## **ORDER NO. 89933**

Maryland's Electric Distribution Systems * PUBLIC	SERVICE COMMISSION OF MARYLAND
	OF MARYLAND
To Ensure That Electric Service is *	
Customer-Centered, Affordable, Reliable *	
And Environmentally Sustainable in *	
Maryland * A	dministrative Docket
*	PC44
*	

**Issue Date: September 9, 2021** 

### ORDER ON RECOMMENDATIONS OF INTERCONNECTION WORKGROUP

- 1. On May 14, 2021, the PC44 Interconnection Workgroup (the "Workgroup") filed its Small Generator Facility Interconnection Phase III Report (the "Report"). On June 30, 2021, the Commission requested that comments on the Report be filed by July 28, 2021. On July 28, 2021, the Commission received comments from the Interstate Renewable Energy Council ("IREC"); the Center for Renewables Integration ("CRI"); the Southern Maryland Electric Cooperative ("SMECO"); the Potomac Electric Power Company ("Pepco") and Delmarva Power & Light Company ("Delmarva"); the Office of People's Counsel ("OPC"); the Staff of the Public Service Commission ("Staff"); and Sunrun, Inc., the Solar Industries Association, and the Chesapeake Solar and Storage Association (styling themselves "the Solar Stakeholders").
- 2. On August 27, 2021, the Workgroup filed a request that the Commission issue an indefinite waiver of Commission regulations -- Code of Maryland Regulations

("COMAR") 20.50.09.06N, requiring the implementation of smart inverters in Maryland by January 1, 2022.

3. For the reasons discussed below, the request for a waiver of COMAR 20.50.09.06N is granted. The Commission also notes the recommendations of the Workgroup and directs the Workgroup to proceed with a Phase IV, as described below.

# **Background**

# 1. The Report

- 4. The Report considered the following topics: (1) the Commission's jurisdiction over electric distribution interconnections; (2) alternatives to Maryland's existing "causer pays" model of funding distribution grid upgrades required for new interconnections; (3) settings standards for "smart" inverters (inverters also capable of providing advanced features that support grid reliability and stability); and (4) utility monitoring and control plans for aggregated, decentralized, small generator facilities.
- 5. Regarding jurisdiction, Section 201 of the Federal Power Act confers upon the Federal Energy Regulatory Commission ("FERC") jurisdiction over the transmission of electric energy for resale in interstate commerce. FERC Order Nos. 2222 and 2222-A, however, clarified that FERC will not exercise jurisdiction over the interconnection of distributed energy resources ("DERs") that participate in Regional Transmission Organization ("RTO") markets exclusively through a DER aggregation. The Report therefore concluded that--except for specific cases set out in COMAR 20.50.09.01--the Commission has authority in such cases.
- 6. Regarding alternatives to the causer pays model, the Workgroup considered various alternatives, including some in present use in other states, but was unable to reach

consensus. The Report nonetheless made a non-consensus recommendation in favor of what it terms the "Maryland Cost Allocation Model" ("MCAM"). Under the MCAM proposal, utilities could recover the costs of upgraded hosting capacity through the ratemaking process or a regulatory asset. All interconnection customers using the upgraded capacity would pay their proportional share of the costs based on the share of the upgraded capacity attributable to them and pay fees to reduce the amounts needed to be recovered through rates. Under the MCAM, some small interconnection customers would not be charged these upgrade capacity fees. Also under the MCAM, utilities could size hosting capacity upgrades based on forecasted need, though preemptive expansion was discouraged.

- 7. Regarding smart inverters, the Report explained that having a statewide standard for smart inverter settings (the "MSDS") was necessary to allow manufacturers to supply correctly configured inverters, which are necessary for grid modernization. The Workgroup previously proposed a January 1, 2022 deadline for a statewide standard, since codified in Commission regulations in RM68. Since then, however, there have been industry-wide problems in developing a smart inverter testing standard, and those problems have pushed back the timetable for the availability of smart inverters from manufacturers. The Workgroup also presented an interim default inverter settings profile (the "Interim MSDS"), which would not be contained in regulations, but for which the Workgroup sought Commission approval in the form of a motion captured in the minutes of the rulemaking.
- 8. Also regarding smart inverters, the Report explained that the Workgroup had determined that for certain inverter functions related to voltage control, a statewide

standard would not be appropriate at this time, and that each utility would need to develop utility-specific settings profiles for those functions based on specific utility practices (these profiles are referred to as "DU-URPs"). There may also need to be site-specific profiles in some cases. The Report made a non-consensus recommendation that utilities be required to include their DU-URPs in their Commission-approved tariffs--or else clarify that they would be using the MSDS. The Report also made a non-consensus recommendation that utilities provide notice of whether they would be using the MSDS or DU-URPs, with a DU-URP target deadline, by the rulemaking proceeding. Because those recommendations did not stem from consensus, the Report requested Commission direction.

- 9. Also regarding smart inverters, the Report made recommendations regarding certain smart inverter performance requirements. In particular, the Report highlighted disagreements within the Workgroup regarding the ability of utilities to control the voltage of DERs in order to manage grid reliability. The issue is a prerequisite to meeting the January 1, 2022 smart inverter requirement, but some solutions depend on further time needed to develop smart inverter settings and control systems. Relatedly, the Report included a non-consensus recommendation, with associated regulations, that the Commission require utilities annually provide high-level data regarding DER curtailments, to determine if this is an issue that requires corrective action. The Workgroup also requested to defer consideration of certain other utility monitoring and control regulations until Phase IV.
- 10. Regarding utility monitoring and control of certain small DERs, the Report stated that there were several issues still under consideration by the Workgroup. The

Workgroup proposed to defer proposing further regulations until a potential Phase IV.

The Workgroup proposed that Phase IV consider utility monitoring and control regulations, cyber-security, as well as resolving outstanding issues from Phase III.

11. For each of its proposals, the Report provided proposed regulatory language to be considered in a future rulemaking.

## 2. Comments by stakeholders

12. A number of stakeholders filed comments to the Report. Although the stakeholders were generally supportive of the recommendations contained in the Report, specific areas of concern were as follows:

#### a. Interstate Renewable Energy Council

- 13. IREC recommended that the electric distribution process be updated to include DERs as grid assets. IREC also recommended that the Commission go beyond the Workgroup recommendations and adopt a distribution planning process that called for utilities to proactively develop and prepare the grid for DER integration.
- 14. IREC also argued that the Workgroup's proposal of an Interconnection Customer Fee contained unknowns in the fee calculation process, and it further recommended that the Commission direct the Workgroup to develop guidelines for how utilities would set those fees.

# b. Center for Renewables Integration

15. CRI supported the proposed regulations and recommended that the Commission issue them as proposed rules. CRI also supported the adoption of the proposed interim statewide inverter settings profile, contained in Table 4 of the Report, but recommended that the Commission set a timetable for utilities to bring forward voltage control

recommendations. CRI also supported Staff's recommendation to temporarily suspend the application of COMAR 20.50.09.06N(1).

# c. Southern Maryland Electric Cooperative, Inc.

16. SMECO filed comments on only a single issue: the Workgroup's non-consensus recommendation that utilities publish their distribution utility specific default inverted settings profile ("DU-URP") in their service tariffs. SMECO opposed that recommendation, arguing that utilities are already required to publish DU-URPs in their interconnection agreements and on their websites; that DU-URPs are technical and subject to change frequently; that changing tariff language adds additional costs; and that parties are free to bring specific issues with DU-URPs to the attention of the Commission regardless of whether DU-URPs are contained in tariffs.

# d. Pepco and Delmarva

17. Like SMECO, Pepco and Delmarva also opposed the Workgroup's non-consensus recommendation to require utilities to publish DU-URPs to their tariffs. They recommended that utilities instead provide DU-URPs to Staff and other stakeholders ahead of publishing them to the utility websites.

### e. Maryland Office of People's Counsel

18. OPC argued that the Workgroup's proposed MCAM framework for cost allocation lacked necessary detail and placed unreasonable risks on ratepayers in the event of unallocated upgrade costs. OPC stated that shifting risk from interconnection customers to ratepayers would require a counterbalancing ratepayer benefit. OPC suggested that a distribution planning process--such as one that may be developed by the PC44 Distribution Planning Workgroup--could provide an avenue for measuring such

ratepayer benefits. Relatedly, OPC recommended that the Commission integrate outstanding interconnection issues into the PC44 Distribution Planning Workgroup docket.

19. OPC also recommended that the Commission require utilities to maximize the ways that smart inverters can make electric service more reliable and affordable.

#### f. Commission Staff

20. Staff generally supported the changes recommended by the Workgroup. On the question of cost recovery and the MCAM framework, Staff recommended that--in order to mitigate costs that will otherwise be borne by ratepayers--utilities continue to collect interconnection payments for unused capacity even if the costs of those upgrades have been moved into rate base.

## g. The Solar Stakeholders

21. The Solar Stakeholders agreed with the concerns, raised by IREC and discussed above, regarding the structure of the Interconnection Customer Fee under the proposed MCAM framework. They also recommended that further efforts should be made to enhance hosting capacity without the need for grid upgrades that would require interconnection fees. They also recommend special care in setting tariff fees for small interconnection customers.

#### 3. Staff's request to suspend COMAR 20.50.09.06N

22. On August 27, 2021, Staff filed a request that the Commission suspend the implementation of Maryland's smart inverter requirement, currently scheduled for January 1, 2022 under COMAR 20.50.09.06N.

- 23. In its request, Staff reiterated concerns mentioned in the Report that there have been delays in the development of an industry testing standard for smart inverters, with the standard now expected to issue between now and the end of 2021.
- 24. Staff recommended that the implementation of the smart inverter requirement occur no earlier than nine to twelve months after the issuance of the testing standard, in order to allow time for certification by manufacturers. Staff expressed reluctance to recommend a specific timetable, however, and instead recommended an indefinite suspension of COMAR 20.50.09.6N. Staff noted that this indefinite postponement was also the route chosen by California regulators.
- 25. Relatedly, Staff also recommended that the Commission indefinitely suspend rulemaking proceedings to develop further smart inverter regulations, as originally recommended in the Report.
- 26. Staff reiterated its recommendation from the Report that the Commission initiate a Phase IV for the Workgroup to continue to work toward consensus on the areas identified in the Report. Staff anticipated that this would result in a revised rulemaking petition from the Workgroup in the next several months, as well as a proposal for a new smart inverter compliance date and an end to the COMAR suspension now requested.

#### **Commission Determination**

27. The Commission appreciates the hard work of the Workgroup members and notes the recommendations and comments that have been made thus far. The Commission directs the Workgroup to continue into a Phase IV, for the purpose of studying and reaching consensus on the remaining issues identified in the Report. To the extent that the Workgroup finds that certain issues would be better investigated within the PC44

Distribution Planning Workgroup, as recommended by OPC, the Workgroup should provide a recommendation to the Commission.

- 28. Regarding the request for a suspension of COMAR 20.50.09.06N and related rulemaking, the Commission finds that the circumstances in the industry make compliance with the current regulatory timeline impossible, thus providing good cause for a temporary suspension of the affected regulations and deferral of additional rulemaking. The Commission therefore suspends the effect of COMAR 20.50.09.06N indefinitely. The Commission also will defer initiating further rulemaking on smart inverters.
- 29. Regarding the non-consensus items for which the Report requests Commission direction, the Commission notes the progress that the stakeholders have made thus far. Based on that progress, the Commission is persuaded that there is merit to a review of the traditional "causer pays" model of interconnection fees, and that the current MCAM proposal is well-considered and may represent an improvement on the status quo. However, the Commission is mindful of Staff and OPC's concerns regarding the impact of the MCAM proposal on customer rates and of IREC and the Solar Stakeholders' concerns regarding the Interconnection Customer Fees. The Commission understands these disagreements stem in part from the need for further data collection and further refinement of the MCAM proposal. The Commission is optimistic that the gap between stakeholders on these issues can be diminished if not eliminated during Phase IV.
- 30. The Commission is also convinced that a compromise solution can be reached on the question of the publication of DU-URPs. The Commission appreciates the value in having DU-URPs being made available to Staff and other stakeholders through a public

filing with the Commission. The Commission is not yet persuaded, however, of the legal or practical necessity of including DU-URPs within utility tariffs. The Commission remains open to possible solutions and encourages the stakeholders to work toward a mutually agreeable procedure that provides transparency and an opportunity for Commission review when necessary, while also minimizing unnecessary costs and procedure and enabling utilities to adapt DU-URPs as necessary to protect the integrity and capacity of the distribution grid. Given the now-indefinite timeline for smart inverter implementation, the Commission will consider the question of a DU-URP target deadline at a later date.

**IT IS THEREFORE**, this 9<sup>th</sup> day of September, in the year of Two Thousand Twenty-One, by the Public Service Commission of Maryland

**ORDERED:** (1) Staff's motion to temporarily suspend COMAR 20.50.09.06N granted;

(2) The Interconnection Workgroup is directed to proceed with Phase IV, as described herein.

/s/ Jason M. Stanek	
/s/ Michael T. Richard	
/s/ Anthony J. O'Donnell	
/s/ Odogwu Obi Linton	
/s/ Mindy L. Herman	
Commissioners	