

Interconnection Workgroup

The PSC tasked the Interconnection Workgroup with “implementing rules and policies to promote competitive, efficient and predictable distributed energy resources (DER) markets that maximize customers’ choices.”¹ The PSC, with assistance from the Interconnection Workgroup, has implemented five different rulemaking phases focused on improving interconnection of DERs, addressing interconnection costs and cost recovery, and adopting new smart inverter regulations.

In November 2017, after several meetings, the Workgroup requested the PSC to initiate a rulemaking proceeding to review draft regulations proposed by the group, including some non-consensus regulations. In total, the Workgroup identified 45 items for potential revisions to COMAR 20.50.09. Subsequently, the PSC opened Rulemaking 61, “Revisions to COMAR 20.50.02 and 20.50.09 – Small Generator Facility Interconnection Standards.” During the Rulemaking, the PSC did not accept the initial proposed COMAR revisions but provided the Workgroup with guidance on the pertinent issues. In March 2018, the Interconnection Workgroup submitted a modified COMAR revision proposal for PSC consideration. In September 2018, the PSC adopted several, but not all, of the proposed revised regulations, including:

- Broadening the definition of “small generator facility” to include: (i) energy storage devices; and (ii) facilities larger than 10 MW.
- Allowing a single interconnection point for a facility’s multiple generating or storage devices, and
- Streamlining the interconnection application process.

Two additional phases were added to address interconnection issues that arose during Phase I. Some of the issues addressed in Phase II included: FERC versus Maryland interconnection jurisdiction, establishing fees for interconnection requests, assessing interconnection facility cost responsibility and developing Smart Inverter requirements.

The following PC44 Interconnection Workgroup Phase II revisions to COMAR went into effect on April 20, 2019:

- Interconnection Jurisdiction – The Workgroup further clarified the applicability of FERC interconnection jurisdiction requirements versus Maryland jurisdiction requirements for small generator facility interconnection requests in Maryland regulations.
- Utility Fees – The Workgroup recommended regulation modifications to allow utilities to establish fees for interconnection requests greater than 20 kilowatts (kW) in their tariffs.
- Flexible Interconnection Options for Energy Storage – The Workgroup added provisions in Maryland regulations to improve the efficient utilization of energy storage devices on the electric distribution grid.
- Hosting Capacity – The Workgroup proposed regulations to codify the concepts of reserve hosting capacity, closed circuits and restricted circuits, and established that

¹ Maryland Public Service Commission, Mail Log No. 199669, p. 3.

utilities are required to annually report on their plans for providing hosting capacity information and maps.

- Smart Inverters – A new generation of smart inverters compliant with Institute of Electrical and Electronics Engineers (IEEE) 1547-2018 will be available before 2022.
- Utility Monitoring and Control Plan – The Workgroup clarified the definition of utility monitoring and control plans in the aggregate versus site-specific utility monitoring and control plans.
- Miscellaneous Regulation Modifications – The Workgroup codified the ability for utilities to be able to customize several interconnection documents to meet evolving interconnection needs as long as these interconnection documents are consistent with COMAR regulations.
- Interconnection Process Reporting – The Workgroup codified additional annual reporting regulations for utilities that will provide more transparency to the Commission and other stakeholders on various aspects of the Maryland interconnection process.

Meanwhile, the Commission has requested that the Workgroup address four issues in Phase III:

- Interconnection Facility Costs – Recommend an alternative to the “causer pays” principle for interconnection upgrade costs.
- Smart Inverters – Track the progress for setting statewide smart inverter settings.
- Utility Monitoring and Control Plans – Consider alternatives per stakeholder comments made in Phase II.
- Hosting Capacity – Consider additional hosting capacity topics per stakeholder comments made in Phase II.²

On May 14, 2021, Staff Counsel of the Commission filed the Small Generator Facility Interconnection Phase III Report of the PC44 Interconnection Workgroup with the following proposed regulations to be added for small generator facilities seeking to interconnect under Maryland jurisdiction:

- A small generator facility will only be able to sell wholesale electric energy through PJM by joining a distributed energy resource aggregate at an electric distribution interconnection facility.
- The small generator facility will be interconnected to an electric distribution circuit and its energy will not be transmitted across state lines for a wholesale customer other than the electric distribution owner.³
- Utilities are required to post default inverter settings profiles, either from the state or from the specific utility. A list of unacceptable inverters is also to be posted on utility websites.

² PC44 Interconnection Workgroup, Phase III Kick-off Presentation, October 22, 2019.

³ PC44 Interconnection Workgroup, Phase III Final Report, May 14, 2021, p. 6.

- Utilities are also required to have procedures for calculating hosting capacity, and to do so at least annually, or more frequently in areas experiencing significant growth or distributed energy resource penetration.

On September 9, 2021, the Commission approved a Workgroup request to indefinitely delay the requirement that smart inverters be implemented in Maryland by January 1, 2022, because of industry-wide problems in developing a smart inverter testing standard. The Commission requested that the Workgroup address the following issues in Phase IV:

- Consider reforming the current “causer pays” for the costs associated with system upgrades necessary to interconnect a small generator facility; and
- Consider requiring utilities to publish utility-specific system profiles for various smart inverter capabilities such as voltage control in their tariffs.

Phase IV was completed ⁴with a final RM77 rulemaking on February 22, 2023, to change the effective date for the requirement that small generators utilizing inverters comply with the IEEE 1547-2018 from April 1, 2023, to January 1, 2024 in COMAR 20.50.09.06N(1), (2), (3) and 9(a). This change was made to allow for inverter manufacturer’s delays in obtaining IEEE 1547-2018 certification.

⁴ Staff of the Public Service Commission - Petition for Rulemaking-Amendment to the Small Generator Facility Interconnection Regulations COMAR 20.50.02 and 20.50.09 and PC 44 Interconnection Workgroup Phase IV Final Report, June 23, 2022, in the PC44 docket.