IN THE MATTER OF NEW JERSEY GRID MODERNIZATION
/ INTERCONNECTION PROCESS
Docket No. QO21010085
Comments of Rockland Electric Company on Draft Report

Rockland Electric Company (RECO or the Company) supports the New Jersey Board of Public Utilities' (Board) efforts to review and modernize the New Jersey's electric grid to better manage and incorporate distributed energy resources (DERs), including solar. The Company has been actively involved in this proceeding – participating in and presenting at stakeholder meetings, responding to data requests, and meeting with the Board's consultant, Guidehouse Inc. (Guidehouse).

RECO supports many of the recommendations in the draft Report[1] and notes that many (*e.g.,* non-renewable fuel source proposal) exceed the purpose of this proceeding to review the current interconnection standards and processes, and should be addressed outside of this proceeding. In addition to its specific comments set forth below under each Finding and Recommendation (F&R), RECO offers the following overall observations.

It cannot be overstated that flexibility is paramount in implementation of processes. When updating the regulations and standards, the Board should focus on outcomes and results, and not the underlying methods and processes to achieve them. For example, the Report recommends an automated interconnection process be implemented by each electric distribution company (EDC) (*i.e.,* the result) but does not dictate the specific software to be used by an EDC. This approach appropriately affords flexibility to individual EDCs to implement the software that works best with its existing systems.

Transparency is also critical. Providing information, processes, and standards to developers and other third parties in an easy to navigate and understandable fashion will increase the deployment of DERs. RECO's current Interconnection Online Application Portal (IOAP) provides developers with information throughout the interconnection process in one, easy-to-find location. In addition, development of an interconnection handbook and/or manual can provide developers and other interested stakeholders with information (*e.g.,* application processes, technical standards, and timelines) all in one user-friendly document. These documents can be posted on an EDC's website, along with frequently asked questions (FAQs), to help developers and others navigate the EDC's interconnection processes and procedural guidelines. Tariffs can be challenging for third parties to understand and navigate. Because each EDC has a different tariff structure, there may not be consistency on where such information is contained. Development of a common interconnection requirements document that would be adopted by each EDC may alleviate these concerns.

[1] Grid Modernization Study: New Jersey Board of Public Utilities, draft issued June 13, 2022. Guidehouse. (Report)

Forums for ongoing collaboration and feedback are also important. RECO supports the establishment of a technical working group during which stakeholders can work with EDCs and Board Staff on all interconnection issues and recommends that each participating entity designate a liaison to represent that entity's interests.[2] Subcommittees should be established as needed. This will provide consistent results and reduce the potential for duplicate work. The Report notes in different F&Rs that a working group or stakeholder process should be established by the Board and other times by the EDC. However, RECO recommends that most, if not all, of these recommendations be directed to the technical working group, as that group is best positioned to analyze the issues holistically in light of other working group topics. Managing attendance at one working group, rather than numerous stakeholder processes, is easier and more efficient for developers and EDCs who can assign the appropriate subject matter experts to the topic at hand. This recommendation should be implemented as soon as possible as it would provide valuable input to the implementation of many of the other F&Rs.

Finally, the Report should review each F&R considering FERC Order No. 2222[3] to determine whether there is a potential impact and whether a delay in implementation for a particular finding is advisable. The impacts of aggregating smaller assets, that will be implemented under FERC Order No. 2222, and of any assets participating in the wholesale market must be considered so that interconnection processes do not need to be updated again in the near term, and therefore implemented twice by the EDCs.

Finding and Recommendation (F&R) 1: IEEE 1547 reference is out of date

RECO supports updating the regulations to adopt a more recent version of IEEE 1547 and notes that clarity is needed as to which sections of IEEE 1547-2018 will be adopted. Application of the standards and the timing for implementation must be considered on a granular level. For example, volt-var and volt-watt functionality is included in the recent version. Examples of specific issues that must be addressed include: (1) how these functions will be applied by the EDCs; (2) the extent of a grace period for developers to meet the new standards, if 1547-2018 compliant inverters are not readily available; and (3) whether these changes apply not only to new installations but also to upgrades.

Clarity is also needed regarding what is expected of a "conformity assessment process." RECO recommends that prior to adoption of an updated IEEE 1547 standard, all related issues should be discussed in the technical working group proposed in F&R 5, and that the EDCs be given flexibility to develop processes that fit within their current work management flow and structure, so they can be implemented in an efficient and quick manner.

[2] In New York's Interconnection Technical Working Group, each participating entity has a designated liaison to represent the entity's interests.
[3] Docket No. RM18-9-000; Order No. 2222, Participation of Distributed Energy Resource Aggregations in Markets Operated by Regional Transmission Organizations and Independent System Operators (issued September 17, 2020) 172 FERC ¶ 61,247

RECO also supports the continued evaluation of evolving IEEE 1547 standards and recommends that this review be part of the technical working group.

F&R 2: Opportunities to streamline the interconnection process

RECO supports the Report's recommendation to automate the interconnection process and implement EDC interconnection application software, as well as the Report's focus on the outcomes and functionality of this process rather than dictating a specific software. The software 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 information technology (IT) investment plans. RECO's IOAP currently tracks applications and provides the recommended notifications, which are important tools in RECO's successful interconnection process. RECO supports use of a software-based application that is capable of tracking key information and recommends that Board Staff work with the EDCs to determine what constitutes "key" information. This same group should collaborate to update this key information as warranted. A collaborative approach is critical, especially if this information will form the basis for key performance indicators (KPIs), so that an understanding of which party controls the results (*i.e.,* EDC or developer) can inform any changes.

While storage of electronic records is important to the Board, EDCs, and developers, the specifics as to the inputs that should be stored and the definition of the KPIs must be established with sufficient time to build tracking capabilities. The EDCs should work with the Board in developing the inputs and KPIs taking into account the software's capabilities and the inputs that are under EDC control. Once developed, adequate time will be needed for implementation. Similarly, requiring software-based improvements within a set timeframe may not be realistic given that some changes may need longer implementation timelines. Changes to these inputs and KPIs must be kept to a minimum so that reporting is successful and time is focused on the interconnection process itself and not updating tracking software.

Entities permitted to audit the interconnection software must be limited to the EDC's third-party consultants and, if required, the Board and its authorized consultant(s). Necessary non-disclosure agreements and other customer and cyber protections should be put in place to protect sensitive customer information and EDC systems.

F&R 3 – Existing online EDC hosting capacity maps are inconsistent across EDCs

RECO supports the Report's recommendation to update the EDC hosting capacity maps annually. RECO currently updates its maps twice a year. Based on years of discussions, the New York working group, of which RECO's parent Orange and Rockland Utilities, Inc. (O&R) is a member, has agreed that updating the hosting capacity maps twice a year is sufficient to capture the changing landscape for renewables interconnection and changes in load. Implementing changes more frequently due to EDC-specified amounts for generation or load changes may be hard to determine and would require almost full-time monitoring. Updating the hosting capacity map to reflect changes in technical standards or other changes resulting from the technical working group are best completed on a scheduled basis. Based on O&R's experience

in New York, bi-annual updates are sufficient to capture these changes and provide transparency to developers.

RECO recognizes the clarity that shared lexicons for the maps may provide but notes that the Company has deployed multi-state maps that may make it difficult and more costly to implement these changes. Conforming multi-state maps to multiple sets of requirements may require an extensive amount of work. Again, flexibility is critical to achieve the desired outcome. For example, providing a key that interprets the naming convention on the map and aligns it with the statewide lexicon is a way to cost-effectively offer consistency.

The benefits of publishing detailed electric system and controls equipment data does not outweigh the costs nor the security concerns. Identifying detailed electric system and controls equipment that may require a system upgrade on the hosting capacity maps raises security concerns because some of that equipment is considered Critical Energy Infrastructure Information (CEII). Although provision of this information may provide slightly more clarity to developers, this benefit must be weighed against the security concerns. Further, the clarity provided should not be relied on by developers as changes to this equipment will be more frequent than map updates such that developers would not be able to rely on this information and as to whether a facility study would be needed. RECO notes that New York's recently adopted Cost Sharing 2.0 methodology,[4] requires updates to EDC hosting capacity maps to focus on substation system upgrades that require long lead times to construct (*i.e.,* longer than twenty-four months). Instead of displaying individual equipment, RECO recommends the New York approach which will provide adequate information on which a developer can base its initial decision.

Likewise displaying a unit cost guide for system upgrades may be misleading because the upgrade cost of the project is determined by the actual site and upgrades needed. Cost guides for distribution circuit level upgrades may vary significantly from actual costs based on the specifics of the site. Each New York EDC has developed a list of typical distribution and substation cost estimates for DER interconnection. It is important to note that the cost estimates are provided to developers for planning purposes - a detailed, binding cost estimate is provided with the system impact study. Consequently, developer reliance on a unit cost guide could lead to decisions based on inaccurate data. A facility study would still be needed to determine the actual costs on which the developer can make an informed decision.

The Company recognizes the importance of a developer's understanding the available capacity of a particular site at an early stage in a project's lifecycle. The New York EDCs provide a pre-application study option to developers that are investigating potential locations for their DER siting. The study provides initial data similar to that provided in the hosting capacity maps. Specifically, the study report includes: operating voltage of closest distribution line; phasing at

[4] 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) and Order Approving Compliance Filings, With Clarifications (issued April 14, 2022).

the site; approximate distance to 3-Phase (if only 1 or 2 phases nearby); circuit capacity (MW); fault current availability, if readily obtained; circuit peak load for the previous calendar year; circuit minimum load for the previous calendar year; approximate distance (miles) between serving substation and project site; number of substation banks; total substation bank capacity (MW); total substation peak load (MW); aggregate existing distributed generation on the circuit (kW); and aggregate queued distributed generation on the circuit (kW). 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.

F&R 4 – No way to accelerate interconnection projects within NJ rules

RECO supports an optional pre-application process for all projects and notes that it may offer only a high level view of the interconnection needs. In addition, it may not be cost-effective for some smaller projects. Requiring a large amount of detailed results in a pre-application process turns it into an actual application, the latter of which may be more useful and reserve a position in the queue. The Company also supports the development of a FAQ webpage once the standards for fast tracking and pre-application process are developed.

RECO currently offers a fast-track screening process for certain projects. The Company has automated the 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.[5] Because other EDCs may offer a different solution, the focus should be on the end results of offering a fast track screening process and not on the process itself. EDCs have different system capabilities making a statewide process difficult and more costly to achieve.

The EDCs can work together to develop and agree to the end results of both a pre-application process and a fast track screening process. However, the specific methods and processes to achieve these results must be EDC-specific, similar to the approach set forth in F&R 2. Such an approach will permit each EDC to choose the software application that meets the State's needs and conforms with and supplements the EDC's own internal systems and processes. Although the need to move quickly is important, more than six months will be needed to establish these standards given the changes to be made to the regulations and associated interconnection processes and the different status of each EDC's current system capabilities.

[5] *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.

RECO agrees with the Report's acknowledgement that a pre-application screening process may produce additional work for the EDCs that they are not currently staffed to handle. However, outsourcing this work to external third parties is not efficient because an EDC's internal systems are unique and some of the work may be manual. Therefore, RECO recommends that to the extent needed, additional headcount be approved instead of outsourcing the work.

F&R 5 – EDC-specific interconnection rules or tariffs

As noted above, RECO supports the establishment of an ongoing technical working group that will discuss and consider a myriad of interconnection issues including technical standards, and new equipment capabilities and their potential impact on an EDC's system. During the technical working group meetings, EDCs will have an opportunity to discuss the electric grid modernization investments that are critical to enabling the accelerated and increased deployment and operation of DERs, so that all stakeholders understand the impacts of proposed changes and recommendations. An open and honest dialogue is intended to produce collaborative results that benefit industry, EDCs, and the State and should not be viewed as a means of gathering otherwise non-public information.

Including interconnection rules in an EDC's tariff may be burdensome as it requires each EDC to conform tariff leaves to updated rules which are subject to Board approval. Instead, RECO recommends the inclusion of these detailed rules in a business practice manual and/or handbook which are easier to update, and may be more user-friendly tools for developers, and can be referenced in the tariff as well as posted on an EDC's website. Alternatively, RECO notes that New York's Standardized Interconnection Requirements (SIR) has addressed the interconnection process in more detail than New Jersey's current rules and can be used as a model for update of the New Jersey rules.[6] In New York, the SIR is included as an addendum to the tariffs of each of the investor-owned utilities and is a common document for each utility.

Appendix B of the Report, which is modeled on California – a state in which no New Jersey EDC has an affiliate, is another example of an interconnection process. Both New York and California have successful interconnection processes that should be leveraged as a jumping off point for development of the New Jersey EDC's documentation and can form the basis for the initial conversations among the EDCs to align their processes, if practical. Any of these documents could also clarify technical criteria in N.J.A.C. 14:8-5 to set forth the EDCs' joint interpretation. As the technical working group recommends changes that are agreed to by interested parties, these updates can be more readily updated in a manual, handbook, or SIR-type document.

While RECO is not opposed to hiring a consultant to work with the EDCs, the consultant's responsibilities should be limited to administrative support to facilitate interconnection discussions and schedule SMEs to help understand specific issues. The consultant should not

[6] Report page 82: F&R #5 Rationale (a) "New Jersey can leverage ideas from existing interconnections rules such as California Rule 21 to achieve the goals in the EMP within the required timeframe, avoiding a long stakeholder process." This rationale does not preclude leveraging processes from states other than California.

influence or approve EDC grid modernization investments. Clarity is needed regarding whether the consultant would be hired by the EDCs or the Board, and how the consultant would be compensated. The interplay between the consultant's role and the technical working group must also be established.

The proposed "Regulatory Sandbox" should be part of the technical working group wherein equipment vendors and other third parties can vet their equipment and proposals with the EDCs to learn about and discuss new equipment and standards, their impact on the electric grid, any interactions with existing regulations (*e.g.*, use of revenue grade meters for billing customers), and other benefits provided. This equipment may be tested as a pilot program in one or more EDC territories before it is approved and rolled out statewide. Results from this pilot can be reported back to the technical working group and Staff to determine whether to move forward with statewide approval. The Regulatory Sandbox can also include pilot programs initiated by the EDCs such as implementation of new technologies integrated with existing EDC systems or cost recovery pilots that authorize forward-looking approval and cost recovery of utility investments.

Further, the Report recommends regular stakeholder process reviews of new equipment and technology adoption, as well as quarterly meetings to review legacy practices and future technology advancements and their impact on the grid. RECO recommends that all these topics be discussed by the technical working group, with subcommittees established as necessary, in order to combine all lessons learned and decisions / understandings in one place. Establishing multiple committees and stakeholder groups may result in duplicate work with inconsistent results. In addition, many participants will be the same in multiple groups.

F&R 6 – Interconnection application queueing and cost allocation process is serial

Queue management is critical to a successful deployment of renewable assets. RECO supports a queue management process that is transparent to developers, establishes timelines for both the EDC and developers, and minimizes the potential for "queue sitting" of non-viable 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 Order No. 2222 may also impact the current approach to clustering due to the need for aggregation studies. Addressing the queue management process and associated cost allocation issue in the technical working group, or a subcommittee thereof, will allow for an informed and collaborative implementation of, and any necessary subsequent modifications to, the Board's current policies.

As discussed under F&R 5 above, any rules should be implemented on a statewide basis and incorporated into either Board regulations, an SIR-type common document, or an EDC's handbook or manual. If an SIR-type common document is not developed, each EDC should have the discretion to either update individual tariff leaves with detailed processes regarding clustering studies or a fast track process, for example, or include them in an EDC's manual and

handbook. If included in the manual and handbook, the tariff can reference the associated regulations and direct developers and other third parties to the EDC's handbook and manual.

F&R 7 – Cost allocation and cost recovery options for accelerated interconnection of renewables not yet defined

RECO supports a cost allocation method based on cost causation and recommends looking to New York's recently adopted Cost Sharing 2.0 methodology.[7] Cost-Sharing 2.0 is designed to charge various interconnection applicants for substation upgrades on a pro rata basis, rather than placing the entire costs upon the first applicant, which may be reimbursed subsequently. A utility would reimburse a "Triggering Project" within 60 business days of "Sharing Projects" paying 100 percent of their respective payments. Reimbursements would be based on cost estimates. Once actual costs are known, the utility would conduct its final cost reconciliation for the Triggering Project and any Sharing Projects, and would send final bills or refunds, as appropriate, to participants. Cost Sharing 2.0 also seeks to avoid Free Ridership by ensuring that developers providing funding for projects under Cost-Sharing 2.0 and other utility customers receive equitable treatment. To accomplish this, developers are required to pay their fair share when using an upgrade that had been previously funded under Cost-Sharing 2.0. To assist developers and provide transparency, the utilities will add information to their hosting capacity maps that focuses on system upgrades that require long lead times to construct (*i.e.,* longer than twenty-four months). To manage ratepayer impacts, a limit for Cost-Sharing 2.0 eligibility was adopted such that costs associated with unassigned capacity borne by utility ratepayers are capped at two percent of each utility's distribution/sub-transmission electric capital investment budget per fiscal year.

Setting thresholds for upgrades that are socialized once exceeded puts the burden on a utility to demonstrate that the upgrade is prudently incurred after the fact. Whether a grid modernization investment (*e.g*., replacement of existing equipment to allow DER interconnection) is paid for by the developer or all ratepayers must be known at the time of interconnection. Waiting until a subsequent rate case when it may be determined that the developer should have paid for the cost puts the EDC at risk of making investments that it would not have otherwise made and now are not recoverable. This uncertainty dampens an EDC's support of DER deployment while unnecessarily benefiting developers.

F&R 8 – EDC Integrated Distribution Plans

RECO supports the development of Integrated Distribution Plans (IDPs) as called for in the Energy Master Plan. Specifically, the Energy Master Plan requires that each EDC file an IDP within one year of a Board order setting forth the IDP requirements. The Grid Modernization proceeding is not the appropriate forum to determine the contents or even the overall tone of an IDP. While the Company supports the development of IDPs, this is a longer-term

[7] 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) and Order Approving Compliance Filings, With Clarifications (issued April 14, 2022).

recommendation since it is important that the framework of an IDP be developed under a carefully thought through stakeholder process in conjunction with the many other ongoing proceedings. The Company looks forward to participating in a statewide proceeding to develop a holistic approach to its IDP.

F&R 9 – Non-renewable fuel sources

RECO notes that this recommendation to compensate "non-renewable resources" in a modified net energy metering methodology exceeds the focus of Grid Modernization and specifically the interconnection process. As such, the Company recommends that any consideration of expanding the fuel sources eligible for net energy metering compensation be reviewed in a Board-initiated, dedicated proceeding outside of the Grid Modernization proceeding. Whether the type of compensation received by non-renewable resources should be adjusted must be analyzed in a separate proceeding that holistically evaluates the impact of such change on all ratepayers. The issues surrounding rate treatment, potential cost caps, and shifting of costs to non-participating customers, particularly low- to moderate-income customers, among others, go beyond the interconnection process itself. Metering configurations and interconnection processes can be discussed as part of any separate proceeding.