NJBPU Grid Modernization Stakeholder Meeting #3

Rockland Electric Company Overview

January 14, 2022

COVID impact statement for Rockland Electric Company (RECO)

Impact of COVID on handling of interconnection requests		
Remote work	Supply chain issues	Other [please specify]
The team transitioned to remote work and continued to meet deadlines, respond to customer inquiries, and issue Permission to Operate (PTO) to projects.	None noted	

Introduction to RECO

- EDC 2021 characterization snapshot (all values are approximate for 2021)

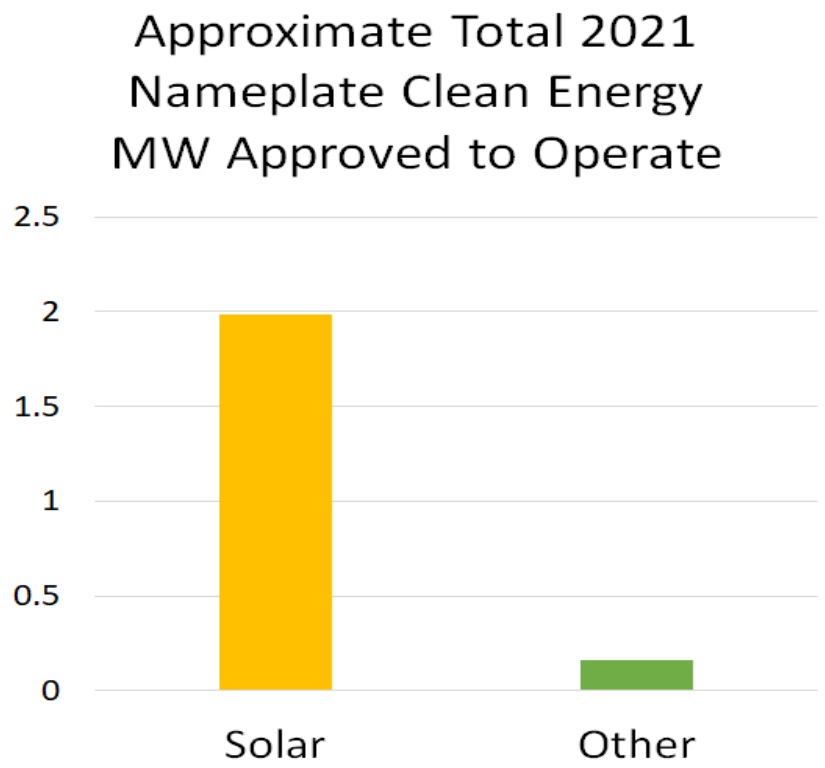
Electric Customers Served in 2021

73,948

Total Net Metering Connections* in 2021

140

* distribution-side connections



Introduction to RECO

- How many interconnection applications (approximately) were completed, withdrawn, or still pending at the end of 2021, by level and generation type?*

	SOLAR			WIND			CHP			OTHER		
	Completed	Withdrawn	Pending	Completed	Withdrawn	Pending	Completed	Withdrawn	Pending	Completed	Withdrawn	Pending
Level 1	666	65	168	0	0	0	0	0	1	20	6	19
Level 2	337	18	112	0	0	0	2	0	0	10	1	15
Level 3	4	4	2	0	0	0	0	0	0	0	1	1

* applications may have been initiated prior to 2021

The path to meeting the NJ clean energy goals

What resource gaps and policy changes need to be addressed to interconnect the required clean energy capacity?

- Holistic, technology-neutral approach when reviewing all resources and programs needed to achieve State's clean energy goals
  - Support Environmental Justice communities in the Company's service territory
- Prioritize distribution system needs to deliver safe, reliable, and resilient energy to customers while enabling projects that deliver multiple values and benefits to stakeholders, customers, and the grid
- Minimize customer bill impacts
- Transform the Energy Industry and Evolve the Electric Utility Current Business Model
  - Utility ownership of DER, EV charging infrastructure, clean energy assets, storage
  - Non-Wires Solutions
  - Pilot projects, including Research and Development / testing opportunities
  - Rate Design
- Establish a regulatory structure that enables a clean energy industry, reliability, resiliency, encourages investments, prioritizes safe operations, and smooths customer bill impacts

The path to meeting the NJ clean energy goals

What resource gaps and policy changes need to be addressed to interconnect the required clean energy capacity? (cont'd)

- Valuation and deployment of DERs and Clean Energy Resources managed by Cost Cap
  - Financing options (*e.g.,* Green Bank) instead of incentives to manage and minimize customer bill impacts
  - Enable retail and wholesale market for DERs to earn revenues
- Development of data access mechanisms, data privacy standards, and cyber security protections, as currently under consideration in the BPU's Data Access proceeding, is critical to customer engagement, third-party business models, and achievement of the State's clean energy goals

The path to meeting the NJ clean energy goals

What are possible mitigation plans to address resource gaps starting from the current status quo?

- Support transformation to a modern and resilient grid with focus on reliability
  - Foundational investments in information and grid technology, advanced control and monitoring, and communications infrastructure and customer facing technologies to manage two-way energy delivery infrastructure
- Approval of utility investments through Infrastructure Investment Program (IIP) or other forward-looking mechanisms
- Enhanced and granular forward-looking planning process which includes load modifiers and a 10-year look ahead
  - RECO has implemented this process
- Continue to transform how utilities engage with customers in energy use to meet changing customers' expectations
- Interconnection working groups that include EDCs, industry, and BPU Staff to meet on a regular basis to discuss both policy and technical issues related to the proliferation of the interconnection of clean resources
- Optimize peak demand to balance load and customer needs with availability of resources

The path to meeting the NJ clean energy goals

How might the mitigation plans change depending on the outcome of rules currently under revision (e.g., PJM, FERC Order 2222)?

- State and EDC programs and policies that are developed using a holistic, flexible, and adaptable approach can evolve more efficiently and effectively in response to changes to statutes, regulations, goals, and other rules
- Establishing annual statewide review process to include goal progress and achievement, monitoring costs and ratepayer impacts, and market and third-party engagement will enable appropriate program and target adjustments
- New and evolving utility business models to facilitate achievement of clean energy goals, such as utility participation of clean energy assets in wholesale markets
  - New York Public Service Commission is encouraging battery storage participation in wholesale markets. RECO can leverage experiences and lessons learned by its New York affiliates
- Development of Data Security Agreements and other customer protections where necessary to protect both customer data and utility systems

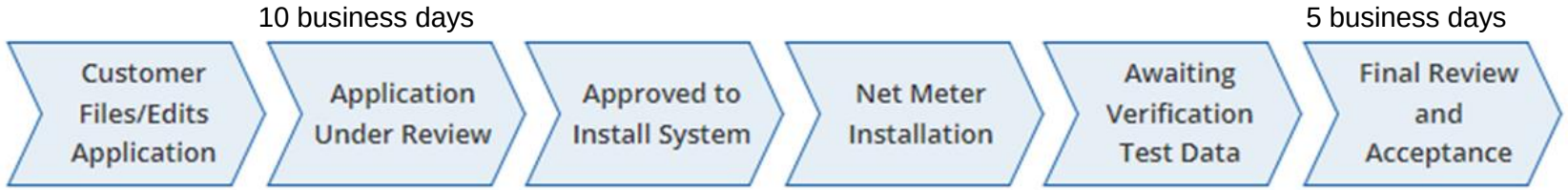
Interconnection Application Approach

For Level 1, Level 2 and Level 3

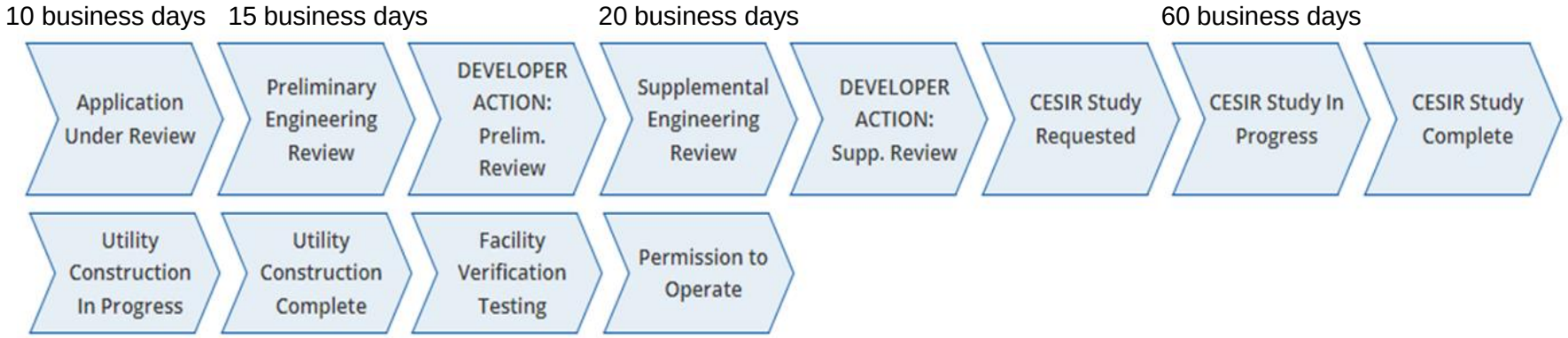
Application Process

Level 1
Level 2
Level 3

Level 1 and Level 2 (up to 50kW AC):



Level 2 (over 50 kW AC) and Level 3:



Interconnection Application Approach

For Level 1, Level 2 and Level 3

	What is going well?

Level 1
Level 2
Level 3
	• RECO's interconnection application approach provides clarity, transparency, and certainty to developers
	• RECO has established internal processes - applications complete within 10 business days
	• RECO uses an Interconnection Online Application Portal (IOAP) to manage and process applications:
	  • IOAP provides amount of fee to customer at time of application
	  • IOAP contains application checklist to assist customers with application process (*e.g.*, documents to be submitted)
	  • IOAP requires complete application and fee to be submitted prior to acceptance
	  • Customer can check on application status at any time – real time document updates
	  • IOAP is flexible, configurable to meet changing needs

Interconnection Application Approach

For Level 1, Level 2 and Level 3

	What could be improved?
Level 1 **Level 2** **Level 3**	• After certain period of inactivity, projects should be removed from the EDC's queue to allow viable projects to use hosting capacity • Continue training and updates for Customer Service Representatives for an enhanced customer experience

Interconnection Staffing for RECO

Were present staffing levels sufficient to meet company internal and/or N.J.A.C. application timelines for each stage of the interconnection application process in 2021?*

Stage	Sufficient / Not sufficient
Initial Application / Intake	
Level 1 Application Screening	Sufficient
Level 2:	
Application Technical Review Staff	Sufficient
Load Study Engineer	Sufficient
Inspection Engineer	Sufficient
Level 3:	
Application Technical Review Staff	Sufficient
Load Study Engineer	Sufficient
Inspection Engineer	Sufficient

* i.e., were there difficulties meeting internal or N.J.A.C. target timelines that were considered by the EDC to be attributable to not enough staff to perform the required tasks in the target timeframe

N.J.A.C = New Jersey Administrative Code

Forward-looking Priorities for RECO

What would be the expected impact on the EDC's ability to meet current N.J.A.C. or internal company timelines if there were a substantial (e.g., more than 25%) increase in interconnection applications without an increase in staffing or other resources?

Level 1	Depending on the actual increase in the number of solar projects requesting PTO, without additional staffing, RECO's response/processing time may increase for Level 1, Level 2, and Level 3 applications.
Level 2	Please see response to Level 1 above. In addition, any required studies could take longer to complete without additional staffing. A large increase in the number of required studies may require the use of consultants which cost more than internal resources.
Level 3	Please see response to Level 1 above. In addition, any required studies could take longer to complete without additional staffing. A large increase in the number of required studies may require the use of consultants which cost more than internal resources.

Interconnection Timeline Delays for RECO

What were the most frequently missed milestones by the customer in 2021? *Add/Remove "X" to all that apply.*

[X] **Applications**

- Level 1: Incomplete or inaccurate application documents
- Level 2: Incomplete or inaccurate application documents including missing application fees
- Level 3: Incomplete or inaccurate application documents including missing application fees

Funding

Permitting

Third party delays

- RECO does not track data on developer delays and therefore cannot speak to funding, permitting, or third-party delay issues

RECO works with developers and guides them through each step of the application process. The Interconnection Online Application Portal supports successful management of the application process and customer interactions.

Interconnection Timeline Delays for RECO

Were there common delays that impacted the actual date of operations permission to operate (PTO) in 2021?

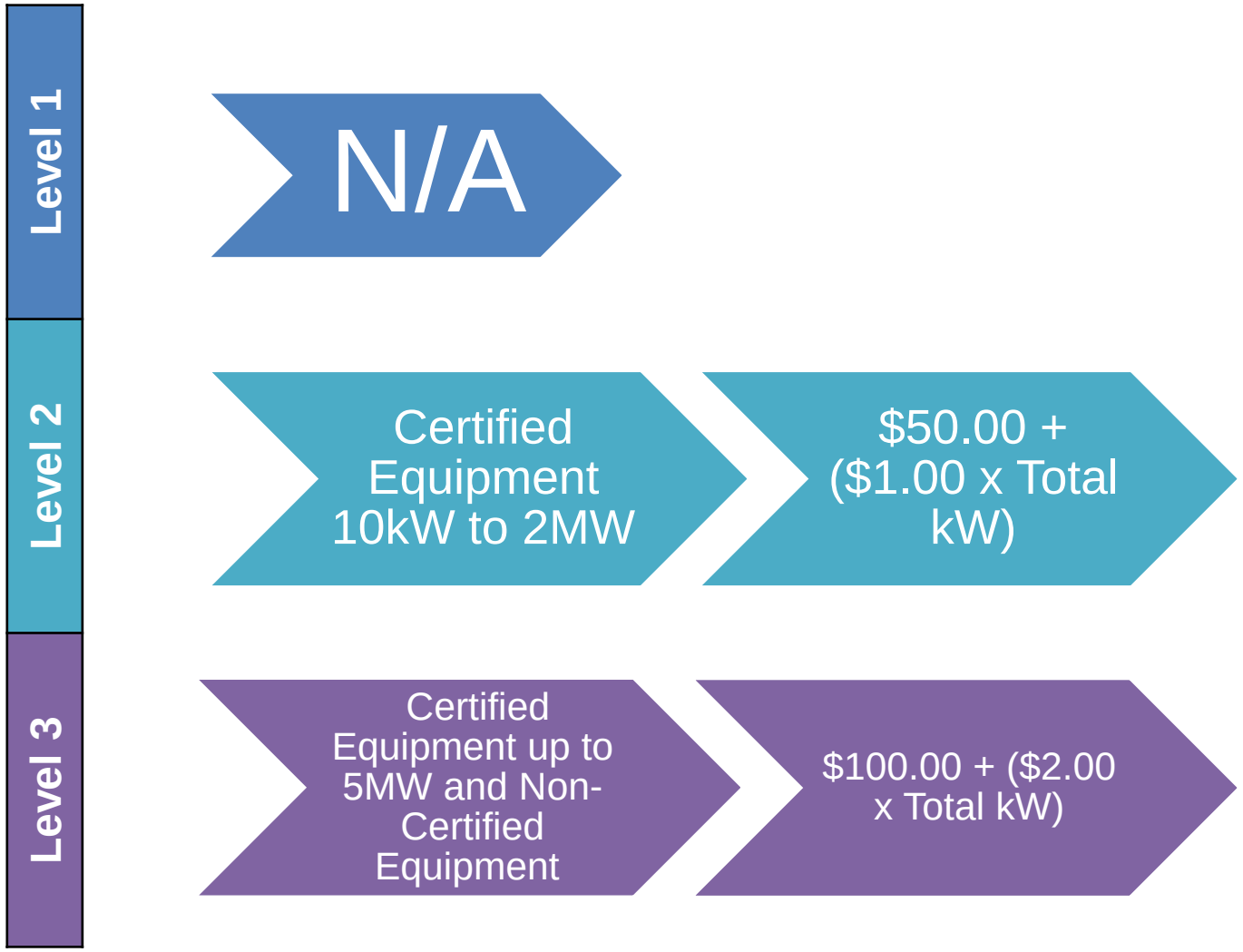
Incomplete paperwork for Part 2 of application.
Weather delays for scheduling verification tests.

In 2021, what were common reasons each of these delays?

See above

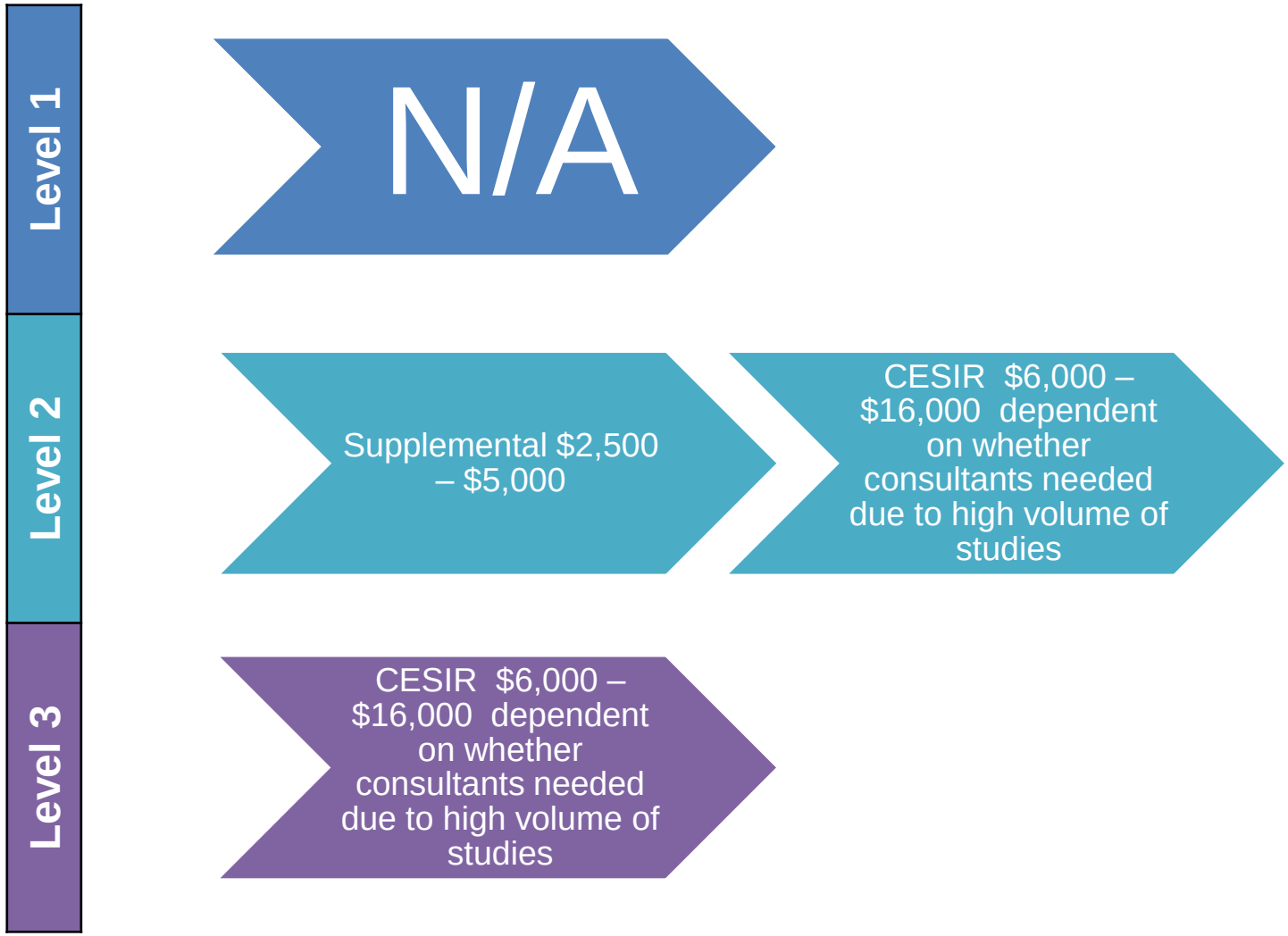
Application Fees for RECO

How are application fees assessed, where applicable?



Load Study Fees for RECO

How are application fees assessed, where applicable?



Cost Responsibility for System Upgrades for RECO

	In 2021, what were the primary drivers considered to be for upgrading the system?	How was the cost allocation primarily determined for upgrades?
Level 1	1. Transformer upgrade due to load beyond rating (safety)	1. Customer is responsible for full cost of upgrade
Level 2	1. Transformer upgrade due to load beyond rating (safety) 2. Distribution or transmission upgrades due to load	1. Customer is responsible for full cost of upgrade as determined by engineering study results
Level 3	1. Distribution or transmission upgrades due to load	1. Customer is responsible for full cost of upgrade as determined by engineering study results

Drivers and mitigation strategies for projects that exceeded the cost envelope in 2021 for RECO

Clustering

How many projects were interconnected using a clustering approach in 2021?

- Projects in queue are studied in the order in which they are received
- Exception possible for multiple projects from the same developer on a particular circuit

Interconnection Fees for RECO

What were the approximate average fees paid by interconnection customers in 2021 for each stage of the interconnection application process?

Stage	Average Fees (Approximate)
Initial Application Screening	N/A
Level 1 Application	
Level 2:	
Application Technical Review	$50.00 + ($1.00 x Total kW)
Load Study	varies
Inspection	N/A
Level 3:	
Application Technical Review	$100.00 + ($2.00 x Total kW)
Load Study	varies
Inspection	N/A

Are load study fees due 100% up front for work to proceed, or is a deposit (e.g., 10%) sufficient for work to go ahead?

Stage	% Upfront Load and Cost Study Fees
Level 2	100%
Level 3	100%

Telemetry for RECO

What are the telemetry (revenue grade metering) requirement thresholds for your EDC?

Area	Requirement Threshold
Project Capacity	500 kW or greater must be primary metered for solar
Serial Versus Parallel Circuits	RECO/O&R is a radial system, not a network system
Other Requirements (Please Specify)	Other technologies may have other requirements All solar receive AMI meters

Renewables Integration for RECO

Hosting Capacity

Question	Response
What percent of total circuit miles are closed to new distributed energy resources (DER)?	0 percent
Were hosting capacity maps available in your utility jurisdiction in 2021?	Yes, RECO's Hosting Capacity Maps went live in March 2019
When was the last update?	October 1, 2021
What is the targeted update frequency for hosting capacity maps?	RECO's Hosting Capacity Maps are updated every six months

Renewables Integration for RECO

The Company has leveraged or plans to leverage the following renewable resources integration strategies in its service territory. *Add/Remove "X" to all that apply.*

[X] **Inverter-based Controls**

- Developing Smart Inverter requirements for Volt-Watt, Volt-VAR, Ride-Through, etc.
- Partnered with the New York State Energy Research and Development Authority (NYSERDA) to study Smart Inverter functionality and interoperability

[X] **Volt-Var Controls**

- Supported BPU study on VVO benefits/costs
- Partnered with NYSERDA to study VVO implementation

[X] **ADMS**

- Deploying new DSCADA and ADMS with advanced situational awareness capabilities, integration of field devices, and granular analytics. Implementation of advanced applications for FLISR, VVO, State Estimator, and DERMS are planned for future phases.

Renewables Integration for RECO

N.J.A.C. § 14:8-5.4 3(c) Level 1 interconnection review

Question	Response
What percentage of Level 1 applications in 2021 required revision due to N.J.A.C. §14:8-5.4 3 (c)?	0 percent

N.J.A.C. §14:8-5.4 3 (c) The aggregate generation capacity on the line section to which the customer-generator facility will interconnect, including the capacity of the customer-generator facility, shall not contribute more than 10 percent to the distribution circuit's maximum fault current at the point on the high voltage (primary) level that is nearest the proposed point of common coupling.

Renewables Integration for RECO

N.J.A.C. § 14:8-5.4 3(e) Level 1 interconnection review

Question	Response
What percentage of Level 1 applications in 2021 required revision due to N.J.A.C. §14:8-5.4 3 (e)?	0 percent

N.J.A.C. §14:8-5.4 3 (e) If a customer-generator facility is to be connected to a radial line section, the aggregate generation capacity connected to the circuit, including that of the customer-generator facility, shall not exceed 10 percent (15 percent for solar electric generation) of the circuit's total annual peak load, as most recently measured at the substation.

Customer Satisfaction for RECO

Do you solicit customer satisfaction feedback on the following that you are willing to share? If so, please share the results.

Area	Top Level Customer Survey Results
Application Process Overall	RECO does not offer a customer satisfaction survey. The Company is currently evaluating a customer satisfaction survey process.
Application Process to Approval to Install (ATI)	
Application Process between ATI and Permission to Operate (PTO)	
Load Study Process (where applicable)	

Does your website have a frequently asked questions (FAQ) specifically for issues with interconnection requests?

- The Company's website has FAQs about billing and crediting and plans to add additional FAQs about interconnection requests

Have questions or need to contact us?

Reach out to us at
ORU_DG@oru.com
or
845-577-3683

Thank you