National Grid Cobleskill - Ag Solutions Fair 2024

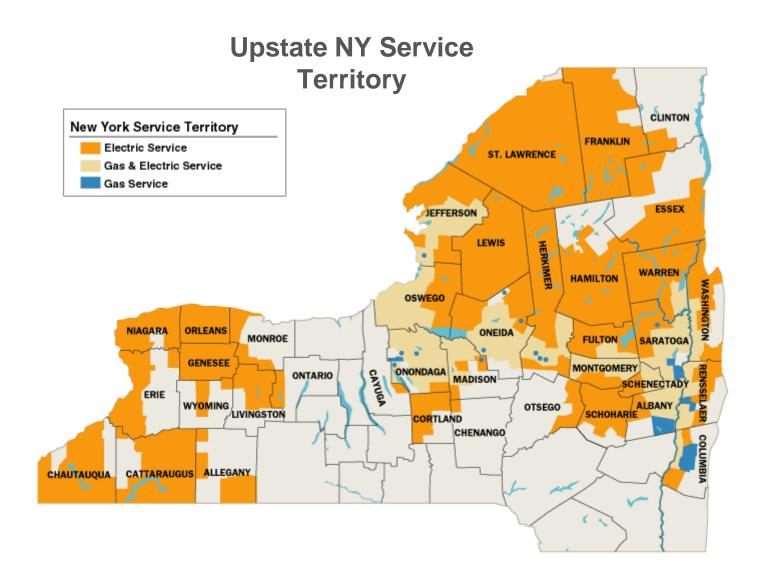
Marie Schnitzer, NY DG Ombudsperson February 16, 2024

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About National Grid

National Grid (NYSE: NGG)

- electricity, natural gas, and clean energy delivery
- serving more than 20 million people through our networks in New York and Massachusetts.



National Grid

Electric Generation - Interconnection Processes



New York Interconnection Framework



Standardized Interconnection Requirements (SIR) Process



Cost Sharing 2.0



Best Practices & Interconnection Resources

New York Electric Interconnection Framework



Standardized Interconnection Requirements

Ideally for Distribution
Interconnection Up to 5 MW for VDER Compensation



Utility Process

Ideally for Distribution
Interconnection not seeking
VDER Compensation and not
under SIR or NYISO jurisdiction

Consult with interconnecting utility.



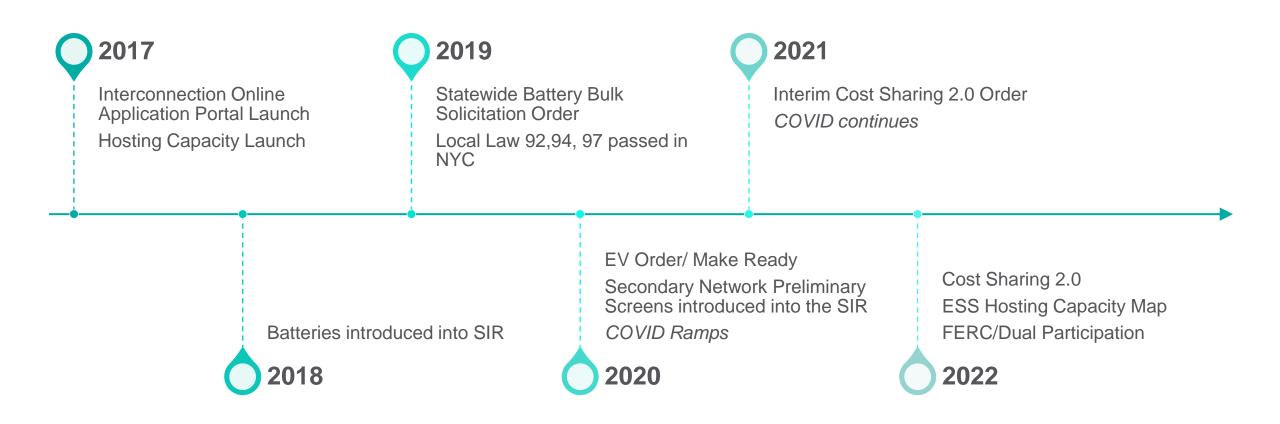


NYISO Process

Ideally for Distribution
Interconnection from 2MW not seeking VDER Compensation or those on the Bulk system

Review the <u>Transmission Interconnection</u> <u>Guide</u> and the following training modules for interconnection:

New York Electric Interconnection Framework



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New York Electric Interconnection Framework

Statewide working groups are chaired by Public Service Commission and NYSERDA

Interconnection Policy Working Group

Interconnection Technical Working Group

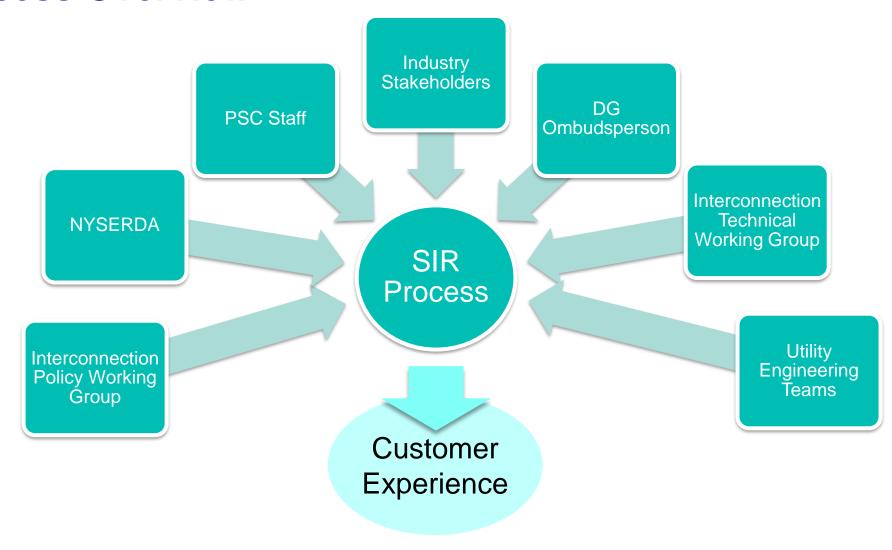
Interconnection process is governed by the Standardized Interconnection Requirements (SIR)

Each utility also has a Distributed Generation Ombudsman as of 2016

Interconnection Ombudsman Effort (ny.gov)

SIR Process Overview

Interconnection Process SIR Process Overview



Interconnection Process SIR Process Overview

Projects ≤ 50kW

No fee to apply

Mostly smaller residential applications

Could incorporate small commercial installations in the city

Timeline for installation is usually driven by developer's schedule

Projects > 50kW up to 5MW

Application fee of \$750 (non-refundable)

Projects undergo a screen

Series of standardized questions

If all Pass, project is approved

If Fail, additional study is required

Secondary Network Screens added in 2020

Electric Interconnection Processes Best Practices & Interconnection Resources



Review and <u>understand</u> the SIR Requirements and milestones



Submit an understandable Appendix K



Engage the local fire department and/or Authority Having Jurisdiction (AHJ)



Understand utility operating requirements and construction standards



Identify the Operational Parameters of the ESS System (hardware & software)



Develop a reasonable construction timeline

Electric Interconnection Processes Common Negative Impacts/Concerns



Project fails to meet SIR milestones



Appendix J (site control form) incorrect



Stacking projects >5MW on one parcel/property



Operational Parameters of the ESS System are too vague



Modification submittals that are Material in nature

Electric Interconnection Processes Storage "Stay Alert" Items



IEEE 1547 Compliant Submittals



UL 1741 SB Certification & Set Points



Cost Sharing 2.0 Impacts



Modification submittals that are Material in nature



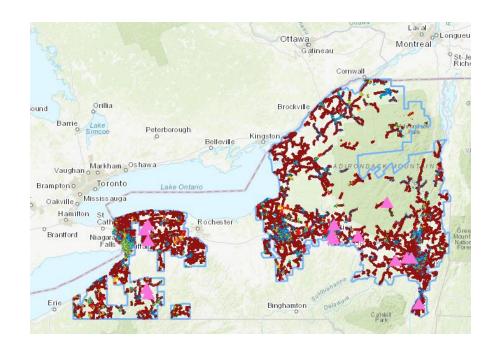
FERC 2222/Dual Participation Rules

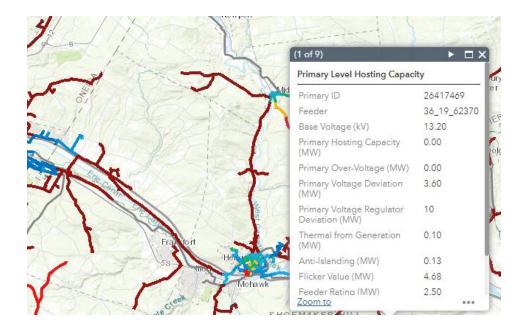
System Data Portals

National Grid New York System Data Portal

Introduction Company Reports Distribution Assets Overview PV Hosting Capacity Electrification Capacity ESS Hosting Capacity LSRV/VDER DG Cost Sharing CESIR Pass Fail REST API NWA

National Grid New York





https://systemdataportal.nationalgrid.com/NY/

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Renewable Natural Gas

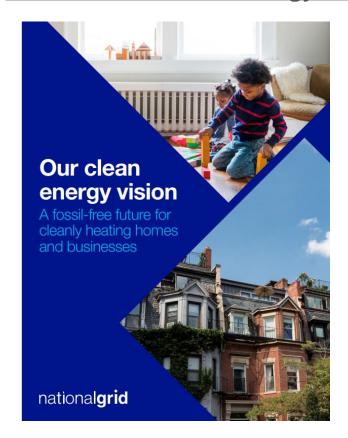
What is RNG?

RNG is derived from a variety of organic waste materials used in daily life. For example: food waste, biodegradable plant material, animal waste, paper, cardboard, and wood. This abundance of renewable energy sources is important since wind and solar energy are intermittent and often rely on supplemental supply of power when the wind isn't blowing, or the sun isn't shining.

Renewable natural gas can play a significant role in the future of energy. While the biggest driver of the focus on renewable energy is greenhouse gas reduction, what makes renewable gas more compelling is that it also provides the following:

- Enhances diversity of supply
- Stimulates local economy and creates green jobs
- Provides a real and innovative solution for using local waste resources to produce renewable energy
- Reduces waste buildup
- Creates a more efficient use for the fuel
- Leverages the existing gas network to deliver a renewable fuel

National Grid Clean Energy Vision - Fossil Free



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