

April 24, 2023

VIA ELECTRONIC MAIL
sherri.golden@bpu.nj.gov
board.secretary@bpu.nj.gov

Sherri L. Golden
Secretary of the Board
New Jersey Board of Public Utilities
44 South Clinton Avenue, 1st Floor
P.O. Box 350
Trenton, New Jersey 08625-0350

RE: In the Matter of Modernizing New Jersey's Interconnection Rules,
Processes and Metrics
BPU Docket No. QO21010085

Dear Secretary Golden:

On behalf the State's four Electric Distribution Companies ("EDCs"),¹ please accept this letter as the EDCs' joint comments in response to the Board of Public Utilities' ("Board") Notice on the proposed rule changes regarding interconnection of distributed generation resources, also known as Distributed Energy Resources ("DERs"), to the New Jersey electric grid dated January 27, 2023, in the above-referenced Docket. Pursuant to a request from Board Staff, the EDCs enclose a "redlined" version ("Redline") of the draft Interconnection Rules that were attached to the Board's Notice. The EDCs address certain of their general concerns below, which drive many of the proposed changes in the Redline. In addition, the EDCs will supplement these general concerns in their individual comments on the Notice. While some of the EDCs' recommended changes are self-explanatory, the EDCs will gladly walk through their proposed changes with Board Staff and provide the rationale for each change. Due to the breadth and complexity of the draft Interconnection Rules, there has been insufficient time and opportunity to fully describe each of the EDCs' proposed changes and concerns herein. However, as this is a first step to revising the Interconnection Rules, the EDCs hope this Redline will prompt additional discussion and collaboration with all affected Parties, as was envisioned by Guidehouse, Inc. for many of the related subject areas in its "Grid Modernization Study" issued on August 24, 2022.

The EDCs' collective goal is to craft rules that protect the safety, integrity, and reliability of the electric grid, while facilitating the achievement of the State's ambitious clean energy goals, accommodating our customers' growing interest in DERs, and making the Interconnection application process more efficient and effective for all Parties.

The EDCs strongly support the goal of streamlining and enhancing the interconnection processes to facilitate the interconnection of DERs and the modernization of the State's electric grid. However, the Board and interested stakeholders should acknowledge that the makeover of the Interconnection Rules will be an iterative process, requiring ongoing stakeholder workgroups, deliberation, and collaboration. To be effective, particularly in the short-term, the scope of the proposed Interconnection Rule modifications should be more narrowly focused than as set forth in

¹ Atlantic City Electric Company, Jersey Central Power & Light Company, Public Service Electric and Gas Company, and Rockland Electric Company.

the Notice. Certain complex topics, particularly those currently being considered in other proceedings before the Board or other regulatory bodies, *e.g.*, aggregation related to FERC Order 2222, grid flexibility services, or the broadening of net energy metering to incorporate storage and non-Class I Renewables, all require further discussion, analysis, and evaluation by interested stakeholders. Given the unsettled nature of these topics or consideration in separate, open dockets, they currently are not ripe for inclusion in the Board's Interconnection Rules and require significant deliberation among the relevant parties. Rather, the revisions to the Interconnection Rules should be limited to those that can be implemented more expeditiously, albeit with further discussion of changes suggested by the EDCs. These include items such as the Pre-Application Verification/Evaluation ("PAVE") process, incorporation of IEEE Standards, dispute resolution process, Common Interconnection Agreement Portal ("CIAP"), and Hosting Capacity Maps. Again, the EDCs stand ready to immediately sit down with Board Staff and whomever Staff deems appropriate to discuss the EDCs' proposed modifications and move forward in these areas.

Consistent with the reality that development of the Interconnection Rules will be an ongoing process, the Board should establish various working groups of interested stakeholders (including representatives of PJM) to consider technical and regulatory issues that are still developing, on a periodic basis. For instance, Proactive System Upgrade Planning ("PSUP"), should be evaluated in conjunction with Integrated Distribution Plans ("IDPs") and other planning proposed in the Grid Modernization Study's long-term recommendations.

Individual EDC CIAPs should offer a similar customer experience and generally should have similar capabilities. Given the current statuses of existing or under-development EDC portals, allowing for a certain amount of variation is cost effective for our customers.

As with CIAPs, the Interconnection Rules should require that Hosting Capacity Maps offer a similar customer experience and generally should have similar capabilities. Given existing differences among EDCs, however, the Interconnection Rules should not require that such maps be identical, as such homogenization likely would be costly.

Interconnection Queue Management is absolutely essential to increase the integration of DERs and streamline the Interconnection process. The EDCs have revised the Interconnection Rules to expedite the application process, eliminate non-viable or stalled applications, and provide developers with a more accurate picture of available capacity.

None of the information required by the Interconnection Rules should be included in the EDCs' tariffs. Amending an EDC's tariff is a time consuming, cumbersome process, and the current landscape on the interconnection of DERs continues to evolve and remains unsettled in certain areas. A more efficient, streamlined process would be to require EDC filings pursuant to Board Orders.

The Interconnection Rules should specifically provide for full and timely recovery of incremental costs that will result from the changes proposed to Chapter 8 by Staff, including personnel costs. As the Board rightfully believes that Interconnection is a critical factor in reaching the goals of the Energy Master Plan, it should help to ensure that investment in such systems and processes to improve Interconnection are incentivized and regulatory lag is minimized.

The EDCs appreciate Board Staff's efforts to enhance Interconnection processes. The EDCs stand ready to walk through, and work through, each of the proposed changes to the draft Interconnection Rules with Board Staff and interested stakeholders. This collaborative effort will serve the Board's goal of enhancing Interconnection processes and positioning New Jersey at the forefront of the clean energy transition.

Respectfully submitted,

ATLANTIC CITY ELECTRIC COMPANY



Cynthia L.M. Holland
Assistant General Counsel

JERSEY CENTRAL POWER & LIGHT



Andrew Hendry
Sr. Advisor, NJ Reg Affairs

ROCKLAND ELECTRIC COMPANY

/s/ John L. Carley

John L. Carley
Associate General Counsel

PSEG SERVICES CORPORATION

Ana J. Murteira

Ana Murteira
Attorney for PSE&G

Enclosure

cc: Kelly Mooij
Paul Heitmann

REDLINE VERSION OF DRAFT INTERCONNECTION RULES
(COMPARED AGAINST EXISTING NEW JERSEY ADMINISTRATIVE CODE)

PAGES R1-R50 FOLLOW

§ 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.

"Annualized period" means a period of 12 consecutive monthly billing periods. A Customer-generator's first annualized period begins on the first day of any single monthly billing period, at the customer's choice. Each Customer-generator selects an annualized period under N.J.A.C. 14:8-4.3.

"Avoided cost of wholesale power" means the average locational marginal price of energy in the applicable utility's transmission zone. This cost can be obtained through the website maintained by PJM Interconnection at www.pjm.com.

"Customer-generator" means an ~~electricity~~electric customer that generates electricity on the customer's side of the meter, using ~~a class~~one or more Class I renewable energy ~~source, that stores electricity, or that involves multiple sources of generation that includes a class I renewable energy source, whether separately or as part of an aggregated resource source(s).~~ The Board may deem a ~~pair of entities acting together—that is, a net~~Net metering generator and a ~~net~~Net metering customer ~~-acting together~~ 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.~~ Class I renewable electric energy. A Customer-generator facility typically includes ~~an electric generator, a Class I renewable energy storage device, vehicle to grid device, generation source and/or the associated~~ interconnection equipment that connects the Customer-generator facility directly to the customer or the EDC's distribution system, whether separately or as part of an aggregated resource entities acting together for the purposes of net metering.

"EDC" means an electric public utility subject to the net metering and interconnection rules set forth in N.J.A.C. 14:8-4.1 et seq. and N.J.A.C. 14:8-5.1 et seq.

"Net metering customer" means a customer that ~~owns and/or operates electrical wires and/or equipment that generates electricity on the customer's side of the meter using Class I renewable energy sources and is~~ connected to the EDC's electric distribution system through a meter used for Net metering. The Net metering customer may or may not be the same entity as the Net metering generator, and may or may not be located on the same

property as the Net metering generator.

"Net metering generator" means an entity that owns ~~and~~/or operates a ~~class~~Class I renewable energy generation ~~facility~~source, the electricity from which is delivered to a Net metering customer; provided that only the electricity produced by the ~~class~~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.

§ 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, ~~14:8-1.2~~, and 14:8-~~14~~.2.

~~“AGIR” or “Authority Governing Interconnect Requirements” means the agency that has authority for setting interconnection rules to the state jurisdictional electric system, as set forth in IEEE 1547 Standard or subsequent standard as identified in a Board order. The term AGIR is functionally equivalent to the term “Relevant Electric Retail Regulatory Authority.”~~

"Applicant" means a person who has filed an application to interconnect a ~~Customer-generator facility~~ Facility to an ~~electric distribution~~ EDC's Electrical power system.

"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, ~~densely populated~~ 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 1547 ~~Standard Section 4.1.4~~, which is incorporated herein by reference, ~~or subsequent standard as identified in a Board order~~ as updated.

~~“Common Interconnection Agreement Process Application Portal” or “CIAP” means a common EDC application an EDC portal-based software application platform, webpage, or website capable of tracking key information throughout the interconnection application process that allows Customer-generators to apply for and manage Applicants to submit applications and monitor 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, timelines, and incorporating schedule. The CIAP may be customized to the needs of the EDC and its Applicants.~~

~~“Customer” has the same meaning as set forth in N.J.A.C. 14:3-1.1.~~

~~“Distribution System Upgrade” means a required addition or modification to the EDC’s Electrical power system at or beyond the Point of common coupling, as identified and and budget for upgrade commitments and construction timelines determined by the EDC, to accommodate the interconnection of a Customer-generator facility, a Net metering facility or a Facility.~~

~~“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 stream, on an aggregated basis, whether for the purposes of participating in retail or wholesale markets, including those established under Order No. 2222 or otherwise.~~

~~“EDC grid flexibility services” are control capabilities that may be procured from a Customer generator and may be compensated by the EDC that help to maintain distribution system reliability and safety, whether separately or as part of a DER aggregation. Volt VAR provided by smart inverters is one example.~~

~~“EIS” means an Expedited Impact Study designed to accelerate projects that have no electrical or cost impact on either other distribution circuits, adjacent circuits, or other Customer generator projects that are seeking individual circuit capacity.~~

~~“Electrical power system” or “EPS” means a facility that delivers electric power to a load and has the same meaning as is assigned to this term set forth in IEEE standard 1547 Standard, which is incorporated herein by reference, or subsequent standard as identified in a Board order. As of June 4, 2012, IEEE standard 1547 defined EPS as a facility that delivers electric power to a load.~~

~~“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.~~

~~“Facility” means a Class I renewable electric generation resource requiring interconnection under this subchapter.~~

~~“Facilities Study” means an engineering study conducted by the EDC to determine the required upgrades to the EDC’s Electrical power system, including the cost and the time required to build and install such upgrades as necessary to accommodate an interconnection request. The EDC may conduct a Facilities Study in combination with other required studies. Nothing in this chapter shall preclude a Facilities Study and a System Impact Study from being conducted together, or as one study.~~

~~“Fault current” means electrical current that flows through a circuit and is produced by an electrical fault, such as to single-phase to ground, double-phase to ground, three-phase to ground, phase-to-phase and three-phase. A Fault current is several times larger in magnitude than the current that normally flows through a circuit.~~

~~“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. The Operating Agreement can be obtained on the PJM Interconnection website at~~

~~<https://agreements.pjm.com/oa/4534><http://www.pjm.com/documents/downloads/agreements/oa.pdf>, or such subsequent standard as identified in a Board order. As of October 23, 2008~~22~~, 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~~Good 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 available power flow capacity on distribution system circuits that is used to determine incremental allowable interconnection of generator facilities. Hosting capacity may be a positive number, indicating that there is surplus power flow capability or zero, indicating that the circuit is closed to incremental generation or facilities.~~

~~“Hosting capacity Analysis” means the methodology used to calculate, publish and evaluate the ability to increase the available Hosting capacity of a given circuit.~~

~~“Hosting capacity” means the amount of aggregate generation capacity that can be accommodated on the Electrical power system without requiring infrastructure upgrades.~~

~~“IEEE Standard 1547 Standard”~~ means ~~IEEE Standard 1547-2018~~ IEEE Standard 1547-2003 Standard, which was approved in 2018, amended in 2020, or any future updated version of the IEEE 1547 Standard as may be directed by Board order 2003 and reaffirmed in 2008 as updated.

~~“IEEE Standards”~~ means the standards published by the Institute of Electrical and Electronic Engineers, available at www.ieee.org.

~~“Interconnection agreement”~~ means an agreement between an Applicant or Customer-generator and an EDC, which governs the connection of the Facility or Customer-generator facility to the ~~electric distribution system~~ EPS, as well as the ongoing operation of the Facility or Customer-generator facility after it is connected to the ~~system, whether the facility operates singly or as part of a DER aggregation~~ EPS. 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~~ a Facility or Customer-generator with an ~~electric distribution system~~ EPS and includes all interface equipment, including switchgear, inverters ~~or other interface and protective devices. Interconnection equipment may include an integrated generator, 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 provide a fair and transparent interconnection process.

~~“Interconnection Queue” or “queue”~~ consists of the interconnection applications for Facilities that are prioritized by date of completed application. PAVE requests and projects that the EDC determines to have an incomplete application are not in the queue.

~~“Line section”~~ means that portion of an EDC’s ~~electric distribution system~~ EPS, which is connected to an interconnection customer and is bounded by automatic sectionalizing devices or the end of the distribution line.

~~“Non-exporting customer generator”~~ means a Customer-generator facility that is designed to ensure the one-way flow of electricity from the EDC’s electrical power system

~~“Material Modification”~~ means a change to the application for interconnection of such relevance or significance, as determined by the EDC, that it requires a new application, a new queue position, and withdrawal of the original application.

~~“Modification”~~ means a change to the ownership, equipment, equipment ratings, equipment configuration, or operating characteristics of the Facility, or to schedules associated with the Facility as described in the

application. Modifications that alter operating characteristics or schedules may be deemed a Material

Modification.

“Non-exporting technology” means ~~ana certified electric device that is designed pursuant to ensure that a~~
~~Customer generator is a non-exporting system or that limits the amount of injection N.J.A.C. 14:8-5.3 that is~~
designed to restrict export past the Point of common coupling.

“Order No. 2222” means any program adopted by PJM and approved by the Federal Energy Regulatory Commission
designed to enable one or more Customer generator to sell their electrical output into the wholesale market, either
singly or as part of an aggregation of more than one Customer generator facility.

=

~~"Party" or "Parties" means individually and collectively the Applicant, Customer-generator, or the EDC, or both.~~

~~–"PAVE" is a Pre-Application Verification/Evaluation process designed to provide a prospective Applicant or Customer-generator an opportunity to receive actionable feedback from the EDC about the technical aspects of an interconnection request, including electrical feasibility, timeline, and other technical and procedural matters at the beginning of the interconnection process available information from the~~

~~"Point of common coupling" means the point in the power system at which the EDC prior to submitting a formal application.~~

~~"Point of common coupling" and the customer interface occurs, which or "POCC" has the same meaning as assigned to this term set forth in IEEE Standard 1547, or any future as updated version of the IEEE 1547 Standard as may be directed by Board order. The Point of common coupling and the point of interconnection are used synonymously. 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."~~

~~–"Proactive System Upgrade Planning" or "PSUP" means an annual filing in which the EDC identifies targeted proactive circuit and system upgrades aimed at expanding opportunities for Customer-generator facilities to be interconnected in an efficient and expeditious manner.~~

~~–"Rule 21" means the California Public Utilities Commission's Electric Rule 21, which is a tariff that describes the interconnection, operating and metering requirements for generation facilities to be connected to an EDC's distribution system. More information about Rule 21 is available at <https://www.cpuc.ca.gov/rule21>.~~

~~–"Solar Permitting Application Software" is a scalable software platform designed by a national lab or other entity designed to be deployed at a municipality or other local entity to significantly automate and compress the 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" 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 under set forth in IEEE Standard 1547- 2018, or any future as updated version of the IEEE 1547 Standard as may be directed by Board order. 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." A Spot network is generally used to supply power to a single customer or a small group of customers.~~

~~"System impact study~~Impact Study" or "SIS" means an engineering analysis ~~performed by the EDC of the probable impact of a Customer generator facility~~the proposed interconnection on the safety and, power quality or reliability of the EDC's EPS, which may include the cost and the time required to build and install such upgrades as necessary to accommodate an interconnection request. The EDC may conduct a System Impact Study in combination with other required studies. Nothing in this chapter shall preclude a Facilities Study and a System Impact Study from being conducted together, or as one study.

§ 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 and Facilities:

1. Level 1: An EDC shall use this review procedure for ~~all~~ applications to connect inverter-based Customer-generator facilities and Facilities which have a power rating of ~~40~~ 25 kW or less, as measured in ~~direct~~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 and 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 (2) MW or less, as measured in ~~direct~~alternating current; (ii) do not qualify for level 1 interconnection review procedures; or (iii) did not pass a level 1 ~~process~~review. 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 and Facilities that (i) are greater than two (2) MW, as measured in ~~direct~~alternating current; (ii) do not qualify for either the level 1 or level 2 interconnection review procedures; or (iii) did not pass a level 1 or level 2 ~~process~~review. Level 3 interconnection review procedures are set forth at N.J.A.C. 14:8-5.6.

(b) In determining the appropriate interconnection level and performing the related studies, the EDC shall~~may~~ allow a prospective generator~~an applicant~~ to limit its ability to export power to the grid to less than its nameplate rating, including by utilizing ~~non~~Non-exporting technology that ~~prevents export of electricity past the Point of common coupling, either in whole or in part, or enrollment in an approved EDC grid flexibility services program~~is certified pursuant to NJAC 14:8-5.3. The net export capacity of the Customer~~customer~~-generator facility or 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, EDC's EPS and shall ~~document~~include such findings ~~to~~in the BoardSystem Impact Study report.

~~(c) For Customer generator facilities that involve either a stationary or mobile energy storage device, the EDC shall utilize the interconnection level based on the sum of (i) the nameplate power capacity of the energy storage device, as measured in MW of direct current, and (ii) the nameplate power capacity of any~~

Customer generator facility, in MW of direct current, subject to any export controls or non-exporting requirement, or enrollment in an approved EDC grid flexibility services program, that may be utilized as set

~~forth in subsection b. The load aspects of the storage device will be treated just like any other load, using the incremental net load for the customer.~~

~~(d) By January 1, 2024, each EDC shall make a compliance filing to allow existing Customer generator facilities to upgrade to a UL 1741 compliant smart inverter without additional study, or add an energy storage device through the appropriate interconnection process.~~

~~By June 1, 2023, each EDC shall establish a consistent, secure and auditable electronic interconnection application processing software platform that will provide a structured approach for data intake and notifications for all interconnection Levels, to be known as the Common Interconnection Agreement Process or CIAP. Each EDC's CIAP-compliant portal shall allow Applicants to apply for interconnection electronically through a web portal that maintains a consistent presentation and workflow to interconnection Applicants across EDC service territories. The cost of implementing the CIAP portal and related~~

(c) All newly installed DER systems shall comply with IEEE 1547-2018. Inverter-based DER shall be tested and certified as compliant with UL 1741 Schedule B and shall meet the additional field testing and commissioning requirements of IEEE 1547-2018 as approved by the EDC. The EDC has the ability to request a cease to energize test.

(d) Any incremental costs, including personnel costs, incurred by an EDC pursuant to modifications to this chapter in [the current rulemaking] shall be recovered by each EDC in a full and timely manner, through a rider mechanism, as part of its base rates, or through an approved Infrastructure Investment Program pursuant to N.J.A.C. 14:3-2A.2., as proposed by the EDC and approved by the Board.

(e) Within one (1) year of the Board's adoption of these regulations, each EDC shall establish a secure 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 shall be developed based on the needs of the EDC and its Applicants and maintain a consistent customer experience for Applicants. Each CIAP shall, at a minimum:

1. Include a form for a potential Applicant to request a PAVE report as set forth at N.J.A.C. 14:8-5.10, prior to the submission of an initial application;

1.2. Include a portal-based application form that requires the following types of information:

i. Basic information regarding the parties involved, including the Applicant, Customer-generator, and the electricity supplier(s) involved;);

ii. Information regarding the type and specifications of the Customer-generator facilityFacility;

iii. Information regarding the contractor(s) who will install the Customer-generator facilityFacility;

iv. Certifications and agreements regarding utility access to the Customer-generator'sApplicant's property, emergency procedures, liability, compliance with electrical codes, proper operation and maintenance, and receipt of basic information; and

v. Include a check box to indicate whether the Applicant elects to pursue the PAVE process; and

~~vi.v.~~ Other similar information as needed to determine the compliance of a particular Applicant with this chapter, as deemed necessary by the EDC to maintain the safety, power quality or reliability of the EDC's EPS;

~~2.3.~~ Include ~~standardized~~ online forms for required Applicant information, 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, ~~and option for email and phone/text status change notifications, and other.~~ All communication will be electronic communication through the CIAP; ~~such administrative requirements as the EDCs may jointly propose or the Board shall establish via Order;~~

~~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,~~ provided by Applicant, as well as interconnection related information provided by the EDC including 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 EDCs may jointly propose to track or the Board shall establish ~~via order~~ by Order;

5. Provide ~~automatic email and online~~ electronic notifications to the Applicant with the goal of enforcing ~~clearly defined tariff timelines, schedules~~ 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 ~~common data architecture and protocol structure across all EDCs~~ 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 as set forth at all interconnection~~

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

8. Allow for ~~a fully virtual~~an electronic interconnection application process, including allowing

for the upload of files and documents; and

9. Include ~~ana~~ Frequently Asked Questions (FAQ) webpage to provide guidance ~~useful to~~

~~interconnection customersto Applicants~~ engaging in the interconnection process that ~~clearly~~

presents context and instructions for interacting with the ~~electronic application tracking~~

system;CIAP and provides information regarding the dispute resolution process.

10. ~~Provide automated data feeds for all required reporting that is accessible by Board Staff,~~

including capability of establishing dashboards or other data analysis tools, as may be established

by Board order.

~~(bf)~~ Each EDC shall designate and provide contact information for an employee or office from which an applicant Applicant can obtain basic ~~application forms and~~ information through an informal process. On request, this employee or office shall provide all relevant forms, documents, and technical requirements that are not available on the EDC website or through the CIAP necessary for submittal of a complete application for interconnection review under this section, ~~as well as specific information necessary to contact the EDC representatives assigned to review the application.~~

~~(gc)~~ Upon request of the A potential a Applicant, the EDC shall meet with an a Applicant or Customer-generator who qualifies for level 2 or level 3 interconnection review prior to the filing of an application for the purpose of conducting a, may request a PAVE review.

The PAVE review shall follow report following the procedures as set forth at N.J.A.C. 14:8-5.10, prior to the submission of an initial application, to assist ~~them~~ the potential Applicant or Customer-generator 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 customer generator facility;
- ~~3.~~ Information regarding the contractor who will install the customer generator 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.

~~(eh)~~ An EDC shall not be responsible for the cost of determining the rating of equipment owned by an Applicant or a Customer-generator, or of equipment owned by other local customers.

~~(fi)~~ An EDC ~~shall~~may not require an Applicant or a Customer-generator whose ~~facility~~Facility meets the criteria for interconnection approval under 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.

(gj) If the interconnection of a Facility or Customer-generator facility is subject to the interconnection requirements of FERC or PJM, ~~whether in compliance with rules governing DER aggregations under FERC's Order No. 2222 or otherwise,~~ the provisions of this subchapter that apply to interconnection apply to that ~~facility~~Facility only to the extent that they do not conflict with the interconnection requirements of FERC or PJM.

(hk) ~~Each EDC shall develop an interconnection dispute resolution process as set forth in N.J.A.C. 14:5.15, to be included on the EDC FAQ webpages. As part of a dispute resolution process the EDCs should identify an ombudsman to handle customer interconnection complaints. If~~¹³. In addition, if an applicant-Applicant or Customer-generator 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 Applicant or other person~~Customer-generator~~ may ~~file~~engage in informal dispute resolution pursuant to N.J.A.C. 14:8-5.13, including filing an initial informal complaint with the Board's ~~interconnection ombudsman~~Interconnection Ombudsman under N.J.A.C. 14:1-5.13, or ~~may file~~filing a formal petition with the Board under N.J.A.C. 14:1-5.

(il) Once ~~an~~ Applicant or Customer-generator has met the level 1 interconnection requirements of the relevant interconnection review 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, the EDC shall notify the Applicant or 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~~ electronically through the CIAP-compliant automated portal and to the e-mail address on file, and to the U.S. Postal Service mailing address that is listed on the customer-generator'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.~~

(jm) The applicant Applicant ~~shall not operate the or~~ Customer-generator ~~facility~~shall not energize the Facility until the EDC's application and inspection process is completed. Unauthorized~~EDC has provided authorization to energize. The EDC has the right to disconnect an unauthorized~~ system interconnection ~~and operation~~due to safety and reliability risks or operational risk, which will result in no payment for excess generation credits.

Any Applicant or Customer-generator may request that the EDC ~~take into account~~ review the impact of any significant anticipated changes in load associated with ~~contemporaneous installation of the Customer-generator facility and~~ the Applicant installing any of the following ~~contemporaneously with the Facility~~: (i) electric vehicle charging infrastructure, including any ~~electric~~ vehicle-to-grid bidirectional capabilities; (ii) building electrification upgrades; (iii) deployment of energy efficiency upgrades; or (iv) 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~~ these contemplated contemporaneous ~~changes~~ installations are not completed prior to the planned energization of the ~~system~~.

~~(n)~~ Each EDC, on an annual basis, shall make a Proactive System Upgrade Planning filing in which the EDC identifies targeted proactive circuit and system upgrades aimed at expanding opportunities for Customer-generator facilities and detail the costs and benefits of the proposed upgrades, as set forth at N.J.A.C. 14:8-5.15.

An EDC shall allow entities with Interconnection agreements to participate in a DER aggregation without further review; provided that a DER aggregator will provide the EDC 10 business days' written notice before initiating a DER aggregation of: (i) more than 10 MW in total size; (ii) involving multiple customers of greater than 1 MW (as measured at any single retail meter); or (iii) any proposed modification to a DER aggregation in (i) or (ii) that results in a greater than 50 percent change in aggregation size or adds new individual customers at any single retail meter of 1 MW or greater. The EDC shall have 10 business days after receiving a DER request to either approve the proposed DER aggregation or issue a formal letter of objection, which shall be provided to Board Staff and the DER aggregator, identifying with specificity concerns about the proposed aggregation and how it may adversely affect system reliability, along with possible alternative means of mitigating the concern. If the EDC issues such a letter, the parties shall engage in the dispute resolution provisions set forth in N.J.A.C. § 14:8-5.1'6. No notice shall be required before a DER aggregation may remove customers from an aggregation Facility.

~~(e)~~(n) 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, through the CIAP, within three (3) business days, wherever feasible, after the missed deadline via methodology as 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~~ notify the Applicant through the CIAP and Board Staff ~~updated~~ in writing of any changes in ~~the~~an expected completion date for authorization to energize.

~~(p)~~ The Applicant may request in writing, through the CIAP, the extension of a timeline, required of the Applicant, established in this chapter. The requested extension may be for up to one-half of the time originally allotted (e.g., a ten (10) business day extension for a twenty (20) business day timeframe). The EDC shall may not unreasonably refuse this request, with the Applicant's acknowledgement that voluntary extensions may cause completion delays. If further timeline extensions are necessary, the Applicant may request a further extension through the CIAP portal or from the EDC's interconnection ombudsperson, who shall and the EDC may grant the request, if it is reasonable, or otherwise, deny it, within three (3) business days and reflect the decision in the CIAP portal and via email.

~~(q)(o)~~ In conducting studies pursuant to. Any Applicant extension requests may impact the EDC timelines and delay authorization to energize, and the Applicant accepts this risk when requesting an extension. An Applicant extension requests pause any timelines that the EDC is required to meet. If the Applicant does not meet or comply with the timelines or relevant extension provisions set forth in this chapter, each EDC shall plan its system to allow for reverse power flow through substations where minor changes to the substation's control system allow for such flows in a safe and reliable manner and shall prioritize upgrading such control systems in response to interconnection applications that would benefit from such reverse flows the application shall expire.

(p) The Applicant applying for interconnection under N.J.A.C. 14:8-5.2 may propose a Modification at any time by submitting a request to the EDC through the CIAP. Submission of such a request will not suspend any deadlines applicable to the pending application. The EDC will review the request to determine whether the proposed Modification is a Material Modification and provide its determination to the Applicant within ten (10) Business Days, unless the EDC first notifies the applicant that additional information is needed to make the evaluation. In that case, the EDC will have ten (10) Business Days from receipt of the additional information to determine whether the proposed Modification is a Material Modification.

(q) A Material Modification will require a new application, a new queue position, and withdrawal of the original application if the Applicant elects to move forward with the modification (if not yet interconnected). The EDC reserves the right to make the final determination as to whether a proposed change is a Material Modification. When making the materiality determination, the EDC will provide the Applicant with an explanation of its finding. At the Applicant's request, the EDC will meet with the Applicant to discuss the materiality determination. A Modification that is not determined to be material may still require evaluation and acceptance by the EDC through the process described below. The Applicant is obligated to pay any necessary study costs of the evaluation. The EDC will notify the Applicant of any additional cost and/or information that may be required to evaluate the Modification within five (5) Business Days of providing the materiality determination. The Applicant shall have ten (10) Business Days to provide any requested information and pay the associated fees or choose to remain with the original interconnection application with associated uninterrupted timeline. If the proposed change is not a Material Modification, and is proposed prior to the start of a System Impact Study, the EDC will study the modified project in the SIS process. If the proposed change is not a Material Modification and is proposed following the start of a SIS, but no later than forty (40) Business Days after the start date, the EDC may have an additional forty (40) Business Days to complete the SIS incorporating the change. If the proposed change is not a Material Modification and is proposed at a later date, or after completion of a SIS, the change may require further study and will require mutual agreement between the EDC and the Applicant. The EDC retains the right to determine the extent of evaluation necessary but will endeavor to complete any necessary study within a timeframe no longer than a standard SIS. The Applicant will be responsible for any costs related to the change.

(r) Nothing in this chapter shall preclude a Facilities Study and a System Impact Study from being conducted together, or as one study.

§ 14:8-5.3 Certification of ~~customer-generator~~CustomerApplicant and ~~Customer-generator~~customer-Interconnection equipment

(a) ~~In order to~~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-an Applicant's customer-generator~~Customergenerator or Customer-generator's ~~interconnection~~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 herein,~~EPS in accordance with the following standards, as applicable:

1. IEEE 1547-~~2018~~, Standard for Interconnecting Distributed Resources with Electric Power Systems (published July 2003~~18~~, amended April 2020), ~~or any future updated version of the IEEE 1547 Standard as may be directed by Board order~~, which is incorporated herein by reference, as ~~amended or supplemented~~updated. IEEE Standard 1547 ~~Standard~~ can be obtained through the IEEE website at www.ieee.org; and
2. UL 1741-~~Supplement SA or SB~~ Inverters, Converters, and Controllers for Use in Independent Power Systems (September 2021~~November 2005~~) or any future updated version of the UL1741 ~~Standard as may be directed by Board order, which is incorporated herein by reference as amended or supplemented, and any non-exporting technology that is outside the scope of the IEEE 1547 Standard, but is listed under a UL-1741 Certification Requirements Decision (CRD), shall not be deemed eligible for approval unless said technology has been explicitly approved by Board Order after stakeholder process providing opportunity for input, which Order shall also include maximum generation capacity and other parameters that describe under what circumstances such approved technologies may be utilized, which is incorporated herein by reference as amended or supplemented.~~ UL 1741 can be obtained through the Underwriters Laboratories website at www.ul.com; and ~~Equipment for which UL 1741 certification does not currently exist, but approved for operation under California's Rule 21 process, including through the interim testing protocols set forth for Non-exporting AC/DC converter technology or other Non-exporting technology, and incorporated herein by reference. Such facilities will be treated as "certified" for the purposes of this chapter.~~

(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 under this chapter,~~ and has been tested and listed by the laboratory for continuous interactive operation with an ~~electric distribution system~~ EPS in compliance with the applicable codes and standards listed in (a) above.

(c) If the Interconnection equipment has been tested and listed in accordance with this section as an integrated package, which includes a Facility or Customer-generator or other electric source facility, the ~~interconnection~~Interconnection equipment shall be deemed certified and the EDC shall not require further design review, ~~or testing or additional equipment~~.

(d) If the ~~interconnection~~Interconnection equipment includes only the interface components (for example, switchgear, or inverters, or other Non-exporting technology or other interface devices), an ~~interconnection~~ applicant Applicant or Customer-generator shall show that the ~~generator or other electric source being utilized with the Interconnection equipment Facility~~ is compatible with the ~~interconnection~~Interconnection equipment and consistent with the testing and listing specified for the equipment. If the ~~generator or electric source Facility~~ 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 under this rule~~, 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~~Facility~~ that meets all of the following criteria:

1. The facility~~Facility~~ is inverter-based and has smart inverter capability;
2. The facility~~Facility~~ has a capacity of 40~~25~~ kW or less; and
3. The facility~~Facility~~ has been certified in accordance with N.J.A.C. 14:8-5.3.

(b) For a Customer-generator facility~~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~~flat \$100 fee, or other value established by Order of the Board order,~~ if all of the applicable requirements at (c) through (g) below are met. or the EDC has conducted a power flow analysis that demonstrates the interconnection poses no adverse impacts to the EPS. An EDC shall not impose additional requirements not specifically authorized under this section unless required for the safety, power quality or reliability of the EDC's EPS.

(c) The aggregate generation~~Facility~~ capacity on the Line~~section~~ to which the Customer-generator facility~~Facility~~ will interconnect, including the capacity of the Customer-generator facility~~Facility~~, shall not contribute more than ten (10) percent to the distribution circuit's maximum fFault~~Fault~~ current at the point on the high voltage (primary) level that is nearest the proposed pPoint~~of common coupling~~.

(d) A customer-generator~~Customer-generator facility's Facility~~ does not qualify for interconnection under Level~~level~~ 1 if the pPoint~~of common coupling~~ is ~~shall not be~~ on a transmission line, a sSpot~~network~~, or an area network~~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~~Facility~~ is to be connected to a radial Line~~Line~~ section, the aggregate generation~~Facility~~ capacity connected to the circuit, including that of the Customer-generator facility~~Applicant's Facility~~, shall not exceed fifteen (105) percent (~~125~~twenty-five ~~4~~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~~Facility~~ is to be connected to a single-phase shared secondary, the

aggregate ~~generation~~Facility capacity connected to the shared secondary, including the ~~Customer~~
~~generator facility~~Facility, shall not exceed ~~20~~ thirty (30) kilovolt-amps (kVA).

- (g) If a single-phase ~~Customer-generator facility~~ Facility is to be connected to a transformer center tap neutral of a 240 volt service, the addition of the ~~Customer-generator facility~~ Facility shall not ~~create~~ result in an imbalance between the two sides of the 240 volt service of more than ~~twenty (20)~~ percent of the nameplate rating of the service transformer.
- (h) An applicant ~~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 ~~(3)~~ business days after receiving an application for level 1 interconnection review, the EDC shall provide ~~written or e-mail~~ ~~electronic~~ notice to the applicant ~~Applicant~~ via ~~email and through the CIAP portal~~ that it received the application and ~~state~~ whether the application is complete. If the application is incomplete, the ~~written~~ notice shall include a list ~~of all~~ of the information needed to complete the application.
- (j) Within ~~ten (10)~~ business days after the EDC notifies the applicant ~~Applicant~~ that the application is complete under (i) above, the EDC shall notify the applicant ~~Applicant~~ that:
- ~~1.~~ The ~~Customer-generator facility~~ Facility meets all of the ~~applicable~~ criteria at (c) through (g) above ~~or passes an EDC-conducted power flow analysis that apply demonstrates the interconnection poses no adverse impacts to the facility, and the EPS. The~~ interconnection will be finally approved upon completion of the process set forth at (k) through (-o) below;
 - ~~2.~~ ~~That the Customer-generator facility~~ The application is proposing ~~to connect~~ interconnection to a Spot network or an Area network, and the EDC requires additional time to determine whether the interconnection is technically feasible; or
 - ~~23.~~ The ~~Customer-generator facility~~ Facility has failed ~~to pass meet~~ one or more of the applicable ~~criteria screens~~ at (c) through (g) above ~~or fails an EDC-conducted power flow analysis that demonstrates the interconnection poses adverse impacts to the EDC's EPS,~~ and the interconnection application is denied, ~~subject to the resubmittal options set forth in section (p) below.~~
- (k) If the EDC notifies the ~~Customer-generator Applicant~~ under (j)1 above that the ~~facility~~ Facility will be approved, the EDC shall, within three ~~(3)~~ business days after sending the notice under (j)1 above, ~~to do both of~~ the following:

1. Notify the ~~applicant~~ Applicant through the CIAP ~~portal and by e-mail or other writing of as to~~
whether an EDC inspection of the ~~Customer-generator facility~~ Facility is required prior to energizing
the ~~facility~~ Facility; or that the EDC waives inspection; and

Return

2. Respond to the applicant Applicant via the CIAP with confirmation of completion of Part 1 of the original application, ~~signed by the appropriate~~ _

~~2. EDC representative.~~

3. Once an applicant Applicant receives confirmation of completion of Part 1 of the application ~~with~~ expires after one (1) year if Applicant fails to begin construction of the Facility, unless otherwise agreed to by the EDC signature via the CIAP Applicant must reapply if Part 1 confirmation expires.

(l) Once the EDC has confirmed completion of Part 1 of the application in accordance with (k) above, and the Applicant has installed and interconnected the Customer generator facility Facility, the applicant Applicant shall obtain approval of the facility Facility by the appropriate construction official, as defined at N.J.A.C. 5:23-4.1.

(m) The Customer generator Applicant shall submit documentation of the construction official's successful inspections and final permit closing approval approval approval to the EDC, along with a ~~copy of~~ Part 2 of the application, signed by the Customer generator Applicant.

(n) If EDC inspection of the Customer generator facility Facility was waived under (k)1 above, the EDC shall, within five (5) business days after receiving successful installation and inspection of the ~~submission~~ required under (m) above EDC meter, notify the customer generator Applicant of authorization to energize the facility Facility. The notice to the Customer generator Applicant shall be provided ~~in the format required~~ under N.J.A.C. 14:8-5.2(i): through the CIAP portal Portal.

(o) If EDC inspection of the Customer generator facility Facility was not waived under (k)1 above, the following process shall apply:

1. The Customer generator Applicant shall submit the construction official's final permit approval and signed Part 2 of the application, as required at (m) above, and inform the EDC that the Customer generator facility Facility is ready for EDC inspection;

2. Within five (5) business days after the Customer generator Applicant notifies the EDC under (-o)1 above that the facility Facility is ready for inspection, the EDC ~~shall~~ may offer the Customer

~~generator~~Applicant two (2) or more available four– (4)-hour inspection ~~appointment~~times (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 ~~appointment~~scheduled inspection offered under (-o)2 above shall be no later than ~~40-~~ business days after the EDC offers the appointments (that is, ~~within thirteen~~ 13 business days after the ~~Customer-generator~~Applicant submittal under EDC contacts the Applicant for inspection;

~~(m) above~~);

4. The ~~Customer-generator~~Applicant shall notify the EDC within three (3) business days which of the offered inspection times the ~~Customer-generator~~Applicant prefers, or shall arrange another time by mutual agreement with the EDC;

5. Within five (5) business days after successful ~~completion~~installation and inspection of the EDC ~~inspection~~meter, the EDC shall notify the ~~Customer-generator~~Applicant through the CIAP that it is authorized to energize the ~~facility~~Facility. The notice shall be provided in the format required under N.J.A.C. 14:8-5.2(i); and ~~through the CIAP portal and by email~~; and

6. The applicant Applicant shall not begin operating the ~~Customer-generator~~ facilityFacility until after ~~the inspection and testing is completed~~receiving authorization to energize from the EDC.

(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, the EDC shall provide tangible evidence of which screens were failed support for and explanation of why the EDC denied the application. In response, an applicant Applicant may either:

1. Resubmit an amended Levellevel 1 application for expedited review with appropriate mitigation measures that may include:

~~a. The addition of energy storage or increase in proposed load which would limit export; or~~

~~b.a. Reduction in generation orFacility capacity or Facility export capability; or~~

~~e.b. Prevent or limit injections ontoRestrict export past the gridPoint of common coupling through addition of a Non-exporting technologies or other comparable means; or~~
~~technology.~~

~~d. Participation in an EDC grid flexibility service program that uses smart inverter or other functionality to utilize reactive power or predictive analytics to enable the interconnection of more resources that would otherwise be permitted.~~

- 2

2. ~~Resubmit~~ the application under 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 Facility that meets both of the following criteria:

1. The facility Facility has a rated capacity of two megawatts, as measured in direct alternating current, or less; and
2. The facility Facility has been certified in accordance with N.J.A.C. 14:8-5.3.

(b) For a Customer-generator facility Facility described at (a) above, the EDC shall approve interconnection under the level 2 interconnection review procedure if the Customer-generator facility Facility passesmeets all of the applicable screening requirements at (c) through (l) below are met. - An EDC shall not impose additional requirements beyond what is required in IEEE Standard 1547 and not specifically authorized under this section, except when required to be supplemented for safety or reliability as set forth in by IEEE Standard 1547.

(c) The aggregate generation Facility capacity on the Line Line section to which the customer-generator Customer-generator facility Facility will interconnect, including the capacity of the customer-generator Customer-generator facility 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 EPS, to exceed 95 ~~90~~ ninety-five (95) percent of the short circuit interrupting capability of the equipment. In addition, a customer-generator Customer-generator facility Facility shall not be connected to a circuit that already exceeds 90 ~~90~~ ninety-five (95) percent of the short circuit interrupting capability, prior to interconnection of the facility Facility.

(d) If there are posted transient stability limits to generating units located in the general electrical vicinity of the proposed p Point of common coupling (for example, within three (3) or four (4) transmission voltage level busses), the aggregate generation Facility capacity (including the customer-generator Customer-generator facility Facility) connected to the distribution low voltage side of the substation transformer feeding the Line section containing the p Point of common coupling shall not exceed ten (10) MW.

(e) The aggregate generation Facility capacity connected to the Line Line section, including the Applicant's customer-generator Facility, shall not contribute more than ten (10) percent to the

~~Line~~ section's maximum ~~fFault~~ current at the point on the high voltage (primary) level nearest the proposed point of common coupling.

(f) If a ~~customer-generator~~ Facility is to be connected to a radial ~~Line~~ section, the aggregate ~~generation~~ Facility capacity connected to the ~~electric distribution system~~ EDC's EPS by non-EDC sources, including

the ~~customer-generator~~Customer-generator facility~~generat~~ Facility, shall not exceed ~~40~~fifteen (15) percent (or ~~45~~twenty-five (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 twelve (12) months prior to the submittal of the application, measured at the substation nearest to the ~~customer-generator~~Customer-generator facility~~generat~~ Facility.

(g) If a ~~customer-generator~~Customer-generator facility Facility is to be connected to three-phase, three wire primary EDC distribution lines, a three-phase or single-phase ~~generator~~Facility shall be connected phase-to- phase.

(h) If a ~~customer-generator~~Customer-generator facility Facility is to be connected to three-phase, four wire primary EDC distribution lines, a three-phase or single-phase ~~generator~~Facility shall be connected line-to-neutral and shall be effectively grounded.

(i) If a ~~customer-generator~~Customer-generator facility~~generat~~ Facility is to be connected to a single-phase shared secondary, the aggregate ~~generation~~Facility capacity on the shared secondary, including the ~~customer-generator~~Customer-generator facility~~generat~~ Applicant's Facility, shall not exceed ~~20~~ 30 kilovolt-amperes (kVA).

(j) If a ~~customer-generator~~Customer-generator facility~~generat~~ Facility is single-phase and is to be connected to a transformer center tap neutral of a 240 volt service, the addition of the ~~customer-generator~~Customer-generator facilityFacility shall not create an imbalance between the two sides of the 240 volt service, which is greater than twenty (20) percent of the nameplate rating of the service transformer.

(k) A ~~customer-generator~~Customer-generator facility's~~generat~~ Facility's ~~p~~Point of common coupling shall not be on ~~an~~ electric transmission line.

(l) If a ~~customer-generator~~Customer-generator facility's~~generat~~ Facility's proposed ~~p~~Point of common coupling is on a ~~s~~Spot or ~~area network~~Area network, the interconnection shall meet all of the following requirements that apply, in addition to the requirements in (c) through (k) above:

1. For a ~~customer-generator~~Customer-generator facility Facility that will be connected to a ~~s~~Spot network circuit, the aggregate ~~generation~~Facility capacity connected to that ~~s~~Spot network ~~from~~ ~~customer-generator~~Customer-generator facilities, including the ~~customer-generator~~Customer-generator facility Applicant's Facility, shall not exceed ~~five~~ ten (10) percent of the ~~s~~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~~ Facility to the EDC's EPS at higher percentages where technically feasible and ~~if can be performed in a safe and reliable manner. If solar energy~~ ~~Customer generator facilities~~ Facilities are used exclusively, only the anticipated daytime minimum load shall be considered;

2. For a ~~customer-generator~~Customer-generator facility ~~Facility~~ that utilizes inverter-based protective functions, ~~which that~~ will be connected to an ~~area network~~Area network, the ~~customer-generator~~Customer-generator facility ~~Facility~~, combined with other exporting ~~customer-generator~~Customer-generator facilities ~~Facilities~~ on the load side of network protective devices, shall not exceed ~~4500~~500 ~~4(50)0~~ 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 Order of the Board via order; provided that, after technical review, the EDC will use Good utility practice to determine that it can allow interconnection of a Customer-generator facility to such facilities ~~Facility to the EDC's EPS at higher percentages where technically feasible, and #can be performed in a safe and reliable manner. If solar energy Customer-generator facilities~~Facilities are used exclusively, only the anticipated daytime minimum load shall be considered. For the purposes of this paragraph, the percent of minimum load for solar ~~electric generation~~Facilities ~~customer-generator~~Customer-generator facility shall be calculated based on the minimum load occurring during an off-peak daylight period; and ~~or~~

3. For a ~~customer-generator~~Customer-generator facility ~~Facility~~ that will be connected to a ~~sSpot~~ or an ~~area network~~Area network that does not utilize inverter-based protective functions, or for an inverter-based ~~customer-generator~~Customer-generator facility ~~Facility~~ that does not meet the requirements of (-)1 or 2 above, the ~~customer-generator~~Customer-generator facility~~genera~~ ~~Facility~~ shall have the option to utilize Non-exporting technology, reverse power relays or other protection devices that ensure no export of power from the customer-generator ~~Customer-generator facility~~Facility, including inadvertent export (under fault ~~Fault~~ conditions) that could adversely ~~affect~~impact protective devices on the network shall occur.

(m) An ~~applicant~~ Applicant shall submit an Interconnection ~~Application/Agreement Form~~ for level 2 interconnection review through the CIAP portal. The standard form or an electronic application process ~~is shall be~~ available from the EDC's ~~CIAP portal~~, and includes a Part 1 (Terms and Conditions) and a Part 2 (Certificate of Completion). The Applicant may request that the EDC provide a PAVE report prior to or after the submission of an initial application, as set forth in N.J.A.C. 14:8-5.10.

(n) Within three ~~(3)~~ business days after receiving an application for level 2 interconnection review, the EDC shall provide ~~notice through the CIAP portal and written or via e-mail notice~~ to the ~~applicant~~ Applicant ~~that~~electronic notice through the CIAP notice that it received the application and whether the application is

complete. If the application is incomplete, the ~~written~~ notice shall include a list of all of the information needed to complete the application. ~~Within 10 business days of receiving a complete application and the requisite fee, the EDC shall offer a PAVE report to any Customer generator of over 500 kW seeking to participate in the PAVE process, as set forth in N.J.A.C. 14:8-5.10. Following receipt of the PAVE report, the Customer generator may elect to make changes to its application without incurring additional expense.~~

(o) Within fifteen (15) business days after the EDC notifies the ~~applicant~~ Applicant that the application is complete under (n) above, the EDC shall notify the ~~applicant~~ Applicant electronically through the CIAP portal and by e-mail ~~or in writing~~ of one of the determinations at (-o)1 through 4 below, as applicable. During the fifteen (15) business days provided under 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~~ Customer-generator facility Facility ~~meets~~ passes the applicable screening requirements in (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 ~~applicant~~ Applicant, ~~through the CIAP portal and by e-mail~~ or other writing, that the interconnection will be finally approved upon completion of the process set forth at (p) through (r) below; and

ii. Within three (3) business days after the notice in (-o)1i above, the EDC shall ~~return to inform~~ the ~~applicant~~ Applicant Part 1 of the approval of Part 1 of the original application through the CIAP portal, signed approved by the appropriate EDC representative;

2. The ~~customer-generator~~ Customer-generator facility Facility has failed to meet one or more of the applicable screening requirements at (c) through (-l) above or fails an EDC-conducted power flow analysis that demonstrates the interconnection poses adverse impacts to the EPS, but the EDC has nevertheless determined that the ~~customer-generator~~ Customer-generator facility Facility can be interconnected consistent with safety, reliability and power quality. In this case, the EDC shall:

i. Notify the ~~applicant~~ Applicant through the CIAP ~~portal and by e-mail~~ or other writing that the interconnection will be finally approved upon completion of the process set forth at (p) through (r) below; and

ii. Within five (5) business days after the notice in (-o)2i above, the EDC shall ~~return to inform~~ the ~~applicant~~ Applicant of the approval of Part 1 of the original application through the CIAP portal, signed by with the appropriate EDC ~~representative~~ confirmation of completion;

3. The ~~customer-generator~~ Customer-generator facility Facility has failed ~~to meet~~ one or more of the applicable screening requirements at (c) through (-l) above or failed an EDC-conducted power flow

analysis that demonstrates the interconnection poses adverse impacts to the EPS, but the initial review

indicates that additional review may enable the EDC to determine that the ~~customer-~~

~~generator~~Customer-generator facilityFacility can be interconnected consistent with safety, reliability

and power quality. In such a case, the EDC shall, via the CIAP portal:

i. Notify the ~~customer-generator~~Customer-generator Applicant Applicant of which screening requirements were not

met, or why the Facility failed an EDC-conducted power flow analysis that demonstrates the

interconnection poses no adverse impacts to the EPS and offer to perform, additional review to

determine whether minor ~~modifications~~upgrades to the ~~electric~~EPS

~~distribution system (for example, changing meters, fuses or relay settings)~~

, as defined by the EDC, would enable the interconnection to be made consistent with safety, reliability, and power quality. The EDC notice shall provide to the ~~applicant~~ Applicant a nonbinding, good-faith estimate of the costs of such additional review, ~~and/or such minor modifications, at the +25%/ 25% level,~~ as well as the expected timeline for the additional analysis;

ii. Within fifteen (15) business days of receiving the notification under O(3)(i), ~~if the customer-generator~~ Customer-generator Applicant shall ~~notify~~ the EDC that ~~if the customer-generator~~ Customer-generator Applicant consents to pay for the review ~~and/or modifications,~~ to determine required upgrades. The EDC shall undertake the review ~~and/or modifications~~ to determine required upgrades within fifteen (15) business days after this notice-receiving written consent to the review from the ~~customer-generator~~ Customer-generator, or Applicant or a longer period as agreed to by ~~the Customer-generator and the EDC~~ Parties in writing. Any writings required for consent or of an agreement of an extension of the period shall be submitted through the CIAP. Any required payments for the additional review shall be received within thirty (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 remove the Applicant from the Interconnection queue and require the Applicant to re-start that failed to make the payment to restart the interconnection process;~~ and

iii. Within fifteen (15) business days after the review or ~~modifications~~ upgrades are complete, the EDC shall return ~~to the customer-generator~~ Customer-generator Part 1 of the ~~original~~ application, ~~signed to the Applicant, approved~~ approved by the appropriate EDC representative ~~through the CIAP portal;~~ or

4. The ~~customer-generator~~ Customer-generator facility Facility has failed one or more of the applicable screening criteria to meet one or more of the applicable requirements at (c) through (-) above) above or failed an EDC-conducted power flow analysis that demonstrates the interconnection poses adverse impacts to the EPS, and the initial review indicates that additional review would not enable the EDC to determine that the ~~customer-generator~~ Customer-generator facility Facility could be interconnected consistent with safety, reliability and power quality. In such a case, the EDC shall:

i. Notify the Customer-generator Applicant through the CIAP portal that its facility Facility has failed one more of the applicable screening criteria and shall:

~~in writing that the interconnection application has been denied; and~~

- i. Provide a written explanation, through the CIAP, of the reason(s) for the denial, including which screens or power-flow analysis were failed and why; and
- ii. provide a list of additional information and or required modifications to the ~~customer-generator~~ Customer-generator's facility Applicant's Facility that, ~~which~~ would allow the project Facility ~~to be required in order to~~ obtain an approval under level 2 interconnection procedures;

iii. provide guidance to the ~~Customer-generator~~ Applicant on submission of an amended ~~Level~~ Level 2 application with appropriate mitigation measures that may include:

- a. Reduction in the size of the proposed ~~Customer-generator facility~~ Facility that would allow the EDC to interconnect the ~~facility~~ Facility; and
- ~~b. Addition of energy storage or active demand management that would allow~~ Restricting export past the ~~EDC to interconnect the facility~~;
- ~~e.b. Elimination of injections onto the grid~~ Point of common coupling through addition of a Non-exporting technology, ~~power relays, or other comparable means~~;
- ~~d. Participation in an EDC grid flexibility services program that uses smart inverter or other functionality to utilize reactive power or predictive analytics to enable the interconnection of more resources that would otherwise be permitted; or~~

iv. Allow the ~~Customer-generator~~ Applicant to resubmit the application under the level 3 interconnection review procedure.

(p) Once ~~an~~ ~~customer-generator~~ ~~Customer-generator~~ Applicant receives ~~EDC confirmation of completion of~~ Part 1 of the application ~~with the EDC signature~~ in accordance with (-o)1, 2 or 3 above, and has installed and interconnected the ~~customer-generator~~ ~~Customer-generator~~ facility Facility to the EDC's ~~distribution system~~ EPS, the ~~customer-generator~~ ~~Customer-generator~~ Applicant shall obtain approval of the ~~facility~~ Facility from the appropriate local construction official, as defined at N.J.A.C. 5:23-1.4.

N.J.A.C. 5:23-1.4. EDC confirmation of completion of Part 1 of the application expires after one (1) year if Applicant fails to begin construction of the Facility, unless otherwise agreed to by the EDC via the CIAP. Applicant must reapply if the Part 1 confirmation expires.

(q) At least ~~ten (10)~~ business days prior to ~~starting operation of the customer-generator~~ ~~Customer-generator~~ ~~facility~~ energizing the Facility (unless the EDC does not require ~~ten (10)-~~ days notice), the ~~customer-generator~~ ~~Customer-generator~~ Applicant shall through the CIAP portal:

1. Provide the EDC with documentation that the interconnection has been approved by the appropriate

2. Submit Part 2 of the application, signed by the Applicant ~~customer-generator~~ Customer-generator; and
3. Indicate to the EDC the anticipated ~~start~~ date for ~~operation of~~ energizing the ~~customer-generator~~ Customer-generator facility Facility.

(r) The EDC may require an EDC inspection of a ~~customer-generator~~Customer-generator facility Facility prior to ~~operation,~~the EDC authorizing the Facility to energize and may require and arrange for witness of commissioning tests, as set forth in IEEE ~~s~~Standard 1547, (published July 2003) in accordance with the following:

1. The Applicant ~~customer-generator~~Customer-generator shall submit the construction official's approval and the signed Part 2 under (q) above and inform the EDC that the ~~customer-generator~~Customer-generator facility Facility is ready for EDC inspection;
2. Within five (5) business days after the ~~customer-generator~~Customer-generator Applicant informs the EDC under (r)1 above that the ~~customer-generator~~Customer-generator facility Facility is ready for inspection, the EDC shall notify the ~~customer-generator~~Customer-generator Applicant of three (3) or more available four- (4)-hour inspection appointments~~times~~ (for example, February 4th from noon to 4:00 P.M., February 6th from 10:00 A.M. to 2:00 P.M., or February 7th from 1:00 P.M. to 5:00 P.M.);
3. The appointments~~inspection times~~ offered under (r)2 above shall be ~~no later than 15 business days after based on the EDC offers the appointments, (that is, within 20 business days after the Applicant's customer-generator~~Customer-generator ~~submittal under (r)1 above);~~EDC's scheduling process;
4. The ~~customer-generator~~Customer-generator Applicant shall notify the EDC which of the offered inspection appointments~~times~~ the ~~customer-generator~~Customer-generator Applicant prefers or shall arrange another time by mutual agreement with the EDC;
5. Within five (5) business days after successful completion of the EDC inspection and the meter exchange, the EDC shall notify the ~~customer-generator~~Customer-generator Applicant that it is authorized to energize the ~~facility~~Facility. The notice shall be provided in the format required under N.J.A.C. 14:8-5.2(i); and
6. The ~~applicant~~ Applicant shall not begin operating the ~~customer-generator~~Customer-generator facility Facility until after it receives authorization to energize from the inspection~~EDC~~. Unauthorized system interconnection or operation will result in no payment for excess generation credits . The EDC has the right to disconnect unauthorized interconnections because they are a safety, power quality and testing-~~is completed~~reliability risk. (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-

§ 14:8-5.6 Level 3 interconnection review

(a) Each EDC shall ~~by January, within one (1, 2024) year of the Board's adoption of these regulations,~~ adopt a common set of level 3 interconnection review screens, to the extent reasonably possible and allow for use of power flow studies as an alternative procedure. The EDC shall use the level 3 review procedure. ~~An EDC shall use the Levellevel 3 review procedure for applications to connect Customer-generator facilities~~ Facilities that: (i) are greater than 2 MW, as measured in ~~direct~~alternating current; (ii) do not qualify for either the level 1 or level 2 interconnection review procedures; or (iii) did not pass ~~for an application to interconnect a customer-generator facility that does not qualify for the level 1 or level 2 interconnection review~~ procedurescreens set forth at N.J.A.C. 14:8-5.4 and 5.5.

(b) Within fifteen (15) business days after receiving an application for Levellevel 3 interconnection review, the EDC shall provide notice through the CIAP ~~portal and via e-mail~~ to the Applicant that it received the application and whether the application is complete. If the application is incomplete, the notice shall include a list of all ~~of~~ the information needed to complete the application.

~~(c)~~ An ~~At the same time the Applicant submits the application,~~ it shall submit an application fee not to exceed of \$100 plus \$10 per kW of the nameplate rating up to a maximum of

~~(d)~~(c) \$2,000 ~~shall accompany any application and an.~~ The application shall not be deemed complete until the EDC receives the application fee ~~is received~~. The application fee is in addition to any 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 facilityFacility also shall be the responsibility of the Applicant.

~~(e)~~(d) The Applicant may request that the EDC provide a PAVE report prior to ~~or after~~ the submission of an initial level 3 application. ~~If no PAVE report is requested prior to submission of an application, within 10 business days of receiving a complete application and the requisite fee, the EDC shall offer a PAVE report to any Customer-generator seeking to participate in the PAVE process, as set forth in N.J.A.C. 14:8-5.10.~~

~~Following receipt of the PAVE report, the Customer-generator may elect to make changes to its application without incurring additional expense.~~

~~(e)~~ Within thirty (30) days of a completed application and, noticed through the PAVE report being

~~provided~~ CIAP pursuant to ~~the Customer-generator subsection (b)~~, 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~~ Parties. 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 scoping meeting, the EDC shall provide ~~and additional~~ ~~pertinent~~ relevant and non-confidential information to the applicant Applicant ~~that was not already provided as part of the~~.

~~PAVE report, including items~~, such as the available ~~f~~ fault current at the proposed interconnection location, the existing peak loading on the lines in the general vicinity of the ~~customer-generator~~ Customer-generator facility, and the configuration of the distribution lines at the proposed ~~p~~ Point of common coupling.

By mutual agreement of the ~~parties~~ Parties, the scoping meeting or System impact study may be waived in writing, submitted through the CIAP.

~~(ef)~~ Within five (5) business days of the completion of the scoping meeting ~~(or five business~~ within thirty (30) days ~~after~~ of the EDC receives a completed application ~~if the scoping meeting is waived~~), the EDC shall provide a draft ~~n~~ System impact study Impact Study agreement to the Applicant, which shall include a good faith ~~cost~~ estimate of the cost and time for ~~an impact study~~ a System Impact Study to be performed by the EDC. The Applicant shall execute the ~~impact study~~ System Impact Study agreement within ten (10) business days, ~~along with~~ and provide any deposit, if required by the EDC; ~~provided~~ except that the Applicant may request that the EDC hold the ~~draft~~ System Impact Study agreement in abeyance for up to ~~60~~ thirty (30) calendar days, prior to execution, to allow for ~~negotiation~~ modification of the ~~scope of the~~ System impact study-customer application, system and/or operation or to ~~engage in~~ initiate dispute resolution procedures as specified in N.J.A.C. 14:8-5.4513. The application will be automatically cancelled and removed from the queue if Applicant does not execute the System Impact Study agreement within the timeframe established in this subsection.

~~(dfg)~~ A System ~~n~~ impact study Impact Study is an engineering analysis of the probable impact of a ~~customer-generator~~ Customer-generator facility on the safety and reliability of the EDC's electric distribution system. An impact study shall ~~be conducted in accordance with good utility practice~~ Good utility practice, as defined at N.J.A.C. 14:8-5.1 and shall:

1. Detail the impacts to the ~~electric distribution system~~ EDC's EPS that would result if the ~~customer-generator~~ Customer-generator facility Facility were interconnected without modifications to either the ~~customer-generator~~ Customer-generator facility Facility or ~~upgrades~~ to the ~~electric distribution system~~ EDC's EPS;

2. Identify any ~~modifications~~upgrades to the EDC's ~~electric distribution system~~EPS that would be necessary to accommodate the proposed interconnection; and
3. Focus on power flows and utility protective devices, including control requirements.

~~(egh)~~ By January ~~Within one (1, 2024) year of the Board's adoption of these regulations,~~ each EDC shall ~~in a compliance tariff~~ provide standardized protocols governing the conduct of System ~~impact study, facility study~~Impact Studies, Facility Studies, related agreements, and a pro forma Interconnection ~~agreement~~Agreement, as well a detailed description of the various elements of a System ~~impact study~~Impact Study it would typically undertake pursuant to this Section, ~~along with, including~~which may include:

1. ~~Lead~~Power-Flow Study;
2. Short-Circuit Study;
3. Circuit Protection and Coordination Study;
4. Impact on system operation of the ~~electric distribution system~~EDC's EPS;
5. Stability Study (and the conditions that would justify including this element in the System impact study);
6. Voltage-Collapse Study (and the conditions that would justify including this element in the System ~~impact study~~; andImpact Study); or
7. Additional elements, if approved ~~in writing~~ by Board ~~staff~~Order prior to the System ~~impact study~~Impact Study.

~~(fhi)~~ Once~~After~~ an Applicant ~~delivers to the EDC an executed~~executes System ~~impact study~~Impact Study agreement and provides payment in accordance with that agreement, the EDC shall conduct the System ~~impact study~~Impact Study. The System ~~impact study~~Impact Study shall be completed within ~~thirtysixty (60)~~ thirty (30) business days of the Applicant's delivery of the executed System ~~impact study Agreement~~Impact Study agreement; provided that if system upgrades are required, the EDC may elect to extend the study process by an additional ~~20~~thirty (30) business days, or as mutually agreed in writing by the EDC and the Applicant. The System ~~impact study~~Impact Study provided to the Applicant shall include a description of the EDC's analysis, conclusions, and the reasoning supporting those conclusions. If the Applicant fails to execute the System Impact Study agreement or make the required payments within thirty (30) business days after receipt of the System Impact Study agreement from the EDC, the Applicant's application will be

automatically cancelled and removed from the queue.

(gij) If the EDC determines that ~~system upgrades are~~ Distribution System Upgrades required to accommodate the proposed ~~Customer generator facility,~~ Facility are not substantial, the System ~~impact study~~ Impact Study will identify the scope and cost of the ~~modifications~~ Distribution System Upgrades defined in the System ~~impact study~~ Impact Study results, and ~~no~~ Facilities study shall Study may not be required. Modifications, as determined by the EDC. Distribution System Upgrades are considered not substantial if: (i) the total estimated cost is below \$200,000, or such other value as the Board shall establish ~~by order~~, or (ii) the EDC in its reasonable judgement determines the ~~modifications~~ upgrades are not substantial.

(hjk) If the EDC determines that necessary ~~modifications to the electrical power system~~ Distribution System Upgrades are substantial, the results of the System ~~impact study~~ Impact Study will include an estimate of the cost of a Facilities study Study and an estimate of the ~~modification~~ Distribution System Upgrade costs and timeline. The detailed estimated costs of any ~~electrical power system modifications~~ Distribution System Upgrades necessary to interconnect the Applicant's proposed ~~Customer generator facility~~ Facility will be identified in a Facilities study Study to be completed by the EDC.

-

(ikl) If the Parties do not waive the Facilities ~~study~~Study, within ~~five (5)~~ business days of the completion of the System ~~impact study~~Impact Study, the EDC shall provide a Facilities ~~study Agreement~~Study agreement, which shall include a good faith estimate of the cost and time to undertake the Facilities ~~study~~Study.

(jlm) Once the Applicant executes the Facilities ~~study~~Study agreement and provides payment in accordance with the Agreement and pays the EDC pursuant to the terms of that agreement, the EDC shall conduct the Facilities ~~study~~Study within ninety (90) days. The Facilities ~~study~~Study shall include a detailed list of necessary ~~electrical power system~~EPS upgrades and an ~~itemized~~ good faith cost estimate, ~~breaking out equipment, labor, operation and maintenance and other costs, including overheads,~~ for completing such ~~EPS~~ upgrades, which may not be exceeded by ~~425~~200 percent if actual ~~EPS~~ upgrades are completed. The Facilities ~~study~~Study shall also indicate the ~~milestones~~ estimated time for completion of the ~~Applicant's installation of its Customer generator facility and the EDC's completion of any electrical power system modifications~~Distribution System Upgrades, 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.~~ Agreement. If the Applicant fails to execute the Facilities ~~study~~Study agreement or make the required ~~deposits~~payments within ~~60~~thirty (30) business days after receipt of the EDC delivers the invoice for the Facilities ~~study agreement from the EDC~~Study, the EDC may ~~make the interconnection capacity available to other potential Customer generators~~ withdraw the application from the queue and may require the Applicant ~~to that~~ failed to execute the Facilities Study agreement to submit a new application and re-start the interconnection process.

(dn) If the proposed interconnection may ~~affect electric transmission or delivery systems, other than~~ impact an ~~EPS that controlled by~~ the EDC does not control, the EDC, ~~operators of these other systems~~ controlling the impacted ~~EPS~~ may require additional studies to determine the potential impact of the interconnection on these systems. If such additional studies are required, the ~~EDC~~EDCs shall coordinate the studies and shall use best efforts to complete those studies within ~~sixty (60)~~ business days of being notified of the ~~need of an affected system study~~ potential impact to its ~~EPS,~~ but shall not be responsible for their timing.

The ~~applicant~~Applicant shall be responsible for the costs of any such additional studies required by

another ~~affected system-~~impacted EPS. Such studies shall be conducted only after the ~~applicant~~Applicant has provided written authorization ~~to the EDC~~and payment to the EDC. The Applicant may not proceed with interconnection of its Facility unless all potentially impacted EDCs have assessed whether the interconnection impacts their EPS. Failure of the Applicant to provide the written authorization and payment required by this subsection may result in withdrawal from the queue and the need to re-submit the interconnection application.

~~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:~~

~~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~~

~~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.~~

~~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) Within five (5) business days of the completion of the last study, Upon completion of a facilities studyFacilities studyFacilities Study, the EDC shall provide the applicantApplicant with the results of the study and an executable a Part 1 Interconnection agreement to the Interconnection Agreement for execution. The Interconnection agreementAgreement shall list the conditions and facilitiesscope of work necessary for the customer generatorCustomer generator facilityFacility to safely interconnect with the EDC's electric distributionelectrical power 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 studyStudy, and include an itemized quoteestimated cost, including overheads, for any required electrical power system modifications, subject to the cost limit set by the Facilities study cost estimateDistribution System Upgrades.~~

~~(h) Within forty (40) business days of the receipt of an Part 1 to the Interconnection Agreement under subsection o, the Applicant shall execute and return Part 1 to the Interconnection Agreement and notify the~~

EDC of the anticipated date on which the ~~customer-generator~~Customer-generator facility Applicant expects
the ~~customer-generator~~ Facility to reach commercial operations. Unless the EDC agrees to a later date or
requires more time for necessary ~~modifications to its electrical power system, the~~

Distribution System Upgrades, the Applicant shall identify an anticipated start date that is within ~~36~~twelve (12) months of the Applicant's execution of the Interconnection Agreement. However, the ~~Parties~~ Applicant and the EDC 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 ~~or through the CIAP portal~~ if there is any change in the anticipated start date of interconnected operations of the ~~Customer-generator's facility~~ Facility.

~~(hg)~~ (hg) 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~~Applicant shall pay each bill within thirty (30) calendar days of receipt, or as otherwise agreed by the Parties and memorialized in writing. ~~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. At least twenty (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 of up to 50~~one hundred (100) percent of the cost estimated for its interconnection facilities prior to its beginning design. If deposit payment is not received by the EDC within thirty (30) calendar days of such facilities receipt, Applicant's application will be automatically cancelled and removed from the queue.

~~(ir)~~ (ir) Within ~~60 calendar~~one hundred twenty (120) business days of completing the construction and installation of the ~~modifications to the EDC's system~~Distribution System Upgrades, the EDC ~~shall~~may provide the Applicant with a final accounting ~~report~~ of any difference between (1) the actual cost incurred to complete the construction and installation ~~and the budget estimate provided to Applicant in the Interconnection agreement~~; and (2) the Applicant's previous deposit and aggregate payments to the EDC for such ~~modifications-upgrades~~. The EDC shall provide a written explanation for any actual cost ~~exceeding a budget estimate~~the aggregate payments by twenty-five (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 thirty (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 ~~thirty (30)~~ business days of the final accounting ~~report~~.

~~(is)~~ Within fifteen (15-10) business days after notice from the ~~a~~Applicant that the ~~customer-generator~~Customer-generator facility~~generator~~Facility has been installed, the EDC shall ~~inspect~~notify the ~~customer-generator~~Customer-generator facility and Applicant of three (3) or more available ~~four (4)-hour~~ inspection times. Applicant shall notify the EDC which of the offered inspection time the Applicant prefers or shall arrange another time by mutual agreement with the EDC. The EDC shall arrange to witness any required commissioning tests pursuant to ~~required under~~ IEEE

~~Standard-1547 Standard, as updated, and EDC requirements.~~ The EDC and the ~~applicant~~ Applicant shall select a date by mutual agreement for the EDC to witness commissioning tests. ~~For systems greater than 10 MW, IEEE 1547 Standard may be used as guidance. If the Customer-generator facility~~ Facility passes the inspection, the EDC shall provide written notice of the results within ~~three (3) business days.~~ If a ~~Customer-generator facility~~ Facility initially fails an inspection ~~or the equipment was not installed as agreed upon,~~ the EDC shall offer to redo the inspection at the Applicant's expense at a time mutually agreeable to the Parties within ~~thirty (30) business days of the Customer-generator~~ Applicant requesting a retest. If the EDC determines that the ~~Customer-generator facility~~ Facility fails the inspection, it must provide a written explanation ~~via CIAP~~ detailing the reasons and any standards violated.

~~((jst) Provided that the customer-generator~~ Customer-generator facility passes any required commissioning tests satisfactorily, the EDC shall notify the applicant ~~Applicant in writing, within three business days after the tests, of one of the following:~~

~~4. The interconnection is approved and the customer-generator~~ Customer-generator facility may begin operation; or

~~5. The facilities~~ Facilities study ~~Facilities study~~ 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 ~~Customer-generator~~ facility may begin operation. ~~The EDC shall promptly notice the Customer-generator through the CIAP portal of any changes in the construction schedule.~~

(u) Nothing shall preclude an EDC or EDCs from conducting any studies for a level 3 application together, or as one study, nor shall anything preclude the use of agreements that would enable the EDC or EDCs to conduct the studies together, or as one study. The timing of combined studies shall accord with the timing established in this subsection.

~~(k) If the commissioning tests are not satisfactory, the customer generator shall repair or replace the unsatisfactory equipment and reschedule a commissioning test pursuant to (i) above.~~

~~(l) Each EDC shall include in any tariff or published procedures for level 3 interconnection review each element of an impact study, including a description of the review the EDC will undertake for each element. An impact study shall include the following elements, as applicable:~~

~~1. A load flow study;~~

~~A short circuit study;~~

~~A circuit protection and coordination study;~~

~~The impact on the operation of the electric distribution system;~~

~~A stability study (and the conditions that would justify including this element in the impact study);~~

~~A voltage collapse study (and the conditions that would justify including this element in the impact study); and~~

~~Additional elements, if approved in writing by Board staff prior to the impact study.~~

§ 14:8-5.7 Interconnection fees

- (a) An EDC ~~or supplier/provider~~ shall not charge an application flat fee, not to exceed of \$100 or other value established by Order of the Board order, an application or other fee to an applicant Applicant that requests level 1 interconnection review. An application shall not be deemed complete until the EDC receives the application fee. 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.
- (b) For a level 2 interconnection review, ~~the~~ EDC may charge fees of up to \$ ~~50~~100.00 plus \$ 1.00 per kilowatt of the customer ~~generator~~Customer generator facility's Facility's capacity, plus the cost of any minor ~~modifications~~upgrades to the ~~electric distribution system~~EPS or additional review, if required under N.J.A.C. 14:8-5.5(~~e~~)3 or 4, or such other value established by Order of the Board order. Costs for such minor ~~modifications~~upgrades 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 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 application fee.
- (c) For a level 3 interconnection review, ~~the~~ EDC may charge ~~fees~~an application flat fee of up to ~~not to exceed of \$100 plus \$10 per kW of nameplate rating and an application shall not be deemed complete until the application fee is received,~~ up to a maximum of \$2,000, \$100.00 plus \$ 2.00 per kilowatt of the customer generator facility's capacity, as well as charges for actual time spent on analyzing the proposed interconnection, any impact and/or facilities studies System Impact Studies, or Facilities Studies required under N.J.A.C. 14:8-5.6. ~~Costs for engineering work done as part of an impact System impact study or facilities Facilities studyFacilities study study shall not exceed \$ 100.00 per hour.~~ An application shall not be deemed complete until the EDC receives the application fee. If the EDC must install facilities in order to complete Distribution System Upgrades to accommodate the interconnection of the customer generatorCustomer generator facilityF Facility, the cost of such facilities shall be the responsibility of the applicantApplicant.
- (d) If the EDC determines that additional equipment is necessary for safe and reliable operation of the EPS, it shall be installed at the expense of the Applicant.

~~(d)~~(e) An EDC shall not charge any fee or other charge for connecting to the ~~EDC's~~EDC's equipment or for operation of a ~~customer-generator~~Customer-generator facility Facility for the purposes of net metering, except for the fees provided for under this subchapter. Costs for studies and Distribution System Upgrades necessary to accommodate the Applicant's proposed Facility also shall be the responsibility of the Applicant.

§ 14:8-5.8 Testing, maintenance and inspection after interconnection approval

- (a) Once a net metering interconnection has been approved under this subchapter, the EDC shall not require ~~a customer-generator~~Customer-generator Applicant to test or perform maintenance on its facility except for the following:
1. An annual test in which the ~~customer-generator~~Customer-generator's facility~~generate Facility~~ is disconnected from the ~~electric distribution company's~~EDC's equipment to ensure that the ~~facility-~~stops delivering power~~Facility ceases~~ to energize and trips all phases to which the ~~grid~~DER is connected;
 2. Any manufacturer-recommended testing or maintenance; and
 3. Any post-installation testing necessary to ensure compliance with IEEE 1547 Standard or to ensure safety.
- (b) When a ~~customer-generator~~Customer-generator facility~~generate 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~~Customer-generator or Applicant shall retain written records documenting the maintenance and the results of testing for three (3) calendar years. No recordkeeping is required for maintenance or testing performed on a ~~customer-generator~~Customer-generator facility~~Facility~~ approved through a level 1 review.
- (c) An EDC shall have the right to inspect a ~~customer-generator~~Customer-generator's facility ~~Facility~~ after interconnection approval is granted, at reasonable hours and with reasonable prior notice to the ~~customer-generator~~Customer-generator-, Applicant, or Customer. If the EDC discovers that the ~~customer-generator~~Customer-generator's facility~~generate Facility~~ is not in compliance with the requirements of this subchapter, and the noncompliance adversely affects the ~~safety~~or reliability, power quality or reliability of the ~~electric distribution system~~EDC's EPS, the EDC may require the ~~customer-generator~~Customer-generator, Applicant, or Customer to disconnect the ~~customer-generator~~Customer-generator facility~~Facility~~ until compliance is achieved.

(d) For level 3, provided that the ~~customer-~~ Facility passes any required commissioning tests, the EDC shall notify the ~~applicant~~ Applicant in writing, within three (3) business days after the tests, of one of the following:

1. The ~~customer-genera~~ Facility is authorized to energize; or
2. The ~~facilities~~ ~~Facilities study~~ ~~Facilities study~~ Study identified necessary construction on the EDC's EPS that has not been completed, the date upon which the construction will be completed and the date when the ~~customer-generat~~ Facility may begin operation. The EDC shall notify the Applicant 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 ~~Facilities~~ ~~customer-generator~~ Customer-generators connected to its ~~distribution system~~ EPS shall (1) track key performance indicators, ~~on the EDC's website, updated no less than on a monthly basis~~ intervals; (2) maintain an ~~interconnection queue~~ Interconnection Queue that includes all level 2 and level 3 interconnection requests currently pending ~~before~~ with the EDC, at a level of detail that reasonably preserves customer confidentiality; (3) conduct ~~a customer satisfaction surveys and provide these results on its website and~~ to the Board a quarterly a satisfaction survey related to interconnection; and (4) submit ~~two~~ interconnection reports to the Board on a quarterly basis ~~per year, one covering January 1 through June 30 and one covering July 1 through December 31. The EDC shall submit the reports by thirty (30) days after the first day end of each quarter~~ August quarter. August 1 and February 1, respectively.

(b) The EDC shall submit ~~the any interconnection~~ reports to the Board ~~secretary~~ Secretary in a docket as specified by the 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 quarterly interconnection report shall contain the following information regarding ~~customer-generator~~ Customer-generator facilities Facilities that interconnected with the EDC's ~~distribution system~~ EPS or that attempted to interconnect for the first time during the reporting period, listed by type of renewable energy ~~technology including~~ technology including the following key performance indicators, as may be adjusted by Order of the Board ~~order~~, for each interconnection level, based on the nameplate capacity of the ~~Customer-generator facility~~ Facility:

÷

- ~~1.~~ 4. The number and generating capacity of Customer-generators that applied applications for interconnection;
- ~~2.~~ The number and generating capacity of Customer-generators that successfully interconnected Facilities that received authorization to energize;

- 3.** The number and generating capacity of ~~Customer generators that dropped out at each stage of~~ Facilities that withdrew or were removed from the ~~process~~ Interconnection Queue;

- ~~4. –The number of applications submitted with that were rejected due to incomplete or missing information, and not automatically addressed as part of the CIAP process subsequently completed;~~
- ~~5. Number~~The number, generating capacity, and technology type for all of PAVE processes undertaken;
- ~~6. Number~~The number, generating capacity and technology type of Customer-generator applications processed authorized to energize within the timelines established by this chapter;
- ~~7. Length of time each Customer-generator waited for system impact and facilities studies;~~
7. NumberThe time taken to study applications ;
- ~~8. The number, generating capacity and technology type of Customer-generator applications in the Interconnection Queue that have not processed been authorized to energize within the timelines established by this chapter and for delayed processing, how long did it take to complete processing, the application length of the delay and the reasons for the delay;~~
- ~~9. A complete list of all distribution upgrades undertaken, the geographic distribution of those upgrades, the cost of each upgrade, how long the upgrades took, whether the upgrades were completed on time, and if not, when they were completed and why they were delayed;~~
- ~~10.9.~~ The number and generating capacity of Customer-generators of each technology type, broken out by class I eligible technology, energy storage, fuel cell, electric vehicle-to-grid projects, and hybrid systems involving multiple behind-the-meter technologies;
- ~~11. Data on quantity, capacity, type and processing times for DER Aggregations requests;~~
- ~~12. Data on the number of times formal or informal dispute resolution was requested, the timeline for resolution, whether the Board's interconnection ombudsman was involved, and how each dispute was resolved; and~~
10. The number of Applicants seeking informal dispute resolution pursuant to N.J.A.C. 14:8-5.13(a)-(b), the average duration of resolved informal dispute resolutions pursuant to N.J.A.C. 14:8-5.13(a)-(b), the number of applications seeking involvement of the Board's Interconnection Ombudsman pursuant to N.J.A.C. 14:8-5.13(c)-(d), and the status of the unresolved informally disputed applications.
11. A statement for whether the EDC believes it has the resources and capabilities to continue to be able to continue timely processing interconnection applications, as well as a trend analysis that assesses the EDC's capability to continue timely processing interconnection applications if the volume of applications increases.

~~2. The estimated total rated generating capacity of all customer-generator 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.~~

~~(d) Each EDC shall also include in a separate annual report the information on their ability to interconnect additional resources on their systems. At a minimum the report shall include:~~

~~1. A report with diagrams of which Line sections have additional Hosting capacity for additional interconnections;~~

~~2. Reports and diagrams that shows the constrained Line sections that cannot handle additional interconnections;~~

~~3. A Data Validation summary report that confirms the quality and accuracy of the underlying distribution system model data and the Hosting capacity analysis representation;~~

~~4. An explanation of how the EDC determined (e.g., methodology) whether Line sections have headroom or are constrained;~~

~~5. Identify areas where they are considering system upgrades to support additional interconnections within the 12 months following the filing, whether through a PSUP or otherwise;~~

~~6. Projected forward capacity growth on the distribution system circuits and where and what possible upgrades will be needed to support the projected amount;~~

~~(7) The report shall also contain a summary description of:~~

~~_____ a. Observed patterns of delays with root cause explanation~~

~~_____ b. Where in the application life cycle delays are most common; and~~

~~_____ c. Average deviation on time to completion of the interconnection request (by Levels).~~

(e) Transparent public queue reporting:

1. Each EDC shall maintain a current summary status, ~~presented in a common graphical format,~~ updated no less than monthly, of all active ~~interconnection~~ ~~interconnections~~ showing the following performance metrics:

a. Active interconnections in each ~~Level~~ level 1, 2 and 3:

i. New applications (numeric quantity and MW capacity) received during reporting period;

ii. Total (numeric quantity and MW capacity) currently active;

iii. Total (numeric quantity and MW capacity) by percent ~~approved~~ ~~authorized to energize~~ during reporting period; and

iv Total (quantity and MW capacity) by percent approved from Year-to-Date.

(f) Each EDC shall provide the ~~full~~ results of ~~all annual~~ EDC testing performed on legacy interconnected ~~customer/generators~~ ~~Facilities~~, segmented by ~~Levels~~ levels 2 and 3, under 14:8-5.8(a)(1) which shall include:

1. Number and ~~Percentage~~ ~~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 Process

(a) ~~Each EDC shall offer 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 fee, or such alternative fee as the Board shall establish by order.

(b) Within ~~10~~ ~~fifteen~~ (15) business days of the ~~interconnection customer~~ potential Applicant providing a complete PAVE request, the EDC ~~shall~~ ~~may~~ provide the following information about relevant parts of its ~~distribution system~~ EPS through the CIAP ~~portal~~, or other means agreed to by the Applicant in support of an ~~informed~~ EDC and ~~timely decision~~ the potential Applicant, to the potential Applicant regarding the interconnection of a proposed project, which ~~shall~~ ~~may~~ include the following items, as they may be modified by ~~Order of the Board~~ ~~order~~:

1. Total capacity (MW) of substation/area bus or bank and circuit;
2. ~~Aggregate~~ Total capacity (MW) of queued ~~Generating Capacity (MW)~~ Facilities proposing to interconnect to the substation/area bus or bank and circuit;
3. Available capacity (MW) of the substation/area bus or bank and circuit, which is the total capacity less the sum of existing and queued ~~Generating Capacity~~ capacity, accounting for all load served by existing and queued ~~generators~~. ~~Note: Generators may remove available capacity in excess of their Generating Capacity if they serve on-site load and utilize export controls which limit the their Generating Capacity to less than their nameplate rating.~~ Facilities;
4. Whether the proposed ~~Generating~~ Facility is located on an Area, Spot or radial network;
- ~~5.~~ 5. Substation nominal distribution voltage or transmission nominal voltage if applicable.;
- ~~5.6.~~ 6. Nominal distribution circuit voltage at the proposed site.;
- ~~6.7.~~ 7. Approximate circuit distance between the proposed site and the substation.;
- ~~6.~~ 8. ~~Relevant Line section(s) and substation actual or estimated peak load and minimum load data, when available.~~
- ~~7.~~ 9. ~~Number and rating of protective devices and number and type of voltage regulating devices between the proposed site and the substation/area.~~

~~7.8. Whether or not three-phase power is available at the site and/or distance from three-phase service. 11. Limiting conductor rating from proposed Point of Interconnection to distribution substation.; and~~

~~8.9.~~ Based on proposed Point of ~~Interconnection~~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.

~~12.~~ Any other information that the EDC deems relevant to the Applicant.

~~(c)~~ Within 10 business days, or at a time mutually agreeable to the parties, of providing the potential interconnection customer with a PAVE Report, the EDC shall offer a meeting to review the findings.

~~(d)(c)~~ In preparing a PAVE Report, the EDC need only include pre-existing data and a. 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 lack of available data, the EDC will provide the potential Applicant with a PAVE 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.

~~(e)(d)~~ An Each EDC shall provide an FAQ page shall be provided by each EDC that clearly presents context and instructions for the PAVE process. At a minimum, the following shall be provided;

- ~~1.~~ Clearly~~The~~ stated purpose and intention of the PAVE Process;
- ~~2.~~ Specific criteria for allowing application potential Applicants to utilize the PAVE process- (including an easy to use screening/configurator tool that can take basic parameters in as data field entries);;
- ~~3.~~ Any fee schedules, terms, and conditions associated with the PAVE process;
- ~~4.~~ Simplified case studies that illustrate successful handling and outcome of PAVE Applicants; and
- ~~5.~~ A An EDC-designated contact point (email and phone) for handling more detailed questions or issue resolutions.

~~(f)(e)~~ In requesting a PAVE report Report, a potential Applicant understands that:

- ~~1.~~ Participation in the PAVE process does not establish a queue position for the Applicant in the EDC's Interconnection Queue.
- ~~1-2.~~ The existence of "available 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

~~2.3.~~ The ~~distribution system~~EPS is dynamic and subject to change, and that the results of the PAVE Report do not represent binding interconnection cost allocations. Data provided in the Pre-Application Report may become outdated by the time an Applicant submits a complete Application.

~~3.~~ Data provided in the Pre-Application Report may become outdated and not useful at the time of submission of the complete Application.

§ 14:8-5.11 Hosting Capacity Maps

- (a) ~~By January~~ Within one (1, 2024) year of the Board's adoption of these regulations, each EDC shall ~~make a tariff filing to include a common~~ establish a Hosting capacity mapping process to aid ~~Customer-generators~~ Applicants. Hosting capacity maps shall indicate locations on the ~~distribution~~ EDC's EPS with spare capacity and ~~which~~ locations that are likely to require additional upgrades.
- (b) ~~Distribution~~ Each EDC shall update its electric distribution system Hosting capacity maps ~~shall be updated on no less than~~ on a quarterly basis and shall include data at both the circuit and substation level. ~~The Hosting capacity values for each circuit.~~ Each EDC shall ~~be calculated using common methodology and presented in a consistent manner across all EDCs. All significant changes shall be summarized and communicated coincidentally to update via posting to the EDC's website and subscriber email list serv.~~ Each EDC shall clearly label their maps with detailed legends explaining ~~what~~ the data means, and ~~adopt~~ adopting a ~~shared~~ standard lexicon to label their maps.
- (c) All Hosting capacity maps shall be integrated with a ~~geographic information system (GIS systems,)~~ geospatial information system (GIS), visually present ~~all~~ system data for substations, feeders, and related distribution assets, and allow ~~prospective~~ potential Applicants to ~~easily~~ determine, based on entered street address, the following information, ~~subject to North American Electric Reliability Council standards, applicable Federal and State regulations, and internal EDC policies related to physical and cybersecurity restrictions:~~
- ~~1. Whether the nearby distribution circuit(s) are closed (red indication), have limited available surplus (orange) or open (green indication) to interconnecting additional generation;~~
 - ~~2.1. A recommended and maximum~~ The Hosting capacity ~~additional generation~~ that ~~could~~ can be accommodated on each nearby open circuits;
 - ~~3.2. A quantified indication of interest level from other projects (and their aggregate capacity) along the same circuit;~~
 - ~~4.3. A built-in function enabling users to filter sites~~ feeders based on available capacity above a certain ~~threshold;~~ A range of budgetary cost estimates for anticipated required upgrades that would make ~~additional~~ Hosting capacity available, based on high-level estimates (e.g., +/- 25%); ~~threshold;~~
 - ~~5. Uniform~~ 4. The Peak Demand (load) on a feeder ~~circuit segment;~~
 - ~~6. Preliminary information on the circuit segment and whether it 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;~~

~~7. Require identification of potentially limiting equipment requiring a system upgrade on the Hosting capacity maps (e.g., voltage controllers, protective relays, communication systems, conductor ampacity, etc.); and~~

~~For each feeder, the load Hosting capacity and with both the normal generation, energy storage capacity, and PV generation labeled individually. level;~~

~~(d) Each EDC shall ensure that the Hosting capacity process includes a documented process for validating models, publishing the Hosting capacity, and allow for customer feedback collection and compilation~~

~~(e) Each Hosting capacity map shall include data on both a static grid (the amount of generation that can be integrated without violating one of the four criteria in thermal, steady state voltage, voltage fluctuation, and protection) and operational flexibility (for evaluating whether the construction of a DER project would limit the EDC's ability to reconfigure circuits in the case of an emergency fault or other event.)~~

§ 14:8-5.12 Proactive System Upgrade Planning

- ~~(a) Each EDC shall make a Proactive System Upgrade Planning (PSUP) filing on January 1 of each even numbered year, starting on January 1, 2024. The PSUP shall identify congested areas on each EDC system that are significantly limiting the ability to interconnect new resources to the EDC's distribution system and identify proposed upgrades that would proactively alleviate those constraints.~~
- ~~(b) In preparing a list of PSUP upgrades, each EDC shall focus on proposed upgrades to facilities that would:~~
- ~~a. Affect multiple interconnection Applicants or open areas where the EDC reasonably anticipates significant growth in interconnection applications;~~
 - ~~b. Identify upgrades that would result in a 20 percent or more cost savings over the expected costs of addressing multiple interconnections serially;~~
 - ~~c. Significantly reduce the expected interconnection timeline;~~
 - ~~d. Upgrade facilities costing over \$2 million that are unlikely to be funded on a participant-funded basis; or~~
 - ~~e. Where a comprehensive series of proactive upgrades would create economies of scale or that would create additional headroom that may not be immediately subscribed by Applicants currently in the EDC's interconnection queue.~~
- ~~(c) For each identified PSUP upgrade, the EDC shall identify:~~
- ~~i. The circuits that would be affected by the proposed upgrade;~~
 - ~~ii. The cost of the proposed upgrade;~~
 - ~~iii. The additional Hosting capacity that the proposed upgrade would create;~~
 - ~~iv. Whether additional grid flexibility services would provide a cost effective means of increasing Hosting capacity; and~~
 - ~~v. The cost per kW of additional Hosting capacity under both a wires and non-wires alternative.~~
- ~~(d) Each EDC will divide the cost of each PSUP upgrade by the amount of additional Hosting capacity created by the upgrade, and produce a \$/kW value. Any Applicant applying to interconnect to a circuit with a proposed PSUP upgrade may request that the EDC accelerate construction of the approved PSUP upgrade, and fund the \$/kW value multiplied by the size of the proposed project, in kW.~~

§ 14:8-5.13 Dispute Resolution

- (a) ~~By January 1, 2024~~ Within one (1) year of the Board's adoption of these regulations, each EDC shall ~~make tariff filing to include~~ establish a standardized, informal dispute resolution process to govern disputes between the EDC and ~~a Customer-generator~~ an Applicant. Disputes may involve, but are not limited to, issues with interconnection studies, cost estimates for necessary upgrades, queue priority, the development of the ~~interconnection~~ interconnection agreement, billing or fees, or related matters.
- (b) An Applicant ~~for interconnection~~ may initiate the informal dispute resolution process by making a request through the CIAP ~~portal or to the EDC's interconnection ombudsman~~. The ~~parties~~ Parties shall make a good faith ~~effort~~ effort to resolve any dispute within ~~40~~ twenty (20) business days of the initiation of ~~the informal~~ dispute resolution process, including making subject matter experts available, or such longer time as the ~~parties~~ Parties shall agree to in writing.
- (c) If the informal dispute ~~resolution~~ process described in (a) and (b) is unsuccessful, the disputing Party ~~shall~~ may provide the other Party a written notice of dispute containing the relevant known facts pertaining to the dispute, the specific dispute and the relief sought. The notice shall be submitted through the CIAP ~~portal and sent to the non-disputing Party's email address~~, with a copy to the Board's ~~interconnection ombudsman~~ Interconnection Ombudsman.
- (d) The ~~Parties~~ may filing of the notice described in (c), constitutes an informal complaint with the Board's Interconnection Ombudsman under N.J.A.C. 14:1-5.13 and N.J.A.C. 14:8-5.2(k), whereby the ~~parties~~ request that the Board's ~~interconnection ombudsperson~~ Interconnection Ombudsperson help track and facilitate the efficient and ~~fair~~ equitable resolution of any dispute, if possible.
- (e) The non-disputing Party shall acknowledge the notice described in (c) within three (3) business days of its receipt and identify a representative ~~with the authority to make decisions for the non-disputing Party with respect(s)~~ assigned to the dispute.
- (f) The non-disputing Party shall ~~make reasonable effort to provide the disputing Party with all and Board's Interconnection Ombudsman with relevant, non-confidential regulatory and/or technical details and analysis~~ information regarding any EDC interconnection requirements under dispute within ten (10) business days of the date of receipt of the notice of dispute described in (c). Within twenty (20) business days of ~~the date~~ receipt of the notice of dispute, the ~~Parties' authorized representatives~~ Board's Interconnection Ombudsman shall ~~meet and confer~~ convene the Parties to ~~try to resolve~~ seek resolution of the dispute. The Parties shall operate in good faith and use best efforts to

- (g)** If a resolution is not reached in thirty (30) business days from the date of the notice of dispute (1) either Party may request to continue negotiations for an additional 20 business days, or (2) the dispute will be shared with the Board's interconnection ombudsperson; or (3) both Parties may by mutual agreement request mediation from an outside third party mediator with costs to be shared equally between the Parties, twenty (20) business days, or (2) file a formal petition to the Board pursuant to N.J.A.C. 14:8-5.2 and 14:1-5.
- (h)** If no agreement is reached under the foregoing informal processes, the dispute shall may proceed to the Board's formal petition process pursuant to N.J.A.C. 14:1-5.
- (i)** Nothing herein limits any Party's ability to file a complaint resolution process. 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 or Petition before the Board or court of competent jurisdiction.