilowatt-hours.

~~(e)~~ "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.

~~(d)~~~~(f)~~ "Low voltage distribution" means those parts of a distribution system that operate at or below 30 kilovolts, but not including 24 kilovolts.

~~(e)~~~~(g)~~ "Mainline" means the three-phase backbone of a circuit.

~~(f)~~~~(h)~~ "Material modification" means a modification 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;

Commented [A7]: This is the old standard. It is referenced in the Level 1 definition. If the reference is replaced with the term "certified" in the Level 1 definition then this can be removed.

Commented [A8]: Consumers Energy adds this definition should the Staff need to use it; however, it is not used in this redline and should be removed, if not used.

- 2) the cost, timing or design of any application with a later queue position; or 3) the safety or reliability of the distribution system.
- (e)(i) "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.
- (h)(j) "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.
- (h)(k) "MW" means megawatt.
- (l) "MWac" means the electric power, in megawatts, associated with the alternating current output of a DER.
- (h)(m) "MWdc" means the electric power, in megawatts, associated with the direct current output of a DER.
- (h)(n) "Nameplate rating" means nominal voltage (V), current (A), maximum active power (kWac), apparent power (kVA), and reactive power (kvar) at which a DER is capable of sustained operation.
- (h)(o) "Nationally recognized testing laboratory" means any testing laboratory recognized by the accreditation program of the U.S. department of labor occupational safety and health administration.
- (h)(p) "Parallel operation" means the operation, for longer than 100 milliseconds, of a project while connected to the energized distribution system.
- (h)(q) "Party" or "parties" means the electric utility or the interconnection customer.
- (r) "Point of interconnection" means the point where the DER connects with the electric utility's distribution system.
- (h)(s) "Project" means the DER associated with a given application.
- (h)(t) "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.
- (h)(u) "Queue" means a chronological list of study track applications.
- (h)(v) "Queue position" means the position of a valid study track application, relative to all other pending valid study track applications.
- (h)(w) "Readily available" means no collection or creation of data is required, and little or no computation or analysis of data is required.
- (h)(x) "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.
- (h)(y) "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.
- (h)(z) "Renewable energy resource" means that term as defined in section 11(i) of 2008 PA 295, MCL 460.1011(i).
- (aa) "Renewable energy system" means that term as defined in section 11(k) of 2008 PA 295, MCL 460.1011(k).

Commented [A9]: "Project" has a recommended definition below.

- ~~(w)~~(bb) "Spot network" means a location on the distribution system that uses 2 or more inter-tied transformers to supply an electrical network circuit.
- ~~(x)~~ ~~"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)~~(cc) "Standard offer rate" means a tariffed rate paid to qualifying facilities through a standard contract with the utility.
- ~~(z)~~(dd) "Study track" means the procedure for evaluating an application that includes a scoping meeting, system impact study, and facilities study.
- ~~(aa)~~(ee) "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 distribution system.
- ~~(bb)~~(ff) "Transmission owner" means the entity that owns, leases, or otherwise possesses an interest in the portion of the transmission system relevant to the interconnection.
- ~~(cc)~~(gg) "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 provider may include the independent system operator or regional transmission operator.
- ~~(dd)~~(hh) "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)~~(ii) "UL" means underwriters laboratory.
- ~~(ff)~~(jj) "UL 1741" 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> at the time of adoption of these rules.~~

~~(b)~~(c)

(i) The IEEE 1547 - 2018, IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power

Commented [A10]: This can be deleted if the reference to this term is removed in the definition of "Level 1" (as suggested).

Commented [A11]: This is a reference to an older standard. UL 1741SA is Sept 7, 2016.

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.~~

(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.

(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.

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

Commented [A12]: This is the old standard. It is referenced in the Level 1 definition. If the reference is replaced with the term "certified" in the Level 1 definition then this can be removed.

(2) In the event an electric utility is experiencing an inordinate volume of applications, the electric utility may apply for a waiver and the commission may consider such a waiver in an expeditious manner including granting interim relief as appropriate.

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.

Commented [A13]: Legacy interconnection applications are not fully addressed. There is presently a problem with existing applications languishing for an extended time. Automatic withdrawal of all legacy projects after a set period of inactivity would help utilities clean up legacy projects. Maintaining two processes for an unknown period of time would be burdensome.

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 interconnection procedures shall ensure compliance with these rules.

(2) The proposed interconnection 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
- ~~1-~~(iv) Study track application and fee
- ~~2-~~(v) System impact study agreement and fees
- ~~3-~~(vi) Facilities study agreement and fees
- ~~4-~~(vii) Interconnection operating agreement

Formatted: Numbered + Level: 1 + Numbering Style: i, ii, iii, ... + Start at: 4 + Alignment: Left + Aligned at: 0.5" + Indent at: 0.5", Tab stops: Not at 0.5"

(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.

~~1-~~(2) The electric utility shall allow for electronic signatures to be used for all documents to be signed by the 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:

Formatted: Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 2 + Alignment: Left + Aligned at: 0.03" + Indent at: 0.28", Tab stops: Not at 0.5"

- (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 coordinator(s), including email and phone number.
- (e) Directions for the submission of applications.

R 460.920 Communications

Rule 20. (1) The electric utility shall designate one or more DER interconnection coordinators. The name, telephone number, and e-mail address of 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 interconnection customer, but is not responsible to directly answer or resolve all of the issues that may arise in the interconnection process.

(2) The interconnection customer may designate, on the application, an application agent. An application agent may serve as the single point of contact for the interconnection customer and may coordinate with the electric utility on the interconnection customer's behalf. Designation of an application agent does not absolve the 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 customer may submit a completed pre-application report request 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 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 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:

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

Commented [A14]: Consumers Energy believes this should be required for at least Level 3 and above applications.

- (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 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.

- (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.

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 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 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 may be submitted by a single interconnection customer during a one-week period. 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) Existing aggregate generation capacity, in MW, interconnected to a substation bus, bank or circuit likely to serve the proposed point of interconnection.
- (c) Aggregate queued generation capacity, in MW, for a substation bus, bank or circuit likely to serve the proposed point of interconnection.
- (d) Available capacity, in MW, of substation bus, bank or circuit likely to serve the proposed point of interconnection.
- (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.

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 0.5" + Indent at: 0.75"

Commented [A15]: Transmission will never be an interconnection point under these rules; transmission interconnections would be under MISO processes.

- (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.
- (j) Whether the point of interconnection is located behind a line voltage regulator and whether the substation has a load tap changer.
- (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, power quality issues 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) 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 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.

(3) 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 kW_{ac} 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 kW_{ac} or less nameplate capacity, proof of site control may be demonstrated by the site owner's signature on the application.

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

Commented [A16]: Note, grid network, radial supply, secondary network are not defined terms, but should be defined to ensure common understanding amongst all parties.

Commented [A17]: These rules do not cover interconnection to transmission.

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

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 the queue unless slipping occurs pursuant to subrule (3), ~~or subrule (4), or the application is withdrawn.~~

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

(4) Within the queue, those applications verified by the owner or operator of the affected system as that result in an affected system may be placed outside the 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~~ The electric utility shall notify the interconnection customer that its application is being placed outside the queue. The application may then be placed outside the 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 the queue shall be allowed to slip.

(5) The electric utility shall cause applications to exit the queue in the same order in which the applications entered the queue, unless the application’s position in the queue slipped due to waiting on information from ~~a transmission provider or transmission owner/owners or operators of an affected system— pursuant to subrule (3), or subrule (4), or if the study is withdrawn.~~

(6) Within the 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 the queue operates.

R 460.934. Fast track applicability.

Rule 34. (1) The fast track is available to an 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-v Voltage at the Point of Common Coupling	Fast track eligibility regardless of location	Fast track eligibility on a mainline and ≤ 2.5 electrical circuit miles from substation

Commented [A18]: Ensure all queue impacts are covered.

Commented [A19]: We recommend this be changed to “affected systems” The Affected System definition includes transmission and other distribution providers. This helps align with the language of paragraph (4) below.

Commented [A20]: This paragraph is suggested to be reworded for clarity of understanding and consistency with paragraph 3 above.

Commented [A21]: Ensure all queue impacts are covered.

Commented [A22]: Note that while this technically allows batching studies, the opportunities are limited to those studies that can be batched and completed within the study timeline of the first (or oldest) study included in the batch. This is still a benefit, but the ability to batch could be improved if more study time was granted.

Commented [A23]: We understand EPRI and IREC to indicated that fast tracks do not apply to a high voltage distribution system. Accordingly, we are recommending that the last line in the table be removed. These systems in Michigan are typically networked will require system protection and power flow contingency analysis making them ineligible for a successful fast track.

Commented [A24]: PCC is a better measurement, especially if an application is for a connection to a substation.

< 5 kV	≤ 500 kWac	≤ 500 kWac
≥ 5 kV and < 15 kV	≤ 1 MWac	≤ 2 MWac
≥ 15 kV and < 30 kV	≤ 3-2 MWac	≤ 4-2 MWac
≥ 30 kV and ≤ 69 kV	≤ 4 MWae	≤ 5 MWae

Commented [A25]: Limit to ≤2 MW because system protection studies will need to be performed anytime the generation is larger than 2 MW.

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 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.

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) For applications with proposed DERs that fall into level 1, the interconnection customer 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 shall provide a one-line diagram that is signed and sealed by a licensed professional engineer, licensed in the state of Michigan, or signed 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.

Commented [A26]: Only the seal matters when affixing PE approval in the State of Michigan. No need to include signature.

Commented [A27]: Electrical contractors don’t have seals, only a signature should be required.

(4) 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.

(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 shall be notified of receipt by the electric utility within three (3) business days of this time stamp.

Commented [A28]: Tracking the time of date which something is due would be onerous. Also applies to subrule (6). Suggest basing upon only the date stamp.

(6) The electric utility shall notify the interconnection customer as to whether the fast 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.

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

~~(a)~~(8) Upon receipt of the notice that the fast track application is incomplete, the interconnection customer will then have ten ~~(10)~~(20) 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 interconnection customer does not provide the listed information within the applicable time period, the fast track application shall be deemed withdrawn.

~~(b)~~(9) The electric utility will have ~~ten (10) business days time periods per subrule(6)~~ to review the additional material and notify the interconnection customer if the fast track application is deemed complete. If the fast track application is still not complete, the application may be deemed withdrawn.

~~(e)~~(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.

~~(d)~~(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.

R 460.938. Fast track - initial review of DERs

Rule 38. (1) Within the following timelines after the electric utility notifies the interconnection customer it has received a complete 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 of the results:

- (a) Level 1 applications, within 10 business days.
- (b) Level 2 applications, within 10 business days.
- (c) Level 3 applications, within 15 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 procedures ~~that are distinct from the initial review screens and the supplemental review screens.~~

(2) Initial review screens include the following:

Formatted: Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 8 + Alignment: Left + Aligned at: 0.06" + Indent at: 0.06"

Commented [A29]: For simplicity, we suggest giving the interconnection customer 20 business days and eliminate the potential 10 day extension. It is expected that the utility would approve most extensions and the project wouldn't impact other projects in the fast track/study track.

Commented [A30]: For consistency, time for review of additional data should be the same as the lengths listed above in (6).

Commented [A31]: Consumers Energy recommends deleting this qualifier. As technology changes screens may need to be updated in the interconnection procedures. These screens may not be distinct from initial or supplemental review screens except for in value. This flexibility should be preserved since Interconnection procedures still require approval of the MPSC.

(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.

~~1~~(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 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 100% of applicable loading, if available, instead of 15% of line section peak load.

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 2 + Alignment: Left + Aligned at: 0.5" + Indent at: 0.75", Tab stops: Not at 0.5"

~~2~~(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 the smaller of 5% of a network's maximum load or 50 kWac.

~~3~~(d) The proposed DER, in aggregation with other DERs on the distribution circuit, shall not contribute more than 10% to the distribution circuit's maximum fault current at the point on the primary voltage nearest the proposed point of interconnection.

~~4~~(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 equipment on the system to exceed 87.5% of the short circuit interrupting capability; nor shall the interconnection be proposed for a circuit that already exceeds 87.5% of the short circuit interrupting capability. Distribution protective devices and equipment includes, but is not limited to, substation breakers, fuse cutouts, and line reclosers.

~~5~~(f) Using the table below, determine the type of interconnection 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 due to a loss of ground during the operating time of any anti-islanding function.

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

~~6~~(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 20 kWac or 65% of the transformer nameplate rating.

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 2 + Alignment: Left + Aligned at: 0.5" + Indent at: 0.75", Tab stops: Not at 0.5"

~~7~~(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.

—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.

~~(b)~~

~~8-(i)~~ If the DER's point of interconnection is behind a line voltage regulator, the DER's nameplate rating shall be less than 250 kWac. 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 or where the utility provides equipment for installation by the interconnection customer, and the interconnection does require a facilities study, the interconnection process shall proceed to R 460.966.

(d) If the interconnection customer decides not to proceed within 10 business days of notice from the utility, 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 with: (1) the results of the application of the initial review screens; and (2) the option: (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.

(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 is willing to consider further study or modifications acceptable to the electric utility, the electric utility shall provide the interconnection customer the option of: 1) to attend a customer options meeting, as described in R 460.940; 2) ~~undergoing to proceed to~~ supplemental review pursuant to R 460.942; or 23) commencing the study track beginning at R 460.948. The electric utility shall provide copies of all directly pertinent data and analyses underlying its conclusions. If the interconnection customer 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.

R 460.940. Fast track – customer options meeting

Rule 40. (1) To accept the offer of a customer options meeting, the interconnection customer shall notify the utility in writing within ten (10) business days of the offer.

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 2 + Alignment: Left + Aligned at: 0.5" + Indent at: 0.75", Tab stops: Not at 0.5"

Commented [A32]: There are situations where it is necessary for the utility to provide equipment (such as metering current and potential transformers and remote terminal unit (RTU) for installation by the interconnection customer which is not on the utility's own system.

Commented [A33]: This action needs a time limit and a reference of when the time starts. The duration of 10 days is a suggestion.

Commented [A34]: This should match the options in (4).

Commented [A35]: "all...data" is excessive, unnecessary, cumbersome, and brings in issues of confidential and proprietary data. Providing failed screens or other reasons for further study, and explanation data, should suffice.

Commented [A36]: This is different than what happens upon failure of any screens. Both should match.

Failure to notify the electric utility within ten (10) business days will deem the application withdrawn. 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 of that determination and provide copies of all directly pertinent data and analyses underlying its conclusion. Upon request by the interconnection customer, the electric utility shall schedule a customer options meeting between the electric utility and the interconnection customer 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 offer the following options to be discussed at the customer options meeting:

- (a) Offer Proceed 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's agreement to continue Continue evaluating the fast track application under the study track, beginning at R 460.948; or
- (c) Obtain the interconnection customer's agreement for withdrawal Withdraw the fast track application.

(iii)(2) Should Following the meeting be inconclusive, the interconnection customer shall have no more than ten (+020) business days to decide on a course of action. Failure to inform the electric utility within ten (+020) business days will deem the application withdrawn. No refunds shall be granted upon withdrawal.

(iv)(3) The meeting shall be scheduled within thirty (30) business days of the date of notification.

(v)(4) Meetings may happen in person or via telecommunications.

R 460.942. Fast track - supplemental review

Rule 42. (1) To accept the offer of a supplemental review, the interconnection customer 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 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 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 of the results at the end of the supplemental review. The electric utility shall notify the interconnection customer following the failure of any of the screens or if it is unable to perform a screen in this

Commented [A37]: Need protections against to avoid stalling the project at this stage. Language similar to the first sentence in the supplemental review R 460.942 (1). This may better fit in the section calling for a customer options meeting (e.g. R 460.938 (4)) than here.

Commented [A38]: R 460.938 provides for a customer option meeting, and already states this requirement. Having it written in two places causes confusion.

Commented [A39]: "all...data" is excessive, unnecessary, cumbersome, and brings in issues of confidential and proprietary data. Providing failed screens or other reasons for further study, and explanation data, should suffice.

Formatted: Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 2 + Alignment: Left + Aligned at: 0" + Indent at: 0.25"

Commented [A40]: This doesn't align with the supplement review R460.942 time frame of 20 days. Time restraints should be in this section requiring the entity to make a decision and removed from R460.942 (1).

Commented [A41]: Recommendation to include the requirement for the interconnection customer to provide notification of their selection within 20 days be in the section (e.g. R 460.938 (4)(5)) calling for a customer options meeting rather than here.

Commented [A42]: We understand that the only way to get to this point if the customer chose the Supplemental Review track.

~~subrule.~~ The interconnection customer 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; 2) terminate the supplemental review and continue evaluating the proposed interconnection under the study track; or 3) terminate the supplemental review by withdrawing the application. If the interconnection customer 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 minimum load, voltage and power quality, and safety and reliability.

(5) If the proposed interconnection passes the supplemental 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 interconnection shall proceed as follows:

(a) If the proposed interconnection requires no construction of facilities by the electric utility on its own system, or where the utility provides equipment for installation by the interconnection customer, 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 or where the utility provides equipment for installation by the interconnection customer, 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 or where the utility provides equipment for installation by the interconnection customer, and the interconnection does require a facilities study, the interconnection process shall proceed to R 460.966.

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

(6) If the proposed interconnection fails the supplemental 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 the option of commencing the study track beginning at R 460.948. If the interconnection customer 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 is willing to consider further study or modifications acceptable to the electric utility, the electric utility shall provide the interconnection customer 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 underlying its conclusions. If the interconnection customer 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. The fees shall be specific to level size and be based on the

Commented [A43]: This step is greatly complicates the study process, requiring on again / off again study and would slow down the process considerably. It multiplies the number of process steps and deadlines that need to be tracked. If not deleted, "shall" should be changed to "may", as the utility could very likely notify the interconnection customer of a significant failure.

If kept as is, there needs to be language that extends the 30 day deadline to include the 5 days for the interconnection customer to respond to each failed screen notification and also the time for the utility to process the notification and handle the response (5 more days). Without extension, if every screen were failed it could take over 30 days for the interconnection customer to provide all of their responses.

Commented [A44]: There are situations where it is necessary for the utility to provide equipment (such as metering current and potential transformers and remote terminal unit (RTU) for installation by the interconnection customer which is not on the utility's own system. This comment applies to the edits made in the next two subsections as well.

Commented [A45]: This seems out of place; they passed all the screens. There should be a main rule, R _____ that allows interconnection customers to request the utility to withdraw at any time. If (d) is kept it is missing timelines and notification requirements.

Commented [A46]: "all...data" is excessive, unnecessary, cumbersome, and brings in issues of confidential and proprietary data. Providing failed screens or other reasons for further study, and explanation data, should suffice.

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.

(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. ~~Fast track supplemental review screens fees shall be specified in the electric utility's interconnection procedures. The fees shall be specific to level size and be based on the average cost of undertaking a review within a level size over the previous year. The interconnection customer 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. The interconnection customer 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 [A47]: All other study fees in the rules (eg. Subrule 44) provide for fixed fees to be approved by the MPSC as a way of greatly simplifying and adding predictability to the process.

Having a separate supplemental review fee structure creates complications, inefficiencies, and delays in the process as the utility must estimate costs, continually track status, contact the interconnection customer, and stop and wait for the interconnection customer's approval to proceed if an individual study runs over the cost estimate.

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 proposing to interconnect its DER with the electric utility's distribution system if the DER is not eligible for, 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 [A48]: Note: In addition to R460.934 and 942 listed here, this section is also referenced in R460.938 (fast track) and 940 (cust options).

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 ~~signed~~ 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 in 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.

~~(hh)~~(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.

~~(ii)~~(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.

~~(jj)~~(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 ~~(§7)~~ shall be doubled in the event the electric utility, at any point, requests information that is not on the study track application.

~~(kk)~~(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 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 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

Commented [A49]: This is the same language as in R 460.936 (fast track application) with the exception of subrule (1). Therefore, we have the same comments. Only the seal matters when affixing PE approval in the State of Michigan. No need to include signature. Electrical contractors don't have seals, only a signature should be required. Tracking the time of date which something is due would be onerous. Suggest basing upon only the date stamp.

Formatted: Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 7 + Alignment: Left + Aligned at: 0.06" + Indent at: 0.06"

Commented [A50]: Appears this is meant to reference subrule (7).

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.

R 460.954. Scoping meeting before study track

Rule 54. (1) A scoping meeting may be held at the request of interconnection customer 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 has elected to continue with the system impact study or facilities study, or as mutually agreed to by the parties. The interconnection customer shall provide the electric utility five (5) business days of notice when requesting a scoping meeting otherwise the scoping meeting may be omitted. 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 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~~ utility shall ~~further discuss~~ identify 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, as soon as possible, but not later than five (5) business days after the scoping meeting, a system impact study agreement pursuant to R 460.956.

(b) If ~~the parties agree at a scoping meeting that~~ a facilities study should be performed, the electric utility shall provide the interconnection customer, as soon as possible, but not later than five (5) business days after the scoping meeting, a facilities study agreement pursuant to R 460.966.

(c) If ~~the parties agree at a scoping meeting that~~ the interconnection customer should proceed directly to an interconnection agreement, the electric utility shall provide the interconnection customer an interconnection agreement pursuant to R 460.978 and, if necessary, a construction agreement pursuant to R 460.974 within five (5) business days.

(3) The scoping meeting may be omitted by ~~mutual agreement~~ the interconnection customer by providing notification of such, or lack thereof, within five (5) business days of notice. The utility shall identify whether the electric utility should perform a system impact study, proceed to a facilities study, or proceed to an interconnection agreement

(a) If ~~the scoping meeting is omitted by mutual agreement, the fast track has been completed and the interconnection customer has elected in writing to continue with~~ a system impact study should be performed pursuant to R 460.956, the electric utility shall provide the interconnection customer a system impact study agreement within ten (10) business days from the scoping meeting being omitted receiving the interconnection customer's written election.

(b) If ~~the scoping meeting is omitted by mutual agreement, the fast track has been completed and the interconnection customer has elected in writing to continue~~

Commented [A51]: This item should redirect to Subrule 66.

Commented [A52]: We believe this paragraph should redirect to Subrule 74 or 78 to be consistent with the Fast Track process for these situations.

Commented [A53]: Based on input from both parties the utility will determine the appropriate option. The customer has the ability to not sign the agreements and withdraw the application. If this language is kept, then its lacking an exit point if there is no agreement.

Commented [A54]: Subrule (3) is confusing to us as originally written. If the language is retained as is, then a clause needs to be added to address if there is no mutual agreement.

We do find value in meeting with the interconnection customer to discuss, which can lead to withdrawal of the application

with a facilities study ~~should be performed pursuant to R 460.966~~, the electric utility shall provide the interconnection customer a facilities study agreement within ten (10) business days from ~~the scoping meeting being omitted~~ ~~receiving the interconnection customer's written election.~~

Commented [A55]: Redundant with Subrule 66 (3)

(c) ~~If the scoping meeting is omitted by mutual agreement, the fast track has been completed and the utility~~ ~~interconnection customer~~ has elected ~~in writing to continue to proceed to~~ an interconnection agreement, the electric utility shall provide the interconnection customer an interconnection agreement ~~pursuant to R 460.9748~~ and, if necessary, a construction agreement ~~pursuant to R 460.9784~~ within twenty (20) business days from ~~the scoping meeting being omitted~~ ~~receiving the interconnection customer's written election.~~

Commented [A56]: We believe this paragraph should redirect to Subrule 74 or 78 to be consistent with the Fast Track process for these situations.

Commented [A57]: Why does this section only apply to projects that went through the Fast Track? The first paragraph (1) mentions it applies to applications that go directly to studies.

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 in order to perform the system impact study.

~~(2) Additional and reasonable technical data, if applicable, shall be returned with the system impact study agreement. 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.~~

Commented [A58]: This portion is complicated and potentially very hard to track. We recommend eliminating all the slipping language by extending the amount of time to 30 days (or less). See section below.

~~(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

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 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.

R 460.960 System impact study procedure

Rule 60. (1) The electric utility shall complete a system impact study within forty-five ~~(45)~~ business days of obtaining, from the interconnection customer, a signed system impact study agreement, payment of all applicable fees, and any necessary technical data.

Commented [A59]: Utilities could be more effective at batching if this timeframe was expanded to 50 days to allow 1 week for more study applications to accumulate.

- (2) Additional data may be requested from the interconnection customer 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, and the application shall maintain its queue position during these five business days. Should an interconnection customer'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.
- (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. The electric utility shall make all reasonable efforts to facilitate the resolution of the issue or issues involving the affected system.
- (4) The electric utility shall notify the interconnection customer of the results of the system impact study, and provide the report and, if needed, a facilities study agreement ~~within three (3) business days of completing the study. Upon request by the interconnection customer, the electric utility shall provide the interconnection customer supporting documentation and workpapers developed in the preparation of the system impact study.~~
- (5) Within fifteen (15) business days of receiving the system impact study report, the interconnection customer 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 [A60]: R 460.932 subrule (5) requires that the utility shall cause applications to exit the queue in the same order in which the applications entered the queue. This requirement to release the report, when slippage does not occur, violates this rule. Recommend deleting "within...study", so the requirement to issue a report and FA is kept.

Commented [A61]: "supporting documentation and workpapers" is excessive, cumbersome, and brings in issues of confidential and proprietary data. Providing the study results and supporting data, where appropriate should suffice.

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 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 system impact study, savings resulting from work performed in the fast track may be applied to the system impact 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 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.

- (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 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 460.964 Customer options meeting after system impact study.

Rule 64. (1) Upon request by interconnection customer, the electric utility shall schedule a customer options meeting between the electric utility and the interconnection customer 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 within twenty-five (25) business days of the electric utility receiving notification that the interconnection customer plans to attend a customer options meeting. The meeting may happen in-person or via telecommunications. At the customer options meeting, the electric utility shall:

- ~~(e)~~(a) Offer to perform a facilities study and provide a facilities study agreement to the interconnection customer with the applicable fee; or
- ~~(f)~~(b) Offer to provide provide the interconnection customer an interconnection agreement and, if necessary, a construction agreement; or
- ~~(g)~~(c) Obtain the interconnection customer's agreement for withdrawal.

(2) At the conclusion of the meeting, the interconnection customer 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 a facilities study agreement in tandem with the results of the interconnection customer's system impact study, if applicable.

(2) 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 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. The electric utility shall terminate the application if the facilities study agreement and payment are not returned within twenty (20) business days.

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

Commented [A62]: The utility needs to be initiated by something to schedule a meeting. Per R 460.960 subrule (5), the customer is required to ask for it within 15 days. Similar language should be used as R 460.940 to initiate the process.

Commented [A63]: For other such meetings, there is an option to omit the meeting and move immediately to the next step upon mutual agreement.

Commented [A64]: There is no time requirement for the interconnection customer to respond to such a request.

Commented [A65]: Providing an interconnection agreement should not be required if there is the possibility for the interconnection customer to withdraw. The utility could offer to provide the interconnection customer an interconnection agreement.

Commented [A66]: Note, it is possible to get here from the supplemental review R 960.942 subrule (5), therefore there could be no "results" to provide.

Commented [A67]: This language is to confirm what occurs if the interconnection customer does not respond accordingly within the 20 business days.

Commented [A68]: It is possible for a project not to go through an impact study (e.g. fast track/supplemental track) and still require facilities, i.e. R 460.942 subrule (5c). We recommend addressing this issue by removing this language.

provided in the facilities study shall be specified in the electric utility's interconnection procedures.

R 460.970. Facilities study procedure.

Rule 70. (1) The facilities study must be completed within forty-five (45) business days of the receipt of the executed facilities study agreement, supporting documents and payment.

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

Commented [A69]: "supporting documentation and workpapers" is excessive, cumbersome, and brings in issues of confidential and proprietary data. Providing the study results and supporting data, where appropriate should suffice.

(3) Within ten (10) business days of providing a ~~draft~~ facilities study report to the interconnection customer, the electric utility and interconnection customer 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 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's comments or within five (5) business days upon receiving the interconnection customer's written statement that no comments will be provided. The electric utility may reasonably extend the time frame upon notice to the interconnection customer in order to address the interconnection customer'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 is responsible for reasonable additional costs incurred by the electric utility in responding to the interconnection customer's comments.

Commented [A70]: Providing a draft, having a meeting, and reviewing/responding to comments creates administrative burden and adds days to the timeline that are unneeded. Suggest the draft be eliminated and a final report issued by the utility. The Interconnection customer would have the option of requesting a meeting to discuss the final report within a certain number of days. The utility could reissue the report if there is mutual agreement to do so.

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 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.

(2) If two or more applications undergo a facilities study as part of a cluster or batch, the fee for each interconnection customer 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, the interconnection customer and the electric utility shall execute a final construction agreement.

(a) If the interconnection customer and the electric utility fail to execute a final construction agreement, the interconnection customer 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 the greatest extent possible, the construction agreement will identify all design, procurement, installation and construction requirements associated with installation of the DER.

(4) During the construction of any facilities, the electric utility and the interconnection customer shall adhere to the requirements and timelines set forth in the construction agreement.

(5) The interconnection customer 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.

- (a) The electric utility shall provide the interconnection customer with a final accounting report of any difference between 1) the interconnection customer's cost responsibility for the actual cost of such [interconnection](#) facilities or [distribution](#) upgrades, and 2) the interconnection customer's previous aggregate payments to the electric utility for such [interconnection](#) facilities or [distribution](#) upgrades. If the interconnection customer's cost responsibility exceeds its previous aggregate payments, the electric utility shall invoice the interconnection customer for the amount due and the interconnection customer shall make payment to the electric utility within twenty (20) business days. If the interconnection customer's previous aggregate payments exceed its cost responsibility under the construction agreement, the electric utility shall refund to the interconnection customer an amount equal to the difference within twenty (20) business days of the final accounting report. Failure of the interconnection customer to promptly pay the interconnection customer's cost responsibility shall be cause for disconnection of interconnection customer.

R 460.976. Inspection, testing, and commissioning.

Rule 76. (1) The interconnection customer shall notify the electric utility when [installation of a DER and any required local code inspection and approval is complete](#) and provide an opportunity for the electric utility to schedule a site visit to witness or perform commissioning tests required by IEEE 1547.1 and inspect the 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 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.

(2) Within five (5) business days of the receipt of the completed commissioning test report, the electric utility shall notify the interconnection customer of its acceptance of the commissioning test report and shall notify the interconnection customer of its approval or disapproval of the interconnection. If approved, the electric utility shall provide to the interconnection customer an interconnection agreement. If the electric utility does not approve the interconnection, the electric utility shall notify the interconnection customer of the [necessary corrective actions required for approval](#). The interconnection customer, 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 shall have thirty (30) business days to sign and return the interconnection agreement.

(2) If the interconnection customer 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 a fully executed interconnection agreement within fifteen (15) business days after receiving a signed interconnection agreement from the interconnection customer.

Commented [A71]: There should be a timeline associated with reasonable extensions to be granted upon request (problems with permitting, etc.) We do not want an approved application sitting in the construction phase forever.

Commented [A72]: There should be a timeline associated with this.

R 460.980. Authorization required prior to parallel operation.

Rule 80. (1) The interconnection customer shall not operate its DER in parallel with the electric utility's distribution system without prior written permission to operate 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, permission will be granted by the electric utility for reasonable but limited non-revenue testing as required for the interconnection customer.

~~(b)~~(2) Once the interconnection customer and the electric utility have signed an interconnection agreement; the interconnection customer has complied with all applicable parallel operation requirements as set forth in the electric utility's interconnection procedures; the interconnection customer 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.

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

Formatted: Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 2 + Alignment: Left + Aligned at: 0.01" + Indent at: 0.26"

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 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.

~~1.~~(a) For applicable time frames described in these rules, the interconnection customer 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.

~~2.~~(b) The electric utility must notify the commission and all interconnection customers 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 customers that have in-process applications when application processing resumes.

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 0.5" + Indent at: 0.75", Tab stops: Not at 0.5"

R 460.984. Interconnection metering

Rule 84. Any metering requirements necessitated by the use of the DER shall be installed at the interconnection customer’s expense.

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 or their agent of this finding as soon as possible. The interconnection customer 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. The interconnection customer 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:

~~(2)~~(a) Failure of the interconnection customer to bring a DER into compliance pursuant to R 460.986 subrule (1).

~~(3)~~(b) Failure of the interconnection customer to pay costs of remedy pursuant to R 460.986 subrule (2).

~~(4)~~(c) Termination of interconnection by mutual agreement.

~~(5)~~(d) Distribution system emergency, but only for a reasonable length of time necessary to resolve the emergency.

~~(6)~~(e) Routine maintenance, repairs, and modifications, but only for a reasonable length of time necessary to perform the required work and upon reasonable notice.

~~(7)~~(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.

~~(8)~~(g) Noncompliance with technical or contractual requirements in the interconnection agreement that presents a safety hazard.

Formatted: Indent: First line: 0.24", Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 0.25" + Indent at: 0.25"

R 460.990. 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 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.

~~(4)~~(2) An application for a DER that includes a single or multiple energy production devices at a site for which the interconnection customer 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.

Formatted: Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 2 + Alignment: Left + Aligned at: 0.01" + Indent at: 0.26"

R 460.992 Non-export provision.

Rule 92. A non-export operating mode shall be available to any interconnection customer, and the interconnection customer must agree to install export limiting equipment on their site, 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.

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, 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 shall submit to the electric utility, in writing, all proposed modifications to any information provided in the fast track or study track application. 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 or affected system. Neither the electric utility nor the affected system operator may unilaterally modify the fast track or study track application.

(2)(d) If the proposed modification is determined to be a material modification, then the electric utility shall notify the interconnection customer in writing that the interconnection customer 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 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 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 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 the 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 must either withdraw the proposed modification within five (5) business days or proceed with a new fast track or study track application for such modification. If the interconnection customer does not provide its determination within the appropriate timeframe, the fast track or study track application shall be deemed withdrawn.

Formatted: Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 0.5" + Indent at: 0.75"

~~3~~(e) If the proposed modification is determined not to be a material modification, then the electric utility shall notify the interconnection customer in writing that the modification has been accepted and that the interconnection customer shall retain its eligibility for interconnection, including its place in the queue.

~~1~~(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 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.

~~2~~(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 the queue, its position may slip while on hold.

R 460.996 Modifications to project.

Rule 96. The interconnection customer shall notify the electric utility of plans for any material modification to the DER subsequent to execution of the interconnection agreement. The interconnection customer 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 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.

R 460.998 Insurance.

Rule 98. (1) An interconnection customer 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.

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

~~Section 2~~(3) For level 3 to level 5 projects, the interconnection customer shall obtain and maintain general liability insurance of a minimum of \$1,000,000.

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 is responsible for the cost of ~~all providing or obtaining~~ easements or rights-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

Formatted: Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 2 + Alignment: Left + Aligned at: 0.01" + Indent at: 0.26", Tab stops: Not at 0.5"

Formatted: Indent: First line: 0.24", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 2 + Alignment: Left + Aligned at: 0" + Indent at: 0"

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, commensurate with the demonstrated impact of any such violation.

Commented [A73]: This is the same language that is in the law. Consumers Energy believes that this rule should recommend guidelines that are commensurate with the demonstrated impact of violations.

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 distribution 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 and 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.

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~~ system impact study or ~~distribution system~~ study. The application shall be processed in accordance with R 460.620 and R460.640.

Commented [A74]: Artifact from present ruleset.
Commented [A75]: Artifact from present ruleset.

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.

(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 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) 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 meter(s) is installed for the legacy net metering 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 legacy net metering program credit to be applied to the account.

(4) If a 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.

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.

(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.

(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 corresponding revised legacy net metering program or distributed generation program tariff sheets.

(4) The alternative electric supplier shall file a revised legacy net metering program plan or distributed generation program plan.

R 460.1010 Generation and legacy net metering program or distributed generation program equipment.

Rule 110. New legacy net metering program or distributed generation program equipment and its installation must meet all current local and state electric and construction code requirements, and other standards as specified in Part 2 of these rules.

R 460.1012 Meters for legacy net metering program.

Rule 112. (1) For a customer with a generation system ~~capable of generating with a nameplate rating of~~ 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

Commented [A76]: See (2) below – does this section also need the wording “the electric utility shall utilize a meter or meters capable of measuring the flow of energy in both directions”

Commented [A77]: “shall test” forces testing all meters. Presently, existing bi-directional meters are not tested when a customer is enrolled in the net-metering program. Should use the same language as Rule 114. No need to test meters already deployed in the field that are capable of performing the required functions.

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 ~~with a nameplate rating of capable of generating~~ more than 20 kWac and ~~up to not more than~~ 150 kWac, the electric utility shall utilize a meter or meters capable of measuring the flow of energy in both directions and the generator output. If meter upgrades are necessary to provide 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 an eligible electric generator with a nameplate rating of~~ ~~For a customer with a generation system capable of generating~~ more than 150 kWac ~~and not more than 550kWac~~, 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 with a nameplate rating of~~ 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

Commented [A78]: "up to 150kWac" leaves the open question "What about 150 kW?" Use language from the Level 2 definition, or simply say "a level 2 customer"

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~~ not more than 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 and not more than 550kWac, 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.

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 not more than 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.

Commented [A79]: "up to 150kWac" leaves the open question "What about 150 kW?" Use language from the Level 2 definition, or simply say "a level 2 customer"

Commented [A80]: As customers get more energy efficient the ones who sized their systems to 90%+ of their prior usage could eventually go net-zero or always sell back. A Move-in/Move-out situation could also result in a system previously sized appropriately to be over-sized. Possibly change language to credit the customer minus the distribution charges.

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.

Commented [A81]: Credit amount minus distribution charges?

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.

Commented [A82]: Should this be rule 120?

Commented [A83]: New participants should not be entitled to a prior arrangement with the customer and utility. The new customer pays the net-metering enrollment fee.

PART 4. LEGALLY ENFORCABLE OBLIGATION

460.1050 Applicability.

Rule 50. The rules in this subpart apply to an electric utility whose rates are regulated by the Commission.

460.1052 Requirements for the creation of a legally enforceable obligation.

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

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

- (i) The facility is a "qualifying facility;" and
- (ii) The facility has been certified as a qualifying facility with or by the Federal Energy Regulatory Commission.

(b) Provided the electric utility 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 or owner, 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 enforceable option to purchase or lease the site that allows construction and operation of the proposed facility.
- (d) Provided evidence to the electric utility that the project is financeable.
- (e) If qualifying as a "cogeneration facility" under R 460.1052(1)(a), ~~provided~~ provided the electric utility 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, if required under R 460.966.
- (g) If required under R 460.974, ~~Executed~~ executed a construction agreement with the electric utility and either (i) remitted the full payment of the good faith estimated cost of the distribution upgrades, or (ii) is in good standing with all milestone payments pursuant to the agreement.
- (h) Unilaterally signed and tendered a proposed power purchase agreement ("PPA") to the purchasing utility with a price term equal to either:
- (i) the existing standard offer rate in accordance with the applicable standard tariff provisions as approved by the commission for qualifying facilities eligible for standard offer rates; or
 - (ii) a price term consistent with the purchasing utility's avoided costs, with specified beginning and ending dates for delivery of energy, capacity, or both to be purchased by the utility
- (i) Provided to the purchasing utility an Internal Revenue Service Form W-9
- (j) Provided the purchasing utility with sufficient evidence of an engineering, procurement, and construction program that will result in commercial operation of the project (and the project's interconnection) on a defined schedule that is consistent with the capacity needs of the purchasing utility. This evidence must include written proof of a secured commitment from major equipment manufacturers for the delivery and/or installation of all major equipment to be utilized by the project.
- (k) Provided the purchasing utility with proof of fuel security, or, if the project is for wind, solar, or hydroelectric generation, the amount of available fuel at the project's location.

460.1054 Power purchase agreement.

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 five (5) business days of the qualifying facility both (i) returning a signed facilities study agreement and associated payment, and (ii) submitting a written request of the electric utility, 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 both (i) signing a construction agreement, and (ii) submitting a written request of the electric utility, 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~~ partially ~~an~~ executed 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

(b) The legally enforceable obligation terminates.

(i) Upon termination of the legally enforceable obligation, the 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, the electric utility must publish on its website a standard offer tariff applicable to qualifying facilities corresponding to the standard offer project size approved by the commission.