MARYLAND REGISTER

Transmittal Sheet

Proposed Action on Regulations			
Date Filed with AELR Committee February 16, 2024	Date Filed with Division of State Documents		
	Document Number 24-020-P Date of Publication in MD Register		

1. Desired date of publication in Maryland Register: April 5, 2024

2. COMAR Codification

Title	Subtitle	Chapter	Regulation
20	50	09	02
20	50	09	06
20	50	09	07
20	50	09	09
20	50	09	10
20	50	09	12
20	50	09	13
20	50	09	14

3. Promulgating Authority

Public Service Commission

4. Name of Regulations Coordinator

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5. Name of Person to Call About this Document

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6. Check applicable items:

	New Regulations
Х	Amendments to Existing Regulations
	Repeal of Existing Regulations
	Recodification
	Incorporation by Reference of Documents Requiring DSD Approval

7. Is there Emergency text that is identical to this Proposal:

____Yes <u>___</u>No

Х

8. Incorporation by Reference

Incorporation by Reference (IBR) approval form(s) attached and 16 copies of documents proposed for incorporation submitted to DSD. (Submit 16 paper copies of IBR document to DSD and one copy to AELR.)

9. Public Body - Open Meeting

OPTIONAL - If promulgating authority is a public body, check to include a sentence in the

Notice of Proposed Action that proposed action was considered at an open meeting held pursuant to General Provisions Article, §3-302(c), Annotated Code of Maryland

OPTIONAL - If promulgating authority is a public body, check to include a paragraph that final action will be considered at an open meeting

10. Children's Environmental Health and Protection

Check if the system should send a copy of the proposal to the Children's Environmental Health and Protection Advisory Council

11. Certificate of Authorized Officer

I certify that the attached document is in compliance with the Administrative Procedure Act. I also certify that the attached text has been approved for legality by H. Robert Erwin, General Counsel, telephone #410-767-8039, on February 16, 2024. A written copy of the approval is on file at this agency.

Name of Authorized Officer

Andrew S. Johnston

Title

Executive Secretary

Telephone No.

410-767-8067

Date

February 16, 2024

Title 20

PUBLIC SERVICE COMMISSION

Subtitle 50 SERVICE SUPPLIED BY ELECTRIC COMPANIES

20.50.09 Small Generator Interconnection Standards

Authority: Public Utilities Article, §§2-113, 2-121, 5-101, 5-303, and 7-306, Annotated Code of Maryland

Notice of Proposed Action

[24-020-P]

The Public Service Commission proposes to:

amend Regulations .02, .06-.07, .09,-.10, and .12,-.14 under COMAR 20.50.09 Small Generator Facility Interconnection Standards.

This action was considered by the Maryland Public Service Commission at a scheduled rule-making (RM 81) meeting held on January 9, 2024, notice of which was given under General Provisions Article, §3-302, Annotated Code of Maryland.

Statement of Purpose

The purpose of this action is to (1) Establish a modified definition for a "Hosting capacity upgrade plan" under Regulation .02; (2) Establish new definitions for "Limited export interconnection customer agreement," "Meter collar adapter," "Primary voltage hosting capacity upgrade cost," "Primary voltage interconnection customer," "Rightsizing," "Secondary voltage hosting capacity upgrade cost," and "Secondary voltage interconnection customer" under Regulation $02 \cdot$ (3) Expand flexible interconnection options for interconnection customers under Regulation .06: Establish (4)new requirements for hosting capacity upgrade plans under Regulation .06: (5) Propose a new cost allocation methodology for interconnection upgrades for primary voltage (i.e., greater than 600 volts) interconnection customers and secondary voltage (i.e., 600 volts or less) interconnection customers under Regulation .06; (6) Eliminate and update regulations that have become outdated with the establishment of certified smart inverter requirements which became effective January 2024, under Regulation .07: 1. (7) Establish new requirements related to public service company approval of meter collar adapter devices for small generator facility interconnection under Regulation .07: (8) Establish new requirements for the use of power flow analysis associated with Level 1 and Level 2 small generator interconnection studies under Regulations .09 .10: and (9) Remove financial requirements for interconnection customers associated with delays in electric distribution system upgrades for Level 4 small generator interconnection projects to be compatible with the proposed action for Regulation .06R under Regulation .12: (10)Improve the dispute resolution process under Regulation .13; and

(11) Include additional reporting requirements for public service companies beginning on April 1, 2025, that are associated with the proposed action for Regulation .06R and will also remove one outdated reporting requirement associated with Solar Renewable Energy Credits (SRECs) under Regulation .14.

Estimate of Economic Impact

I. Summary of Economic Impact. These proposed actions to expand flexible interconnection options; implement hosting capacity upgrade plan improvements; improve interconnection study requirements; facilitate the use of meter collar adapters; remove financial requirements for interconnection customers associated with delays in electric distribution system upgrades; and add a new cost allocation methodology for primary and secondary voltage interconnection upgrades will remove inestimable cost obstacles to interconnection of clean energy to the electric grid thereby helping to achieve state policy goals. Other aspects of the proposed action involving dispute resolution and reporting requirements are administrative in nature and will have minimal or no economic impact.

Secondary voltage interconnection customers (i.e., 600 volts or less) will participate in the future in a cost allocation methodology that may result in interconnection fee costs of approximately \$100, or less for residential customers and approximately \$10/ kW, or less for non-residential customers. Primary voltage interconnection customers (i.e., greater than 600 volts) will participate in the future in a cost allocation methodology that may result in approximate interconnection fee costs between \$2/ kW and \$400/ kW, depending on location of the interconnection request.

II. Types of Economic Impact.

Impacted Entity	Revenue (R+/R-) Expenditure (E+/E-)	Magnitude
Impacted Entity	(L+/L-)	wagintude
A. On issuing agency:	NONE	
B. On other State agencies:	NONE	
C. On local governments:	NONE	
	Benefit (+)	
	Cost (-)	Magnitude
D. On regulated industries or trade		
groups:		
(1) Maryland Electric Utilities	(-)	N/A
E. On other industries or trade		
groups:		
(1) Distributed Energy Developers	(+)	N/A

F. Direct and indirect effects on public:

(1) Maryland Electric Utility (+) N/A Residential and Small Business Customers

III. Assumptions. (Identified by Impact Letter and Number from Section II.)

D(1). Maryland Electric Utilities may incur inestimable additional costs to implement these regulations and associated processes. E(1). Since this proposed action changes the methodology by which interconnection upgrade costs are allocated among all interconnection customers, interconnection costs will be reduced for some distributed energy (e.g., solar) developers where these costs were previously an obstacle to interconnection with the tradeoff of adding a fee for other interconnection customers who previously were allowed to access available capacity (i.e., hosting capacity) on the grid for free. These fees and reduced interconnection upgrade costs will vary depending on many factors and the total impacts are inestimable.

F(1). Since this proposed action changes the methodology by which interconnection upgrade costs are allocated among all interconnection customers, interconnection costs will be reduced for some residential and small business customers where these costs were previously an obstacle to interconnection with the tradeoff of adding a fee for other interconnection customers who previously were allowed to access available capacity (i.e., hosting capacity) on the grid for free. These fees and reduced interconnection upgrade costs will vary depending on many factors and the total impacts are inestimable.

Economic Impact on Small Businesses

The proposed action has minimal or no economic impact on small businesses.

Impact on Individuals with Disabilities

The proposed action has no impact on individuals with disabilities.

Opportunity for Public Comment

Comments may be sent to Andrew S. Johnston, Executive Secretary, Public Service Commission, 6 St. Paul Street, 16th Floor Baltimore, Maryland 21202, or call 410-767-8067, or email to psc.rmcomments@maryland.gov. Comments will be accepted through May 6, 2024. A public hearing has not been scheduled.

ANDREW S. JOHNSTON Executive Secretary

Economic Impact Statement Part C

A. Fiscal Year in which regulations will become effective: FY 2025

B. Does the budget for the fiscal year in which regulations become effective contain funds to implement the regulations?

Yes

C. If 'yes', state whether general, special (exact name), or federal funds will be used:

Special Fund – The Public Utility Regulation Fund

D. If 'no', identify the source(s) of funds necessary for implementation of these regulations:

E. If these regulations have no economic impact under Part A, indicate reason briefly:

F. If these regulations have minimal or no economic impact on small businesses under Part B, indicate the reason and attach small business worksheet.

Since this proposed action changes the methodology by which interconnection upgrade costs are allocated among all interconnection customers, interconnection costs may be reduced for some residential and small business customers where these costs were previously an obstacle to interconnection with the tradeoff of adding a fee for other interconnection customers who previously were allowed to access available capacity (i.e., hosting capacity) on the grid for free. Secondary voltage interconnection customers (i.e., 600 volts or less) will participate in the future in a cost allocation methodology that may result in interconnection fee costs of approximately \$100, or less for residential customers and approximately \$10/ kW, or less for non-residential customers.

G. Small Business Worksheet:

1a. Intended Beneficiaries

Interconnection customers who cannot proceed with projects when interconnection upgrades are an obstacle to interconnection.

b. Intended Beneficiaries: Households

Residential customers who cannot proceed with projects when interconnection upgrades are an obstacle to interconnection.

c. Intended Beneficiaries: Businesses

Business customers who cannot proceed with projects when interconnection upgrades are an obstacle to interconnection.

2a. Other Direct or Indirect Impacts: Adverse

b. Other Direct or Indirect Impacts: Positive

3. Long Term Impacts

Residential and Business customers, including distributed energy developers may incur a fee to access available capacity (i.e., hosting capacity) on the grid in the future which they previously were able to access for free.

4. Estimate of Economic Impact

The economic impact depends on the actual fees assessed and the volume of interconnection customers, which are inestimable at this time.

Narrative:

Since this proposed action changes the methodology by which interconnection upgrade costs are allocated among all interconnection customers, interconnection costs may be reduced for some residential and small business customers where these costs were previously an obstacle to interconnection with the tradeoff of adding a fee for other interconnection customers who previously were allowed to access available capacity (i.e., hosting capacity) on the grid for free. Secondary voltage interconnection customers (i.e., 600 volts or less) will participate in the future in a cost

allocation methodology that may result in interconnection fee costs of approximately \$100, or less for residential customers and approximately \$10/ kW, or less for non-residential customers.

Title 20

PUBLIC SERVICE COMMISSION

Subtitle 50 SERVICE SUPPLIED BY ELECTRIC COMPANIES

20.50.09 Small Generator Facility Interconnection Standards

Authority: Public Utilities Article, §§2-113, 2-121, 5-101, 5-303, and 7-306, Annotated Code of Maryland

.02 Definitions.

A. (text unchanged)

B. Terms Defined.

(1)—(16) (text unchanged)

(17) "Hosting capacity" means the amount of aggregate generation that can be accommodated on [the] *an* electric distribution system *or area, or a system component* without requiring infrastructure upgrades.

(18) (text unchanged)

(19) "Hosting capacity upgrade plan" means a *utility* plan to promote clean energy interconnection for a particular area or a proposal to open multiple restricted and closed circuits or areas on an electric system in the aggregate through proactive distribution system investments that includes a cost allocation and recovery [method,] proposal, under conditions that are approved by the Commission.

(20)—(29) (text unchanged)

(30) "Limited export agreement" means an agreement for energy supplied to the grid by an interconnection customer that may be managed to specified ramp rates and generation levels for operating conditions, as specified in the interconnection agreement or in a separate limited export agreement.

[(30)](31)—[(31)](32) (text unchanged)

(33) "Meter collar adapter" means an electronic device that is installed between a residential electric meter and the meter socket, for the purpose of facilitating the deployment of customer-owned or customer-leased technology.

[(32)](34)—[(41)](43) (text unchanged)

(44) "Primary voltage hosting capacity upgrade cost" means the equipment upgrade costs of all interconnection equipment, interconnection facilities, protective devices and associated communications systems, and other upgrades that directly increase hosting capacity for multiple primary voltage and secondary voltage interconnection customers while excluding equipment upgrade costs that solely benefit a single interconnection customer, to the extent practicable and material.

(45) "Primary voltage interconnection customer" means an interconnection customer with a point of interconnection at greater than 600 nominal volts.

[(42)](46) - [(46)](50) (text unchanged)

(51) "Rightsizing" means to increase the size, scope, and cost of an electric utility hosting capacity upgrade project, following a distributed energy resource interconnection request, to account for both the immediate interconnection customer's needs and future hosting capacity needs that are identified by the electric utility through a distributed energy resource forecast.

[(47)] (52)—[(48)] (53) (text unchanged)

(54) "Secondary voltage hosting capacity upgrade cost" means the costs of all primary voltage and secondary voltage interconnection equipment upgrades that directly increase secondary voltage hosting capacity available to multiple secondary voltage interconnection customers while excluding all primary voltage and secondary voltage interconnection equipment upgrade costs that solely benefit a single interconnection customer, to the extent practicable and material.

(55) "Secondary voltage interconnection customer" means an interconnection customer with a point of interconnection at less than or equal to 600 nominal volts.

[(49)](56)—[(57)](64) (text unchanged)

.06 General Requirements.

A.—K. (text unchanged)

L. Witness Test of Small Generator Facility.

(1)—(7) (text unchanged)

(8) For interconnection equipment that has not been [lab-certified] *certified* or [field-approved] *approved* under Regulation .07 of this chapter, the witness test may also include the verification by the utility specified in Section 8 of IEEE Standard 1547.1-2020.

(9)—(11) (text unchanged)

M.—O. (text unchanged)

[P. Inadvertent Export, Net System Capacity, and Proposed Use for Small Generator Facilities with Energy Storage Devices. Utilities shall approve interconnection requests for inadvertent export, net system capacity, and proposed use for small generator facilities subject to the following requirements:

(1) Small generator facilities using Level 3 interconnection requests are by definition nonexporting systems, and are not allowed to utilize inadvertent exports.

(2) Small generator facilities may inadvertently export power of a magnitude and duration as evaluated and allowed by the utility and as specified in their interconnection agreement. 30 seconds shall be used as a default inadvertent export duration unless the utility determines that this level duration will violate utility evaluation criteria.

(3) There are no limits on the number of times inadvertent exports occur in any given customer billing cycle.

(4) Small generator facilities may not have total inadvertent exports greater than the generating facility nameplate capacity multiplied by 1 hour per customer in each billing cycle.

(5) In the event that a small generator facility exceeds approved inadvertent export magnitude or duration limits, the small generator facility shall immediately cease to export real power to the grid until acceptable output control has been reestablished.

(6) If required by the utility, the small generator facility shall be subject to a verification reporting plan to monitor the small generator facility's compliance with any inadvertent export or net system capacity requirements as documented in the interconnection agreement. A verification reporting plan may include periodic reports, online monitoring, or other verification methods, or it may be waived as agreed by the utility and interconnection customer.

(7) Failure of a small generator facility to demonstrate compliance with the facility's verification reporting plan may result in the suspension of utility approvals in this section until the small generator facility agrees and implements an acceptable corrective action plan with the utility.]

P. Flexible Interconnection Options.

(1) Utilities shall approve interconnection requests while considering flexible interconnection options under a limited export agreement or for inadvertent export, net system capacity and a proposed use subject to the requirements of this section.
(2) Inadvertent Export for Energy Storage Devices.

(a) Small generator facilities using Level 3 interconnection requests are non-exporting systems and are not allowed to utilize inadvertent exports.

(b) A utility shall not approve an inadvertent export option if the interconnection customer lacks the appropriate standardized controls to ensure that the small generator facility shall operate as agreed upon in interconnection agreements.

(c) Small generator facilities may inadvertently export power of a magnitude and duration as evaluated and allowed by the utility and as specified in their interconnection agreement. Thirty seconds shall be used as a default inadvertent export duration unless the utility determines that this level duration shall violate utility evaluation criteria.

(d) There are no limits on the number of times inadvertent exports occur in any given customer billing cycle.

(e) Small generator facilities may not have total inadvertent exports greater than the generating facility nameplate capacity multiplied by 1 hour per customer in each billing cycle.

(f) In the event that a small generator facility exceeds approved inadvertent export magnitude or duration limits, the small generator facility shall immediately cease to export power to the grid until acceptable output control has been reestablished.

(3) Net System Capacity and Proposed Use.

(a) An interconnection customer may request that its interconnection request be based on the proposed use of the small generator facility and the impact of its proposed use on net system capacity.

(b) A utility shall not approve a proposed use if the interconnection customer lacks the appropriate standardized controls to ensure that the small generation facility shall operate as agreed upon in interconnection agreements.

(c) In the event that a small generator facility exceeds the approved net system capacity for the proposed use, the small generator facility shall immediately cease to export power to the grid until acceptable output control has been reestablished.
(4) Limited Export Agreements.

(a) By January 1, 2025, a utility shall publish on its interconnection website a description of their limited export agreement policies and provide a process for interconnection customers to request these agreements to avoid the need for a hosting capacity upgrade project to accommodate an interconnection request.

(i) Limited export agreements shall be made available upon request only to Level 2 and Level 4 interconnection customers, and

(ii) Limited export agreement terms shall be mutually agreed between a utility and an interconnection customer for operating conditions as specified in the interconnection agreement or in a separate limited export interconnection customer agreement, and

(iii) The method of implementation and control of the limited export agreement terms shall be mutually agreed between a utility and the interconnection customer and specified in the interconnection agreement or in a separate limited export interconnection customer agreement.

(b) A utility shall not approve a limited export agreement if the interconnection customer lacks the appropriate standardized controls to ensure that the small generation facility shall operate as agreed upon in interconnection agreements.

(c) In the event that a small generator facility does not curtail and exceeds the approved limited export parameters stated in the interconnection agreement or a separate limited export interconnection customer agreement, the small generator facility shall immediately cease to export real power to the grid until acceptable output control has been reestablished.

(5) If required by the utility, the small generator facility shall be subject to a verification reporting plan to monitor the small generator facility's compliance with any flexible interconnection option limits involving net system capacity, inadvertent export, proposed use, and limited export agreement requirements as documented in the interconnection agreement. A verification

reporting plan may include periodic reports, online monitoring, or other verification methods, or it may be waived as agreed by the utility and interconnection customer.

(6) Utilities may include a recurring administrative fee in utility tariffs as a term in flexible interconnection option agreements to reimburse the utility for estimated additional costs to administer these agreements and the stated limiting conditions.

(7) Failure of a small generator facility to demonstrate compliance with the facility's verification reporting plan may result in the suspension of utility approvals in this section until the small generator facility agrees and implements an acceptable corrective action plan with the utility within 30 calendar days of notification by the utility.

(8) A small generator facility shall cease to export power should it fail to provide an acceptable corrective action plan to the utility, pursuant to \$P(7) of this regulation.

Q. Hosting Capacity.

(1) Utilities shall establish hosting capacity policies subject to the following requirements:

(a)—(b) (text unchanged)

(c) A utility may determine the amount of reserve hosting capacity on a restricted circuit based on *a circuit-specific assessment of* distributed energy resource forecasts or other factors including customer density, type of area served, and customer demographics of the circuit.

(d)—(e) (text unchanged)

[(2) To open multiple closed or restricted circuits in the aggregate, a utility may submit, or the Commission may require a utility to submit, a hosting capacity upgrade plan for the Commission's review and approval.]

(2) A utility may submit for the Commission's review and approval a hosting capacity upgrade plan or multiple plans to address or otherwise increase the utilities' existing distribution aggregate circuit hosting capacity limits across the system, or in a specific area of an electric utility's system, that are forecasted to be congested in the future where the utility's forecast of distributed energy resource growth exceeds existing hosting capacity. These plans may be considered by the Commission if primary voltage hosting capacity upgrade fees, pursuant to Regulation .06R, exceed a threshold of the utility's average cost per kilowatt for their aggregate customer funded hosting capacity upgrade projects completed in the previous year, unless good cause exists for a utility to request a waiver of this requirement.

[(2)] (3) Hosting capacity upgrade plans that are submitted by a utility shall include: -

(a) A description of the electric system areas to be included in the hosting capacity upgrade plan at the feeder and substation level.

(b) A description of the assumptions used for establishing and prioritizing the area covered by the hosting capacity upgrade plan and associated forecasts and timeline for hosting capacity utilization;.

(c) A description of the assumptions used for modeling and establishing the cost of the hosting capacity upgrade plan.

(d) If the plan proposes that ratepayers bear any costs that would not be paid by future interconnection customers, a justification for the percentage cost allocation proposed between interconnection customers and ratepayers shall be provided.

(i) This justification shall include a detailed description of how the proposed cost allocation was developed and what alternatives were considered, explain and quantify the benefits ratepayers are expected to receive from the upgrade, and

(ii) This justification shall describe how the utility engaged with stakeholders, particularly the ratepayer advocate's office, the Maryland Office of People's Counsel, in the development of the Company's cost allocation proposal.

(e) A description of the proposed cost allocation method in terms of dollars per kilowatt for a primary voltage hosting capacity fee for an interconnection customer.

(f) A description of the proposed cost allocation to ratepayers and the risks to ratepayers of unallocated hosting capacity upgrade costs if the hosting capacity upgrade does not become fully utilized.

(g) A proposal for utility cost recovery that describes how hosting capacity upgrade costs shall be offset by future utility revenues from interconnection customers.

[(3)] (4)—[(4)] (5)

R. Maryland Cost Allocation Method.

(1) Within one year of the effective date of this regulation, electric utilities shall submit an electric utility service tariff for Commission approval for a primary voltage hosting capacity cost sharing and allocation methodology for interconnection customers.

(a) The default hosting capacity cost sharing and allocation methodology for primary voltage interconnection customers shall be based on locational pricing to incentivize interconnection in areas with higher available hosting capacity and disincentivize interconnection in areas with lower available hosting capacity.

(b) A utility may petition the Commission to implement a hosting capacity cost sharing and allocation methodology for primary voltage interconnection customers that is not locationally based for "good cause" in their tariff filing.

(c) An interconnection request shall be eligible for hosting capacity cost sharing and allocation under this section unless they are exempted for the following reasons:

(i) The interconnection request is subject to the PJM Interconnection, LLC Tariff, or;

(ii) The interconnection request is in an area with its cost allocation governed by a hosting capacity upgrade plan approved by the Commission, or;

(iii) The interconnection is on a dedicated primary voltage feeder that shall not benefit any other interconnection customer, or;

(*iv*) The interconnection is on a dedicated secondary voltage facility that shall not benefit any other interconnection customer, or;

(v) The interconnection request is on an AC distribution grid or spot network, or;

(vi) Other good cause as documented by the utility and reported, pursuant to Regulation .14 of this chapter.

(d) If an interconnection request is exempted, pursuant to Regulation .06R(1)(c) of this chapter, the interconnection customer shall pay all interconnection costs as determined by the utility, unless the interconnection request is subject to the PJM Tariff or the interconnection request is in an area with its cost allocation governed by a hosting capacity upgrade plan approved by the Commission.

(e) If sufficient hosting capacity is not available at a point of interconnection for a primary voltage interconnection customer, an electric utility may propose a hosting capacity upgrade project to the interconnection customer(s).

(i) The utility shall charge the primary voltage interconnection customer a hosting capacity fee for its share of the primary voltage hosting capacity upgrade cost proportional to the interconnection customer's utilization of hosting capacity.

(ii) If more than one interconnection request exists in the interconnection queue that shall benefit from the electric utility proposed hosting capacity upgrade project, these interconnection customers shall be clustered together for the purpose of calculating hosting capacity fees.

(iii) Hosting capacity fees for clustered interconnection customers shall be calculated proportional to each interconnection customer's utilization of the hosting capacity created by the hosting capacity upgrade project.

(iv) All hosting capacity upgrade costs in excess of hosting capacity fees collected shall be accumulated in a separate unallocated primary voltage hosting capacity upgrade cost account for future allocation to primary voltage interconnection customers.

(v) Unallocated hosting capacity upgrade costs for primary voltage interconnection customers shall be shared and allocated to other primary voltage interconnection customers using a primary voltage hosting capacity cost sharing and allocation methodology in an electric utility service tariff approved by the Commission.

(2) Within one year of the effective date of this regulation, electric utilities shall submit an electric utility service tariff for Commission approval for a secondary voltage cost sharing and fee for both residential and commercial interconnection customers.

(a) If sufficient hosting capacity is not available at a point of interconnection for a secondary voltage interconnection customer, an electric utility may construct a hosting capacity upgrade project for the interconnection customer(s).

(b) All secondary voltage hosting capacity upgrade costs shall be accumulated in separate unallocated accounts for both residential and commercial secondary voltage interconnection customers for future allocation in hosting capacity fees.

(c) Unallocated hosting capacity upgrade costs for both residential and commercial secondary voltage interconnection customers shall be shared and allocated to other secondary voltage interconnection customers using a hosting capacity cost sharing and allocation fee in an electric utility service tariff approved by the Commission.

(3) Hosting capacity fees for primary voltage interconnection customers shall be reset using a cost sharing and allocation methodology approved by the Commission in an electric utility service tariff filing whenever a change in methodology is proposed, unless the fee is zero or the fee change is less than one dollar per kilowatt.

(4) Hosting capacity fees for secondary voltage interconnection customers shall be reset annually using a cost sharing and allocation methodology approved by the Commission unless the fee is zero or the fee change is less than one dollar per kilowatt from the current fee in the electric utility's service tariff.

(5) A utility may submit for Commission approval an administrative charge in its service tariff to recover its administrative costs for managing the cost sharing and allocation methodology for primary and secondary voltage interconnection customers.

(6) A utility shall describe all hosting capacity upgrade project rightsizing projects describing their forecasts, inputs, and assumptions in their next rate case to assist stakeholders in a prudency review.

.07 [Lab-Certified] Certified and [Field-Approved] Approved Equipment.

[A. An interconnection request may be eligible for expedited interconnection review if the small generator facility uses labcertified or field-approved interconnection equipment.

B. Interconnection equipment shall be considered to be lab-certified upon establishment of the following:

(1) The interconnection equipment has been tested in accordance IEEE Standard 1547.1 in compliance with the appropriate codes and standards referenced in B(7) of this regulation by any NRTL recognized by the United States Occupational Safety and Health Administration to test and certify interconnection equipment under the relevant codes and standards listed in B(7) of this regulation;

(2) The interconnection equipment has been labeled and is publicly listed by the NRTL at the time of the interconnection request;

(3) The NRTL testing the interconnection equipment makes readily available, such as by posting on its website, copies of all test standards and procedures utilized in performing equipment certification, and, with applicant approval, the test data itself;

(4) The applicant verifies that the intended use of the interconnection equipment falls within the use or uses for which the interconnection equipment was labeled, and listed by the NRTL;

(5) If the interconnection equipment is an integrated equipment package such as an inverter, the applicant shall show that the small generator facility is compatible with the interconnection equipment and is consistent with the testing and listing specified for this type of interconnection equipment;

(6) If the interconnection equipment includes only interface components such as switchgear, multifunction relays, or other interface devices, the applicant shall show that the small generator facility is compatible with the interconnection equipment and is consistent with the testing and listing specified for this type of interconnection equipment; and

(7) The interconnection equipment is:

(a) Evaluated by a NRTL in accordance with the following codes and standards:

(i) IEEE Standard 1547, including use of IEEE Standard 1547.1 testing protocols to establish conformity, which are incorporated by reference in COMAR 20.50.02.02; and

(ii) National Electrical Code, which is incorporated by reference in COMAR 20.50.02.02; and

(b) Certified by Underwriters Laboratories under UL Standard 1741.

C. Interconnection equipment manufactured prior to January 1, 2007, does not require testing and listing based on IEEE Standard 1547.1.

D. Interconnection equipment shall be considered to be field approved if within the previous 36 months of the date of the interconnection request, it has been previously approved for use with the proposed small generator facility and the following criteria are met:

(1) The utility has previously approved interconnection equipment identical to that being proposed under the Level 4 study review process described in Regulation .12 of this chapter in a materially identical system application, or the utility has agreed to accept a Level 4 study review conducted for identical interconnection equipment and system application by another utility;

(2) The prior approval process included a successful witness test; and

(3) The applicant provided as part of its interconnection request the following:

(a) A copy of the final certificate of completion from the prior approval process;

(b) A written statement that the proposed interconnection equipment is identical to what was previously approved; and (c) Documentation or drawings indicating the system interconnection details.]

A. After January 1, 2024, any small generator facility inverter for which an interconnection request is submitted shall be deemed certified and approved if it meets the requirements of IEEE Standard 1547-2018 and UL Standard 1741-SB, except for inverters purchased pursuant to Regulation .06N(2) of this chapter.

B. After January 1, 2024, any small generator facility shall be deemed approved if the interconnection equipment including interface components such as switchgear, multifunction relays, or other interface devices are compatible with the interconnection equipment, pursuant to Witness Test requirements pursuant to Regulation .06L of this chapter.

C. An electric utility shall approve a meter collar adapter model for installation in its Maryland service area for specific compatible meter configurations and customer applications provided that the meter collar adapter model meets the following criteria:

(1) The meter collar adapter model is approved or listed by a nationally recognized testing laboratory;

(2) The meter collar adapter model is approved for use in utility service areas, unless sufficient rational for disapproval is provided by an electric utility;

(3) All meter collar model installations, access, testing, inspections, servicing and removals shall only be performed by a qualified person as agreed between the utility and the meter collar manufacturer;

(4) The meter collar adapter model design does not impede access to the sealed meter socket compartment, or to the meter itself by a qualified person;

(5) The meter collar adapter model is compatible with the National Electric Code; and

(6) The meter collar adapter model is compatible to the specific meter configurations and customer applications to ensure that the meter collar adapter is capable of being safely and reliably inserted into a meter socket to maintain a secure connection with both the meter socket and the utility meter.

D. An electric utility shall approve or disapprove a meter collar adapter model for installation in its service area no later than 90 days after a meter collar manufacturer submits a request for approval of the meter collar adapter and a utility's procedures shall be updated within 90 days of utility approval.

E. An electric utility shall provide an explanation to the requesting meter collar manufacturer explaining the reasons any meter collar adapter model application was denied.

F. A requesting meter collar adapter manufacturer may appeal the utility decision to the Commission using the dispute resolution process in Regulation .13 of this chapter.

G. An electric utility shall provide public notice of all decisions approving a meter collar adapter model by posting the information on the utility's internet website.

H. An electric utility shall authorize the installation and operation of a utility approved meter collar adapter for a customer installation provided the meter collar adapter meets the following criteria:

(1) The meter collar adapter is qualified to be connected to the supply side of the service disconnect, pursuant to the applicable provisions of the National Electric Code;

(2) The meter collar adapter is rated for the meter socket into which it is intended to be installed;

(3) The meter collar adapters does not exceed the weight bearing limits of a meter socket;

(4) Multiple meter collar adapters are not stacked in a meter socket; and

(5) The meter collar adapter does not disable this excessive heating detection capability of AMI meters.

I. A utility shall uninstall an approved meter collar adapter in the aggregate if any deficiencies are found after installation that result in safety or operational concerns, if these concerns cannot be remediated by a customer for a specific installation or by a meter collar adapter manufacturer, in the aggregate.

J. The determination of violations in this section of Regulation .07 and the assessment of related civil penalties and corrective action plans shall be delegated to the Engineering Division.

.09 Level 1 Review.

A. The utility shall evaluate a Level 1 small generator facility for the potential for adverse system impacts using net system capacity, pursuant to Regulation .06A and .06B of this chapter unless nameplate capacity is specifically required using the following:

(1)—(3) (text unchanged)

(4) As an alternative *non-mandatory* method to evaluate the adverse system impacts of a proposed Level 1 small generator facility on the distribution system, as described in §A(1)—(3) of this regulation, *or as a mandatory next step prior to rejecting an interconnection request, pursuant to §E of this regulation, for Level 1 Review Failure, a utility may use a power-flow based analysis system* [if the utility has submitted:] *with modeling of IEEE 1547-2018 inverter capabilities as follows, if its use may change the analysis result as determined by the utility:*

[(a) A plan, subject to Commission approval, that describes its methodology for its power-flow based modeling system and includes reasoning for each screen used to evaluate an application; and]

(a) For primary voltage systems within six months of the effective date of this regulation; and

[(b) Information about the system's results, as required in Regulation .14 of this chapter;]

(b) For secondary voltage systems within two years of the effective date of this regulation.

(5)—(6) (text unchanged)

B.—E. (text unchanged)

.10 Level 2 Review.

A. The utility shall evaluate a Level 2 small generator facility for the potential for adverse system impacts using net system capacity, pursuant to Regulation .06A and .06B of this chapter unless nameplate capacity is specifically required using the following:

(1)—(8) (text unchanged)

(9) As an alternative *non-mandatory* method to evaluate the adverse system impacts of a proposed Level 2 small generator facility on the distribution system, as described in A(1)—(8) of this regulation, *or as a mandatory next step prior to rejecting an interconnection request, pursuant to §E of this regulation, for Level 1 Review Failure, a utility may use a power-flow based analysis system* [if the utility has submitted:] *with modeling of IEEE 1547-2018 inverter capabilities as follows, if its use may change the analysis result as determined by the utility:*

[(a) A plan, subject to Commission approval, that describes its methodology for its power-flow based modeling system and includes reasoning for each screen used to evaluate an application; and]

(a) For primary voltage systems within six months of the effective date of this regulation; and

[(b) Information about the system's results, as required in Regulation .14 of this chapter;]

(b) For secondary voltage systems within two years of the effective date of this regulation.

(10) (text unchanged)

(11) If the proposed interconnection facility requires a *site-specific utility required inverter settings profile review or a* minor system [modification,] *modification without further study review needed*, the utility shall notify the applicant of that requirement when it provides the Level 2 evaluation result, as follows:

(a) (text unchanged)

(b) If the applicant makes such an election, the utility shall provide an interconnection agreement, along with a nonbinding good faith cost estimate and construction schedule for [those upgrades,] *any minor system modifications* to the applicant within 30 calendar days after the utility receives such an election; and

(c) (text unchanged)

B.—E. (text unchanged)

F. Failure to Meet Level 2 Criteria.

(1) (text unchanged)

(2) A utility shall:

(a) Within 30 calendar days, offer to perform additional review to determine whether minor *system* modifications [to the electric distribution system] *or a site-specific utility required inverter settings profile* would enable the interconnection to be made consistent with safety, reliability, and power quality criteria; and

(b) Provide the applicant with a nonbinding, good faith estimate of the costs of *the* additional review and minor *system* modifications.

(c) Advise the applicant if a limited export customer agreement could be used to facilitate reliable and safe interconnection to the electric distribution system.

(3)—(4) (text unchanged)

G.—H. (text unchanged)

.12 Level 4 Study Review.

A.—D. (text unchanged)

E. Interconnection Feasibility, Interconnection System Impact, and Interconnection Facilities Studies.

(1)—(2) (text unchanged)

(3) Interconnection Facilities Study.

(a)—(d) (text unchanged)

[(e) Delay in Electric Distribution System Upgrades.

(i) In the event that electric distribution system upgrades are identified in the impact study that will be required to be added only in the event that higher queue position customers not yet interconnected eventually will complete and interconnect their small generator facilities, an applicant may elect to interconnect without paying for such upgrades at the time of the interconnection under the condition that the customer shall pay for such upgrades at the time the higher queue position customer is ready to interconnect.

(ii) If the applicant does not pay for the cost of the electric distribution system upgrades at that time, the utility shall require the customer to immediately disconnect its small generator facility so that interconnection of the higher-queued customer can be accommodated.]

[(f)](e)—[(h)](g) (text unchanged)

F.—G. (text unchanged)

.13 Dispute Resolution.

A. (text unchanged)

B. Dispute Resolution Before the Commission.

(1) If a dispute arises, the applicant or utility may seek immediate resolution through the procedures of COMAR 20.32.01[, or an alternative dispute resolution process approved by the Commission, by providing written notice to the Commission and the other party stating the issues in dispute].

(2) (text unchanged)

(3) [If available, dispute resolution may be conducted by phone.] If a dispute arises involving technical matters regarding the interconnection process, dispute resolution shall be delegated to the Commission's Engineering Division.

[C. Dispute Resolution by Technical Master.

(1) If disputes relate to the technical matters regarding the interconnection process, upon the request of the applicant and utility and at their cost, the Commission may designate a technical master to resolve the dispute.

(2) The Commission may designate a Department of Energy National Laboratory, PJM Interconnection, LLC, a college or university with electric distribution system engineering expertise, or another electric distribution system expert unaffiliated with the interconnection process in dispute as the technical master.

(3) Upon Commission designation, the applicant and utility shall use the technical master to resolve disputes related to interconnection.

(4) Responsibility for the costs for a dispute resolution conducted by the technical master shall be determined either prior to submission of the dispute to the technical master by the applicant and utility, or by the technical master after the resolution of the dispute.]

[D.] *C*.—[E.] *D*. (text unchanged)

E. If a satisfactory resolution is not achieved between the applicant and utility, the applicant or utility may request a hearing, pursuant to Public Utilities Article, §3-102, Annotated Code of Maryland.

.14 Record Retention and Reporting Requirements.

A.-B. (text unchanged)

C. A utility shall file not later than April 1 of each year a report entitled "Annual Small Generator Interconnection Report" to the Commission containing the following information for the preceding calendar year:

(1) The total number of [and the nameplate capacity of the] interconnection requests received, approved, and denied under Level 1, Level 2, Level 3, and Level 4 reviews;

[(2) The number of evaluations of interconnections requests approved and denied using any alternate process under Level 1, Level 2, Level 3, and Level 4 reviews;]

[(3)](2) - [(9)](8) (text unchanged)

[(10)] (9) Beginning April 1, 2021, a utility shall also report annually for the previous year:

(a)—(c) (text unchanged)

(d) The number of interconnection requests for [net system capacity] *flexible interconnection options* totaled for Level 1, Level 2, Level 3, and Level 4 that were approved, denied, or suspended due to non-compliance;

(e)—(f) (text unchanged)

[(11)] (10) (text unchanged)

(11) Beginning April 1, 2025, an electric utility shall report exemptions to Regulation .06R of this chapter annually for the previous year including:

(a) The number of interconnection requests subject to the PJM Interconnection, LLC. Tariff, and;

(b) The number of interconnection requests in an area governed by a hosting capacity upgrade plan approved by the Commission, and;

(c) The number of interconnection requests on a dedicated primary voltage feeder that shall not benefit any other interconnection customer, and;

(d) The number of interconnection requests on a dedicated secondary voltage facility that shall not benefit any other interconnection customer, and;

(e) The number of interconnection requests on an AC distribution grid or spot network, and;

(f) The number of interconnection requests exempted for other good cause, and;

(g) The reason for good cause for each interconnection request exempted from Regulation .06R of this chapter.

D. -F. (text unchanged)

[G. The utility shall send a weekly electronic confidential report to Commission Staff of all solar facilities successfully interconnected. The weekly electronic confidential report shall:

(1) Be compatible with the format requirements of PSC and MD State IT departments to facilitate the processing of Solar Renewable Energy Credits (SRECs); and

(2) Contain the name of the customer, the address, the size of the facility (kW DC) and the date of final approval (net meter set).]