

THE PUBLIC UTILITIES COMMISSION OF OHIO

IN THE MATTER OF THE COMMISSION'S
REVIEW OF CHAPTER 4901:1-22 OF THE
OHIO ADMINISTRATIVE CODE
REGARDING INTERCONNECTION
STANDARDS.

CASE NO. 22-861-EL-ORD

FINDING AND ORDER

Entered in the Journal on October 4, 2023

I. SUMMARY

{¶ 1} The Commission adopts proposed amendments to the interconnection rules in Ohio Adm.Code Chapter 4901:1-22.

II. DISCUSSION

{¶ 2} R.C. 121.95, as enacted on October 17, 2019, required state agencies, including the Commission, to create a base inventory of regulatory restrictions contained in each of their rules by December 31, 2019.

{¶ 3} R.C. 121.951(A)(1), effective June 8, 2022, requires the Commission to amend or rescind rules identified in its base inventory – using the criteria listed in R.C. 106.03(A) – as necessary to reduce the total number of regulatory restrictions by thirty percent over the course of three years.

{¶ 4} In performing the above review, R.C. 106.03(A) requires the Commission to determine, among other things, whether the rule should be amended or rescinded (including for the purpose of accomplishing the requirements of R.C. 121.951) because it exceeds or conflicts with the purpose, scope, or intent of the statute(s) under which the rule was adopted; creates a compliance or oversight burden that is greater than the burden that would be created if the agency accomplished the intended purpose of the restriction by other

means; is no longer useful or beneficial; or duplicates, overlaps with, or conflicts with a federal or state law or rule. Additionally, the Commission must assess whether the rule has an adverse impact on businesses, as determined under R.C. 107.52, or any other person or entity.

{¶ 5} In evaluating whether the rule has an adverse impact on business, the Commission must also prepare a business impact analysis (BIA) pursuant to R.C. 121.82. If there will be an adverse impact on businesses, as defined in R.C. 107.52, the Commission is tasked to incorporate features into the draft rules to eliminate or adequately reduce the adverse business impact. R.C. 121.82 also requires the Commission to provide a copy of the draft rules and BIA to the Common Sense Initiative (CSI) office for comment.

{¶ 6} Commission Staff (Staff) evaluated the rules contained in Ohio Adm.Code Chapter 4901:1-22 in order to reduce the number of regulatory restrictions pursuant to R.C. 121.951(A)(1). As a result of that review, Staff proposed substantive changes to reduce the total number of regulatory restrictions present as well as non-substantive changes to provide clarity and correct typographical errors.

{¶ 7} On May 17, 2023, the Commission issued an Entry seeking comments on the proposed amendments to Ohio Adm.Code Chapter 4901:1-22 and a BIA. Initial and reply comments were due by June 2, 2023, and June 16, 2023, respectively.

{¶ 8} On June 2, 2023, Duke Energy Ohio, Inc. (Duke) and The Dayton Power and Light Company d/b/a AES Ohio (AES Ohio) each filed initial comments. In its comments, Duke identifies—and suggests corrections to—two minor errors in the current version of the rules. First, Duke highlights that Ohio Adm.Code 4901:1-22-01(A)(3) refers to “a distributed energy resource as defined in paragraph (K) of this rule” but that the term “distributed energy resource” is defined in paragraph (L). Second, Duke points out that the definition of “minor modification” contained in Ohio Adm.Code 4901:1-22-01(U) appears incomplete. AES Ohio’s comments express appreciation for the ongoing dialogue regarding these rules with Staff, other electric distribution utilities, and interested stakeholders as part

of the DER Stakeholder Group that was established by the Commission in the most recent five-year review of the rules. *In re the Commission's Review of Chapter 4901:1-22 of the Ohio Administrative Code Regarding Interconnection Services*, Case No. 18-884-EL-ORD (*Five Year Review Case*). Neither Duke nor AES Ohio oppose any of the Staff's current recommended changes to these rules.

{¶ 9} The Commission agrees with Duke's comments and has implemented revisions to Ohio Adm.Code 4901:1-22-01 to correct the identified typographical errors. Ohio Adm.Code 4901:1-22-01(A)(3) has been revised to accurately identify the paragraph in which "distributed energy resource" is defined. Similarly, the definition of "minor modification" found in Ohio Adm. Code 4901:1-22-01(U) has been corrected. For clarity, the Commission notes that the definition of "minor modification" now reflects the definition established in the *Five Year Review Case*. *Five Year Review Case*, Finding and Order (Dec. 15, 2021) at Attachment A.

{¶ 10} Under R.C. 121.95 and R.C. 121.951, the Commission was obligated to produce a base inventory of the regulatory restrictions contained in each of our rules and then, not later than June 30, 2025, reduce that total number of regulatory restrictions by thirty percent.

{¶ 11} During this process, the Commission is required to consider the criteria provided in R.C. 106.03(A), including the continued need for the rules, the nature of any complaints or comments received concerning the rules, and any relevant factors that have changed in the subject matter area affected by the rules. Pursuant to R.C. 106.03(A)(6) and R.C. 121.82(A), the Commission must also demonstrate that we have evaluated the impact of the rule on businesses. The Commission has included stakeholders and integrated their comments, has considered the impact of the rules on businesses and other entities in developing these revised rules, and has adhered to the requirement regarding the removal of regulatory restrictions.

{¶ 12} At this time, the Commission finds that the proposed amendments to Ohio Adm.Code Chapter 4901:1-22, as revised to correct the typographical errors identified in stakeholder comments and attached to this Finding and Order, should be adopted.

{¶ 13} To minimize the expense of this proceeding, interested persons who have not agreed to electronic service will be served a paper copy of this Finding and Order only. The rules are posted on the Commission's Docketing Information System website at <http://dis.puc.state.oh.us>. All persons are directed to input case number 22-861 into the Case Lookup box to view this Finding and Order, as well as the rules, or to contact the Commission's Docketing Division to request a paper copy.

III. ORDER

{¶ 14} It is, therefore,

{¶ 15} ORDERED, That amended Ohio Adm.Code 4901:1-22-01, -02, -04, -05, -07, -08, -09, and -10 be adopted. It is, further,

{¶ 16} ORDERED, That Ohio Adm.Code 4901:1-22-03, -06, -11, -12, and -13 be adopted with no changes . It is, further,

{¶ 17} ORDERED, That the adopted rules be filed with the Joint Committee on Agency Rule Review, the Secretary of State, and the Legislative Service Commission, in accordance with R.C. 111.15(D). It is, further,

{¶ 18} ORDERED, That the final rules be effective on the earliest date permitted by law. Unless otherwise ordered by the Commission, the five-year review date for Ohio Adm.Code Chapter 4901:1-22 shall be in compliance with R.C. 106.03. It is, further,

{¶ 19} ORDERED, That a copy of this Finding and Order be served upon all electric utilities and all certified retail electric service providers in the state of Ohio, the electric industry service list, the Ohio Consumers' Counsel, and all interested persons of record.

COMMISSIONERS:

Approving:

Jenifer French, Chair
Lawrence K. Friedeman
Dennis P. Deters
John D. Williams

PAS/dr

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AMENDED

4901:1-22-01 Definitions.

As used in this chapter:

- (A) "Applicant" means the person requesting interconnection service and may be any of the following:
 - (1) A customer-generator as defined by division (A)(29) of section 4928.01 of the Revised Code.
 - (2) A self-generator as defined by division (A)(32) of section 4928.01 of the Revised Code.
 - (3) The owner or operator of a distributed energy resource as defined in paragraph (K) of this rule.
- (B) "Application" means a request to an electric distribution utility (EDU) using the format set forth on the web site of the public utilities commission of Ohio for interconnection of a distributed energy resource to the electric distribution system owned by the EDU.
- (C) "Area network" means a type of electric distribution system served by multiple transformers interconnected in a distribution secondary network circuit, which is generally used in large metropolitan areas that are densely populated, in order to provide highly reliable service. Area networks may also be described as "grid networks" or "street networks."
- (D) "Area electric power system" (area EPS) means an EPS that serves local EPSs, as defined in institute of electrical and electronics engineers (IEEE) standard 1547 (2018). For purposes of this chapter, an EDU's distribution system itself will always be considered an area EPS
- (E) "Automatic sectionalizing device" means any self-contained, circuit-opening device used in conjunction with a source-side protective device, which features automatic reclosing capability.
- (F) "Backup electricity supply" means replacement electric power supplied to an applicant by the EDU at a tariff rate or alternatively, as a market-based option or by a competitive retail electric service provider of the applicant's choice at a rate to be determined between the provider and the applicant.
- (G) "Business day" means any day that is not a Saturday, Sunday, or legal holiday.
- (H) "Calendar day" means any day, including Saturday, Sunday, and legal holidays.
- (I) "Commission" means the public utilities commission of Ohio.
- (J) "Competitive retail electric service" means a component of retail electric service that is competitive as provided under division (B) of section 4928.01 of the Revised Code.
- (K) "Cost recovery" means collection, upon approval by the commission pursuant to its authority under section 4909.15 of the Revised Code, of such documented EDU interconnection costs that are

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incurred at reasonable levels for prudent purposes and that are over and above the review processing fees set forth in rules 4901:1-22-06 to 4901:1-22-08 of the Administrative Code.

- (L) "Distributed energy resource" (DER) is a source of electric power that is not directly connected to a bulk power system. DER includes both generators and energy storage technologies capable of exporting active power to an electrical power system (EPS) either by itself or together with an equipment package that is necessary for compliance with IEEE standard 1547.
- (M) "Distribution secondary network" means an AC distribution system where the secondaries of the distribution transformers are connected to a common network for supplying electricity directly to consumers. There are two types of secondary networks: area networks (also referred to as grid networks or street networks) and spot networks.
- (N) "Electric distribution utility" or (EDU) means an electric distribution utility, which is an investor-owned electric utility that owns and operates a distribution wires system and supplies at least retail electric distribution service.
- (O) "Equipment package" means individual or multiple devices assembled to facilitate operation of the DER including switchgear, inverters, or other interface devices.
- (P) "Electric power system" (EPS) means facilities that deliver electric power to a load. An EPS may include generation and may contain only load, only generation, or a mix of load and generation.
- (Q) "Interconnection" means the physical connection of the applicant's DER to the EDU's system for the purpose of electrical power transfers.
- (R) "Interconnection service" means the services provided by an EDU or transmission provider for the applicant's distributed generation facility.
- (S) "Line section" means either that portion of an EDU's electric system connected to a customer bounded by automatic sectionalizing devices, the end of the distribution line, or a line segment identified as appropriate for study by a utility engineer.
- (T) "Local electric power system" (local EPS) is an EPS contained entirely within the single premises or group of premises, as defined in IEEE standard 1547 (2018).
- (U) "Minor modification" to an interconnection application means a change in the technical characteristics that improves the reliability, safety, and compatibility of the interconnection with the electric distribution system while not materially increasing the size or cost of the intended DER installation~~changes to the EDU's electric system, or adversely impact earlier queued interconnection requests, and that would otherwise not be done but for the applicant's interconnection request.~~
- (V) "Parallel operation with the EDU's system" means all electrical connections between the applicant's DER and the EDU's system that are capable of operating in conjunction with each other.

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- (W) "Point of common coupling" means the point of connection between the area EPS and the Local EPS, as defined in IEEE standard 1547 (2018).
- (X) "Reliability" means the degree of performance of the elements of the electric system that results in electricity being delivered to and from an applicant in the amount desired while avoiding adverse effects on the adequacy and security of the electric supply, defined respectively as:
- (1) The ability of the electric system to supply the aggregate electrical demand and energy requirements at all times, taking into account scheduled and unscheduled outages of system elements.
 - (2) The ability of the electric system to withstand sudden disturbances such as electric short circuits or unanticipated loss of system elements.
- (Y) "Retail electric service provider" means any entity in this state that provides retail electric service as defined by division (A)(27) of section 4928.01 of the Revised Code.
- (Z) "Sale for resale" means a sale of energy to an energy supplier, electric utility or a public authority for resale purposes.
- (AA) "Scoping meeting" means a meeting between representatives of the applicant and the EDU conducted for but not limited to the following purposes:
- (1) To discuss alternative interconnection options.
 - (2) To exchange information including any electric distribution system data and earlier study evaluations that would be expected to impact such interconnection options.
 - (3) To analyze such information.
 - (4) To determine the potential points of common coupling.
- (BB) "Spot network" means a type of electric distribution system that uses two or more inter-tied transformers to supply a distribution secondary network circuit and is generally used to supply power to a single customer or a small group of customers.

AMENDED

4901:1-22-02 Scope and application.

- (A) The rules in this chapter are intended to do all of the following:
- (1) Make compliance within this chapter not unduly burdensome or expensive for any applicant in accordance with division (A) of section 4928.11 of the Revised Code.

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- (2) Establish uniform nondiscriminatory, technology-neutral procedures for interconnecting DERs to an EDU's system in a manner that protects public and worker safety and system reliability.
 - (3) Apply in the entire territory where commission-approved tariffs apply to those situations where an applicant seeks to physically connect a DER to, and operate it in parallel with, the EDU's system.
 - (4) Provide three review options for an applicant's request for interconnection with the EDU including level 1, level 2, and level 3 procedures.
- (B) Each EDU in the state of Ohio shall file uniform interconnection service tariffs for commission review and approval pursuant to division (A) of section 4928.11 of the Revised Code that include the procedures and technical requirements set forth in this chapter for interconnection service on a first-come, first-served basis.
- (C) The rules in this chapter ~~shall~~do not relieve any applicant from complying with all applicable federal, state, and local laws and ordinances.

NO CHANGE

4901:1-22-03 Industry standards.

The following safety and performance standards established by the institute of electrical and electronics engineers (IEEE), the underwriters laboratories (UL), and the national fire and protection association (NFPA) including the national electric code (NEC), or the subsequent controlling version at the time the interconnection application is submitted, apply throughout this chapter, and as required consistent with division (B)(4) of section 4928.67 of the Revised Code: IEEE Std 1547™-2003; IEEE Std 1547™-2014a; IEEE Std 1547.1™-2005; IEEE Std 1547.1a™; UL 1741, Edition 2; NFPA 70® NEC® 2017.

AMENDED

4901:1-22-04 General provisions.

(A) Prohibitions

- (1) In accordance with the EDU's code of conduct adopted pursuant to section 4928.17 of the Revised Code, an EDU or its affiliates shall not use, without the customer's consent, such knowledge of proposed interconnection service to prepare competing proposals to the interconnection service that offer either discounted rates in return for not providing the interconnection service or competing generation.

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- (2) No EDU shall reject, penalize, or discourage the use or development of new technology for interconnection service in accordance with division (A) of section 4928.11 of the Revised Code.

(B) Pre-application

- (1) The EDU will designate an employee or office from which information on the requirements for EDU's application review process can be obtained through an informal request by the applicant that includes discussion of the following:
- (a) The applicant's proposed interconnection of a DER at a specific location on the EDU's system.
 - (b) Qualifications under EDU's level 1, level 2 or level 3 review procedures.
- (2) In addition to the information described in paragraph (B)(1) of this rule, which may be provided in response to an informal request, an applicant may submit a formal request along with a non-refundable processing fee of three hundred dollars for a pre-application report on a proposed project at a specific site. The EDU shall provide ~~the a pre-application report data described in paragraph (B)(3) of this rule~~ to the applicant within ten business days of receipt of the written request and payment of the three hundred dollar processing fee.
- (3) The pre-application report will include the following information:
- (a) Total generation capacity (in megawatts, ONAN) of substation/area bus, bank or circuit based on normal or operating ratings likely to serve the proposed site.
 - (b) Existing aggregate generation capacity (in megawatts) interconnected to a substation/area bus, bank or circuit, which is the online amount of generation, likely to serve the proposed site.
 - (c) Aggregate queued generation capacity (in megawatts) for a substation/area bus, bank or circuit, which is the amount of generation in the queue likely to serve the proposed site.
 - (d) Available generation capacity (in megawatts) of substation/area bus or bank and circuit most likely to serve the proposed site, which is the total capacity less the sum of existing aggregate generation capacity and aggregate queued generation capacity.
 - (e) Substation nominal distribution voltage and/or transmission nominal voltage, if applicable.
 - (f) Nominal distribution circuit voltage at the proposed site.
 - (g) Approximate circuit distance between the proposed site and the substation.
 - (h) Relevant line section(s) peak load estimate, and minimum load data, when available.
 - (i) Number and rating of protective devices and number and type (standard, bi-directional) of voltage regulating devices between the proposed site and the substation/area. Identify whether substation has a load tap changer.

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- (j) Number of phases available at the site.
 - (k) Limiting conductor ratings from the proposed point of common coupling to the distribution substation.
 - (l) Based on the proposed point of common coupling, existing or known constraints such as, but not limited to, electrical dependencies at that location, short circuit interrupting capacity issues, power quality or stability issues on the circuit, capacity constraints, or secondary networks.
 - (4) The pre-application report need only include pre-existing data. A pre-application report request does not obligate the EDU to conduct a study or other analysis of the proposed generator in the event that data is not readily available. If the EDU cannot complete some of a pre-application report due to lack of available data, the EDU ~~shall~~will provide the applicant with a pre-application report that includes the data that is available.
- (C) Application processing
- (1) EDUs shall process all applications for interconnection service and parallel operation with the EDU's system in a nondiscriminatory manner and in the order in which they are received.
 - (2) Where minor modifications to a pending application are required during the EDU's review of the application, such minor modifications ~~shall not require~~ do not obligate the applicant to file a new or separate application ~~to be filed by the applicant~~.
 - (3) When an application is submitted, the EDU shall determine whether the application is complete and provide the applicant with a written or email notice of receipt within ten business days after the application has been received.
 - (4) ~~If~~When the EDU determines that the application is complete, the EDU ~~shall~~will issue a notice of receipt with the following:
 - (a) A copy of the applicable review process.
 - (b) A target date for processing the application.
 - (5) ~~If~~When the EDU determines that the application is incomplete, the EDU ~~shall~~will issue a notice of receipt with the following:
 - (a) A copy of the applicable review process.
 - (b) A checklist or description of the information needed to complete the application.
 - (c) A statement that processing the application cannot begin until the needed information is received.

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- (6) Upon receiving any necessary application materials missing from the original application, the EDU shall provide the applicant with a second, written or email notice establishing a target date for processing the application.
- (7) If an EDU determines that it cannot connect the applicant's facility within the time frames stated in this chapter, it will notify the applicant in writing of that fact within ten business days after the complete application has been received. The notification must include the following:
 - (a) The reason or reasons interconnection service could not be performed within the time frames stated in this rule.
 - (b) An alternative date for interconnection service.

(D) Compliance with national industry standards

An EDU shall file tariffs for uniform interconnection service with the commission that are consistent with the following:

- (1) Applicable IEEE standards, effective as set forth in rule 4901:1-22-03 of the Administrative Code.
- (2) Applicable UL standards for inverters, converters, and controllers for use in independent power systems, effective as set forth in rule 4901:1-22-03 of the Administrative Code.
- (3) The appropriate criteria and interconnection parameters for the customer's technology, so as not to impose technical and economic barriers to new technology or the development, installation, and interconnection of an applicant's facilities, pursuant to division (A) of section 4928.11 of the Revised Code.

(E) Metering

Any metering installation, testing, or recalibration performed by the EDU at the request of the applicant for installation of the applicant's DER shall be provided consistent with the electric service and safety standards pursuant to Chapter 4928. of the Revised Code, and rule 4901:1-10-05 and, as applicable, paragraph (B) of rule 4901:1-10-28 of the Administrative Code. Interconnection requested by the applicant for the purposes of net metering must follow the commission's net metering rules promulgated pursuant to division (A)(31) of section 4928.01 of the Revised Code. Any exception to the net metering rules shall be implemented in accordance with any special metering or communication infrastructure ordered by the commission.

(F) Disposal of excess energy produced by the applicant's DER

- (1) An applicant proposing to install a self-generator as defined in division (A)(32) of section 4928.01 of the Revised Code for the purposes of selling excess electricity to retail electric service providers as a competitive service to the extent not preempted by federal law must first seek certification of managerial, technical and financial capability consistent with section 4928.08 of the Revised Code.

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- (2) An applicant requesting interconnection for the purpose of selling energy to any party as a sale for resale or as a wholesale transaction may be subject to applicable rules for regional interstate sales at wholesale prices in markets operated by independent transmission system operators or regional transmission operators under the jurisdiction of the federal energy regulatory commission.
- (G) Construction or system upgrades of the EDU's system
- (1) Where construction or system upgrades of the EDU's system are required by the applicant's installation of a DER, the EDU shall provide the applicant with an estimate of the timetable and the applicant's cost for the construction or system upgrades, consistent with the provisions of this chapter.
 - (2) All construction or distribution system upgrade costs ~~shall be the responsibility of the interconnection applicant~~ are the interconnection applicant's responsibility.
 - (3) If the applicant desires to proceed with the construction or system upgrades, the applicant and the EDU shall enter into a contract for the completion of the construction or system upgrades.
 - (4) All construction and system upgrade cost estimates and invoices shall be itemized and clearly explained.
 - (5) Interconnection service shall take place no later than ten business days following the completion of such construction or system upgrades, unless necessary inspections outside the control of the EDU cannot be completed within the allocated ten-day period.

AMENDED

4901:1-22-05 Application requirements for interconnection.

(A) Application forms

- (1) Each applicant for interconnection to an EDU's system shall complete either of the following:
 - (a) A "short form" application for interconnection of a DER that is twenty-five kilowatts or less and utilizes equipment that is certified in compliance with IEEE and UL standards, as set forth in rule 4901:1-22-03 of the Administrative Code.
 - (b) A standard application for interconnection of a DER that does not qualify for a "short form" application.
- (2) The application form shall follow the format and content set forth on the commission's website, or in a format otherwise approved by the commission, and ~~must~~ be submitted to the EDU from which the applicant receives retail electric distribution service. Such application should properly

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identify the applicable customer name, service address, and account number to be considered complete and subject to review by the EDU. Application forms will be available from the applicant's local EDU. The applicant's completed application form should not be sent to the commission for the purposes of review and approval.

- (3) The applicant also is advised to refer to the "applicant's checklist" found on the commission website to determine whether to complete the "short form" or the standard form to request interconnection service.

(B) DER equipment

- (1) Each applicant shall provide to the EDU in writing a description of the applicant's DER that identifies the following:

- (a) The applicant's equipment package, which ~~shall be~~ is considered certified for interconnected operation if it is listed by a nationally recognized testing and certification laboratory for continuous interactive operation with a utility grid and type-tested consistent with the applicable codes and standards set forth in rule 4901:1-22-03 of the Administrative Code. An applicant's equipment package shall include the following:

- (i) All interface components including switchgear, inverters, or other interface devices.
- (ii) Access for the EDU for commissioning purposes.
- (iii) A schedule for periodic compliance testing.

- (b) The integrated generator or electric source to be used with the equipment package that meets the following criteria:

- (i) Compatibility with the equipment package.
- (ii) Consistency with the testing and listing specified for the equipment package.

- (c) A disconnect switch that meets the following criteria:

- (i) The disconnect switch ~~must be~~ is capable of isolating the DER for the purposes of safety during EDU system maintenance and during emergency conditions.
- (ii) The disconnect switch should be located externally to the equipment package and ~~must~~ be accessible to and lockable by EDU personnel, within an acceptable distance of the meter as determined by the EDU, at either the primary voltage level, which may include load-break cutouts, switches, and elbows, or at the secondary voltage level, which may include a secondary breaker or switch.
- (iii) The disconnect switch ~~must be~~ is clearly labeled as a DER disconnect switch.

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- (iv) The disconnect switch will be provided, installed, and paid for by the applicant, whether it is an integrated feature of the equipment package or a compatible external device.
- (d) For solar equipment, the photovoltaic power source and interconnecting inverter shall be clearly labeled in accordance with the standards listed in rule 4901:1-22-03 of the Administrative Code to identify the following:
 - (i) Nominal current.
 - (ii) Nominal voltage.
 - (iii) Maximum short-circuit current.
- (2) Certified equipment does not include equipment provided by the EDU.
- (C) The review processing fees
 - (1) Each applicant shall pay the interconnection fees in accordance with the EDU's tariff for the review and processing of an application, established at levels consistent with the DER size and technology as well as the location of the interconnection on the electric distribution system.
 - (2) The EDU's review processing fee levels will apply in accordance with the EDU's tariff to all interconnections, including those for the purposes of net metering, combined heat and power or waste heat from industrial processes, as well as any interconnections used for energy efficiency or the promotion and utilization of renewable or clean secondary fuels.
 - (3) Exception to the fee schedule may be determined by the EDU if the EDU invokes a fee-free feature on a nondiscriminatory basis.

NO CHANGE

4901:1-22-06 Level 1 review procedure.

(A) Level 1 qualifying criteria

In order for the application to be approved by the EDU under the level 1 review procedure, the applicant's DER must meet the following requirements:

- (1) The DER uses inverter-based equipment that is certified in compliance with the IEEE and UL standards set forth in rule 4901:1-22-03 of the Administrative Code.
- (2) The DER has a nominal nameplate capacity of twenty-five kilowatts or less.

(B) Level 1 approval criteria

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- (1) The EDU shall approve an application for interconnection under level 1 review procedures if the DER meets the following criteria:
 - (a) The applicant's proposed DER's point of common coupling is not on a transmission line.
 - (b) For interconnection of a proposed DER to a radial distribution circuit, the aggregated generation, including the proposed DER, on the circuit shall not exceed fifteen percent of the line section annual peak load as most recently measured at the substation.
 - (c) The proposed DER, in aggregation with other generation on the distribution circuit, shall not contribute more than ten percent to the distribution circuit's maximum fault current at the point on the high voltage (primary) level nearest the proposed point of common coupling.
 - (d) For interconnection of a proposed DER to the load side of spot network protectors, the proposed DER must utilize an inverter-based equipment package and, aggregated together with other inverter-based generation, shall not exceed the smaller of five percent of a spot network's maximum load or fifty kilowatts.
 - (e) Direct current injection shall be maintained at or below five-tenths of a percent of full rated inverter output current into the point of common coupling.
 - (f) When a proposed DER is single phase and is to be interconnected on a center tap neutral of a two hundred forty volt service, its addition shall not create an imbalance between the two sides of the two hundred forty volt service of more than twenty percent of the nameplate rating of the service transformer.
 - (g) The proposed DER installation is certified to pass an applicable non-islanding test, or uses reverse power relays or other means to meet the unintentional islanding requirements of IEEE standard 1547, effective as set forth in rule 4901:1-22-03 of the Administrative Code.
 - (h) The proposed DER installation complies with applicable codes and standards, effective as set forth in rule 4901:1-22-03 of the Administrative Code.
 - (2) Having complied with the parameters set forth in paragraph (B)(1) of this rule, the applicant's proposed DER installation requires no further study by the EDU for the purpose of interconnection to the EDU's distribution system.
- (C) Level 1 review timeframe
- (1) Within fifteen business days after the EDU notifies the applicant that it has received a complete short form interconnection service application, the EDU shall perform a review using the criteria set forth in paragraph (B)(1) of this rule, shall notify the applicant of the results, and shall include with the notification copies of the analysis and data underlying the EDU's determinations under the criteria.

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- (2) If the proposed interconnection fails one or more of the screening criteria, the EDU may, at its discretion, work with the applicant to modify the application to comply; otherwise, the application shall be denied. At the applicant's request, the EDU shall provide copies of the analysis and data underlying the EDU's determinations under the criteria. Upon denial of the level 1 interconnection request, the applicant may elect to submit a new application for consideration under level 2 or level 3 review procedures. If the new application is submitted within ten business days, the queue position assigned to the level 1 application shall be retained.
- (3) If the proposed interconnection meets the screening criteria, the application shall be approved and the EDU will provide the applicant a standard interconnection agreement within five business days after the determination. The standard interconnection agreement shall be consistent with the uniform requirements for an interconnection agreement in rule 4901:1-22-10 of the Administrative Code, and include a timetable for the physical interconnection of the applicant's proposed DER to the EDU's system.

(D) Level 1 application fee

The EDU's tariff for a level 1 fee shall not exceed fifty dollars and may be waived.

AMENDED

4901:1-22-07 Level 2 review procedure.

(A) Level 2 qualifying criteria

In order for the application to be reviewed by the EDU under the level 2 review procedure, the applicant's DER must meet the following requirements:

- (1) The DER utilizes inverter-based equipment that is certified in compliance with the IEEE and UL standards set forth in rule 4901:1-22-03 of the Administrative Code.
- (2) The DER does not meet the level 1 interconnection review requirements.
- (3) The DER nominal nameplate capacity does not exceed the limits identified in the table below, which vary according to the voltage of the line at the proposed point of interconnection. DERs located within 2.5 feeder line miles of a substation and on a main distribution line with minimum 600-ampere capacity are eligible for level 2 review under higher thresholds. These eligibility limits do not guarantee fast track approval.

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Line Voltage	Nominal Nameplate Capacity	Nominal Nameplate Capacity if located on a 600 amp line and within 2.5 feeder miles of substation
less than or equal to 5kV	less than or equal to 500 kW	less than 2 MW
5kV less than or equal to 15 kV	less than or equal to 2MW	less than 3 MW
15 kV less than or equal to 30 kV	less than or equal to 3MW	less than 4 MW
30 kV less than or equal to 69 kV	less than or equal to 4MW	less than 5 MW

(B) Level 2 approval criteria

- (1) The EDU shall approve an application for interconnection under level 2 review procedures if the DER meets the following criteria:
 - (a) The proposed DER's point of common coupling is not on a transmission line.
 - (b) The proposed DER complies with applicable codes and standards, effective as set forth in rule 4901:1-22-03 of the Administrative Code.
 - (c) The proposed DER is not located in an area where there are known or posted transient stability limitations to generating units located in the general electrical vicinity (for example, three or four distribution busses from the point of interconnection), or the proposed DER shall not have interdependencies, known to the EDU, with earlier queued transmission system interconnection requests. The EDU shall not disclose confidential information in the application of this screen.
 - (d) For interconnection of a proposed DER to a radial distribution circuit, the aggregated generation, including the proposed DER, on the circuit shall not exceed fifteen per cent of the line section annual peak load as most recently measured at the substation. The application of this screen addresses back feed and islanding conditions.
 - (e) The proposed DER, in aggregation with other DER generation on the distribution circuit, shall not contribute more than ten per cent to the distribution circuit's maximum fault current at the point on the primary voltage distribution line nearest the point of common coupling.
 - (f) The proposed DER, in aggregation with other DER generation on the distribution circuit, may not cause any distribution protective devices and equipment including substation breakers, fuse cutouts, and line reclosers, or other customer equipment on the electric distribution system, to be exposed to fault currents exceeding ninety per cent of the short circuit interrupting capability; nor shall an application requesting interconnection on a circuit that already exceeds ninety per cent of the short circuit interrupting capability be approved.
 - (g) When a proposed DER is single phase and is to be interconnected on a center tap neutral of a two hundred forty volt service, its addition shall not create an imbalance between the two

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sides of the two hundred forty volt service of more than twenty per cent of the nameplate rating of the service transformer.

- (h) The proposed DER shall be interconnected to the EDU's primary distribution system as shown below:

Primary Distribution Line Configuration	Interconnection to Primary Distribution Line
Three phase, three wire	If a three-phase or single-phase DER, interconnection must be phase-to-phase
Three phase, four wire	If a three-phase (effectively grounded) or single phase DER, interconnection must be line-to-neutral

- (i) A review of the type of electrical service provided to the applicant, including line configuration and the transformer connection, will be conducted to limit the potential for creating over voltages on the EDU's electric distribution system due to a loss of ground during the operating time of any anti-islanding function.
- (j) When the proposed DER is to be interconnected on single-phase shared secondary line, the aggregate DER generation capacity on the shared secondary line, including the proposed DER, will not exceed sixty-five per cent of the transformer nameplate rating.
- (k) For interconnection of a proposed DER to the load side of spot or area network protectors, the proposed DER must utilize an inverter-based equipment package and, aggregated with other inverter-based generation, shall not exceed the lesser of five per cent of a spot or area network's maximum load or fifty kilowatts.
- (l) Construction of facilities by the EDU on its own system is not required to accommodate the DER.

(C) Level 2 review timeframe

- (1) Within twenty business days after the EDU notifies the applicant it has received a complete application, the EDU shall perform an initial review using the criteria set forth in paragraph (B) of this rule and shall notify the applicant of the results.
- (2) If the proposed interconnection meets the screening criteria, the application shall be approved and the EDU will provide the applicant a standard interconnection agreement within five business days after the determination. The standard interconnection agreement shall be consistent with the uniform requirements for an interconnection agreement enumerated in rule 4901:1-22-10 of the Administrative Code, and include a timetable for the physical interconnection of the applicant's proposed DER to the EDU's system.

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- (3) If the proposed interconnection fails to meet the screening criteria, but the EDU determines that the proposed DER may nevertheless be interconnected consistent with safety, reliability, and power quality standards, the EDU shall provide the applicant a standard interconnection agreement within five business days after the determination and include a timetable for the physical interconnection of the applicant's proposed DER to the EDU's system.
 - (4) If the proposed interconnection fails to meet the screening criteria and the EDU determines that minor modifications or further study are required to interconnect the proposed DER to the EDU's system consistent with safety, reliability, and power quality standards, the EDU shall:
 - (a) Offer to perform facility modifications or minor modifications to the EDU's electric system (e.g., change meters, fuses, relay settings), or,
 - (b) Offer to perform a supplemental review if the EDU concludes that the supplemental review might determine that the proposed DER could continue to qualify for interconnection pursuant to the level 2 review process, or,
 - (c) Obtain the applicant's agreement to continue evaluating the application under level 3 review.
 - (5) At the applicant's request, the EDU shall provide copies of the analysis and the data underlying the EDU's determinations that minor modifications or further study is required.
- (D) Facility or minor system modifications
- (1) If facility modifications or minor system modifications are required to allow the proposed DER to be interconnected consistent with safety, reliability, and power quality standards under these procedures, the EDU shall provide the applicant with a non-binding good faith estimate of the cost to make such modifications.
 - (2) If the interconnection customer agrees to pay for the modifications to the EDU's system, the EDU shall provide the applicant with a standard interconnection agreement within five business days. The standard interconnection agreement shall be consistent with the uniform requirements for an interconnection agreement enumerated in rule 4901:1-22-10 of the Administrative Code, and include a timetable for the physical interconnection of the applicant's proposed DER to the EDU's system.
- (E) Level 2 supplemental review
- (1) If the customer requests that the EDU perform a supplemental review, the customer shall agree in writing within fifteen business days of the offer, and submit a supplemental review deposit of twenty-five hundred dollars, or the application shall be deemed withdrawn. Within twenty-five business days following receipt of the supplemental review deposit, the EDU shall perform a supplemental review using the screens set forth in this rule and notify the applicant of the results. For interconnection of a proposed DER to an area network, the EDU may utilize different analytical procedures for conducting supplemental review than those set forth in this rule.

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Following study completion, the EDU shall bill or credit the applicant any difference between the supplemental review deposit and the actual cost to perform the review. If the proposed interconnection fails one or more of the supplemental review screens, the EDU shall include with the notification copies of the analysis and data underlying the EDU's determinations under the screens.

- (a) A supplemental review may be performed where twelve months of line section minimum load data is available or can be calculated, estimated from existing data, or determined from a power flow model, and where the aggregate DER capacity on the line section is less than one hundred percent of the minimum load for all line sections bounded by automatic sectionalizing devices upstream of the proposed DER. If minimum load data is not available, or cannot be calculated, estimated or determined, the EDU shall include the reason(s) that it is unable to calculate, estimate or determine minimum load in its supplemental review results notification as set forth in paragraph (E)(1) of rule 4901:1-22-07 of the Administrative Code.
 - (i) The type of generation used by the proposed DER will be taken into account when calculating, estimating, or determining the circuit or line section minimum load. For the application of a solar photovoltaic generation system with no energy storage technology, use daytime minimum load, and use absolute minimum load for other generation.
 - (ii) When this screen is being applied to a DER that serves some onsite electrical load, the total load must be considered as part of the aggregate generation.
 - (iii) The EDU will consider generating facility capacity known to be reflected in the minimum load data as part of the aggregate generation for purposes of this screen.
- (b) In aggregate with existing generation on the line section: (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 IEEE Std 1453 or utility practice similar to IEEE Std 1453, and (iii) the harmonic levels meet IEEE Std 519 limits at the point of interconnection.
- (c) The location of the proposed DER and the aggregate generation capacity on the line section do not create impacts to safety or reliability that cannot be adequately addressed without application of the level 3 review. The EDU may consider the following and other factors in determining potential impacts to safety and reliability in applying the screen:
 - (i) Whether the line section has significant minimum loading levels dominated by a small number of customers.
 - (ii) If there is an even or uneven distribution of loading along the feeder.
 - (iii) If the proposed DER is located within 2.5 electrical line miles to the substation and if the distribution line from the substation to the customer is composed of a 600A class cable or conductor.

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- (iv) If the proposed DER incorporates a time delay function to prevent reconnection of the generator to the system until system voltage and frequency are within normal limits for a prescribed time.
 - (v) If operational flexibility is reduced by the proposed DER, such that transfer of the line section(s) of the DER to a neighboring distribution circuit/substation may trigger overloads or voltage issues.
- (2) If the proposed interconnection meets the supplemental review criteria, the application shall be approved and the EDU will provide the applicant a standard interconnection agreement within five business days after the determination. The standard interconnection agreement shall be consistent with the uniform requirements for an interconnection agreement enumerated in rule 4901:1-22-10 of the Administrative Code and include a timetable for the physical interconnection of the applicant's proposed DER to the EDU's system.
- (3) If the proposed interconnection fails the supplemental review criteria, the EDU shall obtain the applicant's agreement to continue evaluating the application under level 3 review. If the applicant agrees to have the project evaluated under the level 3 review process, the cost of level 2 supplemental review shall be deducted from the otherwise applicable level 3 review fee. If the level 3 standard review fee is less than the level 2 supplemental review cost, the level 3 review fee shall be waived.
- (F) Level 2 fees

The EDU's tariff for level 2 review processing fees will include the following:

- (1) An application fee of up to fifty dollars, plus one dollar per kilowatt of the DER's nominal nameplate capacity rating.
- (2) In the event that an application is evaluated under supplemental review, any or all of the following fees may be assessed by the EDU:
 - (a) The twenty-five hundred dollar supplemental review deposit, adjusted following study completion to reflect the cost of engineering work billed at actual costs.
 - (b) The actual cost of any minor modification of the electric distribution utility's system that would otherwise not be done but for the applicant's interconnection request.

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4901:1-22-08 Level 3 review procedure.

(A) Level 3 review qualifying criteria

In order for the application to be approved by the EDU under the level 3 review procedure, one of the following conditions must apply:

- (1) The DER does not qualify or failed to meet the level 1 or level 2 interconnection review requirements.
- (2) The DER does not utilize equipment that is certified in compliance with the IEEE and UL standards as set forth in rule 4901:1-22-03 of the Administrative Code.
- (3) The DER has a nominal nameplate capacity of twenty megawatts or less.

(B) Level 3 approval criteria

- (1) Level 3 review procedure ~~shall use~~ uses the determinations made in the scoping meeting and any feasibility, system impact, or facilities study defined in rule 4901:1-22-09 of the Administrative Code for technical analysis of the applicant's proposed DER installation.
- (2) The EDU shall approve an application for interconnection under level 3 review procedures if the EDU determines that the safety and reliability of the public utility's transmission or distribution system will not be compromised by interconnecting with the generation facility.

(C) Level 3 fees

- (1) The EDU's tariff for level 3 review fees will include the following:
 - (a) An application fee of up to one hundred dollars, plus two dollars per kilowatt of the system's nominal nameplate capacity.
 - (b) The cost of engineering work done as part of any feasibility, system impact or facilities study, billed at actual cost.
 - (c) The actual cost of any modifications of the EDU's system that would otherwise not be done but for the applicant's interconnection request.
- (2) Within five business days after completion of the level 3 review including any applicable feasibility, system impact or facilities studies leading to the EDU's approval for interconnection of the applicant's proposed DER installation and collection by the EDU of all the actual costs for

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the studies as billed to the applicant, the EDU shall provide the applicant with a standard interconnection agreement.

AMENDED

4901:1-22-09 Scoping meeting and interconnection studies.

(A) Scoping meeting

- (1) A scoping meeting will be held within ten business days after the interconnection application is deemed complete, or as otherwise mutually agreed to by the parties. The EDU and the applicant may bring to the meeting personnel, including system engineers and other resources as may be reasonably required to accomplish the purpose of the meeting.
- (2) The purpose of the scoping meeting is to discuss alternative interconnection options, to determine potential points of common coupling, to examine the applicant's proposed generator connection, or to review an applicant's pre-application report or existing studies relevant to the interconnection application. The parties shall further discuss the appropriate interconnection studies required to evaluate the interconnection of the proposed DER to the EDU's system.
- (3) The scoping meeting may be waived by mutual agreement if the parties decide to proceed directly to the interconnection studies.

(B) Queuing

- (1) When an interconnection request is complete, the EDU shall assign the application a queue position to establish the order in which the interconnection request will be reviewed in relation to other interconnection requests on the same or nearby sections of the EDU's system.
- (2) The queue position of an interconnection request shall be used to determine the cost responsibility necessary for the construction of any facilities to accommodate the interconnection in relation to other interconnection requests on the same or nearby sections of the EDU's system.
- (3) The EDU shall notify the applicant at the scoping meeting about other higher-queued applicants.

(C) Interconnection study requirements

- (1) One or more interconnection studies may be required by the EDU prior to interconnection of a level 3 DER including a feasibility study, a system impact study, and a facilities study.
- (2) Each type of study required will include an EDU interconnection tariff fee schedule approved by the commission as set forth in rule 4901:1-22-08 of the Administrative Code.

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- (3) Each type of study will be the subject of a written study agreement between the applicant and the EDU that includes the following:
 - (a) A target date for completion of the study.
 - (b) A provision to share the results of the study by the EDU with the applicant.
 - (c) A clear explanation of all estimated charges.
 - (d) A good faith estimate of the total number of hours needed to complete the study.
 - (e) An estimate of the total interconnection study fee.
 - (4) A written study agreement may include an alternative provision that allows the required studies related to the interconnection of the DER to be conducted by a qualified third party with the consent of the EDU.
 - (5) By mutual agreement of the parties, a feasibility study, a system impact study, or a facilities study under level 3 procedures may be waived by the EDU.
 - (6) When the EDU determines, as a result of the studies conducted under a level 3 review, that it is appropriate to interconnect the DER, the EDU shall provide the applicant with a standard interconnection agreement.
 - (7) If the interconnection request is denied, the EDU shall provide a written explanation within five business days from the denial. ~~The EDU must allow the applicant~~ An applicant has thirty business days to cure the reasons for denial while the applicant's position in the queue is maintained.
- (D) The feasibility study
- (1) No later than five business days after the scoping meeting, the EDU shall provide the applicant with a feasibility study agreement in accordance with the EDU's tariff to determine the feasibility of interconnecting the applicant's proposed DER at a particular point on the EDU's system. The feasibility study agreement shall include the following:
 - (a) An outline of the scope of the study.
 - (b) A non-binding good faith estimate of the cost to perform the study.
 - (2) A feasibility study shall include the following analyses for the purpose of identifying a potential adverse system impact to the EDU's system that would result from the interconnection:
 - (a) Initial identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection.

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- (b) Initial identification of any thermal overload or voltage limit violations resulting from the interconnection.
 - (c) Initial review of grounding requirements and system protection.
 - (d) A description and nonbinding estimated cost of facilities required to interconnect the distributed generation facility to the EDU's system in a safe and reliable manner.
- (3) When an applicant requests that the feasibility study evaluate multiple potential points of interconnection, additional evaluations may be required.
- (4) The applicant is responsible for the actual cost of the EDU's additional evaluations ~~shall be paid by the applicant.~~
- (E) The system impact study
- (1) No later than five business days after the completion of or a waiver of the feasibility study, the EDU shall provide a distribution system impact study agreement to the applicant, using a form of system impact study agreement in accordance with the EDU's tariff that includes an outline of the scope of the study and a nonbinding good faith estimate of the cost to perform the study.
 - (2) If the feasibility study concludes there is no adverse system impact, or the study identifies an adverse system impact but the EDU is able to identify a remedy, no system impact study is ~~required~~necessary.
 - (3) A system impact study ~~shall evaluate~~evaluates the impact of the proposed interconnection on the safety and reliability of the EDU's system. The purpose of the system impact study ~~shall~~is to:
 - (a) Identify and detail the system impacts that result when a DER is interconnected without project or system modifications.
 - (b) Consider the adverse system impacts identified in the feasibility study, or potential impacts including those identified in the scoping meeting.
 - (c) Consider all DERs that, on the date the system impact study is commenced, are directly interconnected with the EDU's system.
 - (d) Consider the impact of pending higher-queued interconnection applications to the system as well as the position of facilities having a signed interconnection agreement that are not yet online.
 - (4) A system impact study performed by the EDU shall consider the following criteria:
 - (a) A load flow study.
 - (b) A short circuit analysis.

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- (c) A stability analysis.
 - (d) Voltage drop and flicker studies.
 - (e) Protection and set point coordination studies.
 - (f) Grounding reviews.
- (5) The EDU shall state the underlying assumptions of the study and show the results of the analyses to the applicant, including the following:
- (a) Any potential impediments to providing the requested interconnection service.
 - (b) Any required distribution system upgrades and a nonbinding good faith estimate of cost and time to construct the system upgrades.
- (F) The facilities study
- (1) Within five business days of completion of the system impact study, a report will be transmitted by the EDU to the applicant with a facilities study agreement in accordance with the EDU's interconnection tariff.
 - (2) If the parties agree at the scoping meeting that no system impact study is required, the EDU shall provide to the applicant, no later than five business days after the scoping meeting, a facilities study agreement in accordance with the EDU's interconnection tariff that enables the EDU to determine the interconnection facilities needed to interconnect the applicant's proposed DER at a particular point on the EDU's system.
 - (3) The facilities study agreement shall include both of the following:
 - (a) An outline of the scope of the study.
 - (b) A nonbinding good faith estimate of the cost to perform the facilities study to cover the cost of the equipment, engineering, procurement and construction work, including overheads, needed to implement the conclusions of the feasibility study and/or the system impact study to interconnect the DER.
 - (4) The facilities study shall identify all of the following:
 - (a) The electrical switching configuration of the equipment, including transformer, switchgear, meters, and other station equipment.
 - (b) The nature and estimated cost of the EDU's interconnection facilities and distribution upgrades necessary to accomplish the interconnection.
 - (c) An estimate of the time required to complete the construction and installation of such facilities.

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- (5) The parties may agree to permit an applicant to separately arrange for a third party to design and construct the required interconnection facilities under the following conditions:
- (a) The EDU may review the facilities to be designed and constructed by a third party under provisions included in the facilities study agreement for that purpose.
 - (b) The applicant and the third party separately arranging for design and construction agree to comply with security and confidentiality requirements.
 - (c) The EDU shall provide the applicant with all relevant information and required specifications, including make and/or model of equipment where necessary, available to permit the applicant to obtain an independent design and cost estimate for the facilities, which must be built in accordance with the specifications.

AMENDED

4901:1-22-10 Uniform requirements for interconnection agreements.

- (A) The EDU shall provide the applicant with a standard interconnection agreement for the DER within five business days following completion of project review. If applicable, the applicant ~~must pay for~~ is responsible for the cost of the interconnection facilities and distribution upgrades identified in the facilities study.
- (B) The applicant shall have thirty business days or another mutually agreeable time frame after the standard interconnection agreement is received to sign and return the interconnection agreement to the EDU.
- (C) If the applicant does not sign the agreement within thirty business days, the interconnection request will be deemed withdrawn unless the applicant requests an extension of the deadline in writing. The request for extension shall not be denied by the EDU, unless conditions on the EDU system have changed or the EDU determines that the extension will adversely impact one or more queued projects.
- (D) Milestones for construction
 - (1) When construction is required, the interconnection of DER will proceed according to any milestones agreed to by the parties in the standard interconnection agreement.
 - (2) The interconnection agreement ~~may not become~~ is not effective until the milestones agreed to in the standard interconnection agreement are satisfied, including the following:
 - (a) The DER is approved by electric code officials with jurisdiction over the interconnection.
 - (b) The applicant provides a certificate of completion to the EDU; or there is a successful completion of an on-site operational test within ten business days or at a mutually convenient

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time, unless waived. The operational test shall be observed by EDU personnel or a qualified third party with sufficient expertise to verify that the criteria for testing have been met.

(E) Insurance

- (1) Any EDU interconnection agreement with the applicant shall not require additional liability insurance beyond proof of insurance or any other suitable financial instrument sufficient to meet its construction, operating and liability responsibilities in accordance with the EDU's tariff with respect to this rule.
- (2) At no time shall the EDU require the applicant to negotiate any policy or renewal of any policy covering any liability through a particular insurance agent, solicitor, or broker.

(F) Alternative dispute resolution

The EDU or the applicant who is a nonmercantile, nonresidential customer may seek resolution of any disputes which may arise out the EDU tariffs filed under these rules, in accordance with Chapter 4901:1-26 of the Administrative Code, for alternative dispute resolution procedures.

(G) Site testing

The applicant must provide the EDU a reasonable opportunity to witness the testing of installed switchgear, protection system, and generator as included in the applicant's installation test plan and maintenance schedule that has been reviewed and approved by the EDU.

(H) Periodic testing

- (1) ~~Any~~ The applicant is responsible for any periodic tests of the interconnection equipment (including any relays, interrupting devices, control schemes, and energy storage technology that involve protection of the EDU's system) as recommended by the applicant's equipment manufacturer or required by the IEEE Std 1547, effective as set forth in rule 4901:1-22-03 of the Administrative Code, ~~shall be the responsibility of the applicant.~~
- (2) Such periodic tests shall be included in the applicant's installation test plan and maintenance schedule that has been reviewed and approved by the EDU.
- (3) The applicant shall make copies of the periodic test reports or inspection logs available to the EDU for review.
- (4) Upon a written request, the EDU is to be informed of the next scheduled maintenance and be able to witness the maintenance program and any associated testing.

(I) Disconnection of the applicant's facility

Except as provided for in paragraph (J)(2) of this rule, when the EDU discovers the applicant's equipment is not in compliance with IEEE Std 1547, effective as set forth in rule 4901:1-22-03 of the

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Administrative Code, and such noncompliance has the potential to adversely affect the safety and reliability of the electric system, the EDU may disconnect the applicant's facility according to the following procedures:

- (1) The EDU shall provide a notice to the applicant with a description of the specific noncompliance condition.
- (2) The disconnection can only occur after a reasonable time to cure the noncompliance condition has elapsed.

(J) Other disconnection of the unit

- (1) The applicant retains the option to temporarily disconnect from the EDU's system at any time. Such temporary disconnection ~~shall not be~~ does not constitute a termination of the interconnection agreement unless the applicant exercises its termination rights under the interconnection agreement.
- (2) The EDU shall have the right to disconnect the applicant's unit(s) without notice in the event of an emergency or to eliminate conditions that constitute a potential hazard to the EDU personnel or the general public. The EDU shall notify the applicant of the emergency as soon as circumstances permit.

(K) Service interruption

During routine maintenance and repairs on the EDU's system consistent with Chapter 4901:1-23 of the Administrative Code, or other commission order, the EDU shall provide the applicant with a five-business-day notice of service interruption.

(L) Effective term and termination rights of an interconnection agreement

- (1) An interconnection agreement becomes effective when executed by both parties and ~~shall continue~~ in force until terminated under any of the following conditions:
 - (a) The applicant terminates the interconnection agreement at any time by giving the EDU sixty calendar days prior notice.
 - (b) The EDU terminates the interconnection agreement upon failure of the applicant to generate or discharge energy from the applicant's DER in parallel with the EDU's system by the later of two years from the date of the executed interconnection agreement or twelve months after completion of the interconnection.
 - (c) Either party terminates by giving the other party at least sixty calendar days prior written notice that the other party is in default of any of the material terms and conditions of the interconnection agreement, so long as the notice specifies the basis for the termination and there is reasonable opportunity to cure the default.

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- (2) All applicants' installations existing on or before the effective date of this rule are exempted from the changes instituted by this rule.
- (3) Upon termination of an interconnection agreement, the applicant's facilities will be disconnected from the EDU's system.
- (4) The termination of the interconnection agreement ~~shall not~~ does not relieve either party of its liabilities and obligations, owed or continuing at the time of the termination.

NO CHANGE

4901:1-22-11 Backup electricity supply.

Replacement electric power for the applicant shall be supplied in accordance with division (C) of section 4928.15 of the Revised Code, by either of the following:

- (A) The EDU either at a tariff rate or at the market price as provided for in its tariff.
- (B) By the applicant's competitive retail electric service provider at a rate to be determined by contract.

NO CHANGE

4901:1-22-12 Complaints.

All formal complaints brought by applicants or interconnection service customers pursuant to section 4905.26 of the Revised Code, will be handled according to the procedural standards set forth in Chapters 4901-1 and 4901-9 of the Administrative Code. Each EDU must provide to the commission the name and telephone number of a contact person to assist the commission staff with the resolution of informal complaints regarding provisions in Chapter 4901:1-22 of the Administrative Code.

NO CHANGE

4901:1-22-13 Exceptions.

Except where rule requirements are mandated by federal or state law, the commission may waive any provision contained in this chapter for good cause upon its own motion or upon application by a company.

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in

Case No(s). 22-0861-EL-ORD

Summary: Finding & Order adopting proposed amendments to the interconnection rules in Ohio Adm.Code Chapter 4901:1-22 electronically filed by Debbie S. Ryan on behalf of Public Utilities Commission of Ohio.