

Rockland Electric Company Comments
In the Matter of New Jersey Grid Modernization / Interconnection Process
Docket No. QO21010085

March 22, 2022

On October 25, 2021, the New Jersey Board of Public Utilities (“BPU”) issued a Notice¹ of a series of public meetings to collect stakeholder input on existing BPU distribution grid interconnection policies and processes, and potential improvements to those aimed at faster grid modernization and higher levels of distributed energy resource (“DER”) integration.

At the January 14, 2022 stakeholder meeting, the Electric Distribution Companies (“EDCs”) made presentations² regarding their current interconnection processes in response to data requests from the BPU’s consultant, Guidehouse, and recommended changes to the BPU interconnection process. Importantly, Rockland Electric Company (“RECO” or the “Company”) noted that achievement of New Jersey’s clean energy goals will require a holistic, flexible approach that incorporates Non-Wires Alternatives (“NWA”), resources such as battery storage and demand response, pilot programs, and the evolution of the current electric utility business model to include utility ownership of DER, EV charging infrastructure, along with an efficient DER interconnection process to incorporate clean energy resources.

Subsequently, at the January 28, 2022 stakeholder meeting, non-EDC stakeholders made presentations regarding technical, financial, and procedural issues related to the BPU grid interconnection process. On January 28, 2022, the BPU issued a notice announcing that the BPU will issue a draft report on April 22, 2022. Comments on the draft report will be due seven days later (on April 29, 2022), and the BPU will issue a final report on July 29, 2022.

The Company submits these initial comments to provide recommendations and to address stakeholder presentations and other issues raised to date. RECO reserves the right to comment on the draft report.

Executive Summary

While improvements to the interconnection application, review, and approval processes are important, they are only one facet of the broader transformation needed to modernize the grid, increase the amount of DER deployed, and achieve the State’s clean energy goals. RECO recommends that the BPU take the opportunity to view grid modernization holistically and update interconnection rules while developing policies to support evolving grid technologies,

¹ See <https://nj.gov/bpu/pdf/publicnotice/Notice%20Grid%20Modernization%20Stakeholder%20Meeting.pdf>

² See https://www.njcleanenergy.com/files/file/GridMod/NJ%20BPU%20Grid%20Mod%20Stakeholder%20Meeting%20%20Presentations_2022-01-14.pdf

increased electrification efforts, and alternative business models. A modernized electric grid that has the ability to integrate clean energy assets, monitor and control those assets, and provide reliable and resilient service to all customers is critical to increased DER integration and electrification efforts. Increased electrification from electric vehicles (“EVs”), building electrification, and clean heating requires a future grid with enhanced flexibility of load and DER to manage constraints on the distribution and transmission systems. Evolving technologies, including energy storage, can play a role in supporting the modern grid. Utility-owned energy storage, NWAs, and / or a hybrid approach that integrates traditional capital infrastructure with battery technology are critical to developing and managing the future grid. In addition, foundational investments³ to transform the electric grid will enable a clean energy future while providing reliable and resilient energy to all customers. Policies that support prioritization of grid modernization investments in transmission capacity, multi-value projects,⁴ and utility-scale / utility owned business models at the distribution system level must be viewed holistically and in tandem so that EDCs, DER developers, industry, the State, and other stakeholders can make informed decisions that stimulate the market, enable increased electrification, and support customer management of consumption and corresponding bill impacts.

The Company emphasizes that updating rules to ease the interconnection process must be met with a grid that is capable of maximizing clean energy resources.⁵ Now is the time to focus on a collaborative process among EDCs, industry, and the BPU to understand the needs of the stakeholders and develop and implement the mechanisms and upgrades needed to achieve the State’s goals, all while balancing the requirement to provide safe, reliable, and resilient service at an affordable cost.

The comments below focus on the interconnection process in the context of the broader need to modernize the grid to enable achievement of the State’s clean energy goals. To accomplish this and produce results that balance the needs of stakeholders, including industry, EDCs, the State, and others, the Company strongly recommends that the BPU establish working groups to address a variety of grid modernization topics, including emerging technologies, data access standards and processes, and the increasing levels of DER interconnection needed to reach New Jersey’s clean energy goals successfully and expeditiously. Non-EDC presenters supported the deployment and/or BPU approval of various emerging technologies, such as smart inverters and customer-sited switches, which are topics that would benefit from technical working group discussions. A more thorough understanding of the impact of these technologies on the grid, worker safety, and stakeholders must be undertaken to inform establishment of standards and requirements to integrate these technologies into the grid. In addition, in many states, stakeholder working groups were critical to amending interconnection policies and adopting

³ Examples of foundation investments include Advanced Metering Infrastructure (“AMI”), Advanced Distribution Management System (“ADMS”), and Distributed Energy Resource Management System (“DERMS”).

⁴ Multi-value projects are those projects that can simultaneously address a combination of system needs, including improving reliability and safety, replacing obsolete equipment, enhancing DER hosting capacity, and providing the future capacity needed to support beneficial electrification.

⁵ The Energy Master Plan in Strategy 5 Decarbonize and Modernize New Jersey’s Energy System recognizes that “electric public utilities must ensure the distribution grid is upgraded to handle the dynamic, decentralized, and bi-directional nature of evolving grid technology.” p. 177

cost-effective technologies. The National Renewable Energy Laboratory (“NREL”)⁶ recognizes that convening stakeholder working groups to address the complex issues raised by DER interconnection is a best practice, which has been adopted by multiple states who have reformed their DER interconnection practices.⁷ Technical issues in particular need to be the subject of working groups.⁸

In addition, the Company recommends as a model the New York Public Service Commission (“NYPSC”) Cost-Sharing 2.0 program, which the Company supports to address the allocation of interconnection costs among projects. The Company also supports the clustering of interconnection studies of multiple projects on multiple sites if the projects are owned by the same developer and are to be connected to the same circuit. The Company provides information below on New York’s pre-application process which may address some concerns with closed circuits.

The Company recognizes the potential impact of increased residential electrification efforts on residential solar sizing and cautions against instituting changes without carefully considering related issues such as the timing of the electrification efforts and the impact on solar incentives.

Further, the Company opposes the establishment of a statewide interconnection application portal or a detailed set of rules for EDC-specific interconnection application portals. The Company’s interconnection online application portal (“IOAP”) is a major contributor to the Company’s streamlined interconnection process. As described in more detail below, the Company’s robust, customizable IOAP is able to serve current and future interconnection processes and requirements in its service territory and is integrated with other Company IT systems, including its geographic information system and customer management/billing system to offer a streamlined experience to applicants and the Company.

Data access security issues are not unique to grid modernization efforts. Currently, the BPU is addressing data security and privacy issues in its AMI Data Access proceeding.⁹ The Company recommends that data access security and privacy issues be developed and established through the AMI Data Access proceeding. This will allow for the adoption of statewide, holistic

⁶ The National Renewable Energy Laboratory (“NREL”), is the United States' laboratory for renewable energy and energy efficiency research and development and is a government-owned, contractor-operated facility funded and overseen by the U.S. Department of Energy's (“DOE”) Office of Energy Efficiency and Renewable Energy (“EERE”).

⁷ A Guide to Updating Interconnection Rules and Incorporating IEEE Standard 1547, National Renewable Energy Laboratory (October 2021) available at <https://www.nrel.gov/docs/fy22osti/75290.pdf>. See also Establishing a permanent working group allows customers and EDCs the opportunity to dialogue about interconnection issues and, if structured well, is likely to prevent some conflicts. <https://portal.ct.gov/-/media/PURA/electric/DG-Policy-Working-Group/Solar-Connecticut-Report-on-Interconnection-Best-Practices-8-25-20.pdf>

⁸ For example, an issue raised in the January 28 stakeholder presentations was implementation of smart inverters. However, the implementation of smart inverter technology will depend on the electrical characteristics of the area of high DER penetration. See, *Impact of IEEE 1547 Standard on Smart Inverters and the Applications in Power Systems*, IEEE PES Industry Technical Support Leadership Committee (August 2020). Available at <https://www.nrel.gov/grid/ieee-standard-1547/smart-inverters-power-systems.html>.

⁹ Docket No. EO20110716 Straw Proposal On Advanced Metering Infrastructure (AMI) Data Transparency, Privacy & Billing, (“Data Access Proceeding”)

standards that balance the needs of customers, industry, EDCs, the State, and other stakeholders while providing certainty and transparency for all parties.

Comments

Modernizing the Interconnection Process and the Distribution System

RECO supports improvements that will streamline and automate the interconnection process to facilitate the deployment of DERs on the distribution system. Not only are processes related to the interconnection application, studies, and installation ripe for improvements and streamlining, but modernizing the electric grid is critical to enabling the accelerated and increased deployment and operation of DERs. As discussed below, automation can facilitate the interconnection application process to provide a positive customer experience while accelerating the process and providing certainty and transparency to all parties. RECO's IOAP offers a seamless way for developers to interact with the Company, providing an application checklist to assist Applicants with the application process (*e.g.*, identifying documents to be submitted), uploading documentation in a central location, and requiring a complete application and fee to be submitted prior to acceptance. Documents are updated in real time, providing Applicants with up-to-date status of their applications.

In addition, RECO's robust hosting capacity maps provide useful data to developers contemplating DER deployment. RECO's hosting capacity maps provide granular data in a user-friendly format via pop up boxes at the circuit and sub-circuit level (*e.g.*, the maximum and minimum hosting capacity available, the amount of DER connected, voltage, and substation information) and incorporates the locations of installed DERs. The Company's efforts to provide hosting capacity and interconnection information to stakeholders follow the staged approach defined by EPRI and adopted by the New York EDCs. RECO's maps are easily accessible and publicly available on the Company's website.¹⁰

The interconnection application and review process is only one piece of the DER integration ecosystem that needs to be modernized to enable the deployment of clean energy assets at a level necessary to meet the State's clean energy goals. The electric grid itself must be transformed to achieve a modern, resilient, and reliable grid that is information-rich, facilitates customer engagement and choice, seamlessly integrates DERs, and encourages clean energy resources, including improved energy efficiency. Foundational investments can transform the electric grid to adapt to new and evolving business models and technologies and further the transition to a clean energy future.

RECO has deployed AMI throughout its service territory - a foundational investment that can be leveraged to support customer engagement and third-party business models. RECO is actively working on grid modernization technologies such as smart inverters (see discussion below on development and establishment of requirements for Volt-Watt, Volt-VAR, Ride-Through, among

¹⁰ RECO's maps can be found at: [Hosting Capacity and System Data | Orange & Rockland \(oru.com\)](https://www.oru.com/Hosting-Capacity-and-System-Data)

others), Volt-VAR controls, new distribution supervisory control and data acquisition (“DSCADA”) and ADMS with advanced situational awareness capabilities, integration of field devices, fault location, isolation and service restoration (“FLISR”), volt var optimization (“VVO”), State Estimator, DERMS, and granular analytics are important technologies and processes. They will enable the modern grid to support and effectively monitor and control increased renewable resources and technologies. RECO has implemented, or has plans to implement, these technologies within the next few years. The Company recommends forward-looking approval and cost recovery of utility investments that support a reliable, resilient and modern grid through an Infrastructure Investment Program (“IIP”) surcharge or similar mechanism that supports forward-looking investments and strategies and recovers costs from all customers as these investments benefit all customers.

Leveraging Other States’ Experiences and Establishing a Dynamic Process

RECO recommends that BPU Staff leverage the experiences of other states in developing and updating New Jersey’s interconnection application, review, and approval standards and processes. In particular, extensive work has been accomplished in New York through working groups composed of utility, industry, and New York Department of Public Service (“DPS”) Staff representatives. RECO’s affiliate, Orange and Rockland Utilities, Inc. (“O&R”) is an active participant in New York’s interconnection working groups (*i.e.*, Interconnection Policy Working Group (“IPWG”) and Interconnection Technical Working Group (“ITWG”))¹¹ which provide an opportunity for utilities, developers, DPS Staff, and other stakeholders to raise and discuss both policy and technical issues in order to arrive at a mutually acceptable solution that furthers the integration of renewable resources.

Understanding the needs and capabilities of each stakeholder group expedites the development and implementation of potential solutions. New York’s Standardized Interconnection Requirements (“SIR”), which contains interconnection rules, standards, and processes, is a living document that is improved over time based on the work of both the IPWG and the ITWG. As a living document, the SIR is reflective of changing states policies and evolving technologies. Establishment of working groups becomes more critical as new technologies, such as smart inverters, emerge and existing technologies, such as energy storage, become more prevalent. Based on the success of these programs in New York, RECO recommends a similar process in New Jersey, and it incorporate best practices and lessons learned from New York or other states.

Cost Allocation of DER Interconnection Upgrades

As noted above, the Company supports the NYPSC’s Cost-Sharing 2.0 program to address the cost of upgrades required by the increasing interconnection of DER to the New Jersey distribution grid. The NYPSC recently adopted,¹² the proposal of its IPWG for a cost-sharing

¹¹ See *Distributed Generation Information* at <https://www3.dps.ny.gov/w/pscweb.nsf/all/DCF68efca391ad6085257687006f396b>.

¹² Case 20-E-0543 et al, *Petition of Interconnection Policy Working Group Seeking a Cost-Sharing Amendment to the New York State Standardized Interconnection Requirements*, Order Approving Cost-Sharing Mechanism and Making Further Findings, (issued July 15, 2021) (“NYPSC Cost-Sharing 2.0 Order”). .

amendment to New York’s SIR for DER and energy storage systems of five MW or less. As explained in more detail below, Cost Sharing 2.0 built upon the NYPSC’s prior cost allocation process,¹³ which had not been fully successful in increasing DER and battery storage projects in distribution-saturated areas of the New York electric grid.¹⁴ The experience in New York demonstrates that a program of reimbursing initial solar developers may not achieve New Jersey’s DER absorption goals. Prior to Cost-Sharing 2.0, the NYPSC SIR provided that first-moving interconnection projects bear 100 percent of the cost for substation upgrades (e.g., transformer bank upgrades or replacements) and then be reimbursed by subsequent projects interconnected on the same substation and benefiting from such upgrades.¹⁵ However, this mechanism provided no certainty to developers of the first-moving interconnection project that subsequent interconnection projects would materialize and result in any reimbursement of expenditures. As a result, DER and energy storage projects did not take on the first-mover cost impact and pay for substation upgrades, and no DER and energy storage projects were sited in distribution-saturated areas of the NY utilities’ respective service territories.¹⁶

The NYPSC was able to implement a resolution of these upgrade cost allocation issues as a result of its collaborative approach through the IPWG.¹⁷ The utilities and IPWG continue to work on refinements to Cost-Sharing 2.0.¹⁸

Cost-Sharing 2.0 applies to two categories of distribution system modifications: utility-initiated upgrades and market-initiated upgrades. Utility-initiated upgrades consist of 3V0 installations and modifications to planned substation transformer bank installations and replacements included in a utility’s capital investment plan as asset maintenance or reliability projects. For substation transformer bank installations/replacements, the modification would provide for greater hosting capacity than the replacement-in-kind project that the utility would otherwise install. These projects, where a planned upgrade may be enhanced to provide additional hosting capacity, are referred to as Multi-value Distribution (“MVD”) projects.

Coordinating the expansion of DER capacity with work that is already being planned to address asset maintenance or reliability issues to create MVD projects is a cost-effective approach to increasing hosting capacity. To facilitate the process, each electric utility posts a list of the substations scheduled for major upgrades on its respective system data portals and includes an estimate of the funding required to accommodate additional DER interconnections. The posting

¹³ See Case 16-E-0560, *Joint Petition for Modifications to the New York State Standardized Interconnection Requirements and Application Process For New Distributed Generators 5 MW or Less Connected in Parallel with Utility Distribution Systems*, Order Adopting Interconnection Management Plan and Cost Allocation Mechanism, and Making Other Findings (issued January 25, 2017). Available at <https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={22BEAB22-7F9F-45B8-89FD-0E8AD84692B4}>

¹⁴ See Case 20-E-0543, *Petition of the IPWG Members Seeking A Cost-Sharing Amendment to the New York State Standardized Interconnection Requirements for New Distributed Generators and Energy Storage Systems 5 MW or Less Connected in Parallel with Utility Distribution Systems*, at 3 (October 29, 2020). (“IPWG petition”) Available at <https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={4B2B2DC0-5C29-4E32-9C28-C6946EEA72E6}>

¹⁵ IPWG petition at p. 3.

¹⁶ *Id.*

¹⁷ IPWG petition at p. 2

¹⁸ See <https://www3.dps.ny.gov/W/PSCWeb.nsf/All/0D7596DBBEF0380885257FD90048ADFA?OpenDocument>

would identify the utility's cost estimate for upgrading substations to establish additional hosting capacity and a deadline for additional DER and/or energy storage projects to submit interconnection applications at those substations.

Clustering of Interconnection Studies

Currently, RECO undertakes studies of multiple projects on multiple sites if those projects are owned by the same developer and are to be located on the same circuit. Such clustering enables the Company to run iterations of the study on the associated projects collectively, while working with the developer to optimize the size of individual projects while maximizing the interconnection of the combined projects. RECO supports the clustering approach to interconnection studies only when a single developer is involved and that developer's projects are all located on the same circuit. Expanding clustering to multiple developers and projects on multiple circuits injects an unacceptable level of complication and competing interests into the interconnection process.

The upcoming implementation of FERC 2222 may also impact the current approach to clustering due to the need for aggregation studies. As noted above, the establishment of technical and policy working groups will allow for an informed and collaborative implementation of, and any necessary subsequent modifications to, the BPU's clustering policy.

Closed Circuits

Currently, RECO has no closed circuits. The Company reviews circuit and transformer bank capacity early in the application process to determine if a proposed DER would exceed design standards. In addition, the Company supports implementation of a pre-application reports process in which developers have the option to request, for a fee, a pre-application study. The Company recognizes the importance of understanding the available capacity of a particular site at an early stage in a project's lifecycle. O&R, like other New York EDCs, provides a pre-application study option to developers that are investigating potential locations for their DER siting. The EDCs charge a fee for this study, which can be offset against the application fee should the developer move forward with the project. Under this option, the fee should be set at a level that discourages developers from requesting analyses without serious consideration for the potential to move forward, such as the investigation of other potential roadblocks including permitting or siting on preserved lands.

Interconnection Application Portal

RECO's current Interconnection Online Application Portal ("IOAP") is a critical component of the Company's interconnection process and facilitates a positive developer experience. Streamlining and automating the interconnection application process is a key facet of increasing the deployment of renewable assets, and RECO's IOAP eases the process to interconnect these assets successfully. RECO strongly opposes the establishment of a statewide interconnection application portal, as this would extend an EDC's interconnection timeline by requiring the interaction between a third-party system and the EDC. Moreover, an EDC-operated portal allows direct and timely contact between an applicant and the EDC – providing a positive

developer experience. In addition, RECO does not support the implementation of portal-specific rules for EDC-operated portals. Instead, the portals must support the interconnection rules and standards for timelines, fees, and other requirements set forth in regulations, but otherwise remain flexible based on each EDC’s capabilities and IT investment plans. RECO’s IOAP is flexible and adaptable and has successfully supported the interconnection of approximately 650, or 13 MW AC of, renewable assets, thereby supporting the State’s clean energy goals.

RECO’s IOAP meets the needs of both applicants/developers (“Applicants”) and the Company by streamlining and automating the interconnection application process. Applicants and the Company can communicate through RECO’s IOAP, where the Company can provide relevant timelines and fees, the capability for electronic signatures, and the status of applications throughout the interconnection application process. Documents are uploaded in real time, thereby providing Applicants with the up-to-date status of their applications. RECO has integrated its IOAP with other Information Technology systems to allow basic customer information from its Customer Information Management System to populate automatically into the appropriate IOAP form fields. This system connectivity enhances the Applicant experience and application process by reducing the Applicant’s need to enter data that already exists in other Company systems. In addition, RECO’s IOAP permits only completed applications to be submitted which expedites the review process.

Further, the IOAP triggers interconnection application work requests to be sent to RECO’s metering department, and updates automatically new DER applications and installations into the Company’s geographic information system. Finally, the Company has automated the DER applications process screening for DERs less than or equal to 50kW and supplemental screens for DERs larger than 50kW. RECO accomplished this automation by integrating its IOAP with the Company’s Distribution Engineering Workstation/Integrated System Model (“DEW/ISM”) back-end systems. This process improvement was highlighted as a best practice opportunity in the Electric Power Institute (“EPRI”) “Navigating DER Interconnection Standards and Practices” project.¹⁹

Given the maturity and success of RECO’s IOAP, the portal’s interoperability with RECO’s other internal systems, and the flexibility to customize the portal for changes in the interconnection process, RECO will continue to operate its own interconnection portal and strongly opposes the establishment of a statewide interconnection portal.

Residential Solar Sizing

Today, the size of an onsite, behind-the-meter residential solar system is limited by the customer’s historical twelve-month period of consumption.²⁰ Adjusting this rule to account for prospective increases in consumption, for example due to the addition of heating electrification equipment or an electric vehicle charger, raises a variety of issues that must be carefully

¹⁹ *Recommendations for Improving Orange and Rockland Utilities’ Interconnection Processes & Procedures: Custom Utility Report*. EPRI, Palo Alto, CA: 2018. Navigating DER Interconnection Standards and Practices Supplemental – Part II.

²⁰ N.J.A.C. §14:8-4.3(a)

considered prior to enactment of any changes. A thorough examination that balances the developer's business model with the cost shift to non-participating customers must be undertaken and should include a review of the oversight needed to make sure the residential customer implements those electrification measures and the timing of implementation. Allowing a customer to oversize its rooftop solar system may lead to the customer becoming a generator for an extended period of time. As such, that excess generation should be compensated at a wholesale rate and not carried forward to offset the increased load resulting from the prospective changes. This type of compensation framework will minimize the cost shift between those customers with oversized rooftop solar and those without solar or who "right-sized" their solar system initially. In addition, the impact on solar incentives, such as solar renewable energy certificates ("SRECs"), transition renewable energy certificates ("TREC"), and SREC-IIs, must be analyzed and the programs adjusted accordingly so that customers with oversized systems do not reap benefits beyond those contemplated under the current solar incentive programs rules.

In addition, any upgrades made by the utility because of the larger size of the solar project should be borne by the customer installing the oversized system, unless the additional electrification efforts come online soon after the solar is installed.

Data Access

Customer and system data is critical to achievement of the State's clean energy goals, including increasing the amount of renewable assets connected to the electric distribution system. Sharing this data can support third-party business models which enables new markets, empowers customers to manage their electricity consumption, and provides useful information to renewable developers, EV charging infrastructure site hosts, and industry to inform their business and technical decisions. Leveraging this data allows these providers to focus their efforts on deployment of clean energy assets and programs that support the reliability and resiliency of the distribution system and enhance the ability of customers to adopt clean energy technologies.

Working with industry and other stakeholders, the EDCs and BPU Staff can understand the data needs of third parties which must be balanced with the privacy and cybersecurity standards needed to protect both the distribution system and customers' expectation in the privacy of their own data. Sharing data in a user-friendly way can ease accessibility while offering easy-to-understand data geared towards the needs of third parties. RECO currently offers customer data to authorized third parties via Green Button Connect. In addition, as discussed above, RECO provides granular system data via its hosting capacity maps.

The BPU has acknowledged the need for data access, sharing mechanisms, and the importance of privacy and security standards through its Data Access Proceeding. Data access issues, including privacy standards and data security agreements, are not unique to the Grid Mod efforts and should be developed and established through the Data Access Proceeding so that statewide, holistic standards are established that balance the needs of customers, industry, EDCs, the State, and other stakeholders while producing certainty and transparency for all parties.

Customer-Sited Switches and Adapters

Tesla Energy recommended in its January 28, 2022 presentation that a variety of customer-sited switches and adapters be authorized for installation on customer premises and on the utility meter. Prior to general BPU authorization of the installation of such devices, manufacturer standards must be established, after a thorough and careful analysis, so that these devices not only support the customer's goals for installation savings but more importantly address utility concerns for worker safety. For example, these devices cannot allow customer generated electricity to flow back into the distribution system during outages when the EDC shows the local lines as not energized. In addition, any collars or other adapters attached to the meter must not interfere with meter reading or render the meter unavailable or inaccurate.

Hosting Capacity Maps

RECO has offered its Hosting Capacity Maps since March 2019 and added information to guide EV charger applicants with siting ("Reverse Hosting Capacity") in December 2020. RECO's maps are informed by New York working groups, in which its parent company, O&R, participates. Based on years of discussions, the New York working group has agreed that updating the Hosting Capacity Maps twice a year is sufficient to capture the changing landscape for renewables interconnection. RECO believes the same holds true for New Jersey and recommends a biannual update.

Smart Inverters

RECO recognizes the important role that smart inverters play in a modern grid. As stated during RECO's presentation on January 14, O&R worked with the New York State Energy and Research Development Authority ("NYSERDA") to study smart inverter functionality and interoperability. Establishing requirements for smart inverter functionality, such as Volt-Watt, Volt-VAR, and Ride-Through, is critical prior to activating these devices. A working group of EDCs, industry, BPU Staff, and other stakeholders should be established to understand the functionality needed and available and the impact on each EDC's distribution and related systems. RECO is working to implement smart inverters as part of system-wide enhancements that will work with ADMS, DERMS, and other monitoring and control functionalities - all essential to modernize the electricity grid.

Integrated Distribution Plan ("IDP")

The Energy Master Plan requires that each EDC file an IDP within one year of a BPU order setting forth the IDP requirements. The Grid Mod proceeding is not the appropriate forum to determine the contents or even the overall tone of an IDP. The IDP can be a roadmap of each EDC's plans to meet the State's and the EDC's clean energy goals and should not contain processes and procedures at a granular level. For example, an EDC could discuss its interconnection portal, which supports the State's interconnection application, review, and approval processes. The IDP should not contain a how-to manual for use of that portal. In

addition, the IDP could provide information on the work the EDC has, and plans to, undertake surrounding the modernization of its distribution system to support the increased integration of DERs and other electrification efforts.

Conclusion

The transformation of the electric system to a modern grid that enables increasing levels of DER integration, monitoring and control of those assets, updated EDC business models, non-wires solutions and pilots, and increased electrification efforts, including for EVs and buildings, is a timely undertaking that must be accomplished with a holistic approach to reviewing and updating standards, processes, and rules that support achievement of the State's clean energy goals in an efficient and cost-effective manner. All of this must be accomplished with the overriding imperative of providing safe, reliable, and resilient electric service to customers. RECO looks forward to working with the BPU, Staff, industry and other stakeholders in this critical transformation journey.