OFFERINGS; EMPLOYEE BENEFIT PLANS; ACCREDITED INVESTORS

13:47A-12.4 Manual exemptions

The manuals issued by Mergent's [and by Standard and Poor's] are recognized for the "manual" exemption [under] **pursuant to** N.J.S.A. 49:3-[50(b)(2)(i)(B)]50.b(2)(i)(B). This exemption encompasses both the printed manuals and the electronic data services of Mergent's [and Standard and Poor's].

PUBLIC UTILITIES

(a)

BOARD OF PUBLIC UTILITIES

Renewable Energy and Energy Efficiency Proposed Amendments: N.J.A.C. 14:8-4.2 and 14:8-5 Proposed New Rules: N.J.A.C. 14:8-5.10, 5.11, and 5.12

Authorized By: New Jersey Board of Public Utilities, Christine Guhl-Sadovy, President, Dr. Zenon Christodoulou, Marian Abdou, and Michael Bange, Commissioners.

Authority: N.J.S.A. 48:2-13 and 48:3-87.

Calendar Reference: See Summary below for explanation of exception to calendar requirement.

BPU Docket Number: QO21010085. Proposal Number: PRN 2024-067.

The deadline for comments on this matter is 5:00 P.M. on August 2, 2024. Please submit comments directly by using the Board's Public Document Search tool, search for the specific docket listed above and post by utilizing the "Post Comments" button. Written comments may also be submitted. Please include subject matter and docket number and submit to:

Sherri L. Golden Secretary of the Board New Jersey Board of Public Utilities 44 South Clinton Ave., 1st Floor PO Box 350 Trenton, NJ 08625-0350 Attn: BPU Docket Number: QO21010085 Email: board.secretary@bpu.nj.gov

Phone: 609-292-1599

All comments are considered "public documents" for purposes of the State's Open Public Records Act. Commenters may identify information that they seek to keep confidential by submitting it in accordance with the confidentiality procedures set forth at N.J.A.C. 14:1-12.3.

The agency proposal follows:

Summary

The Board of Public Utilities (Board) is proposing amendments and new rules at N.J.A.C. 14:8, which governs the interconnection of distributed energy resources (DERs) to the electric grid, a summary of which can be found below.

The purpose of the proposed amendments and new rules is to remove stakeholder-identified sources of confusion or delay in the process of customer-generators applying for interconnection authorization from their respective electric distribution company (EDC), and to prepare for a broader grid modernization effort that will enable the grid to host more DERs. The rulemaking will significantly reduce the uncertainty, inefficiency, and delay for applicants with viable DER projects seeking interconnection, while also clarifying the level of commitment and responsiveness expected from active applicants. The rulemaking will better align the financial interests of the EDCs with project developers and ratepayers by discouraging inefficient and overly broad rate-based system upgrades in favor of more data-driven investments tailored to optimize DER integration. Lastly, the rulemaking recognizes the growing

importance of community solar projects in enabling underserved communities to access the benefits of clean energy.

This rulemaking is a revision to the Board's existing rules for DER interconnection. The Board ordered changes to these rules on November 9, 2022, when it accepted the Guidehouse, Inc. recommendations in Docket No. QO21010085. Board staff then released a pre-proposal draft of proposed rulemaking through public notice on March 2, 2023, generating extensive public comment, detailed issue identification, and debate. The proposed amendments and new rules incorporate feedback obtained from this collaborative stakeholder process. The effect of this rulemaking will be immediately felt by project developers who will be able to access more consistent and timely information on available hosting capacity along the circuits of the EDC.

The proposed rulemaking specifies and clarifies the application and interconnection process. This includes adjusting some evaluation criteria and threshold levels to increase the number of applicants that qualify for simpler review processes, as well as creating more uniformity and consistency in EDC-supplied planning information and the associated application process. The proposed rulemaking also establishes clearer roles and responsibilities to ensure that participants take appropriate and timely action (including making required payments). The rulemaking, therefore, defines more discrete workflow interval compliance requirements, and partially automates the review process by requiring EDCs to create an online interactive application portal.

The longer-term goal of the proposed amendments and new rules is to foster collaboration on deeper grid modernization. The amendments and new rules, therefore, seek to remove obstacles to future provision of grid supporting services and/or participation in non-wire alternatives by DERs. Ultimately, this will help New Jersey achieve its ambitious clean energy deployment targets.

The proposed rulemaking is the initial step of a longer-term grid modernization effort. This effort will also include more substantial changes through further rulemaking that will be informed by the recommendations of structured workgroups in the Grid Modernization Forum, which is convening grid experts, Board staff, EDC representatives, developer representatives, and others to discuss and develop additional grid modernization reforms. The Board envisions that these efforts will help achieve New Jersey's clean energy goals by enabling EDCs to develop and implement proactive System Upgrade and DER Integration Plans that better respond to evolving technology and business models. These plans will introduce structural reform to the cost estimation/allocation/recovery for system-upgrade investment, and enabling broader DER participation in, and proper compensation for, grid flexibility operational services. Together, these future reforms should enable the continual and proactive expansion of distribution system hosting capacity.

Following is a section-by-section summary of the proposed amendments and new rules:

N.J.A.C. 14:8-4.2

The Board is proposing amendments at N.J.A.C. 14:8-4.2 that add specificity to the following definitions: "customer-generator," "customer-generator facility," and "net metering generator." "Customer generator" is proposed for amendment to include storing energy on the customer's side of the meter using an energy storage device, regardless of whether the equipment is aggregated. "Customer-generator facility" is proposed for amendment to include equipment used to "store" and to include an energy storage device and a vehicle-to-grid device, regardless of whether the equipment is aggregated. "Net metering generator" is proposed for amendment to include that only the electricity produced by class I renewable energy sources shall be eligible for net metering treatment. Additional definitions have been added for the terms "community solar facility," "community solar project," and "energy storage device."

N.J.A.C. 14:8-5.1

The Board is proposing amendments at N.J.A.C. 14:8-5.1 that add specificity to the following definitions: "area network," "electrical power system," "good utility practice," "IEEE Standard 1547," "interconnection agreement," "interconnection equipment," "point of common coupling," and "spot network." The definitions of "area network," "electrical power system," "good utility practice," and "IEEE Standard 1547," are proposed

for amendment to specify compliance with current Federal and industry standards. "Interconnection agreement" is proposed for amendment to include provisions for aggregated systems. "Interconnection equipment" is proposed for amendment to include provisions for energy storage devices. "Point of common coupling" and "spot network" are proposed for amendment to align these definitions with the IEEE Standard 1547-2018 and include provisions for future updated IEEE Standards. These changes to existing definitions should clarify language and reduce the potential for any misinterpretations. The amendments also define the following new terms: "authority governing interconnect requirements," "common interconnection agreement process," "community energy system," "community solar facility," "community solar project," "DER aggregation," "distributed energy resource," "distribution system upgrade," "EDC grid flexibility services," "enhanced PAVE process," "facilities study," "hosting capacity," "hosting capacity analysis,"
"Interconnection Ombudsman," "non-exporting customer-generator facility," "non-exporting technology," "party," "Pre-Application Verification/Evaluation (PAVE)," "solar permitting application software," and "system impact study." These new and revised definitions should provide a consistent vocabulary for grid modernization efforts.

N.J.A.C. 14:8-5.2

The Board is proposing amendments at N.J.A.C. 14:8-5.2 that modify the maximum nameplate capacity of level 1, 2, and 3 customer-generator facilities, with the purpose of increasing the number of interconnection projects that will require simpler, lower-level applications. These amendments also allow eligible level 2 and 3 projects to request and acquire PAVE reports from an EDC, which will provide more detailed information to reduce the number of unfeasible projects clogging the queue. The proposed amendments also modify or add specific requirements for EDCs regarding applications, filing, timelines, protocols, and dispute processes to ensure a more timely and facile interconnection application process. They further detail allowable mitigation methods that enable certain applications that initially fail to modify their design and receive continued consideration without losing their place in the queue or needlessly initiating a more rigorous higherlevel application. Other than the specter of loss of queue position for specific missed application milestones, the proposed amendments include no direct penalties or incentives, as these will be debated further in the course of the evolving Grid Modernization Forum. Energy storage options and power export limitations have been explicitly allowed as factors for interconnection evaluation and approval. A common and automated online application process will reduce uncertainty and set expectations for the workflow and process that lies ahead for the application. EDCs will be required to develop and adhere to more consistent (and less overly conservative) screening processes and disclose more information on the hosting capacity of their systems. The rulemaking will significantly reduce the uncertainty, inefficiency, and delay for applicants with viable DER projects to achieve interconnection agreement.

N.J.A.C. 14:8-5.2(a)1, 2, and 3 have been amended to add specificity to distinctions between level 1, 2, and 3 interconnections. An amendment is proposed at subsection (c) to specify who is responsible for requesting an EDC meeting. Subsection (d) is proposed for deletion. An amendment is proposed at recodified subsection (e) to ensure safety and reliability on behalf of the EDCs. An amendment is proposed at recodified subsection (f) to ensure compliance with the Federal Energy Regulatory Commission (FERC) Order No. 2222. Existing subsection (h) is proposed for deletion. Recodified subsection (g) is proposed for amendment to specify EDS compliance with the common interconnection agreement process (CIAP) portal and prohibit the EDSs from conditioning authorization to energize on the EDC's replacement of the customer-generator's meter. The purpose of proposed new subsections (i) through (r) are to improve the effectiveness of the interconnection process and provide more information about an applicant's proposed system interconnection. Subsections (i) and (j) recognize the value to larger projects of gaining system information on potential grid siting issues prior to application, thus mitigating future 'queue packing" delay from non-viable projects. Subsections (k), (l), and (o) create allowable paths for applicants to temper their operational impact to stay within acceptable interconnection limits, while subsection (n) creates a formal dispute resolution process as an additional path to resolving interconnection barriers. Subsections (m), (p), and (q) create a structured, electronic-based application platform and gated process that keeps order and consistency while moving projects through the growing DER interconnection queue. Lastly, subsection (r) requires prescriptive filed tariffs from the EDCs on all evaluation processes used in a level 3 interconnection evaluation to provide full transparency for these larger system applicants.

N.J.A.C. 14:8-5.3

The Board is proposing an amendment at N.J.A.C. 14:8-5.3 to update specifications for interconnection equipment standards to conform with current industry standards. Specifically, the Board proposes to amend subsection (a) to require compliance with the UL1741 technical standards and IEEE Standard 1547-2018, instead of the outdated IEEE Standard 1547-2003. Subsections (b) and (d) are proposed for amendment to expand the number of accepted interconnection testing protocols. Subsection (c) is proposed for amendment to add clarity to interconnection equipment requirements. Subsection (d) is also proposed for amendment to include non-exporting technology as a potential element to which applicants must certify compatibility with interconnection equipment.

N.J.A.C. 14:8-5.4

The Board is proposing amendments at N.J.A.C. 14:8-5.4 that allow for and designate customer-generator application fees. The Board further proposes to modify level 1 interconnection classification and constraints, including by increasing the qualifying upper limit on capacity. The proposed changes also specify how EDCs should contact customergenerators, add explicit language on an EDC's right to disconnect unauthorized or non-compliant interconnections, and specify allowable mitigation methods for initially failed applications. Paragraphs (a)1 and 2 are proposed for amendment to allow provisions for smart inverters and increase the upper size limit capacity for level 1 evaluation from 10 to 25 kW, respectively. Subsection (b) is proposed for amendment to reflect the maximum fee an EDC may charge an applicant for level 1 interconnection. Subsection (d) is proposed for amendment to exclude customer-generator facilities from being categorized as a level 1 interconnection if the point of common coupling is on a transmission line, spot network, or an area network as defined by the IEEE Standard 1547-2018. Subsection (e) is proposed for amendment to increase the amount of customer-generator capacity that can connect to an individual radial line section, and to allow potential customer-generators that would otherwise be prohibited from interconnecting if they use non-exporting technology to mitigate their facility's impact on the grid. Subsections (h), (i), (k), and (n) and paragraph (o)5 are proposed for amendment to ensure EDC compliance with the CIAP portal. N.J.A.C. 14:8-5.4(j)3 is proposed for addition to specify EDC timelines regarding spot/area network interconnection requests and, at paragraph (j)2, to add a cross-reference to the resubmittal options at subsection (p), as proposed for amendment. Subsection (1) is proposed for amendment to correct grammar issues. Subsection (m) and paragraph (o)1 are proposed for amendment to reflect the appropriate documentation an applicant must submit for interconnection. Paragraph (o)7 is proposed to be added to grant EDCs the ability to disconnect unauthorized connections and state the timeframe for notification. Subsection (p) is proposed for amendment to include avenues for applicants to resubmit failed interconnection applications.

N.J.A.C. 14:8-5.5

The Board is proposing amendments at N.J.A.C. 14:8-5.5 that add criteria for level 2 interconnections. The proposed changes describe how EDCs should consider inverter-based DERs, including those using non-exporting technology. They also specify the method through which EDCs should contact customer-generators, as well as the timelines for such proposed contact and all associated response intervals. The Board further proposes to implement numerical changes to level 2 projects' allowable thresholds for distribution system impact. The Board also proposes to create a more proportional fee structure that better aligns with service costs, along with defined consequences for an unresponsive applicant. This should improve participant accountability in the interconnection process. The Board is likewise proposing additional requirements for EDCs that will govern how they consider customer-generator mitigation

measures following an initial failure of an interconnection application. Paragraph (a)1 is proposed for amendment and paragraph (a)3 is proposed for addition to further specify the capacity and description of level 2 interconnections. Subsection (b) is proposed for amendment to provide language clarity. Subsection (c) is proposed for amendment to reflect an increase in percentage (from 90 to 95) of short circuit interrupting capability of the interconnection equipment. Subsection (f) is proposed for amendment to include non-exporting technology, as well as increase the percentage of total circuit annual peak load a level 2 customergenerator facility may generate. Subsection (i) is proposed for amendment to increase the aggregate generation capacity from 20 to 30 kilovolt-amps. Paragraphs (1)1, 2, and 3 are proposed for amendment to add specification to the interconnection requirements. Subsections (m), (o), and (q) are proposed for amendment to ensure EDC compliance with the CIAP portal. Paragraph (o)1 is further proposed for amendment to include power flow analyses as an additional metric through which the EDCs can ensure safe and reliable access to the customer-generator's system, if the system has failed to comply with the criteria specified at subsections (c) through (l). The power flow analysis is less rigorous than the System Impact Study and is intended to verify that the interconnection yields no negative impact to the electric grid. Paragraph (o)3 is further proposed for amendment to specify time frames in which the applicant must provide payment for additional review or modifications, if appropriate. Subsection (r) is proposed for amendment to specify timelines on EDC inspections of customer-generator facilities. Paragraph (r)7 is also proposed to be added to grant EDCs the ability to disconnect unauthorized connections and to add a notice timeframe. Subsection (s) is proposed for deletion.

N.J.A.C. 14:8-5.6

The Board is proposing amendments at N.J.A.C. 14:8-5.6 that clarify and expand the criteria for level 3 interconnection applications. The amendments include proposed review timelines, as well as upper limits on application fees and cost overrun obligations for customer-generators who incur system upgrade charges. The proposed amendments also specify details about a required scoping meeting for coordination planning, as well as the criteria for necessary studies to be performed on the customer-generator facility. The Board is further proposing a more proportional fee structure that better aligns with service costs, along with defined consequences for unresponsive applicants. These changes should increase participant accountability in the interconnection process. The Board is also proposing to specify allowable mitigations for initially failed level 3 applications. Subsection (a) is proposed for amendment to include a timeframe for EDCs to adopt a common set of level 3 interconnection screens. Paragraphs (a)1, 2, and 3 are proposed to provide specificity on level 3 systems. Subsection (b) is proposed for deletion and replacement to ensure timely compliance of EDCs to notify applicants of incomplete/complete application status. Subsection (c) is proposed for amendment to include the newly defined "system impact study" as part of the interconnection application process. Subsection (d) is proposed for amendment to suggest timelines for EDCs to coordinate said study. Subsections (e), (f), and (h) are proposed for deletion, as they are unnecessary. Recodified subsection (e) is proposed for amendment to include a timeline for EDCs to provide the applicant with the results of said study. Recodified subsection (f) is proposed for amendment to give EDCs a reasonable time frame for inspecting the customer-generator facility. Recodified subsection (g) is proposed for amendment to ensure EDC compliance with the CIAP portal. Proposed new subsections (j) through (t) are added to impose timelines, fees, and additional application requirements for level 3 systems.

N.J.A.C. 14:8-5.7

The Board is proposing amendments at N.J.A.C. 14:8-5.7 that specify upper limits for the application fees EDCs may require and clarify payment terms for initiating required system upgrades. Subsection (a) is proposed for deletion and replacement to include a maximum application fee for a level 1 interconnection review. Subsections (b) and (c) are proposed for amendment to include a maximum application fee for a level 2 and level 3 interconnection review, respectively. New paragraphs (b)1 and (c)1 describe the fees that may be charged for the optional Enhanced Pre-Application Verification/Evaluation (PAVE) process for structure for community solar facilities and community energy systems. New

subsection (e) is proposed to specify the party responsible for the potential costs of necessary additional equipment.

N.J.A.C. 14:8-5.8

The Board is proposing amendments at N.J.A.C. 14:8-5.8 that outline methods EDCs can use to ensure continued compliance with the authorized Interconnection Agreement. Paragraph (a)3 is proposed for amendment to ensure compliance with IEEE Standard 1547-2018. Subsection (b) is proposed for amendment to include a timeline for retaining written records of maintenance and testing of level 2 or level 3 facilities. Subsection (c) is proposed for amendment to ensure EDC compliance with the CIAP portal. Subsection (d) has been added to ensure EDC compliance with the CIAP portal.

N.J.A.C. 14:8-5.9

The Board is proposing amendments at N.J.A.C. 14:8-5.9 that further detail the content of and timing for interconnection process reports that EDCs must file. N.J.A.C. 14:8-5.9(a)1, 2, 3, and 4 are proposed to add additional reporting requirements for the EDCs. Subsection (b) is proposed for deletion and replacement to reflect the Board's preference on methods for EDCs to provide such data. Subsection (c) is proposed for deletion and replacement to list key performance indicators and information on customer-generator facilities, which are further described throughout the new paragraphs in the subsection. Subsection (d) is proposed for deletion and replacement to include information that EDCs must make available on their websites. New subsection (e) is proposed to be added to require EDCs to annually report their testing results to the Board for legacy interconnected customer/generators.

N.J.A.C. 14:8-5.10

The Board is proposing new N.J.A.C. 14:8-5.10 to create a PAVE process that EDCs must offer for qualified prospective level 2 or level 3 projects prior to completion and submittal of their formal interconnection application. Providing larger projects access to more robust distribution system technical information should enable developers to determine the feasibility of projects and/or significantly improve their design before they enter the queue, thereby reducing the number of nonviable project proposals that slow down the review and approval of viable projects.

N.J.A.C. 14:8-5.11

The Board is proposing new N.J.A.C. 14:8-5.11 to ensure consistent calculation methodologies and presentation of available hosting capacity across all EDCs. The proposed rule sets forth required EDC tariff filings, the information an EDC must make available on its website, and how often the EDC must update information posted to its website. Providing more consistent and timely hosting capacity information, in addition to, systematic tracking and analysis of process management data, should facilitate higher DER adoption rates and inform more proactive and focused system upgrade investments.

N.J.A.C. 14:8-5.12

Finally, the Board is proposing new N.J.A.C. 14:8-5.12 to provide dispute mitigation processes with specific contact methodology and response intervals. The proposed new rule requires the Board-regulated EDCs to file tariffs which implement a standardized dispute resolution process to govern disputes between the EDC and customer-generator. The process should address disputes involving interconnection studies, cost estimates for necessary upgrades, queue priority, development of the interconnection agreement, billing, fees, or any other related matters. The new rule provides that a customer-generator may initiate the informal dispute resolution process either through the EDC's CIAP portal or the EDC's interconnection ombudsman, which is required to be appointed pursuant to N.J.A.C. 14:8-5.2(m) (as proposed for amendment). After an applicant initiates the informal dispute resolution, the rules provide for a brief period for information exchange and negotiation. If the parties cannot resolve their dispute among themselves, they may seek the assistance of the Board's interconnection ombudsman to resolve their dispute. The parties may, at any time, end the informal dispute resolution procedures and proceed through the Board's formal complaint procedures.

As the Board has provided a 60-day comment period on this notice of proposal, this notice is excepted from the rulemaking calendar requirements pursuant to N.J.A.C. 1:30-3.3(a)5.

Social Impact

This rulemaking will have a positive social impact on New Jersey by removing barriers that impede the efforts of communities, households, businesses, and other organizations to fully benefit from on-site or nearby renewable energy resources. The proposed rulemaking will enable more low-income households and underserved communities to benefit from the clean energy transition by easing the interconnection of community solar. This rulemaking will, thus, facilitate access to solar energy for consumers who have previously been unable to place solar on their own property by streamlining certain provisions relating to the development of community solar projects.

The proposed rules are designed to facilitate an increased pace of interconnection of DERs (for example, residential solar projects, etc.) to the electric distribution grid. These rules will assist the State's policy of promoting vigorous development of solar energy and other renewable energy resources by lowering barriers to adoption for prospective customer-generators. The accelerated interconnection of DERs will help achieve the State's ambitious goal of 100 percent clean energy by the year 2035. The proposed rulemaking also provide avenues to transition away from ratepayer and taxpayer-funded incentives towards self-scaling, market-driven mechanisms for DER adoption. Much of this work will be accomplished through structured working groups pursuant to a formal Grid Modernization Forum that will recommend further reforms that build on the current proposed rule amendments and new rules.

Economic Impact

The proposed rulemaking will have minimal economic impacts and does not impose any additional direct costs on New Jersey residents. Specifically, this rulemaking may result in *de minimis* additional costs for EDCs related to data acquisition, reporting requirements, and the development of a common interconnection agreement process. Much of the data to be reported is already collected by the EDCs. The proposed amendments are anticipated to result in increased economic activity sooner, as capital expenditures and jobs associated with distributed energy projects will be realized as the projects are able to move forward through the interconnection process faster.

Federal Standards Statement

N.J.S.A. 52:14B-1 et seq., requires State agencies that adopt, readopt, or amend State rules exceeding any Federal standards or requirements to include in the rulemaking document a Federal standards analysis. This rulemaking has no Federal analogue and is not promulgated pursuant to the authority of, or in order to implement, comply with, or participate in any program established pursuant to Federal law or pursuant to a State statute that incorporates or refers to Federal law, Federal standards, or Federal requirements. Accordingly, N.J.S.A. 52:14B-1 et seq. does not require a Federal standards analysis for the proposed amendments.

Jobs Impact

This rulemaking is not anticipated to immediately have a significant impact on employment in New Jersey. Simplifying the process of interconnecting DERs to the grid for New Jersey communities, households, businesses, and other organizations has the potential to increase the number of people employed in designing and installing renewable energy projects, such as solar arrays and associated energy storage systems. In addition, these jobs will be realized sooner in the economy as the interconnection queue backlog and processing time is reduced. It likewise could increase the number of people employed to install, manage, and service smart grid interoperable devices such as inverters, thermostats, water heaters, and electric vehicle (EV) chargers.

Agriculture Industry Impact

The proposed amendments and new rules will have no impact on the agricultural industry.

Regulatory Flexibility Statement

This rulemaking will not impose any recordkeeping, reporting, or other compliance requirements on small businesses whether or not they voluntarily choose to install DER systems, other than that normally required for interconnection filing. A small business, as defined in the New Jersey Regulatory Flexibility Act, N.J.S.A. 52:14B-16 et seq., is a business that has fewer than 100 full-time employees. Regarding businesses that qualify as small businesses pursuant to the Regulatory Flexibility Act, these rule amendments only apply to EDCs and entities that choose to install DERs. Though EDCs must comply with the requirements of these rules, they are not small business. All other entities will only be subject to these rules to the extent they voluntarily choose to install and interconnect DERs pursuant to these rules. Consequently, no small business will be involuntarily subject to any compliance requirements pursuant to this rulemaking.

Housing Affordability Impact Analysis

This rulemaking will not impact the affordability of housing in New Jersey, nor is it likely to have an impact on the average cost associated with housing, as the rules pertain to DERs and interconnectivity.

Smart Growth Development Impact Analysis

This rulemaking will not impact smart growth development in New Jersey. This rulemaking will not evoke a change in housing production in Planning Areas 1 or 2, or within designated centers, pursuant to the State Development and Redevelopment Plan in New Jersey, as the rules pertain to DERs and interconnectivity.

Racial and Ethnic Community Criminal Justice and Public Safety Impact

This rulemaking will not have an impact on pretrial, detention, sentencing, probation, or parole policies concerning adults and juveniles in the State. Accordingly, no further analysis is required.

Full text of the proposal follows (additions indicated in boldface **thus**; deletions indicated in brackets [thus]):

SUBCHAPTER 4. NET METERING FOR CLASS I RENEWABLE ENERGY SYSTEMS

14:8-4.2 Net metering definitions

The following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise. Additional definitions that apply to this subchapter can be found at N.J.A.C. 14:3-1.1 and 14:8-1.2.

"Community solar facility" shall have the same meaning as set forth at N.J.A.C. 14:8-9.2.

"Community solar project" shall have the same meaning as set forth at N.J.A.C. 14:8-9.2.

"Customer-generator" means an electricity customer that generates electricity on the customer's side of the meter[,] using one or more class I renewable energy sources and/or stores energy on the customer's side of the meter using an energy storage device. An electricity customer that meets these criteria is a customer-generator regardless of whether the customer's generation source(s) and/or energy storage device are unaggregated or part of an aggregated resource. The Board may deem a pair of entities acting together - that is, a net metering generator and a net metering customer - to constitute one customer-generator for the purpose of net metering.

"Customer-generator facility" means the equipment used by a customer-generator to generate, **store**, manage, and/or monitor electricity. A customer-generator facility typically includes an electric generator, **energy storage device**, **vehicle-to-grid device**, and/or interconnection equipment that connects the customer-generator facility directly to the customer, **whether the equipment is aggregated or not**.

"Energy storage device" means a device that is capable of absorbing energy from the grid or from a generation source on the customer's side of the meter, storing it for a period of time using mechanical, chemical, or thermal processes, and thereafter discharging the energy back to the grid or directly to an energy-using system to reduce the use of power from the grid.

"Net metering generator" means an entity that owns and/or operates a **class I** renewable energy generation facility, the electricity from which is

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delivered to a net metering customer; provided that only the electricity produced by the class I renewable energy sources shall be eligible for net metering treatment. The net metering generator may or may not be the same entity as the net metering customer; and may or may not be located on the same property as the net metering customer.

SUBCHAPTER 5. INTERCONNECTION OF CLASS I RENEWABLE ENERGY SYSTEMS

14:8-5.1 Interconnection definitions

The following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise. Additional definitions that apply to this subchapter can be found at N.J.A.C. 14:3-1.1 and 14:8-1.2.

. . .

"Area network" means a type of electric distribution system served by multiple transformers interconnected in an electrical network circuit, which is generally used in large metropolitan areas that are densely populated, in order to provide high reliability of service. This term has the same meaning as the term "secondary grid network" as defined in IEEE [standard] **Standard** 1547 Section 4.1.4, which is incorporated herein by reference [as amended and supplemented.], **or in any subsequent standard as identified in a Board order.** [IEEE standard 1547 can be obtained through the IEEE website at www.ieee.org.]

"Authority governing interconnect requirements" or "AGIR" means the agency that has authority for setting interconnection rules to the State-jurisdictional electric system, as set forth in IEEE Standard 1547 or a subsequent standard as identified in a Board order. The term AGIR is functionally equivalent to the term "Relevant Electric Retail Regulatory Authority" as used in FERC's Order No. 2222.

"Common interconnection agreement process" or "CIAP" means a common EDC application that allows customer-generators to apply for and manage the interconnection process electronically through a portal-based software application platform capable of tracking key information throughout the subsequent interconnection application process, documenting generation type and capacity, and incorporating schedules and budgets for upgrade commitments and construction timelines.

"Community energy system" means a community solar facility and/or energy storage device that is located in geographical proximity to an energy-consuming community and connected to the distribution grid for delivery of power to that designated community through an approved EDC tariff.

"Community solar facility" shall have the same meaning as set forth at N.J.A.C. 14:8-9.2.

"Community solar project" shall have the same meaning as set forth at N.J.A.C. 14:8-9.2.

"DER aggregation" means a grouping of discrete interconnected customer-generator facilities or behind the meter load-modifying resources working as a combined or coordinated group for purposes of providing energy, grid services, or other value streams, on an aggregated basis, for the purposes of participating in either retail or wholesale markets.

"Distributed energy resource" or "DER" means an inverter-based, electricity-producing resource, an energy storage device, or a controllable load that is connected to an electric public utility's distribution infrastructure.

"Distribution system upgrade" means a required addition or modification to the electric distribution system to accommodate the safe and reliable interconnection of the distributed energy resource (DER) facility and to enable grid flexibility service calls to the facility during its operation. Distribution upgrades do not include interconnection facilities.

"EDC grid flexibility services" are control capabilities procured from a customer-generator, which may be compensated by the EDC, that help to maintain distribution system reliability and safety, whether separately or as part of a DER aggregation.

"Electrical power system" or "EPS" means facilities that deliver electric power to a load and has the same meaning as is assigned to this term in IEEE [standard] **Standard** 1547[. As of June 4, 2012, IEEE standard 1547 defined EPS as a facility that delivers electric power to a load.], which is incorporated herein by reference, or any subsequent standard as identified in a Board order.

"Enhanced PAVE process" is a real-time meeting between an EDC and a prospective community solar facility or community energy system applicant in which the EDC reviews and walks through a PAVE report. The enhanced PAVE process is an optional addition to the normal PAVE process.

"Facilities study" means a study that determines the cost and timeline associated with upgrading the EDC's electrical power system to safely and reliably accommodate a proposed customer-generator facility.

"Good utility practice" has the same meaning as assigned to this term in the Amended and Restated Operating Agreement of PJM Interconnection, which is incorporated herein by reference, as amended and supplemented, or in any subsequent standard, as identified in a Board order. The Operating Agreement can be obtained on the PJM Interconnection website at [http://www.pjm.com/documents/downloads/ agreements/oa.pdf] https://agreements.pjm.com/oa/4534. [October 23, 2008] December 14, 2023, the Operating Agreement defines this term as "any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety, and expedition. Good [Utility Practice] utility practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather is intended to include acceptable practices, methods, or acts generally accepted in the region; including those practices required by Federal Power Act Section 215(a)(4)."

"Hosting capacity" means the amount of aggregate generation capacity that can be accommodated on the electrical power system, or a specific electrical power system circuit, without requiring distribution system upgrades.

"Hosting capacity analysis" means the methodology used to calculate, publish, and evaluate the ability to increase the available hosting capacity of a given circuit.

"IEEE Standard 1547" means IEEE Standard [1547-2003] **1547-2018**, which was approved in [2003] **2018** and [reaffirmed in 2008] **amended** in **2020**, or any future updated version of the IEEE Standard 1547, as may be identified in a Board order.

"Interconnection agreement" means an agreement between a customergenerator and an EDC, which governs the connection of the customergenerator facility to the electric distribution system, as well as the ongoing operation of the customer-generator facility after it is connected to the system, whether the facility operates singly, or as part of a DER aggregation. An interconnection agreement shall follow the standard form agreement developed by the Board and available from each EDC.

"Interconnection equipment" means a group of components connecting an electric generator with an electric distribution system and includes all interface equipment, including switchgear, inverters, or other interface devices. Interconnection equipment may include an integrated generator, energy storage device, or electric source.

"Interconnection Ombudsman" means a member of Board staff designated to address interconnection issues and work with applicants and EDCs to ensure a fair and transparent interconnection process.

"Non-exporting customer-generator facility" means a customergenerator facility that is designed to prevent or limit export of electricity past the point of common coupling from the customergenerator facility to the EDC's electrical power system.

"Non-exporting technology" means an electric device that is designed to ensure that a customer-generator facility is a non-exporting customer-generator facility or that limits the amount of injection past the point of common coupling.

"Party" or "parties" means the customer-generator, the EDC, or both.

["Point of common coupling" has the same meaning as assigned to this term in IEEE Standard 1547 Section 3.0, which is incorporated herein by reference as amended and supplemented. IEEE standard 1547 can be obtained through the IEEE website at www.ieee.org. As of June 4, 2012, IEEE standard 1547 Section 3.0 defined this term as "the point where a Local EPS is connected to an Area EPS."]

"Point of common coupling" means the point in the power system at which the EDC and the customer interface occurs and has the same meaning as assigned to this term in IEEE Standard 1547, or any future updated version of the IEEE Standard 1547, as may be identified in a Board order. Point of common coupling has the same meaning as point of interconnection.

"Pre-application verification/evaluation process" or "PAVE process" means a process designed to provide a prospective customergenerator an opportunity to receive actionable feedback from the EDC about the technical aspects of an interconnection request, including electrical feasibility, processing timeline, and other technical and procedural matters at the beginning of the interconnection process.

"Solar permitting application software" is a scalable software platform designed by a national lab or other entity designed to be deployed in a municipality or other local entity to significantly automate and compress solar/storage permit application and processing times. One example of solar permitting application software is the SolarAPP+, developed by the National Renewable Energy Laboratory.

"Spot network" [has the same meaning as assigned to the term under IEEE Standard 1547 Section 4.1.4, (published July, 2003), which is incorporated herein by reference as amended and supplemented. IEEE standard 1547 can be obtained through the IEEE website at www.ieee.org. As of June 4, 2012, IEEE Standard 1547 defined "spot network" as "a type of electric distribution system that uses two or more inter-tied transformers to supply an electrical network circuit."] means a portion of an electric distribution system that uses two or more inter-tied transformers to supply an electrical network circuit and has the same meaning as assigned to the term pursuant to IEEE Standard 1547-2018, or any future updated version of the IEEE Standard 1547, as may be identified in a Board order. A spot network is generally used to supply power to a single customer or a small group of customers.

"System impact study" means an engineering analysis of the probable impact of a customer-generator facility on the safety and reliability of the EDC's electric distribution system.

- 14:8-5.2 General interconnection provisions
- (a) Each EDC shall provide the following three review procedures for applications for interconnection of customer-generator facilities:
- 1. Level 1: An EDC shall use this review procedure for [all] applications to connect inverter-based customer-generator facilities which have a power rating of [10] 25 kW or less, as measured in alternating current, and which meet the certification requirements at N.J.A.C. 14:8-5.3. Level 1 interconnection review procedures are set forth at N.J.A.C. 14:8-5.4:
- **2.** Level 2: An EDC shall use this review procedure for applications to connect customer-generator facilities [with a power rating of two MW or less] which meet the certification requirements at N.J.A.C. 14:8-5.3[.] and that:
 - i. Are two MW or less, as measured in alternating current;
 - ii. Do not qualify for level 1 interconnection review procedures; or
- iii. Did not pass a level 1 process. Level 2 interconnection review procedures are set forth at N.J.A.C. 14:8-5.5; and
- **3.** Level 3: An EDC shall use this review procedure for applications to connect customer-generator facilities that [do]:
 - i. Are greater than two MW, as measured in alternating current;
- ii. Do not qualify for either the level 1 or level 2 interconnection review procedures; or
- **iii. Did not pass a level 2 process.** Level 3 interconnection review procedures are set forth at N.J.A.C. 14:8-5.6.
 - (b) (No change.)

- (c) Upon request **of an applicant**, the EDC shall meet with an applicant who qualifies for level 2 or level 3 interconnection review [to assist them in preparing the application].
- [(d) An application for interconnection review shall be submitted on a standard form, available from the EDC. The application form will require the following types of information:
- 1. Basic information regarding the customer-generator and the electricity supplier(s) involved;
- 2. Information regarding the type and specifications of the customergenerator facility;
- 3. Information regarding the contractor who will install the customergenerator facility;
- 4. Certifications and agreements regarding utility access to the customer-generator's property, emergency procedures, liability, compliance with electrical codes, proper operation and maintenance, receipt of basic information; and
- 5. Other similar information as needed to determine the compliance of a particular applicant with this chapter.]
 - [(e)] (d) (No change in text.)
- [(f)] (e) An EDC shall not require an applicant or a customergenerator whose facility meets the criteria for interconnection approval [under] pursuant to the level 1 or level 2 interconnection review procedure at N.J.A.C. 14:8-5.4 and 5.5 to install additional controls or external disconnect switches not included in the interconnection equipment, to perform or pay for additional tests, or to purchase additional liability insurance except [if agreed to by the applicant] at the EDC's discretion when required to maintain the safety, power quality, or reliability of the EDC's EPS.
- [(g)] (f) If the interconnection of a customer-generator facility is subject to interconnection requirements of FERC or PJM, whether in compliance with rules governing DER aggregations pursuant to FERC's Order No. 2222 or otherwise, the provisions of this subchapter that apply to interconnection apply to that facility only to the extent that they do not conflict with the interconnection requirements of FERC or PJM.
- [(h) If an applicant for interconnection disagrees with an EDC's determination of fact or need regarding matters covered in this subchapter, or if any person has a complaint regarding matters covered in this subchapter, the applicant or other person may file an informal complaint with the Board under N.J.A.C. 14:1-5.13, or may file a petition with the Board under N.J.A.C. 14:1-5.]
- [(i)] (g) Once a customer-generator has met the [the level 1 interconnection requirements at N.J.A.C. 14:8-5.4, or has met the level 2 interconnection requirements at N.J.A.C. 14:8-5.5,] requirements of the relevant interconnection review, the EDC shall notify the customer-generator [in writing that the customer-generator is authorized to energize the customer-generator facility, as follows:
- 1. The EDC shall send the authorization to the e-mail address, and to the U.S. Postal Service mailing address that is listed on the customergenerator's submitted interconnection application form.; and
- 2. The EDC shall not condition the authorization to energize on the EDC's replacement of the customer-generator's meter.] through the CIAP-compliant automated portal and a message to all applicant-associated email address(es) on file. The EDC shall not condition the authorization to energize on the EDC's replacement of the customer-generator's meter.
 - [(j)] (h) (No change in text.)
- (i) Potential applicants with systems over 500 kW capacity shall qualify for a Pre-Application Verification/Evaluation (PAVE) report as set forth at N.J.A.C. 14:8-5.10. The CIAP portal shall allow for the initial request and payment for a PAVE report prior to formal application.
- (j) Prospective community solar facility or community energy system applicants shall have the right to request an enhanced PAVE process meeting to discuss the PAVE report prior to application filing, and the EDC shall grant such a request upon a prospective community solar facility or community energy system applicant's payment of the required fee.
- (k) In determining the appropriate interconnection level and performing the related studies, the EDC shall allow a prospective

generator to limit its ability to export power to the grid to less than its nameplate rating, including the utilization of non-exporting technology that prevents the export of electricity past the point of common coupling, either in whole or in part, or by enrolling in a Board-approved EDC grid flexibility services program. The net export capacity of the customer-generator facility shall form the basis for the appropriate studies, unless the EDC determines, using good utility practice, that the applicant's proposal would potentially harm the integrity of the EDC system and documents such findings to the Board.

- (1) By (120 days of the Board's effective date of this rulemaking), each EDC shall make a compliance filing to allow existing customergenerator facilities to add an energy storage device and/or upgrade to a UL 1741-compliant smart inverter without additional study through the appropriate interconnection process on all circuits that can host greater distributed energy storage capacity.
- (m) By (one year of the effective date of this rulemaking), each EDC shall establish a secure common interconnection agreement process (CIAP) that will provide a structured approach for submitting interconnection applications, tracking key information throughout the interconnection application process, and monitoring the interconnection process electronically. Each EDC's CIAP-compliant portal shall be developed based on the needs of the EDC and its applicants and maintain a consistent customer experience for applicants across EDC service territories. The cost of implementing the CIAP portal and related costs shall be recovered by each EDC as part of its base rates or through an approved Infrastructure Investment Program pursuant to N.J.A.C. 14:3-2A.2. Each CIAP shall, at a minimum:
- 1. Include a portal-based application form that requires the following:
 - i. Basic information regarding the customer-generator involved;
- ii. Information regarding the type and specifications of the customer-generator facility;
- iii. Information regarding the contractor who will install the customer-generator facility;
- iv. Certifications and agreements regarding utility access to the customer-generator's property, emergency procedures, liability, compliance with electrical codes, proper operation and maintenance, and receipt of basic information;
- v. Include a check box to indicate whether the applicant has previously requested the PAVE process;
- vi. Include a check box to indicate whether the applicant has previously requested the Enhanced PAVE process and has been granted an Enhanced PAVE process meeting; and
- vii. Other similar information, as needed to determine the compliance of a particular applicant with this chapter;
- 2. Include standardized online forms for required applicant information, the ability to save all work in progress for application completion at a later time, a visual "thermometer bar" indicator of progress through the full process, options for email and phone/text status change notifications, and other such administrative requirements that the Board may establish through Board order either following a joint EDC proposal or on its own initiative;
- 3. Integrate with a solar permitting application software platform, such as SolarAPP+, or other similar solar permitting tool selected and implemented jointly by the EDCs, and approved by the Board;
- 4. Document generation type and capacity, timelines, schedule, and budget for upgrade commitments, when upgrade payments or deposits are due or have been paid, and construction timelines, and other comparable requirements that the Board may establish through Board order either following a joint EDC proposal or on its own initiative;
- 5. Provide automatic email and online notifications to the applicant with the goal of enforcing clearly defined tariff timelines and reducing the turnaround time for missing data. The software should be designed to improve the accuracy and consistency of data entry and facilitate cross-department intake of application information and to identify missing data upon submission or as soon as practicable after submission to minimize the number of incomplete applications;

- 6. Enable each EDC to customize the forms while maintaining a consistent customer experience;
- 7. Enable each EDC to provide key performance indicators regarding interconnection processing, including the number of applications with missing data, applications with complete information, and achieved timelines for all interconnection applications at all interconnection levels;
- 8. Allow for a fully virtual interconnection process, including allowing for the upload of files and documents; and
- 9. Include a Frequently Asked Questions (FAQ) webpage to provide guidance useful to interconnection customers engaging in the interconnection process that clearly presents context and instructions for interacting with the electronic application tracking system.
- (n) Each EDC shall develop an interconnection dispute resolution process as set forth at N.J.A.C. 14:8-5.12, to be included on the EDC FAQ webpage. As part of a dispute resolution process, the EDCs should identify an ombudsman to handle customer interconnection complaints. If an applicant disagrees with an EDC's determination of fact or need regarding matters covered in this subchapter, or if any person has a complaint regarding matters covered in this subchapter, the applicant or other person may file an initial informal complaint with the Board's interconnection ombudsman pursuant to N.J.A.C. 14:1-5.13, or may file a formal petition with the Board pursuant to N.J.A.C. 14:1-5.
- (o) Any applicant may request that the EDC take into account any significant anticipated changes in load associated with contemporaneous installation of the customer-generator facility and any of the following:
- 1. Electric vehicle charging infrastructure, including any vehicleto-grid bidirectional capabilities;
 - 2. Building electrification upgrades;
 - 3. Deployment of energy efficiency upgrades; or
- 4. Verifiable increases in load, which the EDC shall not unreasonably refuse to consider. The EDC may require the applicant to delay energization or re-start the interconnection process if the contemplated contemporaneous changes are not completed prior to the planned energization of the system.
- (p) In administering the deadlines in this chapter, the EDC shall make reasonable efforts to meet all established timelines. If the EDC cannot meet a timeline, the EDC shall notify the applicant and Board staff, in writing, within three business days after the missed deadline by email or another methodology established by Board order. The notification shall explain the reason for the EDC's failure to meet the deadline and provide an estimate of when the step will be completed. The EDC shall keep the applicant and Board staff updated of any changes in the expected completion date.
- (q) The applicant may request, in writing, the extension of a deadline established pursuant to this chapter. The requested extension may be for up to one-half of the time originally allotted (for example, a 10-business-day extension for a 20-business-day timeframe). The EDC shall not unreasonably refuse this request. If further deadline extensions are necessary, the applicant may request an extension through the CIAP portal or from the EDC's interconnection ombudsman, who shall grant the request, if its reasonable, or otherwise, deny it, within three business days, and notify the applicant on the CIAP-compliant automated portal and a message to all associated email address(es) on file.
- (r) By (120 days of the effective date of this rulemaking), each EDC shall file a compliance tariff that sets forth standardized protocols governing the conduct of system impact studies, facility studies, related agreements, and a pro forma interconnection agreement, as well a detailed description of the various elements of a system impact study it would typically undertake pursuant to N.J.A.C. 14:8-5.6, along with, and including:
 - 1. A load-flow analysis;
 - 2. A short-circuit analysis;
 - 3. A circuit protection and coordination analysis;
- 4. Information regarding the impact on system operation of the electric distribution system;

- 5. A stability analysis (and the conditions that would justify including this element in the system impact study);
- 6. A voltage-collapse analysis (and the conditions that would justify including this element in the system impact study); and
- 7. Any additional analyses the EDC would undertake prior to or as part of the system impact study.
- 14:8-5.3 Certification of customer-generator interconnection equipment
- (a) In order to qualify for the level 1 and the level 2 interconnection review procedures described at N.J.A.C. 14:8-5.4 and 5.5, a customergenerator's interconnection equipment shall have been tested and listed by an OSHA-approved nationally recognized testing laboratory for continuous interactive operation with an electric distribution system, except as provided in this section, in accordance with the following standards, as applicable:
- 1. IEEE [1547] **1547-2018**, Standard for Interconnecting Distributed Resources with Electric Power Systems (published July [2003] **2018**, **amended April 2020**) **or any future updated version of the IEEE Standard 1547 as may be identified by Board order**, which is incorporated herein by reference[, as amended or supplemented]. IEEE Standard 1547 can be obtained through the IEEE website at www.ieee.org; and
- 2. UL [1741] **1741-Supplement SA or SB** Inverters, Converters, and Controllers for Use in Independent Power Systems ([November 2005] **September 2021) or any future updated version of the UL1741 Standard as may be identified by Board order**, which is incorporated herein by reference [as amended or supplemented]. UL 1741 can be obtained through the Underwriters Laboratories website at www.ul.com.
- (b) Interconnection equipment shall be considered certified for interconnected operation if it has been submitted by a manufacturer to an OSHA-approved nationally recognized testing laboratory[,] or alternative testing protocols permitted pursuant to this chapter and has been tested and listed by the laboratory for continuous interactive operation with an electric distribution system in compliance with the applicable codes and standards listed [in] at (a) above.
- (c) If the interconnection equipment has been tested and listed in accordance with this section as an integrated package[, which] that includes [a generator or other electric source] an electrical power system facility or a customer-generator facility, the interconnection equipment shall be deemed certified and the EDC shall not require further design review[,] or testing [or additional equipment].
- (d) If the interconnection equipment includes only the interface components (switchgear, inverters, non-exporting technology, or other interface devices), an [interconnection] applicant shall show that the generator or other electric source being utilized with the interconnection equipment is compatible with the interconnection equipment and consistent with the testing and listing specified for the equipment. If the generator or electric source being utilized with the interconnection equipment is consistent with the testing and listing performed by the OSHA-approved nationally recognized testing laboratory or alternative testing protocols permitted pursuant to this section, the interconnection equipment shall be deemed certified and the EDC shall not require further design review, testing, or additional equipment.

14:8-5.4 Level 1 interconnection review

- (a) Each EDC shall adopt a level 1 interconnection review procedure. The EDC shall use the level 1 review procedure only for an application to interconnect a customer-generator facility that meets all of the following criteria:
 - 1. The facility is inverter-based and has smart inverter capability;
 - 2. The facility has a capacity of [10] 25 kW or less; and
 - 3. (No change.)
- (b) For a customer-generator facility described at (a) above, the EDC shall approve interconnection under the level 1 interconnection review procedure **upon payment of a fee, not to exceed \$100.00 or other value established by Board order**, if all of the applicable requirements at (c) through (g) below are met. An EDC shall not impose additional requirements not specifically authorized [under] **pursuant to** this section.
 - (c) (No change.)

- (d) A customer-generator [facility's point of common coupling shall not be on a transmission line, a spot network, or an area network.] facility does not qualify for interconnection as level 1 if the point of common coupling is on a transmission line, a spot network, or an area network; provided that the EDC will use good utility practice to allow interconnection of a customer-generator facility to such facilities, where feasible.
- (e) If a customer-generator facility is to be connected to a radial line section, the aggregate generation capacity connected to the circuit, including that of the customer-generator facility, **reduced by any export limited capacity achieved through non-exporting technology**, shall not exceed [10] 15 percent ([15] 25 percent for solar electric generation) of the circuit's total annual peak load, as most recently measured at the substation.
- (f) If a customer-generator facility is to be connected to a single-phase shared secondary, the aggregate generation capacity connected to the shared secondary, including the customer-generator facility, shall not exceed [20] 30 kilovolt-amps (kVA).
 - (g) (No change.)
- (h) An applicant shall submit an Interconnection Application/ Agreement Form for level 1 interconnection review **through the CIAP portal**. The standard form is available from the EDC and includes a Part 1 (Terms and Conditions) and a Part 2 (Certificate of Completion).
- (i) Within three business days after receiving an application for level 1 interconnection review, the EDC shall [provide written or e-mail notice to] notify the applicant, in writing, through email and through the CIAP portal that it received the application and [whether] that the application is either complete or incomplete. If the application is incomplete, the written notice shall include a list of all of the information needed to complete the application.
- (j) Within 10 business days after the EDC notifies the applicant that the application is complete [under] **pursuant to** (i) above, the EDC shall notify the applicant that:
- 1. The customer-generator facility meets all of the criteria at (c) through (g) above that apply to the facility, and the interconnection will be finally approved upon completion of the process set forth at (k) through (o) below; [or]
- 2. The customer-generator facility has failed to [meet] **pass** one or more of the applicable [criteria] **screens** at (c) through (g) above, and the interconnection application is denied[.], **subject to the resubmittal options set forth at (p) below; or**
- 3. That the customer-generator facility is proposing to connect to a spot network or an area network, and the EDC requires additional time to determine whether the interconnection is technically feasible.
- (k) If the EDC notifies the customer-generator [under] **pursuant to** (j)1 above that the facility will be approved, the EDC shall, within three business days after sending the notice [under] **pursuant to** (j)1 above, do both of the following:
- 1. Notify the applicant **through the CIAP portal and** by [e-mail] **email** or other writing of whether an EDC inspection of the customergenerator facility is required prior to energizing the facility; or that the EDC waives inspection; and
- 2. Return to the applicant Part 1 of the original application, signed by the appropriate EDC representative, through the CIAP portal and by email or other writing.
- (l) Once an applicant receives Part 1 of the application with the EDC signature in accordance with (k) above, and has installed and interconnected the customer-generator facility, the applicant shall obtain approval of the facility [by] **from** the appropriate construction official, as defined at N.J.A.C. 5:23-4.1.
- (m) The customer-generator shall submit documentation of the construction official's [approval] **successful inspections and permit closing** to the EDC, along with a copy of Part 2 of the application, signed by the customer-generator.
- (n) If inspection of the customer-generator facility was waived [under] **pursuant to** (k)1 above, the EDC shall, within five business days after receiving the submittal required [under] **pursuant to** (m) above, notify the customer-generator [of authorization] **that it is authorized** to energize the facility. The notice to the customer-generator shall be provided [in the

format required under N.J.A.C. 14:8-5.2(i).] through the CIAP portal and by email or other writing.

- (o) If inspection of the customer-generator facility was not waived [under] **pursuant to** (k)1 above, the following process shall apply:
- 1. The customer-generator shall submit **documentation of** the construction official's [approval and] **successful inspections and permit closing, as well as a** signed Part 2 **of the application** as required at (m) above, and inform the EDC that the customer-generator facility is ready for EDC inspection;
- 2. Within five business days after the customer-generator notifies the EDC [under] **pursuant to** (o)1 above that the facility is ready for inspection, the EDC shall offer the customer-generator two or more available four-hour inspection appointments (for example, February 4th from noon to 4:00 P.M. or February 6th from 10:00 A.M. to 2:00 P.M.);
- 3. The appointments offered [under] **pursuant to** (o)2 above shall be no later than 10 business days after the EDC offers the appointments (that is, within 13 business days after the customer-generator submittal [under] **pursuant to** (m) above);
 - 4. (No change.)
- 5. Within five business days after successful completion of the EDC inspection, the EDC shall notify the customer-generator that it is authorized to energize the facility [. The notice shall be provided in the format required under N.J.A.C. 14:8-5.2(i)] through the CIAP portal and by email; [and]
- 6. The applicant shall not begin operating the customer-generator facility until after the inspection and testing is completed[.]; and
- 7. Unauthorized system interconnection or operation will result in no payment for excess generation credits. The EDC has the right to disconnect unauthorized interconnections, and must notify the customer-generator facility operator within four hours of such action being taken.
- (p) If an application for level 1 interconnection review is denied because it does not meet one or more of the applicable requirements in this section, [an applicant may resubmit the application under the level 2 or level 3 interconnection review procedure, as appropriate.] the EDC shall provide direct evidence of which screens were failed and why. In response, an applicant may either:
- 1. Resubmit an amended level 1 application for expedited review with appropriate mitigation measures that either reduce the customer-generator facility's capacity or restrict its ability to export past the point of common coupling through the addition of non-exporting technology. The EDC shall also allow an applicant to address a failed screen by adding energy storage or increasing its proposed load, provided that such mitigation measures are paired with non-exporting technology and/or a reduction in the customer-generator facility's capacity; or
- 2. Resubmit the application pursuant to the level 2 or level 3 interconnection review procedure, as appropriate.
- 14:8-5.5 Level 2 interconnection review
- (a) Each EDC shall adopt a level 2 interconnection review procedure. The EDC shall use the level 2 interconnection review procedure for an application to interconnect a customer-generator facility that meets [both of] the following criteria:
- 1. The facility has a capacity of two megawatts or less, as measured in direct current; [and]
- 2. The facility has been certified in accordance with N.J.A.C. 14:8-5.3[.]; and
- 3. The facility does not qualify for the level 1 interconnection review procedure or an applicant that qualifies for the level 1 interconnection review opts to use the level 2 interconnection review procedure.
- (b) For a customer-generator facility described at (a) above, the EDC shall approve interconnection [under] pursuant to the level 2 interconnection review procedure if the customer-generator facility meets all of the applicable screening requirements at (c) through (l) below [are met]. An EDC shall not impose additional requirements not specifically authorized [under] pursuant to this section.
- (c) The aggregate generation capacity on the line section to which the customer-generator facility will interconnect, including the capacity of the

customer-generator facility, shall not cause any distribution protective equipment (including, but not limited to, substation breakers, fuse cutouts, and line reclosers) or customer equipment on the electric distribution system, to exceed [90] 95 percent of the short circuit interrupting capability of the equipment. In addition, a customer-generator facility shall not be connected to a circuit that already exceeds [90] 95 percent of the short circuit interrupting capability, prior to interconnection of the facility.

(d)-(e) (No change.)

(f) If a customer-generator facility is to be connected to a radial line section, the aggregate generation capacity connected to the electric distribution system by non-EDC sources, including the customer-generator facility, reduced by any export limited capacity achieved through non-exporting technology, shall not exceed [10] 15 percent (or [15] 25 percent for solar electric generation) of the total circuit annual peak load. For the purposes of this subsection, annual peak load shall be based on measurements taken over the 12 months prior to the submittal of the application, measured at the substation nearest to the customer-generator facility.

(g)-(h) (No change.)

- (i) If a customer-generator facility is to be connected to a single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the customer-generator facility, shall not exceed [20] **30** kilovolt-amps (kVA).
 - (j)-(k) (No change.)
- (1) If a customer-generator facility's proposed point of common coupling is on a spot or area network, the interconnection shall meet all of the following requirements that apply, in addition, to the requirements [in] at (c) through (k) above:
- 1. For a customer-generator facility that will be connected to a spot network circuit, the aggregate generation capacity connected to that spot network from customer-generator facilities, including the customer-generator facility, shall not exceed [five] 10 percent of the spot network's maximum load; provided that the EDC will use good utility practice to allow interconnection of a customer-generator facility to such facilities at higher percentages where technically feasible, and if solar energy customer-generator facilities are used exclusively, only the anticipated minimum load during an off-peak daylight period shall be considered:
- 2. For a customer-generator facility that utilizes inverter based protective functions, which will be connected to an area network, the customer-generator facility, combined with other exporting customer-generator facilities on the load side of network protective devices, shall not exceed [10] 50 percent of the minimum annual load on the network, or 500 kW, whichever is less, or a future standard proposed by IEEE and approved by the Board by order; provided that the EDC will use good utility practice to allow interconnection of a customer-generator facility to such facilities at higher percentages where technically feasible. For the purposes of this paragraph, the percent of minimum load for [solar] an electric generation customer-generator facility that exclusively generates electricity from solar energy, including a customer-generator facility that incorporates an energy storage device, shall be calculated based on the minimum load occurring during an off-peak daylight period; and/or
- 3. For a customer-generator facility that will be connected to a spot or an area network that does not utilize inverter based protective functions, or for an inverter based customer-generator facility that does not meet the requirements [of] at (1)1 or 2 above, the customer-generator facility shall utilize non-exporting technology, such as reverse power relays or other protection devices that ensure no export of power from the customer-generator facility, including inadvertent export (under fault conditions) that could adversely affect protective devices on the network.
- (m) An applicant shall submit an Interconnection Application/Agreement Form for level 2 interconnection review **through the CIAP portal**. The standard form [is] **shall be** available from the [EDC,] **EDC's CIAP portal** and **shall** include[s] a Part 1 (Terms and Conditions) and a Part 2 (Certificate of Completion).
- (n) Within three business days after receiving an application for level 2 interconnection review, the EDC shall [provide written or e-mail notice to] notify the applicant through the CIAP portal and by email that it

received the application and [whether] that the application is either complete or incomplete. If the application is incomplete, the [written] notice shall include a list of all of the information needed to complete the application.

- (o) Within 15 business days after the EDC notifies the applicant that the application is complete [under] **pursuant to** (n) above, the EDC shall notify the applicant [by e-mail or in writing] **through the CIAP portal and by email** of one of the determinations at (o)1 through 4 below, as applicable. During the 15 business days provided [under] **pursuant to** this subsection, the EDC may, at its own expense, conduct any studies or tests it deems necessary to evaluate the proposed interconnection and arrive at one of the following determinations:
- 1. The customer-generator facility [meets] passes the applicable screening requirements [in] at (c) through (l) above or passes an EDC-conducted power flow analysis that demonstrates the interconnection poses no adverse impacts to the EPS. In this case[, the EDC shall]:
- i. [Notify] The EDC shall notify the applicant, [by e-mail or other writing] through the CIAP portal and by email, that the interconnection will be finally approved upon completion of the process set forth at (p) [through], (q), and (r) below; and
- ii. Within three business days after the notice [in] at (o)1i above, the appropriate EDC representative shall sign Part 1 of the original application and the EDC shall return [to the applicant] the signed Part 1 [of the original application, signed by the appropriate EDC representative] to the applicant through the CIAP portal and by email or other writing;
- 2. The customer-generator facility has failed to meet one or more of the applicable **screening** requirements at (c) through (l) above, but the EDC has nevertheless determined that the customer-generator facility can be interconnected consistent with safety, reliability, and power quality. In this case[, the EDC shall]:
- i. [Notify] The EDC shall notify the applicant [by e-mail or other writing] through the CIAP portal and by email that the interconnection will be finally approved upon completion of the process set forth at (p) [through], (q), and (r) below; and
- ii. Within five business days after the notice [in] at (0)2i above, the appropriate EDC representative shall sign Part 1 of the original application and the EDC shall return [to the applicant] the signed Part 1 [of the original application, signed by the appropriate EDC representative] to the applicant through the CIAP portal and by email or other writing;
- 3. The customer-generator facility has failed to meet one or more of the applicable **screening** requirements at (c) through (l) above, but the initial review indicates that additional review may enable the EDC to determine that the customer-generator facility can be interconnected consistent with safety, reliability, and power quality. In such a case[, the EDC shall]:
- i. [Notify] The EDC shall notify the customer-generator, through the CIAP portal, of[,] which screening requirements were not met and offer to perform[,] additional review to determine whether minor modifications to the electric distribution system (for example, changing meters, fuses, or relay settings) would enable the interconnection to be made consistent with safety, reliability, and power quality. The EDC notice shall provide to the applicant a nonbinding, good faith estimate of the costs of such additional review, and/or such minor modifications, at the +25 percent/-25 percent level, as well as the expected timeline for the additional analysis;
- ii. [If the customer-generator notifies the EDC that the customer-generator consents to pay for the review and/or modifications, the] Within 15 business days after the EDC offers to perform additional review and/or modifications, the customer-generator shall notify the EDC if the customer-generator consents to pay for the review and/or modifications. The EDC shall undertake the review and/or modifications within 15 business days after this notice from the customer-generator [; and], or within a longer period agreed to by the customer-generator and the EDC in writing. Any required payments for the additional review shall be received within 30 days after invoicing. If such deposits or payments are not made, the EDC may make the interconnection capacity available to other potential customer-generators and may require the applicant to re-start the interconnection process; and

iii. Within 15 business days after the additional review or modifications are complete, the appropriate EDC representative shall sign Part 1 of the original application and the EDC shall return [to the customer-generator] the signed Part 1 [of the original application, signed by the appropriate EDC representative] to the customer-generator through the CIAP portal and by email or other writing; or

- 4. The customer-generator facility has failed to meet one or more of the applicable [requirements] screening criteria at (c) through (l) above, and the initial review indicates that additional review would not enable the EDC to determine that the customer-generator facility could be interconnected consistent with safety, reliability, and power quality. In such a case, the EDC shall[:] notify the customer-generator that its facility has failed one or more screening criteria. The EDC shall further include a written explanation of which screens were failed and why within the notice, and provide the following options for the applicant to choose from:
- [i. Notify the customer-generator in writing that the interconnection application has been denied; and
- ii. Provide a written explanation of the reason(s) for the denial, including a list of additional information and/or modifications to the customer-generator's facility, which would be required in order to obtain an approval under level 2 interconnection procedures.]
- i. Receive a list of additional information and/or modifications to the customer-generator's facility that would be required to obtain an approval pursuant to level 2 interconnection procedures. The EDC shall further provide guidance to the customer-generator on submission of an amended level 2 application with appropriate mitigation measures that may include:
- (1) Reduction in the size of the proposed customer-generator facility that would allow the EDC to interconnect the facility;
- (2) Addition of energy storage or active demand management that would allow the EDC to interconnect the facility; and
- (3) Elimination of injections onto the grid through addition of nonexporting technology, power relays, or other comparable means.
- ii. Resubmit the application pursuant to the level 3 interconnection review procedure.
 - (p) (No change.)
- (q) At least 10 business days prior to starting operation of the customergenerator facility (unless the EDC does not require 10 days notice), the customer-generator shall, through the CIAP portal:
 - 1.-3. (No change.)
- (r) The EDC may require an EDC inspection of a customer-generator facility prior to operation, and may require and arrange for witness of commissioning tests as set forth [in] at IEEE [standard] **Standard** 1547 [(published July 2003)] in accordance with the following:
- 1. The customer-generator shall submit the construction official's approval and the signed Part 2 [under] of the application pursuant to (q) above and inform the EDC that the customer-generator facility is ready for EDC inspection;
 - 2. (No change.)
- [3. The appointments offered under (r)2 above shall be no later than 15 business days after the EDC offers the appointments, (that is, within 20 business days after the customer-generator submittal under (r)1 above);]
- 3. The inspection times offered pursuant to (r)2 above shall be based on the EDC's scheduling process, and shall not be unreasonably delayed;
 - 4. (No change.)
- 5. Within five business days after successful completion of the EDC inspection, the EDC shall notify the customer-generator that it is authorized to energize the facility. The notice shall be provided in the format required [under] **pursuant to** N.J.A.C. 14:8-5.2(i); [and]
- 6. The applicant shall not begin operating the customer-generator facility until after the inspection and testing is completed[.]; and
- 7. Unauthorized system interconnection or operation will result in no payment for excess generation credits. The EDC has the right to disconnect unauthorized interconnections, but must notify a customer-generator facility operator within four hours of taking such action
- [(s) If an application for level 2 interconnection review fails to meet the requirements as described at (o)3 or 4 above, or is denied because it

does not meet one or more of the requirements in this section, the applicant may resubmit the application under the level 3 interconnection review procedure.]

14:8-5.6 Level 3 interconnection review

- (a) [Each] By (120 days of the effective date of this rulemaking), each EDC shall adopt a common set of level 3 interconnection review [procedure] screens. [The EDC shall use the level 3 review procedure for an application to interconnect a customer-generator facility that does not qualify for the level 1 or level 2 interconnection review procedures set forth at N.J.A.C. 14:8-5.4 and 5.5.] An EDC shall use the level 3 review screens for applications to connect customer-generator facilities that:
 - 1. Are greater than two MW, as measured in direct current;
- 2. Do not qualify for either the level 1 or level 2 interconnection review procedures; or
- 3. Did not pass the level 1 or level 2 interconnection review procedures set forth at N.J.A.C. 14:8-5.4 and 5.5.
- [(b) The EDC shall conduct an initial review of the application and shall offer the applicant an opportunity to meet with EDC staff to discuss the application. At the meeting, the EDC shall provide pertinent information to the applicant, such as the available fault current at the proposed interconnection location, the existing peak loading on the lines in the general vicinity of the customer-generator facility, and the configuration of the distribution lines at the proposed point of common coupling.]
- (b) Within 15 business days after receiving an application for level 3 interconnection review, the EDC shall notify the applicant through the CIAP portal and by email that it received the application and that the application is either complete or incomplete. If the application is incomplete, the notice shall include a list of all of the information needed to complete the application.
- (c) [The EDC shall provide an impact study agreement to the applicant, which shall include a good faith cost estimate for an impact study to be performed by the EDC. An impact study is an engineering analysis of the probable impact of a customer-generator facility on the safety and reliability of the EDC's electric distribution system. An] A system impact study shall be conducted in accordance with good utility practice, as defined at N.J.A.C. 14:8-5.1, and shall:
 - 1.-3. (No change.)
- (d) If the proposed interconnection may affect electric transmission or delivery systems[, other than] that **are not** controlled by the EDC, operators of these other systems may require additional studies to determine the potential impact of the interconnection on these systems. If such additional studies are required, the EDC shall coordinate the studies[, but shall not be responsible for their timing] **and shall use best efforts to complete those studies within 60 business days of being notified of the need for an affected system study**. The applicant shall be responsible for the costs of any such additional studies required by another affected system. Such studies shall be conducted only after the applicant has provided written authorization to the EDC.
- [(e) After the applicant has executed the impact study agreement and has paid the EDC the amount of the good faith estimate required under (c) above, the EDC shall conduct the impact study and shall notify the applicant of the results as follows:
- 1. If the impact study indicates that only insubstantial modifications to the EDC's electric distribution system are necessary to accommodate the proposed interconnection, the EDC shall send the applicant an interconnection agreement that details the scope of the necessary modifications and an estimate of their cost; or
- 2. If the impact study indicates that substantial modifications to the EDC's electric distribution system are necessary to accommodate the proposed interconnection, the EDC shall provide an estimate of the cost of the modifications, which shall be accurate to within plus or minus 25 percent. In addition, the EDC shall offer to conduct a facilities study at the applicant's expense, which will identify the types and cost of equipment needed to safely interconnect the applicant's customer-generator facility.
- (f) If an applicant requests a facilities study under (e)2 above, the EDC shall provide a facilities study agreement. The facilities study agreement shall describe the work to be undertaken in the facilities study and shall include a good faith estimate of the cost to the applicant for completion of

the study. Upon the execution by the applicant of the facilities study agreement, the EDC shall conduct a facilities study, which shall identify the facilities necessary to safely interconnect the customer-generator facility with the EDC's electric distribution system, the cost of those facilities, and the time required to build and install those facilities.]

- [(g)] (e) [Upon completion of a facilities study] Within five business days of the completion of the facilities study, the EDC shall provide the applicant with the results of the study and an executable Part I interconnection agreement. The interconnection agreement shall list the conditions and facilities necessary for the customer-generator facility to safely interconnect with the EDC's electric distribution system, [the cost of those facilities, and the estimated time required to build and install those facilities] incorporate the milestones (if any) from the facilities study, and include an itemized quote, including overheads, for any required electrical power system modifications, subject to the cost limit set by the facilities' study cost estimate.
- [(h) If the applicant wishes to interconnect, it shall execute the interconnection agreement, provide a deposit of not more than 50 percent of the cost of the facilities identified in the facilities study, complete installation of the customer-generator facility, and agree to pay the EDC the amount required for the facilities needed to interconnect as identified in the facilities study.]
- [(i)] (f) Within [15] 10 business days after notice from the applicant that the customer-generator facility has been installed, the EDC shall inspect the customer-generator facility and shall arrange to witness any required commissioning tests [required under] pursuant to IEEE Standard 1547. The EDC and the applicant shall select a date by mutual agreement for the EDC to witness commissioning tests. For systems greater than 10 MW, IEEE Standard 1547 may be used as guidance. If the customer-generator facility passes the inspection, the EDC shall provide written notice of the results within three business days. If a customer-generator facility initially fails an inspection, the EDC shall offer to redo the inspection at the applicant's expense at a time mutually agreeable to the parties within 30 business days of the customer-generator requesting a retest. If the EDC determines that the customer-generator facility fails the inspection, it must provide a written explanation detailing the reasons and any standards' criteria violated
- [(j)] (g) Provided that the customer-generator facility passes any required commissioning tests satisfactorily, the EDC shall notify the applicant in writing through the CIAP portal, within three business days after the tests, of one of the following:
 - 1. (No change.)
- 2. The facilities study identified necessary construction that has not been completed, the date upon which the construction will be completed, and the date when the customer-generator facility may begin operation. The EDC shall promptly notify the customer-generator through the CIAP portal of any changes in the construction schedule.
- [(k)] (h) If the commissioning tests are not satisfactory, the customergenerator shall repair or replace the unsatisfactory equipment and reschedule a commissioning test pursuant to [(i)] (f) above.
 - [(1)] (i) (No change in text.)
- (j) An application fee not to exceed \$100.00 plus \$10.00 per kW of the nameplate rating up to a maximum of \$2,000 shall accompany any application and an application shall not be deemed complete until the application fee is received. The application fee shall be in addition to charges for actual time spent on analyzing the proposed interconnection. Costs for EDC studies and facilities necessary to accommodate the applicant's proposed customer-generator facility shall be the responsibility of the applicant.
- (k) Within 30 days of a completed application, the EDC shall conduct an initial review that includes a scoping meeting with the applicant. The scoping meeting shall take place in person, by telephone, or electronically, by a means mutually agreeable to the parties. At the scoping meeting, the EDC shall provide additional relevant and non-confidential information to the applicant that was not already provided as part of the PAVE report, including items such as the available fault current at the proposed interconnection location, the existing peak loading on the lines in the general vicinity of the customer-generator facility, and the configuration of the

distribution lines at the proposed point of common coupling. By mutual agreement of the parties, the scoping meeting or system impact study may be waived in writing.

- (l) Within five business days of the completion of the scoping meeting (or five business days after the EDC receives a completed application if the scoping meeting is waived), the EDC shall provide a draft system impact study agreement to the applicant, which shall include a good faith cost estimate of the cost and time for an impact study to be performed by the EDC. The applicant shall execute the impact study agreement within 10 business days, along with any deposit required by the EDC; provided that the applicant may request that the EDC hold the draft agreement in abeyance for up to 60 calendar days to allow for negotiation of the scope of the system impact study or to engage in dispute resolution procedures as specified at N.J.A.C. 14:8-5.12.
- (m) Once an applicant delivers to the EDC an executed system impact study agreement and payment in accordance with that agreement, the EDC shall conduct the system impact study. The system impact study shall be completed within 30 business days of the applicant's delivery of the executed system impact study agreement; provided that if system upgrades are required, the EDC may elect to extend the study process by an additional 20 business days. The system impact study provided to the applicant shall include a description of the EDC's analysis, conclusions, and the reasoning supporting those conclusions.
- (n) If the EDC determines that the system upgrades required to accommodate the proposed customer-generator facility are not substantial, the system impact study will state the scope and cost of the modifications identified in its results, and no facilities study shall be required. Modifications are considered not substantial if:
- 1. The total cost is below \$200,000, or such other value as the Board shall establish by Board order; or
- 2. The EDC, in its reasonable judgement, determines the modifications are not substantial.
- (o) If the EDC determines that necessary modifications to the electrical power system are substantial, the results of the system impact study will include an estimate of the cost of a facilities study and an estimate of the modification costs and timeline. If the applicant chooses to proceed, the EDC shall complete a facilities study that identifies the detailed costs of any electrical power system modifications necessary to interconnect the applicant's proposed customer-generator facility, unless the parties agree to waive the facilities study.
- (p) If the parties do not waive the facilities study, then within five business days of the completion of the system impact study, the EDC shall provide a facilities study agreement, which shall include a good faith estimate of the cost and the time needed to undertake the facilities study.
- (q) Once the applicant executes the facilities study agreement and pays the EDC pursuant to the terms of that agreement, the EDC shall conduct the facilities study. The facilities study shall include a detailed list of necessary electrical power system upgrades and an itemized cost estimate, breaking out equipment, labor, operation, maintenance, and other costs, including overheads, for completing such upgrades. If the EDC commences construction of actual upgrades, the EDC may not charge the applicant for any portion of cost overruns that exceed 50 percent of the total estimated upgrade cost. The facilities study shall also indicate the milestones for completion of the applicant's installation of its customer-generator facility and the EDC's completion of any electrical power system modifications, and the milestones from the facilities study (if any) shall be incorporated into the interconnection agreement. The facilities study shall be completed within 45 business days of the applicant's delivery of the executed facilities study agreement and receipt of any necessary deposits. If the applicant fails to execute the facilities study agreement or make the required deposits within 60 business days after receipt of the facilities study agreement from the EDC, the EDC may make the interconnection capacity available to other potential customer-generators and may require the applicant to re-start the interconnection process.

- (r) Within 40 business days of the receipt of an interconnection agreement, the applicant shall execute and return the interconnection agreement and notify the EDC of the anticipated date on which the customer-generator facility expects to commence commercial operation. Unless the EDC agrees to a later date or requires more time for necessary modifications to its electrical power system, the applicant shall identify an anticipated start date that is within 36 months of the applicant's execution of the interconnection agreement. However, the parties may mutually agree to an extension of this time, if needed, which shall not be unreasonably withheld. The applicant shall notify the EDC, in writing, and through the CIAP portal if there is any change in the anticipated start date of interconnected operation of the customer-generator facility.
- (s) The EDC shall bill the applicant for the design, engineering, construction, and procurement costs of the EDC-provided interconnection facilities and upgrades on a monthly basis, or as otherwise agreed by the parties. The customer-generator shall pay each bill within 30 calendar days of receipt, or as otherwise agreed by the parties and memorialized in writing. At least 20 calendar days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of any EDC facilities or upgrades, the applicant shall provide the EDC with a deposit equal to 50 percent of the cost estimated for its interconnection facilities prior to its beginning design of such facilities.
- (t) Within 60 calendar days of completing the construction and installation of the modifications to the EDC's system, the EDC shall provide the applicant with a final accounting report of any difference between the actual cost incurred to complete the construction and installation and the budget estimate provided to the applicant in the interconnection agreement and the applicant's previous deposit and aggregate payments to the EDC for such modifications. The EDC shall provide a written explanation for any actual cost exceeding a budget estimate by 25 percent or more. If the applicant's cost responsibility exceeds its previous deposit and aggregate payments, the EDC shall invoice the applicant for the amount due and the applicant shall make payment to the EDC within 30 calendar days. If the applicant's previous deposit and aggregate payments exceed its cost responsibility, the EDC shall refund to the applicant an amount equal to the difference within 30 business days of the final accounting report.

14:8-5.7 Interconnection fees

- [(a) An EDC or supplier/provider shall not charge an application or other fee to an applicant that requests level 1 interconnection review. However, if an application for level 1 interconnection review is denied because it does not meet the requirements for level 1 interconnection review and the applicant resubmits the application under another review procedure in accordance with N.J.A.C. 14:8-5.4(p), the EDC may impose a fee for the resubmitted application, consistent with this section.]
- (a) An EDC or supplier/provider shall charge an application fee, not to exceed \$100.00, or other value established by Board order, to an applicant that requests level 1 interconnection review.
- (b) For a level 2 interconnection review, the EDC may charge initial application fees of up to \$50.00 plus \$1.00 per kilowatt of the customergenerator facility's [capacity] nameplate rating, [plus] or any alternative value established by Board order. In addition to the initial application fee, the EDC may charge the applicant for the cost of any minor modifications to the electric distribution system or additional review, if required [under] pursuant to N.J.A.C. 14:8-5.5[(o)3 or 4]. Costs for such minor modifications or additional review shall be based on EDC estimates and shall be subject to case-by-case review by the Board, or its designee. [Costs for] The EDC shall bill an applicant only for the actual costs, including reasonable overhead, of engineering work done as part of any additional review [shall not exceed \$100.00 per hour]. An application shall not be deemed complete until the EDC receives the initial application fee.
- 1. For a level 2 interconnection review of a community solar facility or community energy system for which an applicant is granted an Enhanced PAVE process, the EDC may charge another fee of \$700.00, in addition to the normal fee for a level 2 PAVE report.

- (c) For a level 3 interconnection review, the EDC may charge initial application fees of up to \$100.00 plus [\$2.00] \$10.00 per kilowatt of the customer-generator facility's [capacity, as well as charges] nameplate rating. In addition to the initial application fee, the EDC may charge the applicant for actual time spent on any impact and/or facilities studies required [under] pursuant to N.J.A.C. 14:8-5.6. [Costs for] The EDC shall bill an applicant only for the actual costs, including reasonable overhead, of engineering work done as part of a system impact study or facilities study [shall not exceed \$100.00 per hour]. If the EDC must install facilities in order to accommodate the interconnection of the customer-generator facility, the cost of such facilities shall be the responsibility of the applicant. An application shall not be deemed complete until the initial application fee is received.
- 1. For a level 3 interconnection review of a community solar facility or community energy system for which an applicant requests an Enhanced PAVE process, the EDC may charge another fee of \$700.00, in addition to the normal fee for a level 2 PAVE report.
 - (d) (No change.)
- (e) A customer-generator shall pay for the cost of any additional equipment the EDC reasonably determines is necessary to interconnect a customer-generator facility in a manner that maintains the safe and reliable operation of the EPS.
- 14:8-5.8 Testing, maintenance, and inspection after interconnection approval
- (a) Once a net metering interconnection has been approved [under] **pursuant to** this subchapter, the EDC shall not require a customergenerator to test or perform maintenance on its facility except for the following:
 - 1.-2. (No change.)
- 3. Any post-installation testing necessary to ensure compliance with IEEE **Standard** 1547 or to ensure safety.
- (b) When a customer-generator facility approved through a level 2 or level 3 review undergoes maintenance or testing in accordance with the requirements of this subchapter, the customer-generator shall retain written records documenting the maintenance and the results of testing for three calendar years. No recordkeeping is required for maintenance or testing performed on a customer-generator facility approved through a level 1 review.
- (c) An EDC shall have the right to inspect a customer-generator's facility after interconnection approval is granted, at reasonable hours and with reasonable prior notice to the customer-generator. If the EDC discovers that the customer-generator's facility is not in compliance with the requirements of this subchapter, and the noncompliance adversely affects the safety or reliability of the electric distribution system, the EDC may require the customer-generator to disconnect the customer-generator facility until compliance is achieved. The EDC shall notify the customer-generator of any noncompliance requiring disconnection of the customer-generator facility through the CIAP.
- (d) The EDC shall notify the customer-generator through the CIAP, if it identifies any issue with customer-owned equipment during any required commissioning tests that requires de-energizing the customer-generator facility, or preventing the customer-generator facility from energizing, in order to maintain the safety or reliability of the electric distribution system. The EDC shall notify the customer-generator facility operator within four hours of such action being taken. The customer-generator and the EDC shall then determine a mutually agreeable timeframe in which to resolve the issue. The EDC shall also notify the customer-generator through the CIAP of any changes in the construction schedule.
- 14:8-5.9 Interconnection reporting requirements for EDCs
- (a) Each EDC with one or more customer-generators connected to its distribution system shall: [submit two interconnection reports per year, one covering January 1 through June 30 and one covering July 1 through December 31. The EDC shall submit the reports by August 1 and February 1, respectively.]
- 1. Track key performance indicators, including those listed at (c) and (d) below, as well as any other performance indicator established by Board order, on the EDC's website and update this information at least once every month;

- 2. Maintain an interconnection queue that includes all level 2 and level 3 interconnection requests currently pending before the EDC, at a level of detail that reasonably preserves customer confidentiality;
- 3. Conduct customer satisfaction surveys and post those results on its website and provide them to the Board; and
- 4. Submit interconnection reports to the Board on a quarterly basis, by the first day of each quarter.
- (b) The EDC shall submit [the reports required by this section electronically, in PDF format, to oce@bpu.state.nj.us] any interconnection reports to the Board Secretary in a docket and in a form specified by the Board Secretary. [In addition, the EDC may, at its discretion, submit a paper copy of the reports by hand delivery or regular mail to the Secretary, Board of Public Utilities, 44 South Clinton Avenue, 9th Floor, PO Box 350, Trenton, New Jersey 08625-0350. The EDC may, at its discretion, submit the interconnection report together with the net metering report required under N.J.A.C. 14:8-4.5.
- (c) Each report shall contain the following information regarding customer-generator facilities that interconnected with the EDC's distribution system for the first time during the reporting period, listed by type of renewable energy technology:
 - 1. The number of customer-generators that interconnected;
- 2. The estimated total rated generating capacity of all customergenerator facilities that interconnected; and
- 3. The total cumulative number of customer-generators that interconnected between June 15, 2001 and the end of the reporting period, including the customer-generators in (c)1 above.
- (d) The information required under (c) above shall be listed by type of class I renewable energy, as set forth at N.J.A.C. 14:8-2.5(b), as follows:
 - 1. Solar PV technology;
 - 2. Wind technology;
 - 3. Biomass; or
- 4. A renewable energy technology not listed at (d)1 through 3 above. In such a case, the report shall include a description of the renewable energy technology.]
- (c) Each report shall contain the following key performance indicators and information, as may be adjusted by Board order, regarding customer-generator facilities that interconnected with the EDC's distribution system or attempted to interconnect during the reporting period, for each interconnection level, based on the nameplate capacity of the customer-generator facility:
- 1. The number and total nameplate capacity of customergenerators that applied for interconnection;
- 2. The number and total nameplate capacity of customergenerators that successfully interconnected;
- 3. The number and total nameplate capacity of customergenerator facilities that withdrew or were removed from the interconnection queue;
- 4. The number of applications submitted with missing information that were not automatically addressed as part of the CIAP process;
- 5. Number, total nameplate capacity, and type of all proposed customer-generator facilities that undertook a PAVE process;
- 6. Number, total nameplate capacity, and type of customergenerator applications processed within the timelines established by this chapter;
- 7. Length of time each customer-generator waited for system impact and facilities studies;
- 8. Number, total nameplate capacity, and type of customergenerator applications not processed within the timelines established in this chapter, the length of time taken to complete processing delayed applications, and the reasons for any delay in processing applications;
- 9. Data on Enhanced PAVE requests covering all key performance indicators described at (c)1 through 8 above, presented clearly and conspicuously in a dedicated section of the report;
- 10. The number and total nameplate capacity of customergenerators of each technology type, broken out by class I renewable energy technologies (for example, solar, wind, or fuel cell technologies), energy storage devices, electric vehicle-to-grid projects, and hybrid systems involving multiple behind-the-meter technologies;

11. Data on quantity, nameplate capacity, type, and processing times for DER aggregation requests;

- 12. Data on the number of times applicants requested formal or informal dispute resolution, the timeline for resolution, whether the Board's interconnection ombudsman was involved, and how each dispute was resolved; and
- 13. A statement regarding whether the EDC believes it has the resources and capabilities needed to timely process current interconnection applications, as well as a trend analysis that assesses the EDC's capability to timely process interconnection applications if the volume of applications increases.
- (d) Each EDC shall maintain a current summary status on its website, and present it in a graphical format that is common to all EDCs, of all active interconnection applications showing the following performance indicators for active level 1, 2, and 3 interconnections:
- 1. The number of and total nameplate capacity represented by new applications received during the reporting period;
- 2. The number of and total nameplate capacity represented by currently active applications;
- 3. The number and total nameplate capacity of customergenerator facilities approved for interconnection during the reporting period, as well as the percent of active applications and nameplate capacity approved during the reporting period; and
- 4. The percent of active applications and total nameplate capacity approved year to date.
- (e) Each EDC shall annually report to the Board the full results of all recurring testing performed on legacy interconnected customer/generators, segmented by levels 2 and 3, pursuant to N.J.A.C. 14:8-5.8(a)1, which shall include:
- 1. Number and percentage of total interconnected systems that were tested;
- 2. Number and percentage of waivers that were granted for exemption from testing; and
- 3. Number and percentage of total interconnected systems that failed testing and required remediation.
- 14:8-5.10 Pre-Application Verification/Evaluation (PAVE) process
- (a) A Pre-Application Verification/Evaluation (PAVE) process shall be offered by each EDC for any qualified level 2 or level 3 projects upon payment of a \$300.00 fee, or such alternative fee as the Board shall establish by Board order.
- 1. Community solar facilities or community energy systems that are eligible for PAVE reports may elect to have an Enhanced PAVE process upon payment of a \$700.00 fee, which shall be additional to the fee for the standard PAVE process.
- (b) The PAVE process shall be initiated through the CIAP. To facilitate the PAVE process, the CIAP shall include an easy-to-use PAVE screening/configurator tool with data field entries into which a potential applicant can input basic parameters about their potential customer-generator facility.
- (c) Within 15 business days of the potential applicant providing a complete PAVE request, the EDC should provide information about relevant parts of its EPS through the CIAP, or other means agreed to by the EDC and the potential applicant, to the potential applicant regarding the interconnection of a proposed project, which may include the following items, as they may be modified by Board order:
 - 1. Total capacity (MW) of substation/area bus or bank and circuit;
- 2. Aggregate queued generating nameplate capacity (MW) proposing to interconnect to the substation/area bus or bank and circuit;
- 3. Available hosting capacity (MW) of the substation/area bus or bank and circuit, which is the total capacity less the sum of existing and queued generating nameplate capacity, accounting for all load served by existing and queued generators. In calculating available hosting capacity and how much of it a potential customer-generator facility may utilize, the EDC shall account for non-exporting technology, including non-exporting technology used in combination with increased on-site load or an energy storage device, that limits or will limit the maximum amount of power a customer-generator facility can export to less than its nameplate capacity rating;

- 4. Whether the proposed customer-generator facility is located on an area, spot, or radial network;
- 5. Substation nominal distribution voltage or transmission nominal voltage, if applicable;
 - 6. Nominal distribution circuit voltage at the proposed site;
- 7. Approximate circuit distance between the proposed site and the substation;
- 8. Relevant line section(s) and substation actual or estimated peak load and minimum load data, when available;
- 9. Whether or not three-phase power is available at the site and/or the distance from three-phase service;
- 10. Limiting conductor rating from the proposed point of common coupling to the distribution substation;
- 11. 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; or
- 12. Any other information that the EDC deems relevant to the applicant.
- (d) Within 10 business days of providing the potential applicant with a PAVE report, or at a time mutually agreeable to the parties, the EDC shall offer to have a meeting with the potential applicant to review the findings.
- (e) In preparing a PAVE report, the EDC need only include preexisting data. A PAVE request does not obligate the EDC to conduct a study or other analysis of the proposed project in the event that data is not available. If the EDC cannot complete all or some of a PAVE report due to a lack of available data, the EDC will provide the potential applicant with a report that includes the information that is available and identify any information that is unavailable. The EDC shall, in good faith, provide PAVE report data that represents the best available information at the time of reporting.
- (f) Each EDC shall provide an FAQ page on its website that clearly explains what the PAVE process is and provides instructions for using and completing the process. At a minimum, the EDC shall provide the following:
- 1. A clear statement of the purpose and intent of the PAVE process;
- 2. An overview and explanation of the specific data potential applicants need to provide to utilize the PAVE process, including instructions on how to use the CIAP's PAVE screening/configurator tool:
- 3. Any fee schedules, terms, and conditions associated with the PAVE process;
- 4. Simplified case studies or examples that illustrate successful handling and outcomes of the PAVE process; and
- 5. A designated contact point (email and phone) for handling more detailed questions and/or resolving issues.
- (g) An EDC shall inform a potential applicant who requests a PAVE report that:
- 1. The existence of "available hosting capacity" does not imply that an interconnection up to this level may be completed without impacts because there are many variables studied as part of the interconnection review process;
- 2. The distribution system is dynamic and subject to change, and the results of the PAVE report do not represent binding interconnection cost quotes; and
- 3. Data provided in the PAVE report may become outdated and not useful by the time a potential applicant submits a complete application.

14:8-5.11 Hosting capacity maps

(a) By (120 days of the effective date of this rulemaking), each EDC shall make a tariff filing to implement a common hosting capacity mapping process to aid applicants. Hosting capacity maps shall indicate locations on each EDC's distribution system with spare capacity and locations which are likely to require additional upgrades if a customer-generator facility interconnects there.

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- (b) An EDC shall post distribution system hosting capacity maps on its website, update them at least once every quarter, and include both circuit and substation level data in the maps. The available hosting capacity values for each circuit shall be calculated using common methodology and presented in a consistent manner across all EDCs' websites. An EDC shall post a written summary of all significant changes to hosting capacity maps on its website and simultaneously distribute them to a subscriber email listserv at least once every quarter. Each EDC shall clearly label its maps with detailed legends explaining what the data means and ensure its map legends use a nomenclature common to all EDCs.
- (c) To the greatest extent permitted pursuant to the North American Electric Reliability Council standards, applicable Federal and State laws, rules, and regulations, and internal EDC physical and cybersecurity policies, all hosting capacity maps shall be integrated with GIS systems, visually present all system data for substations, feeders, and related distribution assets, and allow potential applicants to easily determine, based on an entered street address, the following information:
- 1. Whether the nearby distribution circuit(s) are closed, have limited available surplus capacity, or are fully open to interconnecting additional generation;
- 2. A recommended and maximum amount of additional exportcapable generating capacity, defined as the maximum amount of power customer-generator facilities can export, after accounting for any non-exporting technology, that can be accommodated on each nearby open circuit without violating any reliability criteria, including, but not limited to, thermal, steady-state voltage, voltage fluctuation, and voltage protection criteria;
- 3. A quantified indication of interest level from other projects (and their aggregate capacity) along the same circuit;
- 4. A built-in function enabling users to filter sites based on available hosting capacity above a certain threshold;
- 5. A range of budgetary cost estimates for anticipated upgrades required to make additional hosting capacity available, based on high-level estimates (for example, +/- 25 percent);
 - 6. Uniform load on a circuit segment:
- 7. Preliminary information on the circuit segment and if the segment has a known transient/dynamic stability limitation, if a transmission ground fault overvoltage is possible, if a proposed facility has any transmission interdependencies, and if all islanding conditions are met based on the utility's screening policies;
- 8. Identification of potentially limiting equipment requiring a system upgrade on the hosting capacity maps (for example, voltage controllers, protective relays, communication systems, conductor ampacity, etc.); and
- 9. For each feeder, the available hosting capacity, as well as existing energy storage nameplate capacity, PV nameplate capacity, and any non-PV distributed generation nameplate capacity, each labeled individually.
- (d) Each EDC shall ensure that its hosting capacity mapping process includes a documented methodology for validating models, publishing hosting capacity maps, and enabling the collection and compilation of customer feedback.

14:8-5.12 Dispute resolution

- (a) By (120 days of the effective date of this rulemaking), each EDC shall make a tariff filing to implement a standardized dispute resolution process to govern disputes between the EDC and a customer-generator, including, but not limited to, disputes involving issues with interconnection studies, cost estimates for necessary upgrades, queue priority, the development of the interconnection agreement, billing, fees, or any related matters. The Board shall accept a standardized dispute resolution tariff filing upon a finding that the proposed dispute resolution process conforms to the requirements of this section and will enable the EDC to fulfill its duties pursuant to this section.
- (b) An applicant may initiate the informal dispute resolution process by making a request through the CIAP portal or to the EDC's interconnection ombudsman, and an EDC may initiate the process by

- notifying an applicant through the CIAP portal and by sending a written message to the applicant's email address. The parties shall make good faith efforts to resolve any dispute, including by making subject matter experts available, within 10 business days of its initiation or such longer time as the parties agree to in writing.
- (c) If the informal dispute resolution process is unsuccessful, the applicant shall provide the EDC a written notice of dispute, setting forth the nature of the dispute, the relevant known facts pertaining to the dispute, and the relief sought. The applicant shall submit the notice through the CIAP portal or send it to the EDC and the Board's interconnection ombudsman by email. If the applicant submits the notice through the CIAP portal, the EDC shall send a copy of the notice to the interconnection ombudsman by email.
- (d) The EDC shall acknowledge the notice within three business days of its receipt and identify a representative with the authority to make decisions for the EDC with respect to the dispute.
- (e) The EDC shall provide the applicant with all relevant regulatory and/or technical details and analysis regarding any EDC interconnection requirements under dispute within 10 business days of the date of the notice of dispute. Within 20 business days of the date of the notice of dispute, the parties' authorized representatives shall meet and confer to try to resolve the dispute. The parties shall operate in good faith and use best efforts to resolve the dispute.
- (f) If the parties do not resolve their dispute within 30 business days of the date the applicant sent the notice of dispute, then:
- 1. Either party may request to continue negotiations for an additional 20 business days;
- 2. The parties may refer the dispute to the Board's interconnection ombudsman by mutual agreement; or
- 3. The parties may request mediation from an outside third-party mediator by mutual agreement, with costs to be shared equally between the parties.
- (g) If the parties still do not reach an agreement after attempting to resolve their dispute by one or more of the methods listed at (f) above, then the applicant is strongly encouraged to proceed to the Board's formal complaint resolution process by filing a petition with the Board pursuant to N.J.A.C. 14:1-5.
- (h) At any time, either party may file a complaint before the Board pursuant to its rules or exercise whatever rights and remedies it may have at equity or law.

TRANSPORTATION

(a)

DIVISION OF CAPITAL PROGRAM MANAGEMENT DIVISION OF RIGHT OF WAY AND ACCESS MANAGEMENT

Relocation Assistance

Proposed Readoption with Amendments: N.J.A.C. 16:6

Authorized By: Francis O'Connor, Acting Commissioner, Department of Transportation.

Authority: N.J.S.A. 27:1A-5, 27:1A-6, 27:7-27, and 27:7-72 through 27:7-88; 23 U.S.C. §§ 101 et seq., and 46 U.S.C. §§4601 et seq.; and 49 CFR Part 24.

Calendar Reference: See Summary below for explanation of exception to calendar requirement.

Proposal Number: PRN 2024-064.

Submit written comments by August 2, 2024, to:

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