Maillog No. 329817

ORDER NO. 92398

Interconnection Workgroup and the Implementation of FERC Order No. 2222 and Retail Grid Services in Maryland	* * * * * * *	BEFORE THE PUBLIC SERVICE COMMISSION OF MARYLAND Case No. 9778

ORDER ON ELECTRIC UTILITIES' VPP/DER CONCEPTUAL REPORTS AND OFFICE OF CYBERSECURITY STATUS REPORT

Before: Kumar P. Barve, Chair
Frederick H. Hoover, Jr., Commissioner
Bonnie A. Suchman, Commissioner
Odogwu Obi Linton, Commissioner
Ryan C. McLean, Commissioner

Issue Date: May 6, 2026

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I. Introduction

On February 4, 2025, the Commission initiated Case No. 9778[1] for the purpose of: (1) expanding the Interconnection Work Group's ("IWG") focus to include implementation of virtual power plants and vehicle-to-grid services in Maryland to facilitate achieving Federal Energy Regulatory Commission ("FERC") Order No. 2222[2] and Maryland's Distributed Renewable Integration and Vehicle Electrification ("DRIVE") Act goals; and (2) establishing a docket for filings associated with IWG activities. The Commission invited interested parties to file comments on the foundational non-consensus issues identified in the PC 44[3] IWG Leader's Report dated January 31, 2025,[4] and on any other items the Commission should consider related to FERC Order No. 2222. In response, stakeholders submitted comments by March 5, 2025.[5]

On April 11, 2025, the Commission issued Order No. 91603 responding to the stakeholders' comments and requesting various conceptual reports from the investor-owned electric distribution companies and Southern Maryland Electric Cooperative ("SMECO") (collectively, the "EDCs").[6] Specifically, Order No. 91603 directed that:

(1) Baltimore Gas and Electric Company ("BGE"), the Potomac Electric Power Company ("Pepco"), Delmarva Power and Light

[1] Maillog No. 315477, Notice Initiating New Docket and Request for Comments.
[2] *Participation of Distributed Energy Resource Aggregations in Markets Operated by Regional Transmission Organizations and Independent System Operators,* 172 FERC ¶ 61,247 (2020) ("FERC Order 2222").
[3] PC 44, *In the Matter of Transforming Maryland's Electric Distribution Systems to Ensure that Electric Service is Customer-Centered, Affordable, Reliable and Environmentally Sustainable in Maryland*.
[4] Maillog No. 315285.
[5] Maillog No. 316425, Collaborative Utility Solutions ("CUS") Comments (Mar. 4, 2025); Maillog No. 316473, UtilityAPI Comments ("UtilityAPI") (Mar. 5, 2025); Maillog No. 316471, Commission Technical Staff ("Staff") Comments (Mar. 5, 2025); Maillog No. 316468, The Potomac Edison Company ("Potomac Edison") Comments (Mar. 5, 2025); Maillog No. 316465, Baltimore Gas and Electric Company ("BGE"), Delmarva Power & Light Company ("Delmarva"), and Potomac Electric Power Company ("Pepco") (together the "Joint Exelon Utilities" or "MJEU") Comments (Mar. 5, 2025); Maillog No. 316464, Office of People's Counsel ("OPC") Comments (Mar. 5, 2025); Maillog No. 316453, Sierra Club Comments (Mar. 5, 2025); Maillog No. 316452, Coalition Advocating DER Regulation Efficiency ("CADRE") Comments (Mar. 5, 2025); and Maillog No. 316449, Solar United Neighbors ("SUN"), Comments (Mar. 5, 2025).
[6] Maillog No. 317822.

Company ("Delmarva") (together the "Exelon Utilities" or "MEJU"), The Potomac Edison Company ("Potomac Edison"), and SMECO provide reports on Distributed Energy Resource Management System ("DERMS") plans, Distributed Energy Resource ("DER") registration, device-level metering repositories, customer information sharing, and communications protocols;

(2) Potomac Edison file a conceptual report on non-Advanced Metering Infrastructure ("AMI") solutions that facilitate virtual power plant ("VPP") implementation;

(3) the IWG file a report on the status of issues that have been referred to the IWG; and,

(4) the Commission's Office of Cybersecurity ("OC") provides a status update addressing DER and DER Aggregator ("DERA") cybersecurity.[7]

On October 10, 2025, the IWG Leader[8] and the Commission's Technical Staff ("Staff")[9] filed their status reports, and the Exelon Utilities,[10] Potomac Edison,[11] and SMECO[12] filed their conceptual reports on customer information sharing, DER registration, DERMS plans, device-level metering, and communications protocols. By November 19, 2025, stakeholders filed comments on the EDC conceptual reports,[13] and on

[7] Order No. 91603 at 31-32.
[8] Maillog No. 323191, Maryland Interconnection Work Group Leader, Virtual Power Plant (VPP) Regulation Status (Oct. 10, 2025) (outlining the structure of draft VPP regulations and identifying non-consensus areas) ("IWG Status Report").
[9] Maillog No. 323236, Staff, Status Update on DER and DERA Cybersecurity (Oct. 10, 2025) ("Staff Cybersecurity Update").
[10] Maillog No. 323218, Joint Exelon Utilities, Joint Consolidated Conceptual Reports (Oct. 10, 2025) ("MJEU Conceptual Reports").
[11] Maillog No. 323233, Potomac Edison, Conceptual Reports (Oct. 10, 2025) ("PE Conceptual Reports").
[12] Maillog No. 323196, Southern Maryland Electric Coop. Inc. ("SMECO"), Consolidated Conceptual Reports (Oct. 10, 2025) ("SMECO Conceptual Reports").
[13] Maillog 324496, CADRE Comments (Nov. 18, 2025) ("CADRE Nov. Comments"); Maillog 324498, Collaborative Utility Solutions ("CUS") Comments (Nov. 19, 2025) ("CUS Nov. Comments"); Maillog 324541, UtilityAPI, Inc. Comments (Nov. 19, 2025) ("UtilityAPI Nov. Comments"); Maillog 324543, Sierra Club Post-Hearing Brief (Nov. 19, 2025) ("Sierra Club Nov. Comments"); Maillog 324546, Mission:data Coalition Comments (Nov. 19, 2025) ("Mission:data Nov. Comments"); Maillog 324549, Calico Energy Comments (Nov. 19, 2025) ("Calico Nov. Comments"); Maillog 324551, SUN Comments (Nov. 19, 2025) ("SUN Nov. Comments"); Maillog 324554, Staff Comments (Nov. 19, 2025) ("Staff Comments"); Maillog 324556, Maryland Energy Administration ("MEA") Comments (Nov. 19, 2025) ("MEA Nov. Comments"); and Maillog 324557, OPC Comments (Nov. 19, 2025) ("OPC Nov. Comments").

December 3 and December 9, 2025, the Commission held a Technical Conference to discuss the content of the conceptual reports and related stakeholder recommendations.

This Order addresses the various comments and recommendations related to the five topics identified in the EDC conceptual reports and directs further action as appropriate. The Order also addresses the non-consensus issues raised in the OC's Status Report.

II. Importance of Virtual Power Plants for Maryland's Energy Future

The Commission reiterates its position in Order No. 91603 emphasizing the importance of implementing VPPs quickly and effectively in Maryland to help mitigate the impact of rising energy costs to consumers while meeting the state's climate goals. As PJM Interconnection, L.L.C.'s ("PJM") capacity market clearing prices continue to break records,[14] Lawrence Berkeley National Laboratory notes that the duration of these impacts on retail prices will "depend on the ability to build new cost-effective infrastructure to serve new loads."[15] Deploying VPPs represents an opportunity to quickly and cost-effectively meet new infrastructure needs. As the Commission highlighted in Order No. 91603, a 2023 study by the Brattle Group found that VPPs could provide the same resource adequacy at a significant cost discount relative to alternative options.[16] While the Commission acknowledges that the process of implementing VPPs in Maryland may not result in immediate relief, this Order and subsequent work by Maryland stakeholders will lay a

[14] *See* PJM Interconnection, L.L.C., *2027/2028 Base Residual Action Report* at 3 (Dec. 17, 2025), *https://www.pjm.com/-/media/DotCom/markets-ops/rpm/rpm-auction-info/2027-2028/2027-2028-bra-report.pdf*.
[15] *See* Ryan Wiser et al., *Factors Influencing Recent Trends in Retail Electricity Prices in the United States*, 38 The Electricity J. 1, 8 (Dec. 2025), https://www.sciencedirect.com/science/article/pii/S1040619025000612.
[16] Order No. 91603 at 2.

foundation for reducing costs by maximizing the use of existing grid infrastructure, allowing the state to meet rising electricity demand with affordable, clean solutions.

III. Discussion

A. Customer Information Sharing

1. Summary of Conceptual Reports

In Order No. 91603, the Commission directed the Maryland EDCs to:

> perform a study to evaluate the costs and benefits of an implementation of expanded access to utility customer data, along with potential implementation timelines.… This conceptual report should also consider other potential needs for expanded access to utility customer data beyond DERAs…. * * * [U]tilities are further directed to address the stakeholder suggestions described in this Order for using GBC for these purposes.[17]

Green Button Connect My Data ("GBC") is a data standard designed to enable secure access to, and sharing of, energy and water usage data.[18] The Green Button Download My Data standard ("DMD"), which is designed to enable customers to download their energy usage data,[19] is distinct from the GBC standard, which is designed to support third-party access to a customer's data directly, with the customer's permission.[20]

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[17] *Id.* at 22-23.

[18] The Green Button Connect My Data® and Green Button Download My Data® access methods are based on the North American Energy Standards Board's ("NAESB") Energy Services Provider Interface ("ESPI") model business practices, use cases, and schema documents based on the World Wide Web Consortium's ("W3C") Extensible Markup Language ("XML"), to form the core of the standard. The ESPI standard—in conjunction with the Internet Society's Atom Syndication Format and the Internet Engineering Task Force's ("IETF") OAuth Authorization Framework—comprise the primary "Green Button" standards. *Green Button Standards*, Green Button Alliance, https://www.greenbuttonalliance.org/green-button (last visited May 5, 2026).

[19] *Green Button Download My Data (DMD)*, Green Button Alliance, https://www.greenbuttonalliance.org/green-button-download-my-data-dmd (last visited May 5, 2026).

[20] *Green Button Connect My Data (CMD)*, Green Button Alliance, https://www.greenbuttonalliance.org/green-button-connect-my-data-cmd (last visited May 5, 2026).

The Exelon Utilities currently offer implementations of DMD through which a customer can manually download their interval usage data and share it with third-parties, if they wish.[21] In their conceptual report, the Exelon Utilities recommended creating a dedicated work group to evaluate data sharing solutions, using learnings from Exelon's sister utility, Commonwealth Edison, which is in the process of improving its existing data exchange platform.[22] Further, in their written comments, the Exelon Utilities recommended that the Commission "defer[] Green Button Connect implementation until a more fulsome review has been completed,"[23] arguing that uptake in other jurisdictions "has been limited to date, particularly for both [Green Button Download My Data] and [Green Button Connect My Data]."[24] At the Technical Conference, however, the Exelon Utilities revised their position, stating,

> We are supportive of working toward the development of a Green Button "Connect My Data" platform that is either utility-led or a statewide platform administered by a third party or the Exelon Utilities[.] * * * [W]e concur with many stakeholders and propose the Commission establish a Working Group to develop [a] Green Button-style platform on an expedited timeline.[25]

The Exelon Utilities offered six months as a reasonable timeframe[26] and expressed openness to pulling from the work that has already been done in PC 44.[27]

Under the approach laid out in their written comments, the Exelon Utilities estimated the costs of implementing GBC for themselves—sharing only AMI meter

[21] MJEU Conceptual Reports at 40.
[22] *See generally* Illinois Commerce Commission, *Commonwealth Edison Co. Petition for Approval of a Multi-Year Integrated Plan Under Section 16-105.17 of the Public Utilities Act*, No. 26-0047 (2026).
[23] MJEU Conceptual Reports at 41.
[24] *Id.*
[25] Dec. 3, 2025 Hr'g Tr. at 14-15 ("Dec. 3 Tr.").
[26] *Id.* at 52.
[27] *Id.* at 15-16.

interval data—will be approximately $9.2 million, with an additional $3 million for ongoing maintenance over an initial 5-year period.[28] The Exelon Utilities requested a regulatory asset with costs offset by a new, third-party data access tariff that would impose a per-transaction fee on third-parties.[29] The Exelon Utilities reiterated the need for clarity on cost recovery at the Technical Conference.

Potomac Edison noted that "FirstEnergy [Corp.] subsidiaries in Ohio and Pennsylvania provide a download format compatible with the [Green Button Download My Data] standard but do not operate [Green Button Connect My Data] platforms."[30] Potomac Edison contended that AMI is a prerequisite for cost-effective deployment of GBC and, therefore, recommended that GBC be reconsidered in the future.[31] Instead, Potomac Edison proposed to build on existing capabilities by digitizing the existing Letter of Authorization process, expanding the use of Electric Data Interchange ("EDI") transactions[32] and developing a new, third-party data access tariff. Potomac Edison presented its position at the Technical Conference, further stating that GBC has "limited applicability" in its service territory, that moving forward with GBC would be a "significant investment," and the company expected "very low utilization."[33]

Like the Exelon Utilities, SMECO currently offers DMD. SMECO indicated it is open to a unified data access platform and to GBC as a data standard, but the cooperative would require additional time to develop a realistic implementation timeline if the

[28] MJEU Conceptual Reports at 44.
[29] *Id*. at 45.
[30] PE Conceptual Reports, Attachment E at 2.
[31] *Id*. at 1.
[32] EDI is used to electronically exchange business documents like billing invoices, automating processes to reduce errors, costs, and delays associated with paper-based methods.
[33] Dec. 3 Tr. at 62.

Commission decided to proceed with GBC. SMECO supported Potomac Edison's proposal to develop third-party data access tariffs.[34]

2. Summary of Comments

Stakeholders expressed resounding interest in expanding customer information sharing through a data exchange platform developed by a dedicated work group on an expedited timeframe. No stakeholder opposed the use of GBC as a standard for such a platform, and many expressly supported the specific use of GBC. The Office of People's Counsel ("OPC") commented that the Commission should direct the EDCs to adopt and implement a GBC-style platform or comparable solution on a coordinated schedule,[35] while the Maryland Energy Administration ("MEA") recommended that the Commission direct the EDCs to immediately implement a statewide GBC platform and establish a new work group outside of PC 44 to inform the implementation of a GBC platform, starting with the ComEd requirements as a straw proposal.[36] The Sierra Club also urged the Commission to direct the development of GBC,[37] and Calico Energy recommended establishing a statewide customer data access and authorization framework.[38] UtilityAPI recommended the staged development of a data exchange platform, beginning with voluntary data sharing and leveraging findings from ComEd's experience with customer usage data sharing.[39] UtilityAPI, Mission:data, and MEA also recommend leveraging the draft regulation language previously submitted in RM 62[40] and further revised by the PC

[34] SMECO Conceptual Reports at 4-5.
[35] OPC Nov. Comments at 34.
[36] MEA Nov. Comments at 17.
[37] Sierra Club Nov. Comments at 14.
[38] Calico Nov. Comments at 2.
[39] UtilityAPI Nov. Comments at 2-3.
[40] RM 62, *Revisions to COMAR 20.32, 20.50, 20.53, 20.55, and 2059–Competitive Markets and Retail Gas and Electric Choice*.

44 Competitive Markets and Customer Choice Work Group ("CMCCWG") regarding platform development.[41] At the Technical Conference, UtilityAPI contended that the Exelon Utilities outlined a "thoughtful and concrete path forward,"[42] and Mission:data was "pleased" with Exelon's presentation on customer information sharing.[43]

Regarding concerns about low utilization of a data exchange platform in the EDC's conceptual reports, UtilityAPI noted cases of platforms in California and Texas that do not have low usage, and contended from experience that low usage can be driven by implementation problems or poor design.[44] UtilityAPI pointed to ComEd's existing platform as an example.[45] Specifically, ComEd's existing platform does not include an account identifier alongside account information, rendering data unusable for third parties seeking to enroll specific customers. UtilityAPI also noted that ComEd did not update information in a timely manner in an earlier iteration of its data-sharing solution.[46]

Beyond advocating generally for GBC implementation, stakeholders provided specific implementation recommendations. Mission:data and UtilityAPI both recommended certification by the Green Button Alliance, with Mission:data recommending yearly certification.[47] UtilityAPI emphasized that interval data should be tied to appropriate customer-identifying information, which is necessary to enroll a component DER in an aggregation and register a component DER with PJM.[48] UtilityAPI

[41] The PC 44 Competitive Markets and Customer Choice Work Group ("CMCCWG") petitioned to initiate a rulemaking in 2018. The Commission declined to adopt the proposed rules and remanded them back to the CMCCWG for further development. Proposed regulations were subsequently revised in 2023 but not submitted for rulemaking.
[42] Dec. 3 Tr. at 132.
[43] *Id.* at 146.
[44] UtilityAPI Nov. Comments at 31.
[45] *Id.*
[46] *Id.*
[47] Dec. 3 Tr. at 127, 153.
[48] UtilityAPI Nov. Comments at 8.

also contended that (a) enabling a third party to initiate customer enrollment and data-sharing and (b) allowing for native authorization[49] are critical steps that a public utility commission can take to streamline the data exchange process and increase ease of using any platform developed.[50] Mission:data expressed concern "that the Joint Utilities' estimate of 12-18 months to comply with new data sharing rules" is based on the presumption of a self-built, bespoke system and, instead, countered that an implementation timeline of 6-12 months is sufficient, given the availability of off-the-shelf products.[51]

Coalition Advocating DER Regulation Efficiency ("CADRE") and Mission:data disagreed with Potomac Edison's assertion that AMI is necessary for GBC implementation. CADRE contended that, even if collected at a less granular interval, "usage data is still important for DER Aggregators to understand a customer's usage profile to develop products, services and contract offerings for consumers,"[52] and Mission:data asserted that the GBC standard can deliver data at any interval, which means that "useful data can be shared regardless if AMI is in place."[53] Additionally, UtilityAPI stated that "even without AMI, it seems prudent for Potomac Edison to implement a data exchange platform expeditiously" because all of the actions that Potomac Edison contemplated in its conceptual report, as related to customer usage data sharing, can be achieved through an off-the-shelf data exchange platform.[54]

[49] "Native authorization" means that a customer authorizes access directly within a third-party application, rather than requiring multiple logins.
[50] UtilityAPI Nov. Comments at 11-12.
[51] Mission:data Nov. Comments at 3.
[52] CADRE Nov. Comments at 13.
[53] Mission:data Nov. Comments at 5.
[54] UtilityAPI Nov. Comments at 29.

Regarding payment for third parties to access the data exchange platform, Solar United Neighbors ("SUN") opposed a fee-based tariff structure, arguing that the VPPs and other programs enabled by a data exchange platform provide broad customer benefits and that benefits are not limited to third parties and the subset of customers participating in the program.[55] By contrast, OPC and UtilityAPI supported reasonable charges for third-party access. UtilityAPI observed that third-party access fees could align incentives across stakeholders by assigning lower operational costs to non-participants through rates, and higher costs to platform participants through third-party fees.[56] OPC cautioned that third-party data access charges should be transparent, non-discriminatory, tied to the incremental cost of providing access, and should not deter new or smaller Aggregators from entering the market.[57] OPC did not oppose a regulatory asset for implementation costs associated with a GBC-compliant platform, but contended that "any regulatory asset, however, should be subject to full Commission prudence review in future rate proceedings, permitting OPC and other parties to challenge overbuilt or mismanaged implementations, and allowing the Commission's determination, in those rate proceedings, of what rate of return, if any, should be applicable."[58]

3. Commission Decision

The Commission recognizes the broad interest in establishing a work group to develop the parameters for a GBC-compliant data exchange platform on an expedited timeline. To that end, the Commission establishes a new Data Exchange Work Group

[55] SUN Nov. Comments at 9-10.
[56] UtilityAPI Nov. Comments at 25.
[57] OPC Nov. Comments at 39.
[58] *Id.*

("DEWG") to draft regulations and parameters for implementation of a state-wide GBC-compliant data exchange platform. The Commission designates Staff to lead the DEWG.

The Commission directs the DEWG to complete several tasks. First, the DEWG shall draft regulations for third-party access to customer data and file these draft regulations within six months of the issuance of this Order for a rulemaking. In developing regulations, the DEWG should leverage the draft regulations developed by the CMCCWG in RM62, last updated in 2023.[59] The final regulations should ensure that, at minimum, Maryland-licensed DERAs[60] have customer-authorized access to customer data, but the DEWG should consider eligibility for additional third parties to maximize use cases and benefits.

Second, the DEWG shall develop, within six months of the issuance of this Order, criteria for a request for proposals ("RFP') to develop, implement, and, if necessary, maintain a GBC-compliant data exchange platform that enables permission-based sharing of customer usage and appropriate customer-identifying information. The DEWG should consider PJM requirements when determining which customer-identifying information to include. The platform should incorporate the pillars of data privacy, customer authentication and authorization, data standardization, and third-party registration and onboarding, and it should be certified periodically by the Green Button Alliance, at a cadence to be determined by the DEWG. The RFP criteria shall promote a secure, customer-friendly experience with the platform. To that end, the DEWG should consider allowing third parties to initiate requests for customer authorization and data sharing, as

[59] The Commission understands the CMCCWG previously made substantial progress in developing a data access framework that may be adapted in short order to expedite rulemaking.

[60] *See Application for License to Operate as a Distributed Energy Resource Aggregator in the State of Maryland*, *Section 14 Code of Conduct Compliance*, Maryland Public Service Commission, https://psc.maryland.gov/wp-content/uploads/2025/11/Application-for-License-to-Operate-as-a-Distributed-Energy-Clean-Versionpdf.pdf (last visited May 5, 2026).

well as the possibility of native authorization.[61] Furthermore, the RFP criteria should balance the importance of minimizing the potential cost of incorporating new elements into the platform later on with up-front cost-effectiveness and simplicity of implementation. In other words, the RFP criteria should: (a) enable an initial GBC-compliant platform that is designed to be future-proof to mitigate the cost of incorporating incremental elements, while (b) allowing for vendors of commercially available data exchange platforms to make proposals, if possible. To the extent applicable, the DEWG may leverage proposals developed in other states, such as Illinois and Massachusetts.[62]

The Commission finds that regulatory asset treatment is acceptable for up-front costs incurred by the EDCs to implement a state-wide data exchange platform. Any regulatory asset, however, will be subject to a full Commission prudence review in a future rate proceeding, thus permitting parties to challenge overbuilt or mismanaged implementations and allowing Commission determination of an appropriate rate of return, if any, for the tracked balance.

Third, the DEWG shall file a model third-party data access tariff two months after a final rulemaking. The Commission concurs with the Exelon Utilities and stakeholders that reasonable fees for third-party access may be appropriate to alleviate the costs of platform development and maintenance on ratepayers, and the model tariff should include a third-party access fee structure.

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[61] UtilityAPI Nov. Comments at 12. Native Authorization allows customer authorization directly within a third-party application instead of requiring multiple log-ins.

[62] *See generally* Massachusetts Department of Public Utilities, *Investigation by the Department of Public Utilities on the Advanced Metering Data Access Protocol Implementation Plan and Related Proposals Submitted by NSTAR Electric Company d/b/a Eversource Energy Pursuant to an Act Promoting a Clean Energy Grid, Advanced Equity, and Protecting Ratepayers, St. 2024, c. 239, §§ 79, 127,128, Nos. 26.20 (2025)*, https://eeaonline.eea.state.ma.us/dpu/fileroom/#/dockets/docket/12697.

Lastly, the Commission recognizes that while monthly usage data is insufficient for use by DERAs in PJM markets for settlement,[63] such data remains useful for customer participation in state-level programs and may also prove useful for dispute resolution at the retail and wholesale levels. Accordingly, the Commission directs Potomac Edison to participate in the implementation of a statewide GBC-compliant data exchange platform as described above, regardless of AMI status.

B. DER Registry

1. Summary of Conceptual Reports

In Order No. 91603, the Commission directed Maryland EDCs "to study the costs and benefits of a phased DER Registry solution that supports PJM's Demand Response ("DR") Hub direction for FERC Order No. 2222 implementation, while also making least regrets DER Registry investments. This conceptual report should also include potential implementation timelines."[64]

As Phase 1 of a broader DER Registry implementation plan, the Exelon Utilities proposed an "enhance and adapt" approach by enhancing their existing DER interconnection management tool, Intellio Connect,[65] to capture fields in the IWG's draft VPP regulations and to prepare for PJM's implementation of FERC Order 2222.[66] The Exelon Utilities offered to provide Staff with monthly confidential reports, which would not be accessible to third parties until data-sharing requirements are addressed in

[63] Hourly usage data is required for settlement at the wholesale level. *See* PJM Interconnection, L.L.C., *Order No. 2222 Compliance Filing and Motion to Modify Effective Date of PJM Interconnection, L.L.C.* at 36, FERC Docket No. ER22-962-008 (Oct. 23, 2024) ("PJM 2222 Compliance Filing").
[64] Maillog No. 317822.
[65] Intellio Connect is a proprietary cloud-based platform from West Monroe that automates and connects various business processes including streamlining the interconnection process for DERs, resulting in faster approvals and increased processing throughput for a utility.
[66] MJEU Conceptual Reports at 18-19.

regulations.[67] The Exelon Utilities estimate it will take three months to add the required fields from any promulgated VPP regulations, at no additional cost.[68] Future costs associated with third-party integration and internal system updates from implementing FERC Order 2222 will be assessed as PJM's process unfolds.[69] PJM has informed the EDCs that updating the DR Hub will begin in early 2026 with information gathering and design, followed by system buildout in 2027.[70]

At the Technical Conference, the Exelon Utilities discussed the possibility of incorporating or consolidating a DER Registry into a statewide data sharing platform in the long-term, noting that hosting capacity maps could be added as well.[71] They stated, however, that there is a large cost to "upgrade or add more data and information" to a data sharing platform in future phases.[72]

Potomac Edison similarly proposed to use its internal interconnection portal and database as its DER Registry, which would ultimately integrate with PJM's DR Hub, and provide confidential reports to the Commission.[73] If Potomac Edison moves forward with this proposal, the company would need to develop an automated reporting function, and those expenses would be treated as capital investments.[74] Potomac Edison proposed to review its interconnection process over the next three years to determine additional data fields and automate reporting. Potomac Edison considered the possibility of a state-

[67] *Id*. at 19.
[68] *Id*. at 20.
[69] *Id*. at 21.
[70] PJM Interconnection. L.L.C., *Order 2222 Timeline Review and Registration Process Review* at 2 (Feb. 2, 2026), https://www.pjm.com/-/media/DotCom/committees-groups/subcommittees/disrs/2026/20260202/20260202-item-03a---order-2222-timeline-and-registration-process-review.pdf.
[71] Dec. 3 Tr. at 17.
[72] *Id*. at 17-18.
[73] PE Conceptual Reports, Attachment C at 3.
[74] *Id*. at 4.

administered DER Registry, but indicated that the associated cost and complexity would not be justified; further, a standalone registry outside of PJM's DR Hub would duplicate existing efforts.[75] At the Technical Conference, Potomac Edison emphasized that if an external registry were to be developed, access to location data should be limited to Commission personnel for privacy reasons.[76]

Lastly, SMECO proposed to establish a "Secure File Transfer Protocol" site where stakeholders can retrieve reports with critical DER information upon receiving access credentials from SMECO. SMECO indicated that this functionality is available now and can be leveraged at any time with minimal-to-no additional cost.[77]

2. Summary of Comments

Staff supported updating internal EDC tools and providing confidential reports to the Commission, stating that the EDC proposals "ensure cost-effective investments."[78] Staff further recommended that the EDCs should focus on making targeted upgrades to existing tools, provide annual confidential reports to the Commission, engage with the Commission and other stakeholders to define future registry requirements, and adopt a step-by-step approach to minimize risks.[79]

Several stakeholders expressed concern with a lack of third-party Aggregator access to the proposed EDC DER Registries. OPC did not oppose the Exelon Utilities' Phase 1 construct so long as it is only a bridge to a registry that provides timely access for Aggregators, but OPC expressed concern that Potomac Edison's proposal does not have a

[75] *Id.*
[76] Dec. 3 Tr. at 60.
[77] SMECO Conceptual Reports at 3.
[78] Staff Nov. Comments at 13.
[79] *Id*. at 13-14.

clear path to Aggregator usage.[80] OPC characterized SMECO's proposal as "closer to an operationally useful model" but was concerned that SMECO did not explain safeguards that will govern the timeliness and scope of data access, including "which stakeholders will be eligible, what interval and performance data will be made available, how frequently the data will be updated, and whether the information will be provided in standardized, machine-readable formats that can integrate with PJM systems and Aggregator platforms."[81] Collaborative Utility Solutions ("CUS") noted that multiple stakeholders will need access to appropriate portions of DER data to successfully implement FERC Order 2222 and Maryland regulations.[82] The Sierra Club argued that the DER Registry should be designed so that third-party Aggregators can gain access to DER data when they are authorized to do so.[83] MEA recommended appropriate data access for MEA and other State agencies while making aggregated, anonymized datasets publicly available.[84]

Several stakeholders reiterated their interest in a central DER Registry, including CADRE, the Sierra Club, and CUS.[85] MEA supported a "phased but statewide DER Registry that standardizes capabilities across utilities while maintaining integration with PJM's DER Hub."[86] OPC, on the other hand, recommended that the Commission "direct the utilities to develop a common, transparent, phased registry roadmap that tracks PJM's implementation schedule and avoids premature investment in stand-alone, Maryland-only systems."[87] UtilityAPI indicated that the process for allowing customers to authorize the

[80] OPC Nov. Comments at 26-27.
[81] *Id*. at 28.
[82] CUS Nov. Comments at 4-5.
[83] Sierra Club Nov. Comments at 4.
[84] MEA Nov. Comments at 13.
[85] CADRE Nov. Comments at 8; Sierra Club Nov. Comments at 6; and CUS Nov. Comments at 1-2.
[86] MEA Nov. Comments at 12.
[87] OPC Nov. Comments at 24.

sharing of their usage data, as discussed in the Customer Information Sharing section above, could be leveraged to ask the customer if they would like to share their DER data with a DER Registry.[88]

3. Commission Decision

The Commission concurs with Staff that the EDCs' proposals to enhance existing systems may represent cost-effective investments if properly implemented, but the Commission also agrees with OPC that these updates to internal systems should serve only as a bridge to a DER Registry that enables timely access for Aggregators and other relevant third parties. The Commission also agrees with MEA that registry access for State agencies should be enabled, as appropriate.

Therefore, the Commission directs the Exelon Utilities to update their internal interconnection management tool to capture the applicable fields in forthcoming VPP regulations proposed by the IWG. The Commission further directs the Exelon Utilities to provide quarterly confidential reports to the Commission and Staff, beginning no later than 90 days from the issuance of this Order.

Although Potomac Edison described its proposed approach to a DER Registry as "least-regrets," the company did not provide the relative cost of this approach. Consequently, the Commission finds it difficult to assess the veracity of this characterization. It is also unclear whether Potomac Edison's proposed approach—involving a three-year timeline for the review of its interconnection approval process—is compatible with providing Aggregators, or even the Commission, with timely access to

[88] UtilityAPI Nov. Comments at 26.

information. The Commission therefore directs Potomac Edison to file with the Commission, within 60 days of this Order, additional information detailing the feasibility and approximate cost of following a similar interim process to the Exelon Utilities—namely, collecting DER Registration data based on the fields implicated by the current draft VPP regulations and submitting quarterly confidential reports to the Commission. To the extent specific data fields involve substantial costs to incorporate into the reports, Potomac Edison shall note these fields and their estimated costs in the filing.

The Commission supports SMECO's Secure File Transfer Protocol site, provided that appropriate data access safeguards are in place. The Commission therefore directs SMECO to file additional information detailing how data access will be governed, including stakeholder eligibility (with consideration for State agencies and third parties), what interval and performance data will be made available, and how frequently the data will be updated. Data should be provided in a machine-readable format, if possible. SMECO is directed to include in this filing any concerns with providing machine-readable data, if applicable. The Commission directs this information to be filed within 30 days of the issuance of this Order.

The Commission recognizes the broad interest in a centralized DER Registry. The Commission also recognizes the potentially high costs associated with that approach. It is not clear, however, whether the overall cost to develop and maintain a centralized registry would be greater than the costs of individual registries implemented by each EDC. Therefore, the Commission directs the DEWG to scope the potential integration of a central, public-facing DER Registry with the GBC-compliant data exchange platform discussed in the Customer Information Sharing section above. The DEWG shall develop a

DER Registry "Roadmap" to present options and findings. The Roadmap should compare the estimated full costs of implementing a central, public-facing registry with those of implementing standardized EDC-by-EDC registries. If necessary for cost estimation purposes, the DEWG can assume that the minimum-required data fields are those specified in PJM's draft DR Hub requirements[89] and the IWG's draft VPP regulations. Other assumptions can be made as needed to develop cost estimates, but those assumptions should be documented. In addition to cost estimation, the Roadmap shall include implementation timelines with clear milestones and specific dates. The DEWG can note where there are areas of significant flexibility or uncertainty in the proposed costs and timelines.

The DEWG should consider proposed or completed DER registries in other states, such as New York,[90] and reach out to the appropriate agencies for information, if beneficial. The DEWG may also explore incorporating hosting capacity maps and other useful sets of data as additional Roadmap elements.

As part of the Roadmap, the DEWG shall propose a framework for delineating which registry information may be public and which should be private, *i.e.*, accessible only with particular credentials. Consideration can be given to approaches that fall somewhere in between, like geographic masking, which is a technique commonly used to enable public sharing of locational data while protecting specific customer-identifying information. The DEWG shall consider data access for state agencies, whether anonymized and/or

[89] As of the date of this order, the most recent draft requirements are posted on PJM's Distributed Resources Subcommittee ("DISRS") page under Meeting Materials. *Distributed Resources Subcommittee*, PJM Interconnection, L.L.C., https://www.pjm.com/committees-and-groups/subcommittees/disrs. (last visited May 6, 2026).

[90] UtilityAPI Mar. Comments (Mar. 5, 2025); *see also, Map of New York State Distributed Energy Resources Facilities*, New York State, https://der.nyserda.ny.gov/map/ (last visited May 5, 2026).

aggregated, as appropriate. Other credentials that can enable access to data or certain subsets of data may be proposed. Maryland-licensed DERAs shall have access to all PJM-required information held exclusively by the EDCs by January 1, 2028,[91] regardless of whether the registry is centralized or implemented EDC-by-EDC. This may require the EDCs to enable such access prior to the final iteration of any registry. As part of Roadmap development, the DEWG should outline how DERAs will receive information access by January 1, 2028, while maintaining data privacy and security, even if such access is an interim step on the way to a final registry implementation.

The Commission understands that the potential incorporation of a DER Registry into the data exchange platform will constitute a future phase, and we do not intend for this exploration to slow down deployment of a GBC-compliant data exchange platform capable of sharing customer usage information. The Commission directs the DER Registry Roadmap to be filed within six months of the issuance of this Order.

C. DERMS

1. Summary of Conceptual Reports

Order No. 91603 directed Maryland EDCs to provide a status update on their DERMS plans, including a discussion of benefits and costs and timelines for implementation.[92]

The Exelon Utilities are planning a standalone Utility-DERMS that will interface with third-party DERs and Edge-DERMS[93] through a DER gateway. Individually, the

[91] This is the date by which PJM has indicated registration will start. *See supra* note 70.
[92] Order No. 91603 at 6.
[93] Dec. 3 Tr. at 21-22. An Edge-DERMS is a software platform that manages and can aggregate behind-the-meter resources. It shares information with the Utility-DERMS and can be operated by a third-party.

Exelon Utilities are in different stages of implementation. The first iteration of BGE's DERMS, Project 1, went live at the end of 2025 with foundational DER management capabilities.[94] BGE's second phase, Project 2, will run for the duration of 2026 and enable monitoring and control of EDC-owned distributed battery energy storage systems ("DBESS").[95] By the end of 2028, the Exelon Utilities aim to establish a DER Gateway, which will allow EDC-owned and third-party DERs to connect to the Utility-DERMS.[96] In "future phases," BGE will enable advanced DERMS capabilities, including integrations with third-party DERs, Aggregators, and Edge-DERMS.[97] The total cost for BGE's DERMS Project 1 is $9.11 million.[98] Conversely, Pepco and Delmarva (together "PHI"), will have a Utility-DERMS by Q1 of 2027 and a DER Gateway by the end of 2028.[99] The Maryland portion of PHI's DERMS cost is $4.02 million.[100]

Potomac Edison is awaiting a decision from FirstEnergy Corp. ("FirstEnergy"), its parent company, on whether or not to pursue an enterprise-wide Utility DERMS in the next 6-12 months.[101] Implementation after a decision would take 3-4 years.[102] Potomac Edison will contract an Edge-DERMS provider for DRIVE Act Pilots.[103] The Maryland portion of a FirstEnergy Enterprise-wide Utility DERMS would cost about $2.08 million.[104] The cost to Maryland ratepayers if Potomac Edison were to pursue a Utility-DERMS independently from FirstEnergy would be much higher. Potomac Edison recommends that the

[94] *Id*. at 31.
[95] MJEU Conceptual Reports at 7.
[96] Dec. 3 Tr. at 26.
[97] MJEU Conceptual Reports at 7-8.
[98] *Id*. at 9.
[99] Dec. 3 Tr. at 29.
[100] MJEU Conceptual Reports at 14.
[101] PE Conceptual Reports, Attachment A at 4.
[102] *Id.*
[103] *Id*. at 2.
[104] *Id*. at 5.

Commission provide direction to the investor-owned utilities such that long-term programs are well-defined, and the utilities can plan and prepare for investment in DERMS.[105]

SMECO will modernize its Advanced Distribution Management System ("ADMS") over the next six years and contract with Edge-DERMS providers in the interim.[106] SMECO will commission ADMS deployment by Q4 2028 and introduce DERMS functionality in Q4 2029. In Q4 2030, SMECO will consider enabling additional DERMS capabilities, including active DER dispatch and scheduling to support DER aggregation and participation in wholesale markets.[107] The projected cost of this six-year project is $5,000,000.[108]

2. Summary of Comments

Several stakeholders including Staff, OPC, MEA, and CADRE noted a lack of clear dates associated with certain phases in the EDC proposals and differences between the EDCs' timelines. Staff observed that "DERMS deployment timelines are not aligned, which may create uneven operational readiness"[109] and recommended accelerating PHI's timeline, although Staff did not provide a recommended timeline or cost estimate for doing so.[110] In its comments, OPC urged the Commission to direct the EDCs to "revise and implement DERMS plans so that … concrete milestones are established for interoperability with PJM and third-party Aggregators."[111] At the hearing, OPC clarified that the Exelon Utilities' additional information about capabilities was "responsive to half of [OPC's]

[105] PE Conceptual Reports at 2.
[106] SMECO Conceptual Reports at 1.
[107] *Id*. at 2-3.
[108] *Id*. at 3.
[109] Dec. 9, 2025 Hr'g Tr. at 7 ("Dec. 9 Tr.").
[110] *Id.* at 17 and 23.
[111] OPC Nov. Comments at 10.

request around what capabilities [the utilities are] targeting, and on what timelines," and that the proposed architecture "pretty much aligns" with the framework OPC requested in its comments.[112] OPC would like to see additional work on the quantification of benefits.[113] MEA recommended that the Commission direct the EDCs to develop comprehensive, iterative DERMS deployment roadmaps with clear timelines.[114] MEA asserted that DERMS should be ready pre-DRIVE pilot[115] and recommended that BGE use its DERMS this year to integrate and dispatch third-party DERs.[116] The Sierra Club warned that DERMS capabilities will not be ready in time for FERC Order 2222,[117] and CADRE asserted that the Commission, "should put timelines in place to ensure that the DERMS are in place prior to PJM opening its DER market functionality."[118]

Stakeholders also offered feedback on DERMS capabilities. OPC expressed concern about whether SMECO's near-term capabilities would adequately facilitate DER and VPP expansion.[119] Staff recommended that the Commission provide clear guidance on Potomac Edison's long-term programs by defining use cases and functionalities for Grid-DERMs and Edge-DERMS.[120] SUN argued that DERMS capabilities should support long-term retail program needs, which should be informed by lessons learned from DRIVE Act implementation. SUN further recommended that the Commission provide additional guidance for EDC DERMS plans, including "clearly defined retail versus wholesale market use cases and ensuring that utility DERMS plans do not lock in path-dependent investments

[112] Dec. 3 Tr. at 201, 203.
[113] *Id*. at 203.
[114] MEA Nov. Comments at 10.
[115] Dec. 9 Tr. at 27.
[116] *Id*. at 30.
[117] Sierra Club Nov. Comments at 5.
[118] CADRE Nov. Comments at 7.
[119] Dec. 3 Tr. at 205.
[120] Staff Nov. Comments at 8.

that presuppose VPP program frameworks without the benefit of first implementing the DRIVE Act pilots."[121] CADRE recommended involving stakeholders in the discussion of developing use cases for PHI's DERMS.[122]

3. Commission Decision

The Commission declines to accelerate the timelines associated with the Exelon Utilities' and SMECO's DERMS plans because the monetary costs and tangible benefits of doing so are unclear. Utility-DERMS platforms, while useful for visibility into and optimization of DER and DER aggregation dispatch, are not strictly necessary for third-party compliance with FERC Order 2222 because PJM has dispatch rights. Utility-DERMS can also enable more sophisticated use cases at the retail-level; in the near-term, retail programs are progressing through the DRIVE Act pilots with third-party Edge-DERMS providers.

Given the cost projections provided in this proceeding, the Commission finds that it would be imprudent for Potomac Edison to develop a Utility-DERMS outside of FirstEnergy's decision to do so.

While it is the Commission's view that it is premature to provide detailed guidance on specific use cases for DERMS development because future use cases will be informed by DRIVE Act pilot outcomes, the Commission emphasizes that, principally, DERMS development should not limit Aggregator participation in retail and wholesale markets and should maximize customers' ability to participate in VPP programs.

[121] SUN Nov. Comments at 3.
[122] CADRE Nov. Comments at 6.

While the Commission declines to direct acceleration of DERMS development, the Commission believes that such development would benefit from regular stakeholder feedback. To that end, the Commission directs SMECO and the Exelon Utilities to engage stakeholders in the development of their respective DERMS through regular reporting to the IWG and solicitation of stakeholder feedback, with reporting cadence and any additional requirements to be determined at the discretion of the IWG Leader. The Commission directs the EDCs to ensure that DERMS development is coordinated with Distribution System Planners, Transmission Planners, Operators, and other relevant internal teams of the respective EDCs to minimize siloing and maximize the usefulness of DERMS in addressing grid constraints.

The Commission also directs the EDCs to provide annual reports to the Commission on DERMS development with a description of presentations made to the IWG, the extent to which stakeholder feedback was incorporated, and any other significant progress notes. The first report shall be due October 10, 2026.

D. Device-Level Metering

1. Summary of Conceptual Reports

In Order No. 91603, the Commission articulated support for a "gradual approach" to device level metering "until various retail use cases for grid services are developed."[123] The Commission directed the EDCs to provide conceptual reports "with more information on any new or expanded repositories that may be needed to facilitate device metering data."[124]

[123] Order No. 91603 at 16.
[124] *Id.*

The Exelon Utilities recommended continuing to work through pilot programs, including DRIVE Act Distribution System Support Services ("DSSS") and vehicle-to-grid pilots, to test the accuracy of device-level metering and leverage third-party pathways to manage data and payments,[125] and to propose metering configurations for future grid services programs and retail tariffs on a case-by-case basis.[126] The Exelon Utilities also suggested that the Commission direct the IWG to establish a subteam to investigate metering and submetering technologies.[127]

Potomac Edison asserted that PJM will require settlement at the premises level for FERC Order 2222 participation[128] and noted that the responsibility for metering configuration and data submission for wholesale market participation resides with the DERA.[129] Potomac Edison plans to use device-level telemetry in their DRIVE Act DSSS pilot, working with a third-party DERMS provider to collect and store data. The company recommended no additional database beyond what was proposed in the DRIVE Act pilot to allow pilot findings to inform future decisions.[130]

SMECO acknowledged the benefits of device-level metering but asserted that its AMI bandwidth is saturated and instead suggests using smart service panels as a compromise.[131]

[125] MJEU Conceptual Reports at 31.
[126] Dec. 3 Tr. at 33-34.
[127] MJEU Conceptual Reports at 2.
[128] Dec. 3 Tr. at 61.
[129] PE Conceptual Reports, Attachment D at 1.
[130] PE Conceptual Reports at 3.
[131] SMECO Conceptual Reports at 4.

2. Summary of Comments

Staff supported the EDCs' recommendation to propose case-by-case solutions for new programs.[132] OPC also supported a flexible, case-by-case approach to device-level metering,[133] arguing that it is premature to require device-level metering infrastructure at this time.[134]

CADRE stated that the Commission should "compel the EDCs to establish systems that can accept and process device-level metering data in a manner that will provide DERAs and PJM with requisite data to support Component DERs located behind [net energy] meters," while agreeing with EDCs that device-level metering should never be a mandate.[135]

SUN pointed out that Order No. 91917 directed that the EDCs' "default position" regarding device level metering in DRIVE Act pilots should be to accept its use.[136] SUN noted that, to the extent that EDCs lack existing bandwidth or data storage space, a third-party Edge-DERMS provider that can collect data in a separate repository may be leveraged to reduce strain on existing systems. SUN noted that this is Potomac Edison's proposed approach in its DRIVE Act pilot, as specified in its conceptual report. SUN recommended the Commission direct the EDCs to update their reports with information about how third-party Edge-DERMS providers can collect, store, and report on device-level telemetry to measure and compensate customers and Aggregators for VPP services delivered.[137]

[132] Staff Nov. Comments at 17.
[133] OPC Nov. Comments at 3.
[134] *Id*. at 30.
[135] CADRE Nov. Comments at 12.
[136] SUN Nov. Comments at 5.
[137] *Id*. at 6-8.

Staff[138] and the Sierra Club[139] both supported the Exelon Utilities' recommendation to create a subteam under the IWG to investigate metering and submetering technologies, and the Sierra Club urged an expedited timeline.

3. Commission Decision

The Commission directs the IWG to further examine metering and submetering technologies.[140] We leave the creation of a subteam to the IWG's discretion.

In Order No. 91603, the Commission directed the IWG, "to propose future regulations that will provide a framework for device-level metering to be utilized in the future, subject to acceptable accuracy requirements needed for billing and settlement."[141] The Commission recognizes that these regulations are still in development[142] and will be informed by DRIVE Act DSSS pilot outcomes as well as additional investigation into metering and submetering technologies, as directed herein.

Regarding the directive in Order No. 91917 that the EDCs' default position should be to accept device-level metering, the Commission notes that this directive was specific to the DRIVE Act pilots and informed by the following factors: (1) the programs as filed would compensate customers for performance in response to dispatch events, not in energy usage measured; and (2) the use of device-level metering should be a learning objective from the pilot programs. Therefore, the directive in Order No. 91917 to accept device-level metering by default does not necessarily apply to future programs.

[138] Staff Nov. Comments at 17.
[139] Sierra Club Nov. Comments at 12.
[140] Where relevant, the IWG should incorporate consideration of these technologies into VPP regulations.
[141] Order No. 91603 at 16.
[142] *See generally* IWG Status Report at 1-2 (listing the draft VPP regulations reviewed by the IWG).

The Commission provides the additional direction that while a case-by-case approach to metering configurations is acceptable, final VPP regulations should preclude the EDCs from requiring revenue-grade metering in every instance if it is not necessary. If onboard device metering capabilities meet settlement-grade accuracy standards, or if a given program does not require settlement-grade accuracy, the EDCs should be able to accept data from device-level meters for billing and settlement purposes, whether through the use of in-house repositories or a third-party solution. The Commission agrees with stakeholders that device-level metering should not be a mandate.

E. Communication Protocols

1. Summary of Conceptual Reports

In Order No. 91603, the Commission directed the Maryland EDCs to "evaluate the future implementation of IEEE 2030.5, along with potential implementation timelines and … address concerns that there is currently a lack of the necessary support systems and infrastructure with technical, operational, regulatory, and economic impacts when discussing potential implementation timelines."[143]

The Exelon Utilities are evaluating the adoption of the IEEE 2030.5 communication protocol, and they recommended continuing to build support for this standard.[144] The Exelon Utilities plan to implement the protocol through a DER Gateway, which will allow Edge-DERMS, Aggregators, and other third parties to exchange data with the Exelon Utilities' Utility-DERMS.[145] Given the lack of full public certificate management, the

[143] Order No. 91603 at 13.
[144] Dec. 3 Tr. at 34.
[145] *Id*. at 24.

Exelon Utilities will supplement IEEE 2030.5 with network security infrastructure.[146] The Exelon Utilities plan to use IEEE 2030.5 for DERs of 250 kW or less and will rely on private options for larger systems.[147] The Exelon Utilities aim to have the DER Gateway and associated security infrastructure installed by the end of 2028, which they estimate will cost $7.2 million.[148]

Potomac Edison supported IEEE 2030.5 but does not believe it should be prescribed[149] and advocates for prioritizing use cases to drive adoption. Potomac Edison's implementation timeline is dependent on DERMS implementation, and the costs are part of the investment in DERMS.[150] In its conceptual report, Potomac Edison indicated that "DNP 3.0 is the preferred method for communicating with a DER" and that "IEEE 2030.5 can be utilized to interconnect an edge-DERMS to a utility grid-DERMS, however this may not be optimal and a proprietary grid DERMS to edge-DERMS interconnection protocol may be needed."[151] Potomac Edison also noted that "there are a number of other vendor-independent (non-proprietary) protocols that promote interoperability."[152] Potomac Edison laid out a number of recommendations should the Commission require implementation of IEEE 2030.5.[153]

SMECO's multi-year plan to launch a DERMS platform includes the implementation of the IEEE 2030.5 communication protocol.[154]

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[146] *Id.*
[147] *Id.*
[148] MJEU Conceptual Reports at 55-56.
[149] Dec. 3 Tr. at 58.
[150] PE Conceptual Reports, Attachment B at 3-4.
[151] *Id.*
[152] *Id.* at 4.
[153] *Id*. at 6.
[154] SMECO Conceptual Reports at 4.

2. Summary of Comments

Staff generally supported the EDCs' approaches, recommended that BGE and Potomac Edison continue to test protocols for IEEE 2030.5, and recommended that SMECO explore alternative data transmission methods to reduce reliance on customer Wi-Fi.[155] MEA believed the EDCs should proceed as filed.[156] CADRE and the Sierra Club generally supported the EDCs' approach to communications protocols as outlined, but CADRE urged the Commission to require uniformity in communications protocols without being overly prescriptive.[157] CADRE also stated that allowing the EDCs to mandate a specific protocol could give them inappropriate control over customer-owned DERs.[158]

CADRE did not oppose the use of IEEE 2030.5 but stated that it should be a baseline communications protocol and should be limited to governing communications between the EDC and the DERA, not between the DER devices and the Aggregator.[159] Similarly, SUN did not support mandating IEEE 2030.5 and opposed communication protocols for EDC direct-to-device communication and direct EDC control of customer-sited devices.[160]

3. Commission Decision

The Commission supports flexibility and agrees with stakeholders that IEEE 2030.5 should not be mandated. However, EDC-proprietary broadband should not be the only option for communication with small DERs, and the IWG should develop regulations

[155] Staff Nov. Comments at 19-22.
[156] MEA Nov. Comments at 17.
[157] CADRE Nov. Comments at 17.
[158] *Id.*
[159] Dec. 3 Tr. at 183.
[160] SUN Nov. Comments at 4.

to that effect. The Commission supports Staff's recommendation that the Exelon Utilities and Potomac Edison should continue testing IEEE 2030.5, and the Commission directs these EDCs to provide regular updates to the IWG on testing outcomes, with reporting cadence to be determined at the discretion of the IWG Leader.

The Commission affirms that directives on communications protocols will govern EDC communications with Aggregators and not Aggregator communications with DERs, but regulations should allow the EDCs to communicate directly with devices if those devices are enrolled in an EDC-managed VPP and not enrolled in a third-party aggregation.[161]

F. Cybersecurity

1. Summary of Status Report

In Order No. 91603, the Commission concluded it is appropriate to further address DERA cybersecurity in its COMAR 20.06 regulations for cybersecurity. To that end, the Commission directed that "this topic be addressed by the Commission's Cybersecurity Reporting Workgroup (CSRWG), including the [Maryland Exelon Joint Utilities'] recommendation to 'support further discussion within the Workgroup on this topic and recommend that the workgroup consider the DOE and NARUC publicized work on this topic.'"[162] The Commission further directed the OC to provide a status report back in six months.[163]

[161] *See generally* Case No. 9761, In re Drive Act Implementation. DRIVE Act pilots will have both EDC-managed BYOD programs as well as Aggregator participation.
[162] Order No. 91603 at 30. NARUC is the National Association of Regulatory Utility Commissioners.
[163] *Id.*

The OC status report, filed on October 10, 2025, included proposals for a revised DER/DERA license application requiring detailed cybersecurity plans[164] and proposed regulatory language for COMAR 20.06 incorporating the NARUC/DOE Cybersecurity Baselines by reference.[165] Key non-consensus issues include: regulatory approach, with the Maryland EDCs[166]—referred to in the report as the "Maryland Joint Utilities" or "Joint Utilities"—asserting that the draft regulations might be premature and ill-matched for a one-size-fits all approach when a risk-based approach is more appropriate;[167] defining scope and applicability; and compliance oversight.[168] The third issue (compliance oversight) was discussed at length at the Technical Conference, with OC explaining that "[t]he Joint Utilities, in agreement with us, object to provisions in our draft COMAR regulations that delegate initial compliance and enforcement authority to them."[169] OC emphasized, "[W]e need clarity on who's responsible for compliance verification," whether that is the Commission or the utilities.[170] OC also pointed out that the Commission does not have authority to audit DERA compliance with cybersecurity standards except at the time of licensing because DERAs are not regulated utilities.[171]

2. Summary of Maryland Joint Utility Comments

In their written comments,[172] the Maryland Joint Utilities articulated support for "OC's recommendation to adopt the License to Operate Applications including the

[164] Staff Cybersecurity Update at 9.
[165] *Id*.at 5.
[166] BGE, Delmarva, Pepco, Potomac Edison, and SMECO.
[167] Staff Cybersecurity Update at 6.
[168] *Id*. at 6-7.
[169] Dec. 3 Tr. at 94.
[170] *Id*. at 98.
[171] *Id*. at 95.
[172] Maillog 324547, BGE, Delmarva Power, Pepco, Potomac Edison, and SMECO ("Maryland Joint Utilities") Joint Comments (Nov. 19, 2025).

provisions intended to strengthen cybersecurity attestations and require applicants to submit detailed cybersecurity plans at the point of license filing."[173] However, the Joint Utilities object to provisions in the draft regulations that, in their view, inappropriately delegate the Commission's compliance and enforcement authority of DERA cybersecurity standards.[174] At the Technical Conference, the Joint Utilities reiterated that they are not equipped to be the "primary or initial enforcement compliance arm" for cybersecurity and that the regulations require more time to be developed with the CSRWG and stakeholders.[175] The Maryland Joint Utilities also cautioned that the NARUC/DOE Baseline implementation guidance is not final.[176] Additionally, they pointed out that the North American Electric Reliability Corporation ("NERC") will likely require larger DERs to register, so the Baselines should be applied to smaller DERs.[177] Lastly, the Joint Utilities expressed concern that the proposed new licensing requirements will apply to all DERs at once, even smaller ones that might not be able or might not need to be in full compliance with the NARUC Baselines, and instead proposes a step-wise approach to implementation.[178]

3. Commission Decision

The Commission appreciates the work of the OC, CSRWG, and the Joint Utilities. The Commission agrees to give more time for these parties to develop regulations. To be clear, the Commission does not want the EDCs to preemptively audit DERA compliance

[173] *Id*. at 2.
[174] *Id.*
[175] Dec. 3 Tr. at 110.
[176] *Id*. at 113.
[177] *Id*. at 113-114.
[178] *Id*. at 115.

with cybersecurity standards. Instead, the EDCs should observe and report noncompliance to the Commission's OC for further investigation and licensing actions, if necessary.[179] The Commission directs the CSRWG to develop regulations outlining a process by which the EDCs can report DERA noncompliance with cybersecurity standards.

The Commission also directs the CSRWG to consider regulations that balance cybersecurity needs with practical implementation, so the regulations do not become a barrier to attracting Aggregators to Maryland. The Commission directs the OC and CSRWG to consider a risk-based approach to identifying in-scope assets and risk-appropriate tiered requirements.[180]

The Commission also agrees with updating the "License to Operate as a Distributed Energy Resource Aggregator in the State of Maryland" Application to include references to any applicable DERA cybersecurity requirements, but we direct the OC to adopt a proportional approach to implementation to ensure smaller entities are not unduly burdened.

Finally, the Commission directs Staff to determine whether the NARUC/DOE Baselines are suitable for incorporation by reference into COMAR, based on the Maryland Incorporation By Reference ("IBR") Manual.[181] The Commission is concerned that the Baselines might not comply with the IBR Manual because they serve as guidelines as

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[179] *See Application for License to Operate as a Distributed Energy Resource Aggregator in the State of Maryland*, *Section 14 Code of Conduct Compliance*, Maryland Public Service Commission, https://psc.maryland.gov/wp-content/uploads/2025/11/Application-for-License-to-Operate-as-a-Distributed-Energy-Clean-Versionpdf.pdf (last visited May 5, 2026).

[180] For instance, NERC CIP standards (specifically CIP-002) require that utilities identify, categorize, and define the scope of their cyber assets based on risk. This approach involves identifying critical assets and their associated systems based on their potential impact on the reliable operation of the utility's system.

[181] *Incorporation by Reference*, Maryland Division of State Documents, https://dsd.maryland.gov/PDF/IBRManual.pdf#:~:text=identified%20by%20COMAR%20citation (last visited May 5, 2026).

opposed to an enforceable standard. Also, strict adoption of the NARUC/DOE Baselines may not be compatible with implementation of risk-appropriate tiered requirements.

G. Additional Matters

1. SMECO Participation in FERC Order 2222

At the Technical Conference, SMECO explained that the cooperative is "a small utility under FERC Order 2222, and … not directly subject to the requirements of that order, at least from a direct mandatory perspective. It is an opt-in for a small utility like SMECO."[182] SMECO believed it should have "some sort of express direction to allow [it] to participate"[183] in FERC Order 2222. The threshold for mandatory participation is 4 million-megawatt hours,[184] which SMECO projects it will reach around 2030 or 2031.[185]

PJM's compliance filing states that it will allow wholesale participation of Aggregators in a small utility's service territory if that utility presents evidence that the Relevant Electric Retail Regulatory Authority ("RERRA") has permitted customer participation in their territory.[186] The Commission is SMECO's RERRA because the Commission is the entity that "has jurisdiction over and establishes prices and policies for competition for providers of retail electric service to end-use customers."[187]

[182] Dec. 3 Tr. at 85.
[183] *Id*. at 86.
[184] *See e.g.*, PJM 2222 Compliance Filing, Attachment A at 8 (highlighting proposed changes to section 1.4B(g) of PJM's Open Access Transmission Tariff, Attachment K-Appendix).
[185] Dec. 3 Tr. at 85.
[186] *See e.g.*, PJM 2222 Compliance Filing, Attachment A at 7-8.
[187] *Open Access Transmission Tariff*, PJM Interconnection, L.L.C., https://agreements.pjm.com/oatt/3906 (defining the term "Relevant Electric Retail Regulatory Authority) (last visited May 6, 2026).

2. Commission Decision

The Commission hereby permits end-use customers in SMECO's territory to participate in FERC Order 2222 at such a time that SMECO is ready and able to fulfill PJM tariff requirements for EDCs, which shall be no later than January 1, 2030.

IT IS, **THEREFORE,** this 6th day of May, in the year Two Thousand Twenty-Six, by the Public Service Commission of Maryland, **ORDERED:**

(1) that the Data Exchange Work Group is hereby created and delegated to the Commission's Technical Staff, who shall designate a work group leader and notice interested stakeholders for participation;

(2) that the Data Exchange Work Group shall file regulations for third-party access to customer data within six months as described herein;

(3) that the Data Exchange Work Group shall file RFP criteria for a Green Button Connect My Data-compliant data exchange platform within six months as described herein;

(4) that the Data Exchange Work Group shall file a model third-party data access tariff within six months as described herein;

(5) that the Data Exchange Work Group shall file a phased DER Registry roadmap within six months as described herein;

(6) that Baltimore Gas and Electric Company, Potomac Electric Power Company, Delmarva Power and Light Company (together the "Exelon Utilities"), and The Potomac Edison Company ("Potomac Edison") shall provide quarterly confidential Distributed Energy Resource registration reports beginning no later than 90 days from the date of this Order;

(7) that Southern Maryland Electric Cooperative ("SMECO") shall file additional information regarding its Secure File Transfer Protocol site within 30 days as described herein;

(8) that the Exelon Utilities shall provide regular DERMS development updates, with opportunities for feedback, to the Interconnection Workgroup and annual reports to the Commission beginning November 19, 2026;

(9) that the Interconnection Workgroup shall develop proposed regulations for device-level metering and communications protocols as described herein; and,

(10) that the Office of Cybersecurity, in collaboration with the Exelon Utilities, Potomac Edison, SMECO, and the Cybersecurity Reporting Workgroup, shall continue to develop draft cybersecurity regulations as directed herein.

/s/ Kumar P. Barve

/s/ Frederick H. Hoover, Jr.

/s/ Bonnie A. Suchman

/s/ Odogwu Obi Linton

/s/ Ryan C. McLean
Commissioners