DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS

PUBLIC SERVICE COMMISSION

INTERCONNECTION AND DISTRIBUTED GENERATION STANDARDS

Filed with the secretary of state on April 25, 2023

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

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

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

PART 1. GENERAL PROVISIONS

R 460.901a Definitions; A-I.

Rule 1a. As used in these rules:

(a) “AC” means alternating current at 60 Hertz.

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

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

(d) “Alternative electric supplier” means that term as defined in section 10g of 1939 PA 3, MCL 460.10g.

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

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

(g) “Applicant” means the person or entity submitting an interconnection application, a legacy net metering program application, or a distributed generation program application. An applicant is not required to be an existing customer of an electric utility. An electric utility is considered an applicant when it submits an interconnection application for a DER that is not a temporary DER or a substation backup energy storage device.

(h) “Application” means an interconnection application, a legacy net metering program application, or a distributed generation program application.

(i) “Area network” means a location on the distribution system served by multiple transformers interconnected in an electrical network circuit.

(j) “Business day” means Monday through Friday, starting at 12:00:00 a.m. and ending at 11:59:59 p.m., excluding electric utility holidays and any day where electric service is interrupted for 10% or more of an electric utility’s customers.

(k) “Calendar day” means every day, including Saturdays, Sundays, and holidays.

(l) “Certified” means an inverter-based system has met acceptable safety and reliability standards by a nationally recognized testing laboratory in conformance with IEEE 1547.1-2020 and the UL 1741 September 28, 2021 edition except that prior to commercial availability, inverter-based systems which conform to the UL 1741SA September 7, 2016 edition are acceptable.

(m) “Commission” means the Michigan public service commission.

(n) “Commissioning test” means the test and verification procedure that is performed on a device or combination of devices forming a system to confirm that the device or system, as designed, delivered, and installed, meets the interconnection and interoperability requirements of IEEE 1547-2018 and IEEE 1547.1-2020. A commissioning test must include visual inspections and may include, as applicable, an operability and functional performance test and functional tests to verify interoperability of a combination of devices forming a system.

(o) “Conforming” means the information in an interconnection application is consistent with the general principles of distribution system operation and DER characteristics.

(p) “Customer” means a person or entity who receives electric service from an electric utility’s distribution system or a person who participates in a legacy net metering or distributed generation program through an alternative electric supplier or electric utility.

(q) “DC” means “direct current.”

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

(s) “Distributed generation program” means the distributed generation program approved by the commission and included in an electric utility’s tariff pursuant to section 6a(14) of 1939 PA 3, MCL 460.6a, or established in an alternative electric supplier distributed generation program plan.

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

(u) “Distribution upgrades” mean the additions, modifications, or improvements to the distribution system necessary to accommodate a DER’s connection to the distribution system.

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

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

(x) “Electrically remote” means a proposed DER is not electrically coincident with a DER that is associated with a pending interconnection application.

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

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

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

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

(aa) “Export capacity” means the amount of power that can be transferred from the DER to the distribution system. Export capacity is either the nameplate rating or a lower amount if limited using an acceptable means that is defined in an electric utility’s interconnection procedures.

(bb) “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.

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

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

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

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

(gg) “Governmental authority” means any federal, state, local, or other governmental regulatory or administrative agency, court, commission, department, board, or other

governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that this term does not include the applicant, interconnection customer, electric utility, or any affiliate thereof.

(hh) "GPS" means global positioning system.

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

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

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

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

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

(nn) "Inadvertent export" means unscheduled export of active power from a DER, exceeding a specified magnitude and for a limited duration, due to fluctuations in load-following behavior.

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

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

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

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

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

(tt) "Interconnection customer" means the person or entity, which may include the electric utility, responsible for ensuring a DER is operated and maintained in compliance

with all local, state, and federal laws, as well as with all rules, standards, and interconnection procedures. An electric utility is not considered an interconnection customer for temporary DER or a substation backup energy storage device project.

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

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

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

R 460.901b Definitions; J-Z.

Rule 1b. As used in these rules:

(a) "kW" means kilowatt.

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

(c) "kWh" means kilowatt-hours.

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

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

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

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

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

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

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

(k) "Limited export" means the exporting capability of a DER whose export capacity is limited by means specified in an electric utility's interconnection procedures.

(l) "Low voltage distribution" means those parts of a distribution system that operate with a voltage range specified in the electric utility's interconnection procedures.

(m) "Mainline" means a conductor that serves as the three-phase backbone of a low voltage distribution circuit.

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

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

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

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

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

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

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

(q) "MW" means megawatt.

(r) "MWac" means the electric power, in megawatts, associated with the alternating current output of a DER at unity power factor.

(s) "Nameplate rating" means the sum total of maximum rated power output of all a DER's constituent generating units and energy storage units as identified on the manufacturer nameplate, regardless of whether it is limited by any approved means. Nameplate rating includes all of the following:

(i) Nominal voltage (V).

(ii) Current (A).

(iii) Maximum active power (kWac).

(iv) Apparent power (kVA).

(v) Reactive power (kvar).

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

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

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

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

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

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

(z) "Power control system" means systems or devices that electronically limit or control steady state currents to a programmable limit.

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

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

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

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

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

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

(gg) “Secondary network” means those areas of a distribution system that operate at a secondary voltage level and are networked.

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

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

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

(kk) “Study track” means the procedure used for evaluating a proposed interconnection as described in R 460.952 to R 460.962.

(ll) “Supplemental review” means the fast track supplemental review screens described in R 460.950.

(mm) “System impact study” means a study to identify and describe the impacts to the electric utility’s distribution system that would occur if the proposed DER were interconnected exactly as proposed and without any modifications to the electric utility’s distribution system. A system impact study also identifies affected systems.

(nn) “Temporary DER” means a DER that is installed on the distribution system by the electric utility with the intention of not operating at the site permanently.

(oo) “True net metering” means an electric utility billing method that applies the full retail rate to the net of the bidirectional flow of kWh across the customer interconnection with the electric utility’s distribution system, during a billing period or time-of-use pricing period.

(pp) “UL” means underwriters laboratory.

(qq) “UL 1741” means the September 28, 2021 edition of “Standard for Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources,” as adopted by reference in R 460.902.

(rr) "UL 1741 CRD for PCS" means the Certification Requirement Decision for Power Control Systems for the standard titled Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources, March 8, 2019, as adopted by reference in R 460.902(b).

R 460.902 Adoption of standards by reference.

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

(a) UL 1741 Standard for Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources, September 28, 2021 edition, is available from Underwriters Laboratories at the internet website: https://standardscatalog.ul.com/ProductDetail.aspx?productId=UL1741 at a cost of $798.00 at the time of adoption of these rules.

(b) UL 1741 Standard for Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources, January 28, 2010 edition, is available from Underwriters Laboratories at the internet website: https://standardscatalog.ul.com/ProductDetail.aspx?productId=UL1741 at a cost of $716.00 at the time of adoption of these rules.

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

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

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

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

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

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

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

R 460.904 Informal mediation.

Rule 4. (1) In the event that parties are unable to resolve a dispute arising out of the interconnection process, as defined by R 460.901a through R 460.992, privately, the parties may, by mutual agreement, make a written request for informal mediation to the commission staff. The informal mediation must commence within 10 business days after submission of the written request or a mutually agreeable timeframe and be conducted by an interconnection ombudsperson who shall be a member of the commission staff and designated by the commission. Both parties may choose to have attorneys or appropriate representation present.

(2) During informal mediation, the parties shall discuss relevant facts pertaining to the dispute and the relief being sought. The interconnection ombudsperson and relevant

commission staff shall be present to facilitate the discussion and provide guidance among the parties. Parties shall operate in good faith and use best efforts to resolve the dispute.

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

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

R 460.906 Formal mediation.

Rule 6. (1) If the parties have been unable to resolve a dispute, the complaining party may file a written notice of dispute with the commission. The notice of dispute must state the specific grounds for the dispute, sufficient facts to support the allegations, the relief requested, and must contain all information, testimony, exhibits, or other documents and information within the party's possession on which the party intends to rely to support the party's position. After the filing of the written notice of dispute, the following must occur:

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

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

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

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

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

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

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

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

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

R 460.910 Waivers.

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

PART 2. INTERCONNECTION STANDARDS

R 460.911 Applicability.

Rule 11. These rules apply to all interconnection applications filed on or after the effective date of these rules. The electric utility shall complete work on any interconnection study agreement executed prior to the effective date of these rules, pursuant to the terms and conditions of that interconnection study agreement. Any new studies or other additional work must be completed pursuant to these rules. An electric utility or an alternative electric supplier shall not restrict access to interconnection for level 1, level 2, and level 3 DERs that are not participants in the legacy net metering or distributed generation programs.

R 460.920 Electric utility interconnection procedures.

Rule 20. (1) An electric utility shall file applications for approval of interconnection procedures and forms within 120 calendar days of the effective date of these rules.

(2) The commission shall issue its order approving, rejecting, or modifying an electric utility's proposed interconnection procedures and forms within 360 calendar days of the electric utility filing an application for approval of interconnection procedures and forms. If the commission finds the procedures and forms proposed by the electric utility to be inadequate or unacceptable, the commission may either adopt procedures and forms proposed by another person in the proceeding or modify and accept the procedures and forms proposed by the electric utility.

(3) Until the commission accepts, rejects, or modifies an electric utility's interconnection procedures and forms, the electric utility may use the proposed interconnection procedures and forms when processing interconnection applications with the exception of fixed fees and fee caps. An electric utility shall only charge fees that comply with the requirements of R 460.926 until the commission accepts, rejects, or modifies the proposed interconnection procedures and forms, unless the commission approves different fees pursuant to R 460.926(5).

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

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

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

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

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

(d) Required initial review screens.

(e) Required supplemental review screens.

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

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

(h) Parallel operation requirements.

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

(j) If an electric utility uses alternative methods for power limited export DER pursuant to R 460.980(3), a description of those methods.

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

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

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

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

(o) Examples of modifications that are not material modifications.

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

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

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

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

(t) Fast track eligibility criteria for applications proposing to interconnect DERs with 4.8 kV distribution systems.

(u) In the event daytime loading data is not available for the initial screen provided in R 460.946(5)(b), the date when the data will be collected.

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

R 460.922 Online applications and electronic submission.

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

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

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

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

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

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

(e) Directions for the submission of applications.

R 460.924 Communications.

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

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

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

R 460.926 Fees.

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

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

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

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

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

(d) Any applicable legacy net metering program application fee pursuant to R 460.1004(7) or distributed generation program application fee pursuant to R 460.1006(6), in combination with any applicable fast track initial review fee, fast track supplemental review fees and any study track fees, must not exceed a total of $50.

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

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

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

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

(d) The facilities study fee may not exceed $15,000.

(4) The fees listed in subrule (2) and initial fee caps listed in subrule (3) of this rule, must be displayed prominently on the electric utility's interconnection website.

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

R 460.928 Fee and fee cap modifications.

Rule 28. (1) An electric utility shall include in its proposed interconnection procedures fixed fees to replace the fees specified in R 460.926(2)(a), (b), and (c), and add any other fixed fees the electric utility considers necessary.

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

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

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

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

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

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

R 460.930 Pre-application report request form.

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

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

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

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

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

(ii) An aerial map with location clearly marked.

(iii) GPS coordinates.

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

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

(i) Solar.

(ii) Wind.

(iii) Cogeneration.

(iv) Storage.

(v) Solar with storage.

(vi) Other type of DER.

(e) Capacity of the DER types in alternating current kW, direct current kW, kVA, and kWh for storage.

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

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

(h) Whether the DER will be certified.

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

(j) Whether the location is new construction.

(k) If applicable, whether the coupling between the generation and storage is alternating current or direct current and whether separate inverters will be used.

R 460.932 Pre-application report.

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

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

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

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

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

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

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

(e) Substation nominal distribution voltage.

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

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

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

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

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

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

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

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

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

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

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

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

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

(6) An electric utility shall provide the data required in the pre-application report to the applicant within 20 business days of receipt of the completed request form and payment of the fee. The pre-application report produced by the electric utility is non-binding and does not confer any rights on the applicant.

R 460.934 Site control.

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

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

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

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

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

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

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

R 460.936 Interconnection applications.

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

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

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

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

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

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

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

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

(b) If the application is incomplete or non-conforming, the electric utility shall provide to the applicant a written list of all deficiencies with the notification. The applicant shall have 60 business days from the date of electric utility notification to submit the necessary information and may provide up to 2 submissions during this time period. After each submission of information, the electric utility shall have 10 business days to notify the

applicant that the interconnection application is either accepted or rejected due to continuing deficiencies. If the applicant does not meet the timelines required by this rule, the utility may withdraw the application.

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

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

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

R 460.938 Public interconnection list.

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

(2) The public interconnection list must include all of the following: (a) An application identifier.

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

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

(e) The proposed DER nameplate rating. (f) The proposed DER interconnection size level.

(g) The DER technology type.

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

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

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

R 460.942 Non-export track review.

Rule 42. (1) Interconnection applications for DERs that will not inject electric energy into an electric utility's distribution system are eligible for evaluation under the non-

export track. Non-export eligibility requires an existing electrical service at the applicant's premise.

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

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

(4) Within 20 business days after being notified that the application was accepted, the electric utility shall perform an initial review by using some or all of the initial review screens specified in the electric utility's interconnection procedures pursuant to R 460.946 and notify the applicant of the results. If an electric utility chooses to perform a review using a subset of the initial review screens, the exclusion of 1 or more screens may not be the only basis for the electric utility to require further study.

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

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

(b) If a facilities study is required, the interconnection application must proceed under R 460.962.

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

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

(b) Proceed to supplemental review under R 460.950.

(c) Submit within 60 business days after the date of the electric utility notification, with up to 2 submissions during this time period, a complete and conforming revised interconnection application that includes application modifications offered or required by the electric utility. If the applicant does not make the submittal within the required 60 days, then the electric utility may consider the application withdrawn. Submission of interconnection applications shall be governed by the following requirements:

(i)The application modifications must mitigate or eliminate the factors that caused the interconnection application to fail 1 or more of the initial review screens.

(ii) After each submission of information, the electric utility has 10 business days to notify the applicant that the interconnection application is either accepted or rejected due to continuing deficiencies.

(iii) After the electric utility determines the application is accepted, the revised interconnection application must proceed under subrule (4) of this rule.

(d) Withdraw the interconnection application.

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

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

R 460.944 Fast track applicability.

Rule 44. (1) Level 1, level 2, level 3, level 4 applications, and level 5 applications as large as 5 MWac in which the DER is not proposing to interconnect with the electric utility's high voltage distribution system are eligible for the fast track. Level 5 applications proposing to interconnect to a utility's distribution system at 4.8 kV or less are not eligible for the fast track. Projects using an acceptable method for limited export are eligible for fast track.

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

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

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

R 460.946 Fast track; initial review.

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

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

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

(4) Within 10 business days after an electric utility receives a complete and conforming level 1 or level 2 application and associated payment, or within 20 business days after an electric utility receives a complete and conforming level 3, level 4, or level 5 application and associated payment, the electric utility shall perform an initial review and notify the

applicant of the results. The initial review must consist of applying the initial review screens selected by the electric utility pursuant to subrule (3) of this rule to the proposed DER. The electric utility shall not require a supplemental review or a system impact study if the DER passes the applied initial review screens.

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

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

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

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

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

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

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

Primary Distribution Line Type	Type of Interconnection to Primary Distribution Line	Result
3-phase, 3 wire	3-phase or single phase, phase-to-phase	Pass screen

3-phase, 4 wire	Effectively-grounded 3- phase or single-phase, line-to-neutral	Pass screen

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

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

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

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

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

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

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

(b) Proceed to supplemental review under R 460.950.

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

(d) Withdraw the interconnection application.

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

R 460.948 Fast track; customer options meeting.

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

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

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

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

(c) Submit within 60 business days from the date of the customer options meeting, with up to 2 submissions during this time period, a complete and conforming revised interconnection application that includes application modifications offered or required by the electric utility, which mitigates or eliminates the factors that caused the interconnection application to fail 1 or more of the initial review screens. After each submission of information, the electric utility has 10 business days to notify the applicant that the interconnection application is either accepted or rejected due to continuing deficiencies. If the applicant does not meet the timelines required by this subrule, the electric utility may withdraw the application. After the electric utility accepts the revised interconnection application, it must proceed under R 460.946(4).

(d) Withdraw the interconnection application.

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

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

R 460.950 Fast track; supplemental review.

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

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

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

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

(5) Within 30 business days after the applicant pays the applicable supplemental review fee or fees, and provides reasonable requested data, an electric utility shall perform a

supplemental review and notify the applicant of the results. The supplemental review must consist of applying the supplemental review screens selected by the electric utility pursuant to subrule (3) of this rule to the proposed DER. The electric utility shall not require a system impact study if the DER passes the applied supplemental review screens.

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

(a) Minimum load screen. Where 12 months of line section minimum load data, including onsite load but not station service load served by the proposed DER, are available, can be calculated, can be estimated from existing data, or can be determined from a power flow model, the aggregate DER capacity on the line section must be less than 100% of the minimum load for all line sections bounded by automatic sectionalizing devices upstream of the proposed DER. If minimum load data are not available, or cannot be calculated, estimated, or determined, an electric utility shall include the reason or reasons that it is unable to calculate, estimate, or determine minimum load in its supplemental review results notification under subrules (7) and (8) of this rule. All of the following must be applied by the electric utility:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(b) Withdraw the interconnection application.

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

R 460.952 Study track.

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

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

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

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

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

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

(2) If the interconnection application must be evaluated under the study track because it meets the criteria of subrule (1)(a) of this rule, within 10 business days after the electric utility notifies the applicant that the interconnection application has been accepted

pursuant to R 460.936, the electric utility shall provide to the applicant an individual study agreement or an agreement for an alternative process pursuant to R 460.956.

(3) If the interconnection application must be evaluated under the study track because it meets the criteria of subrule (1)(b), (c), or (d), of this rule, within 10 business days after the applicant has notified the electric utility to proceed to the study track, the electric utility shall provide to the applicant an individual study agreement or an agreement for an alternative process. (4) An electric utility's interconnection procedures may include a provision for determining appropriate milestone payments to include with the system impact study fee and facilities study fee.

R 460.954 Individual study.

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

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

(3) An individual study process must consist of a system impact study pursuant to R 460.960 and a facilities study pursuant to R 460.962. An electric utility may waive 1 or both studies for a particular interconnection application. An electric utility may specify additional studies it may perform on an interconnection application in its interconnection procedures, provided the electric utility is able to meet all applicable timelines associated with an individual study process.

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

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

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

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

(d) An applicant has paid all required fees.

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

R 460.956 Alternative process.

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

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

Rule 58. (1) This rule applies only to interconnection applications proceeding pursuant to an individual study agreement.

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

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

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

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

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

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

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

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

Rule 60. For all DERs being studied individually, all of the following apply:

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

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

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

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

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

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

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

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

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

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

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

(g) An electric utility may request reasonable additional data from the applicant within 20 business days of beginning the system impact study. The electric utility and the applicant shall work together to resolve the additional data request so that the electric utility will be able to complete the system impact study within 60 business days as specified in subdivision (f) of this rule. If the applicant does not provide the requested additional data in a timely manner, the electric utility shall notify the applicant that the system impact study is on hold and the date the hold started. The electric utility shall resume work on the study on the date the additional data is received.

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

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

(j) At the system impact study review meeting, the electric utility shall offer the applicant the option to withdraw the interconnection application, and 1 of the following options:

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

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

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

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

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

Rule 62. For DERs being studied individually, all of the following apply:

(a) If construction of facilities is required to provide interconnection and interoperability of the DER with the electric utility's distribution system, the electric utility shall provide the applicant a facilities study agreement and the results of the applicant's system impact study pursuant to R 460.960, if applicable. The electric utility shall provide a facilities study agreement within 10 business days of proceeding to this rule.

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

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

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

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

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

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

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

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

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

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

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

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

(iii) Withdraw the interconnection application.

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

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

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

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

(ii) Withdraw the interconnection application.

(j) Following the meeting, the applicant has no more than 20 business days to decide on a course of action and notify the electric utility of this course of action. If the applicant

fails to notify the electric utility within 20 business days, the electric utility may withdraw the application.

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

R 460.964 Interconnection agreement.

Rule 64. (1) For level 1, 2, or 3 interconnection applications, where no construction of interconnection facilities or distribution upgrades is required, an electric utility shall transmit its standard level 1, 2, and 3 interconnection agreement, which may include modifications to address any special operating conditions, to an applicant within 3 business days of reaching this stage.

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

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

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

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

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

(5) For level 4 or 5 projects, the electric utility shall provide its level 4 and 5 interconnection agreement, which may include modifications to address any special operating conditions, within 15 business days of reaching this stage. When construction of interconnection facilities or distribution upgrades is necessary, the level 4 and 5 interconnection agreement must contain either estimated timelines for completion of activities and estimates of construction costs or a timetable when these requirements can be determined. The interconnection agreement must include a payment schedule that

corresponds to the milestones established and must require the electric utility to refund any unspent and unobligated funds if the agreement is terminated.

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

(a) If the applicant does not sign and return the level 4 and 5 interconnection agreement with payment within 30 business days, an electric utility shall notify the applicant of the missed deadline and grant an extension of 15 business days. If the electric utility does not receive the signed level 4 and 5 interconnection agreement and payment, if applicable, during the 15-business-day extension, the electric utility may consider the interconnection application withdrawn, subject to subdivision (b) of this subrule.

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

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

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

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

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

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

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

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

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

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

(b) The milestone under question has been previously delayed and the affected party has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the party proposing the amendment.

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

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

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

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

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

(14) The electric utility may propose to the commission that a signed interconnection agreement be modified to require compliance with changes to an independent system operator, a regional transmission operator, or the state's regulations. Unless the electric utility has the consent of the applicant or interconnection customer in writing, an electric utility shall not modify a signed interconnection agreement without commission approval.

R 460.966 Inspection, testing, and commissioning.

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

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

(3) The electric utility shall review the applicant's inspection, test reports, or configuration documents, and communicate its intent to perform a witness or commissioning test, or waive its right to perform a witness test and commissioning test within 10 business days. If the electric utility finds the applicant's inspection, test reports, or configuration documents to be incomplete, insufficient, or unsatisfactory, the electric utility shall provide the reasons for doing so in writing and the applicant shall have not less than 20 business days or a mutually agreed upon timeframe with the utility to implement corrections to those documents. The applicant, after taking corrective action, shall request the electric utility to reconsider the inspection, test reports, or configuration documents.

(4) Subsequent to completion of the items in subrule (3), if the electric utility intends to witness or perform commissioning tests required to comply with the interconnection agreement or the interconnection procedures and inspect the DER, the electric utility shall witness or perform the commissioning tests and inspect the DER within the following:

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

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

(c) A mutually-agreed upon timeframe after receiving the notification from the applicant pursuant to completion of subrules (2) and (3) of this rule for level 4 and 5 applications.

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

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

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

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

(7) If the electric utility witnessed or performed commissioning tests and inspected the DER pursuant to subrule (4) of this rule, within 5 business days of the receipt of the completed commissioning test report, the electric utility shall notify the applicant whether

it has accepted or rejected the commissioning test report and found the site to be satisfactory or unsatisfactory. The following requirements apply:

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

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

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

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

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

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

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

R 460.968 Authorization required prior to parallel operation.

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

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

(b) The applicant has executed a standard level 1, 2, and 3 interconnection agreement or level 4 and 5 interconnection agreement and complied with all applicable parallel operation requirements as set forth in the electric utility's interconnection procedures and applicable interconnection agreement.

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

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

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

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

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

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

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

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

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

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

R 460.974 Interconnection metering and communications.

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

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

R 460.976 Post commissioning remedy.

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

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

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

R 460.978 Disconnection.

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

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

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

(c) Termination of interconnection by mutual agreement.

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

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

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

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

(h) Other material noncompliance with the interconnection agreement.

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

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

R 460.980 Capacity of the DER.

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

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

(3) The electric utility's interconnection procedures may describe acceptable methods for power limited export DER including, but not limited to, reverse power protection and utilizing inverters or control systems so that the DER capacity considered by the electric utility for reviewing the interconnection application is only the amount capable of being exported. These methods for power limited export DER may be used as alternatives to the method described in subrule (4) of this rule.

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

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

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

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

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

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

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

R 460.982 Modification of the interconnection application.

Rule 82. (1) At any point after an interconnection application is considered accepted but before the signing of an interconnection agreement, the applicant, the electric utility,

or the affected system owner may propose modifications to the interconnection application that may improve the costs and benefits of the interconnection, or that improve the ability of the electric utility to accommodate the interconnection. The applicant shall submit to the electric utility, in writing, all proposed modifications to any information provided in the interconnection application and the electric utility shall perform an evaluation to determine whether the proposed modification is a material modification and provide the results to the applicant within 10 business days.

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

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

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

(5) For a proposed modification which the electric utility has determined is a material modification and that further study is required, the applicant shall select 1 of the following options:

(a) Withdraw the modification.

(b) Withdraw the application. (c) Propose a different modification to the interconnection application for electric utility review, pursuant to subrule (1) of this rule, to determine whether the modification is material.

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

(e) Initiate informal mediation pursuant to R 460.904

(f) Initial formal mediation pursuant to R460.906

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

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

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

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

(9) At any point prior to the execution of an interconnection agreement, changes to ownership will cause the interconnection application to be put on hold until the new owner signs all necessary agreements and documents. An electric utility may not be

found in violation of these rules related to the processing of the interconnection application during such a transfer of ownership.

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

R 460.984 Modifications to the DER.

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

R 460.986 Insurance.

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

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

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

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

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

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

R 460.988 Easements and rights-of-way.

Rule 88. If a line extension is required to accommodate an interconnection, the applicant is responsible for providing and obtaining the easements or rights of way, including all associated cost, in a form consistent with utility tariffs.

R 460.990 Interconnection penalties.

Rule 90. Pursuant to section 10e of 1939 PA 3, MCL 460.10e, an electric utility shall take all necessary steps to ensure that DERs are connected to the distribution systems within their operational control. If the commission finds, after notice and hearing, that an electric utility has prevented or unduly delayed the ability of a DER greater than 100 kW to connect to the distribution system of the electric utility, the commission may order remedies designed to make whole the applicant proposing the DER, including, but not

limited to, reasonable attorney fees. If the electric utility violates this rule, the commission may order fines of not more than $50,000 per calendar day, commensurate with the demonstrated impact of the violation.

R 460.991 Business day exclusions.

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

R 460.992 Electric utility annual reports.

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

PART 3. DISTRIBUTED GENERATION PROGRAM STANDARDS

R 460.1001 Application process.

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

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

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

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

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

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

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

(a) The generation capacity must be determined by an estimate of the expected annual kWh output of the generator or generators as determined in an electric utility's interconnection procedures and specified on an electric utility's legacy net metering program or distributed generation program tariff sheet or in the alternative electric supplier's legacy net metering program or distributed generation program plan. For projects in which energy export controls are implemented pursuant to section R 460.980 and utilized to limit the export to 100% of the customer's electricity consumption for the previous 12 months, an electric utility shall not add the storage capacity to generation capacity for the purpose of the study. If a customer has multiple inverters capable of exporting to the distribution grid, the inverters must be configured in a way that prevents the cumulative maximum export at any given time to exceed the approved amount in the customer's application.

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

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

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

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

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

R 460.1004 Legacy net metering program application and fees.

Rule 104. (1) An electric utility or alternative electric supplier may use an online legacy net metering program application process. An electric utility or alternative electric supplier not using an online application process, may utilize a uniform legacy net

metering program application form which must be approved by the commission. An electric utility's legacy net metering program application may be combined with an electric utility's interconnection application.

(2) A customer taking retail electric service from an electric utility and applying to participate in the legacy net metering program shall concurrently submit a completed legacy net metering program application and interconnection application or indicate on the legacy net metering program application the date that the customer applied for interconnection with the electric utility and, if applicable, the date the customer received authorization to operate in parallel pursuant to R 460.968. All of the following requirements apply:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

R 460.1006 Distributed generation program application and fees.

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

(2) A customer taking retail electric service from an electric utility and applying to participate in the distributed generation program shall concurrently submit a completed distributed generation program application and interconnection application or indicate on the distributed generation program application the date that the customer applied for interconnection with the electric utility and, if applicable, the date the customer received authorization to operate in parallel pursuant to R 460.968. All of the following requirements apply:

(a) When a distributed generation program application is accompanied by an associated interconnection application, an electric utility may complete its review of the distributed generation program application before, during, or after processing the interconnection application pursuant to part 2 of these rules, R 460.911 to R 460.992. Both of the following requirements apply:

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

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

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

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

(i) The electric utility has 10 business days to review the distributed generation program application and determine whether to accept the application pursuant to the timelines in R 460.936(6) and (7). The timelines in R 460.936(7)(a) apply to utility notifications. The electric utility shall provide the customer an opportunity to remedy any

application deficiencies pursuant to R 460.936(7)(b). If the customer fails to remedy the application deficiencies within the timelines in R 460.936(7)(b), the electric utility may consider the distributed generation program application withdrawn without refund of the application fees.

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

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

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

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

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

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

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

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

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

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

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

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

Rule 108. (1) If an electric utility or alternative electric supplier reaches the program sizes as defined in section 173(3) of the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1173, or a voluntarily expanded program above the requirements defined in section 173(3) of the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1173, as determined by combining both the distributed generation program and the legacy net metering program customer enrollments, the electric utility or alternative electric supplier shall notify the commission.

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

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

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

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

Rule 110. New legacy net metering program or distributed generation program equipment and its installation must meet all current local and state electric and construction code requirements, and other standards as specified in part 2 of these rules, R 460.911 to R 460.992.

R 460.1012 Meters for legacy net metering program.

Rule 112. (1) For a customer with a generation system capable of generating 20 kWac or less, an electric utility may determine the customer's net usage using the customer's existing meter if it is capable of reverse registration or may install a single meter with separate registers measuring power flow in each direction. If the electric utility uses the customer's existing meter, the electric utility shall test and calibrate the meter to assure accuracy in both directions. If the customer's meter is not capable of reverse registration and if meter upgrades or modifications are required, the following apply:

(a) An electric utility serving 1,000,000 or more customers in this state shall provide a meter or meters capable of measuring the flow of energy in both directions at no additional charge to the legacy net metering program customer. The cost of the meter or meter modification is considered a cost of operating the legacy net metering program.

(b) An electric utility serving fewer than 1,000,000 customers in this state shall provide a meter or meters capable of measuring the flow of energy in both directions to customers

at cost. Only the incremental cost above that for the meter provided by the electric utility to similarly situated non-generating customers shall be paid by the eligible customer.

(c) An electric utility shall provide a generator meter, if requested by the customer, at cost.

(2) For a customer with a generation system capable of generating more than 20 kWac and not more than 150 kWac, the electric utility shall utilize a meter or meters capable of measuring the flow of energy in both directions and the generator output. If meter upgrades are necessary to provide this functionality, all of the following apply:

(a) An electric utility serving 1,000,000 or more customers in this state shall provide a meter or meters capable of measuring the flow of energy in both directions at no additional charge to a legacy net metering program customer. The cost of the meter or meters is considered a cost of operating the legacy net metering program.

(b) An electric utility serving fewer than 1,000,000 customers in this state shall provide a meter or meters capable of measuring the flow of energy in both directions to customers at cost. Only the incremental cost above that for meters provided by the electric utility to similarly situated non-generating customers shall be paid by the eligible customer.

(c) An electric utility shall provide a generator meter. The cost of the meter is considered a cost of operating the legacy net metering program.

(3) For a customer with a generation system capable of generating more than 150 kWac, the electric utility shall utilize a meter or meters capable of measuring the flow of energy in both directions and the generator output. If meter upgrades are necessary to provide this functionality, the customer shall pay the cost of providing any new meters.

(4) An electric utility deploying advanced metering infrastructure shall not charge the cost of advanced meters to a legacy net metering program participant or the legacy net metering program.

R 460.1014 Meters for distributed generation program.

Rule 114. (1) For a customer with a generation system capable of generating 20 kWac or less, an electric utility shall determine the customer’s power flow in each direction using the customer's existing meter if it is capable of measuring and recording power flow in each direction. If the customer’s meter is not capable of measuring and recording the customer’s power flow in each direction and if meter upgrades or modifications are required, all of the following apply:

(a) An electric utility serving 1,000,000 or more customers in this state shall provide a meter or meters capable of measuring and recording the customer’s power flow in each direction at no additional charge to the distributed generation program customer. The cost of the meter or meter modification is considered a cost of operating the distributed generation program.

(b) An electric utility serving fewer than 1,000,000 customers in this state shall provide a meter or meters capable of measuring and recording the power flow in each direction to customers at cost. Only the incremental cost above the cost for the meter provided by the electric utility to similarly situated non-generating customers shall be paid by the eligible customer.

(c) An electric utility shall provide a generator meter at cost, if requested by the customer.

(2) For a customer with a generation system capable of generating more than 20 kWac and not more than 150 kWac, an electric utility shall utilize a meter or meters capable of measuring and recording power flow in each direction and the generator output. If the customer's meter is not capable of measuring and recording the customer's power flow in each direction along with the generator output, and if meter upgrades or modifications are required, all of the following apply:

(a) An electric utility serving 1,000,000 or more customers in this state shall provide a meter or meters capable of measuring the flow of energy in both directions at no additional charge to a distributed generation program customer. If the electric utility provides the upgraded meter at no additional charge to the customer, the cost of the meter is considered a cost of operating the distributed generation program.

(b) An electric utility serving fewer than 1,000,000 customers in this state shall provide a meter or meters capable of measuring the flow of energy in both directions to customers at cost. Only the incremental cost above the cost for the meter provided by the electric utility to similarly situated non-generating customers shall be paid by the eligible customer.

(c) An electric utility shall provide a generator meter. The cost of the meter shall be considered a cost of operating the distributed generation program.

(3) For a customer with a methane digester generation system capable of generating more than 150 kWac, an electric utility shall utilize a meter or meters capable of measuring the flow of energy in both directions and the generator output. If meter upgrades are necessary to provide such functionality, the customer shall pay the cost of providing any new meters.

(4) An electric utility deploying advanced metering infrastructure shall not charge the cost of advanced meters to a distributed generation program customer or the distributed generation program.

R 460.1016 Billing and credit for legacy net metering program customers taking service under true net metering.

Rule 116. (1) Legacy net metering program customers with a system capable of generating 20 kWac or less qualify for true net metering. For customers qualifying for true net metering, the net of the bidirectional flow of kWh across the customer interconnection with the electric utility distribution system during the billing period or during each time-of-use pricing period within the billing period, including excess generation, shall be credited at the full retail rate.

(2) The credit for excess generation, if any, shall appear on the next bill. Any excess credit not used to offset current charges must be carried forward for use in subsequent billing periods.

R 460.1018 Billing and credit for legacy net metering program customers taking service under modified net metering.

Rule 118. (1) Legacy net metering program customers with a system capable of generating more than 20 kWac qualify for modified net metering. A negative net metered quantity during the billing period or during each time-of-use pricing period within the

billing period reflects net excess generation for which the customer is entitled to receive credit. Standby charges for customers on an energy rate schedule must equal the retail distribution charge applied to the imputed customer usage during the billing period. The imputed customer usage is calculated as the sum of the metered on-site generation and the net of the bidirectional flow of power across the customer interconnection during the billing period. The commission shall establish standby charges for customers on demand-based rate schedules that provide an equivalent contribution to electric utility system costs. Standby charges may not be applied to customers with systems capable of generating 150 kWac or less.

(2) The credit for excess generation must appear on the next bill. Any excess kWh not used to offset current charges must be carried forward for use in subsequent billing periods.

(3) A customer qualifying for modified net metering shall not have legacy net metering program credits applied to distribution charges.

(4) The credit per kWh for kWh delivered into the electric utility's distribution system must be either of the following as determined by the commission:

(a) The monthly average real-time locational marginal price for energy at the commercial pricing node within the electric utility's distribution service territory or for a legacy net metering program customer on a time-based rate schedule, the monthly average real time locational marginal price for energy at the commercial pricing node within the electric utility's distribution service territory during the time-of-use pricing period.

(b) The electric utility's or alternative electric supplier's power supply component, excluding transmission charges, of the full retail rate during the billing period or time-of-use pricing period.

R 460.1020 Billing and credit for distributed generation program customers.

Rule 120. As part of an electric utility's rate case filed after June 1, 2018, the commission shall approve a tariff for a distributed generation program under the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1001 to 460.1211. A tariff established under this rule does not apply to customers participating in a legacy net metering program under the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1001 to 460.1211, before the date that the commission establishes a tariff under this rule, who continue to participate in the program at their current site or facility, as described by R 460.1026.

R 460.1022 Renewable energy credits.

Rule 122. (1) An eligible electric generator shall own any renewable energy credits granted for electricity generated under the legacy net metering program and distributed generation program.

(2) An electric utility may purchase or trade renewable energy credits from a legacy net metering program or distributed generation program customer if agreed to by the customer.

(3) The commission may develop a program for aggregating renewable energy credits from legacy net metering program and distributed generation program customers.

R 460.1024 Penalties.

Rule 124. Upon a complaint or on the commission's own motion, if the commission finds after notice and hearing that an electric utility has not complied with a provision or order issued under part 5 of the clean and renewable energy and energy waste reduction act, 2008 PA 295, MCL 460.1171 to 460.1185, the commission shall order remedies and penalties as necessary to make whole a customer or other person who has suffered damages as a result of the violation.

R 460.1026 Legacy net metering grandfathering clause.

Rule 126. A customer participating in a legacy net metering program approved by the commission before the commission establishes the initial distributed generation program tariff pursuant to R 460.1020 may elect to continue to receive service under the terms and conditions of that program for up to 10 years from the date of initial enrollment. "Initial enrollment," as used in this rule, means the date a customer or site initially enrolled in a legacy net metering program as described in the electric utility's tariff. A customer participating in a legacy net metering program who increases the nameplate rating of its generation system after the effective date of an electric utility's distributed generation program tariff is no longer eligible to participate in the legacy net metering program.