



OPENING REMARKS

Britt Reichborn-Kjennerud
Director, Distribution Planning

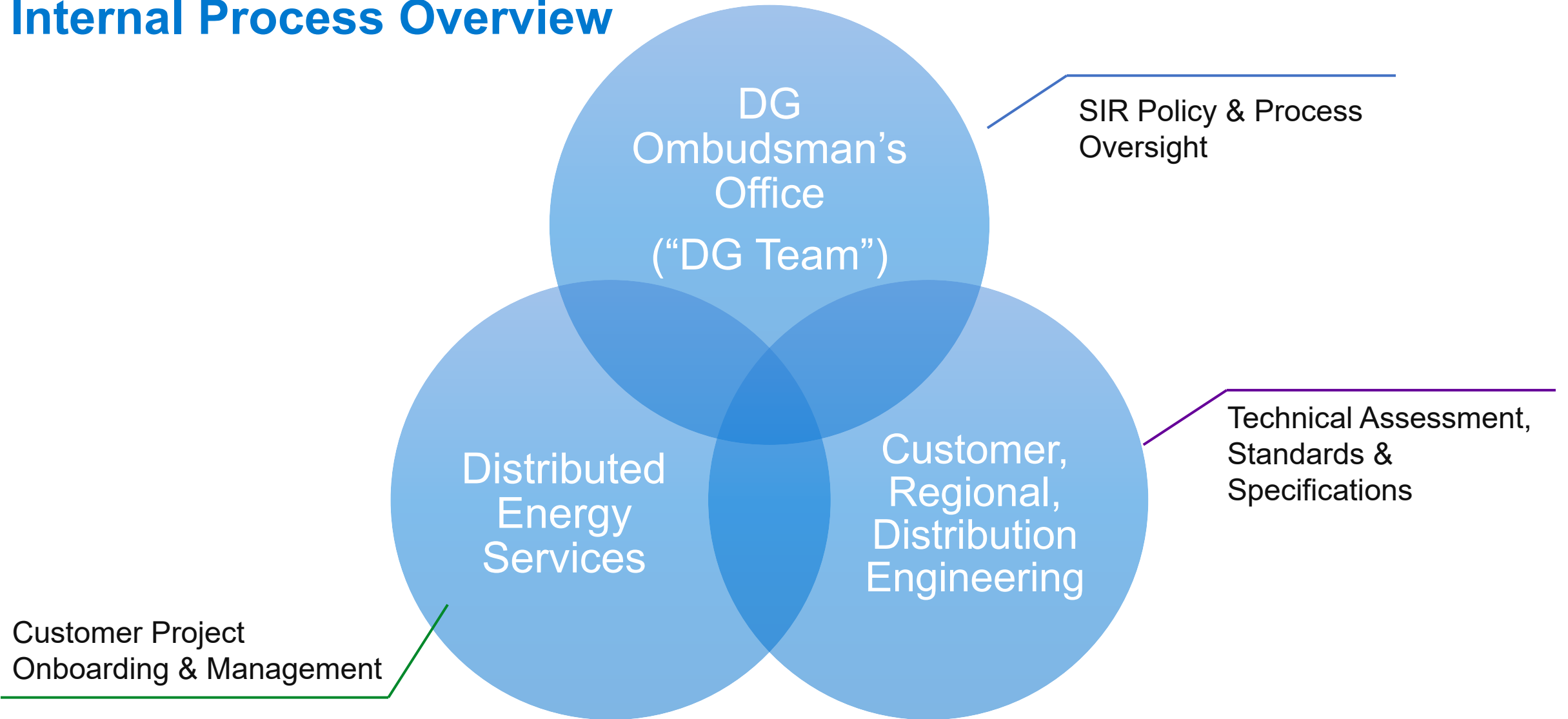
reichbornb@coned.com

Interconnection Overview

Constantine Spanos
DG Ombudsman

DG Interconnection

Internal Process Overview



New York Interconnection Frameworks

Standardized Interconnection Requirements



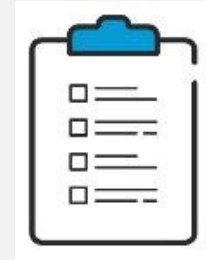
- For Distribution Interconnections **up to 5 MW**
- Seeking VDER compensation or wholesale market participation **and not** under NYISO (FERC) jurisdiction.
- [NYS SIR](#)

NYISO Process



- For Distribution Interconnection **>2 MW and under NYISO (FERC) jurisdiction**
- Seeking wholesale participation

Utility Process



- For Distribution Interconnections **> 5MW**
- Seeking wholesale Compensation **and not** under NYISO (FERC) jurisdiction

Con Edison Hosting Capacity Maps

Con Edison Hosting Capacity Web Application



Introduction

Non-Network PV

Network PV

Non-Wires Solutions

Electrification (formerly EV Charging)

Non-Network Storage

Network Storage

REST API

 Con Edison Company of New York

Introduction to Hosting Capacity:

Hosting capacity of a distribution system refers to the amount of Distributed Energy Resources (DER) that can be accommodated without adversely impacting power quality or reliability under existing control configurations and without requiring infrastructure upgrades. The objective of the hosting capacity map is to provide increased transparency as to where Con Edison has hosting capacity, to provide developers, contractors, and customers visibility into potential DER locations and sites for private generation, and to understand how and where DER installation impacts the distribution system. This hosting capacity tool supports the advancement of DER integration and DER market growth by guiding the DER investment to grid locations where the cost of interconnection is potentially lower. Developers can access this visual aid before committing resources to an interconnection application. Con Edison continues to add new functionalities to the hosting capacity platform, with the goal of maximizing the value of the hosting capacity map to developers.

Recent Updates:

The "EV Charging Capacity" map has been renamed the "Electrification Capacity" map to account for the visualization of available hosting capacity for heat electrification, in addition to the visualization of available hosting capacity for potential electric vehicle charging sites.

FAQs:

Hosting Capacity FAQs | Con Edison

Helpful Links:

Hosting Capacity | Con Edison

About the Platform | Con Edison

Distributed System Platform | Con Edison

Applying for Private Generation Interconnection | Con Edison

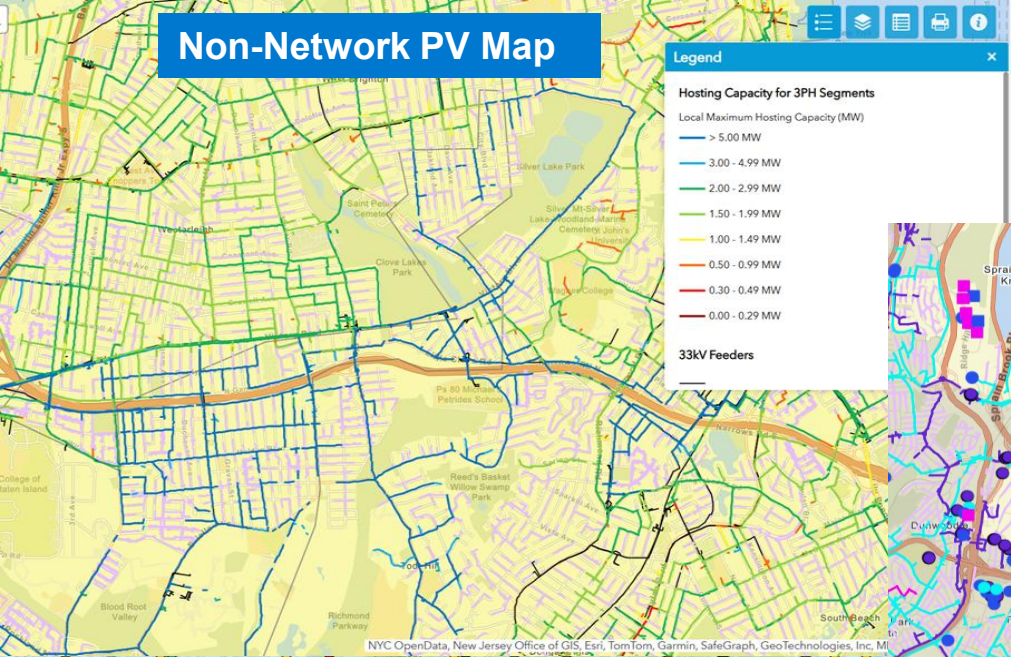
Integrated Planning Guidance Document | Joint Utilities of NY

Solar	Non-network and network
Storage	Non-network and network
Electrification	Electrification capacity for electric vehicle charging and electric heat
Non-Wires	Non-wires solution project areas

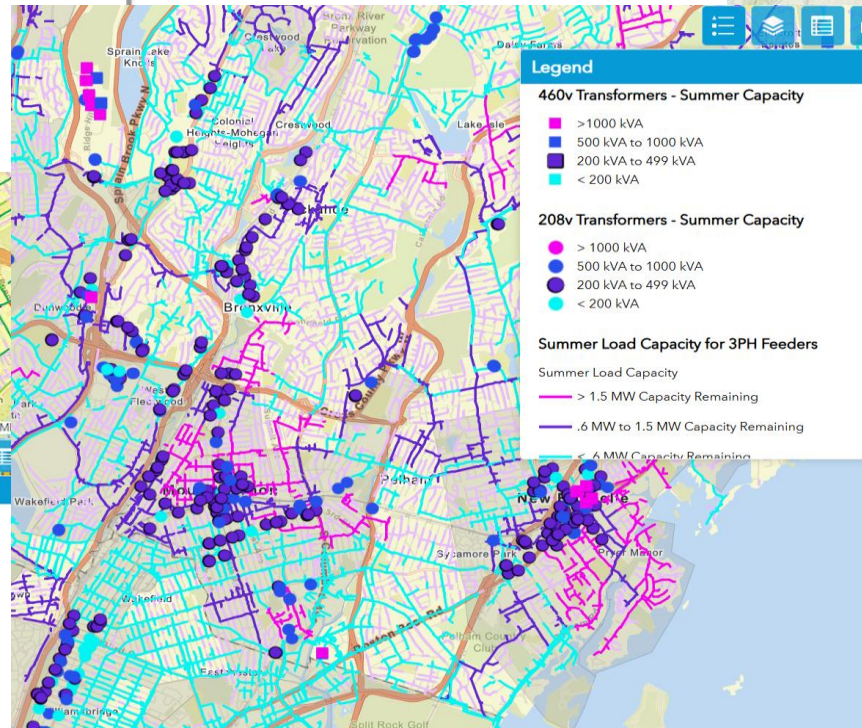
 conEdison

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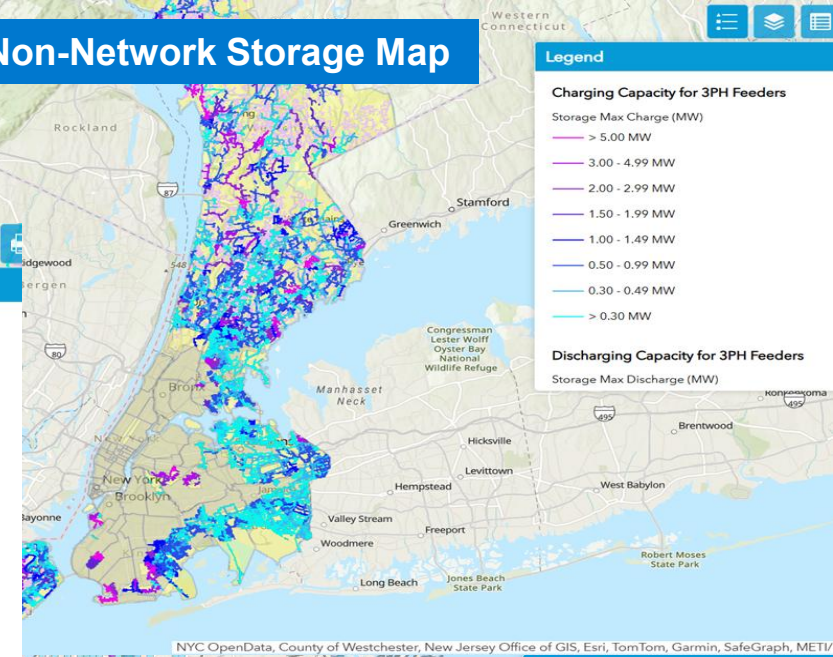
Non-Network PV Map



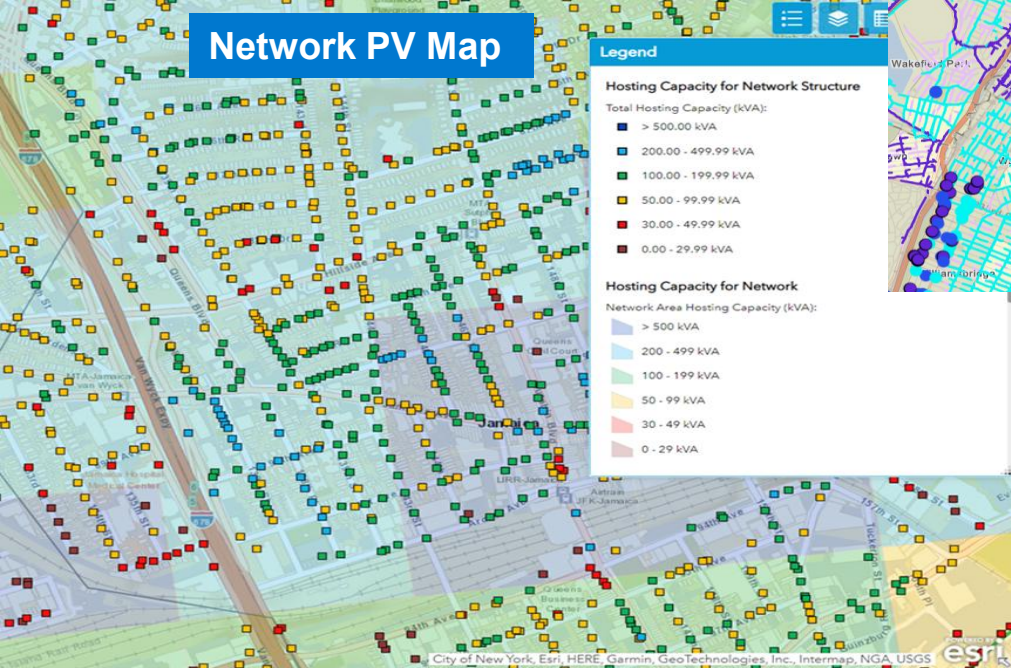
Electrification Map



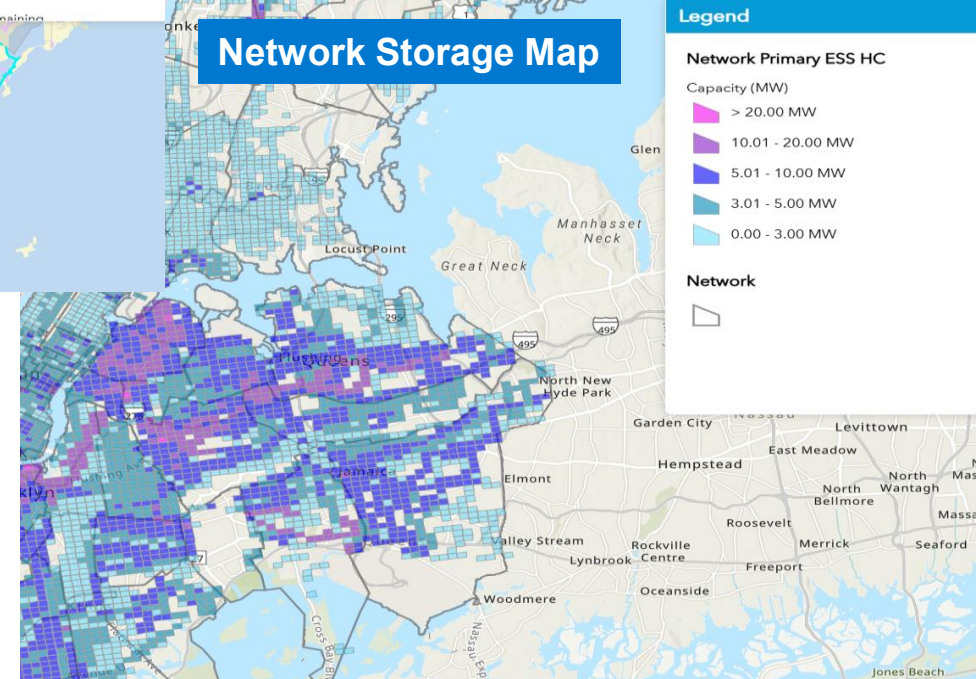
Non-Network Storage Map



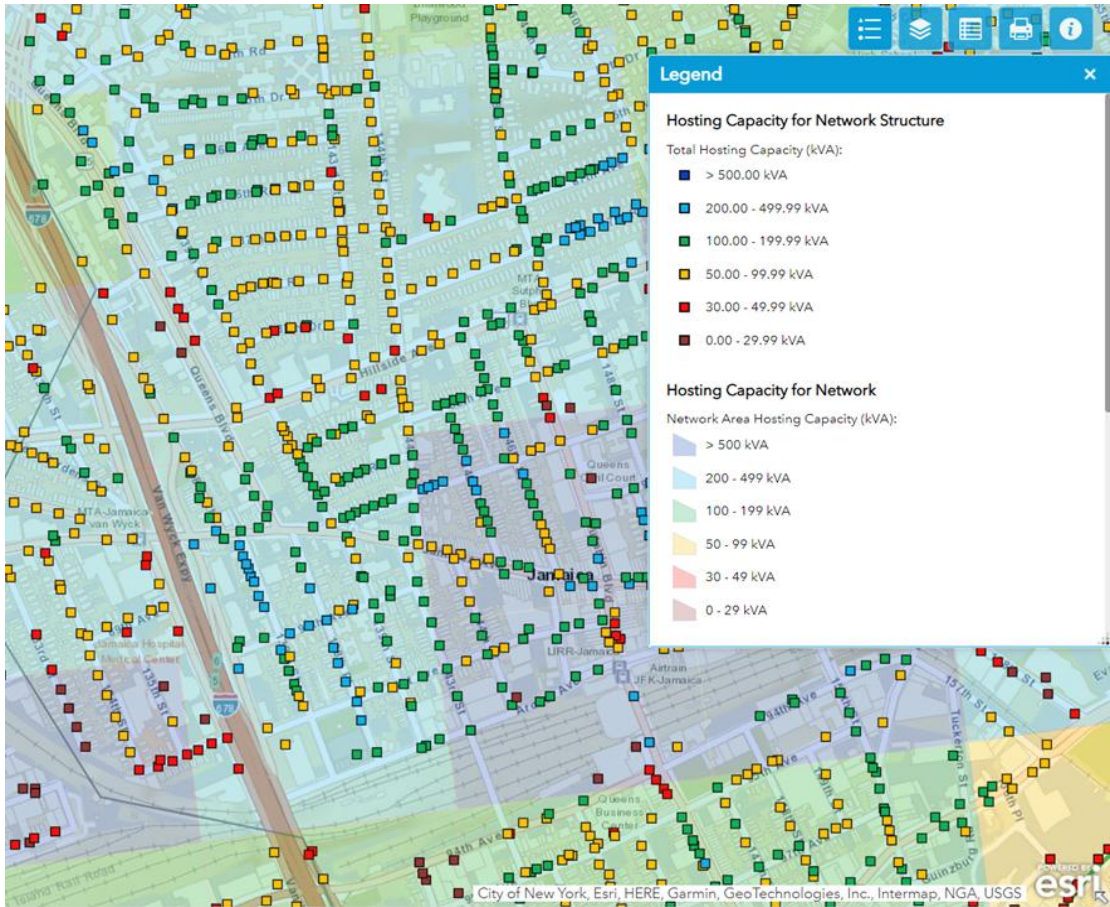
Network PV Map



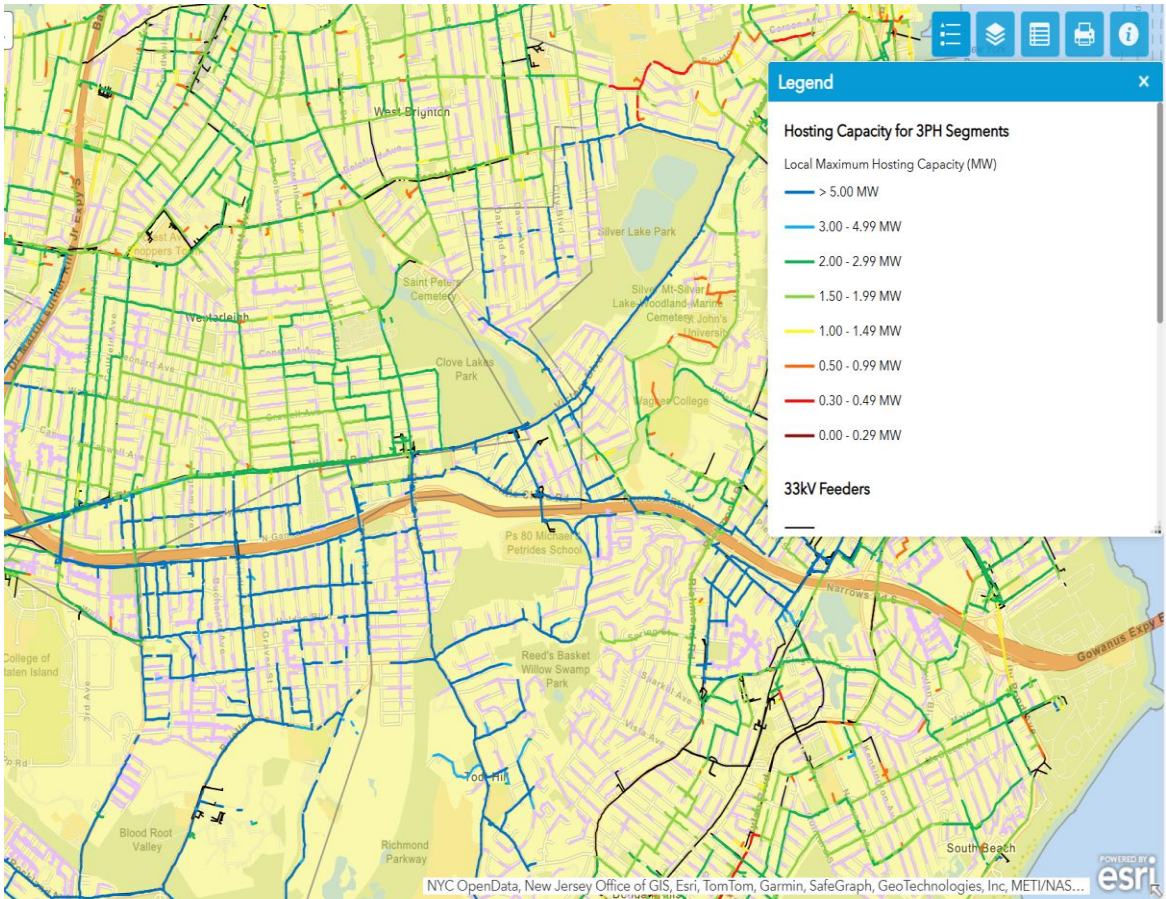
Network Storage Map



PV Hosting Capacity

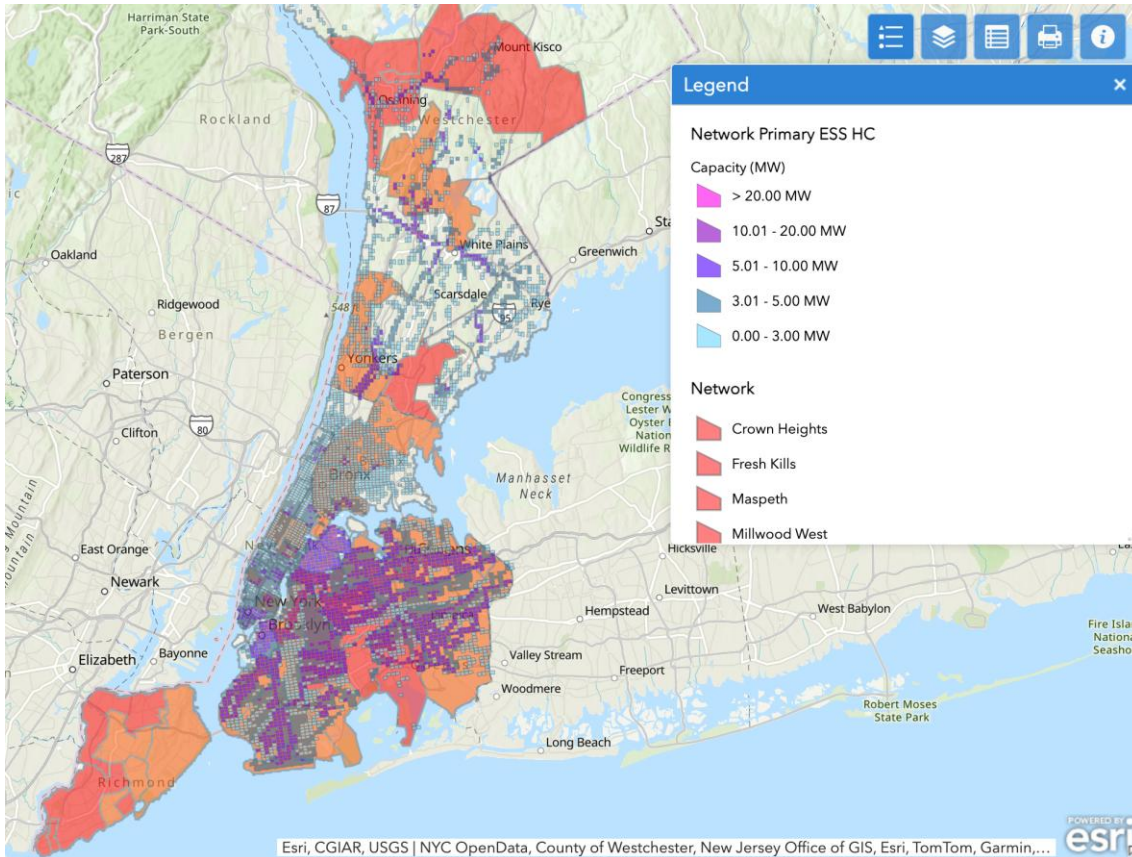


Network

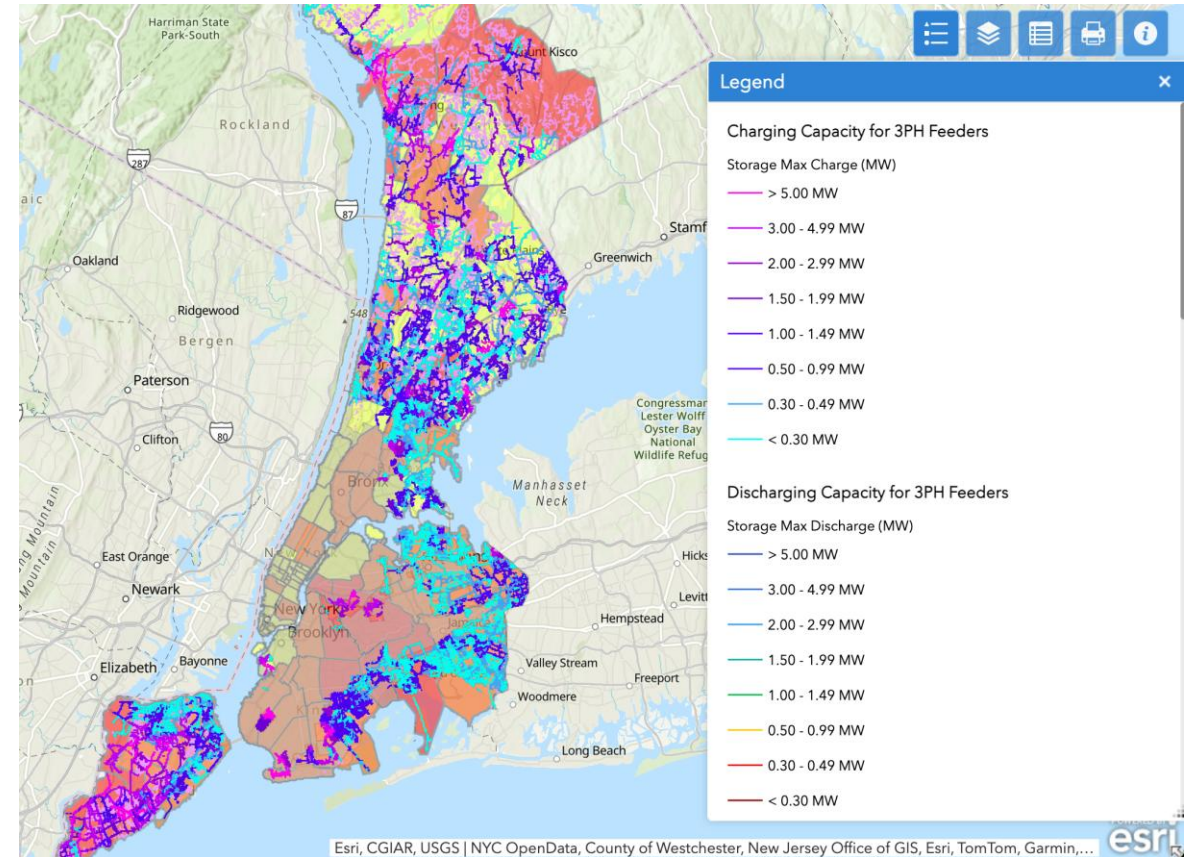


Overhead

Storage Hosting Capacity¹



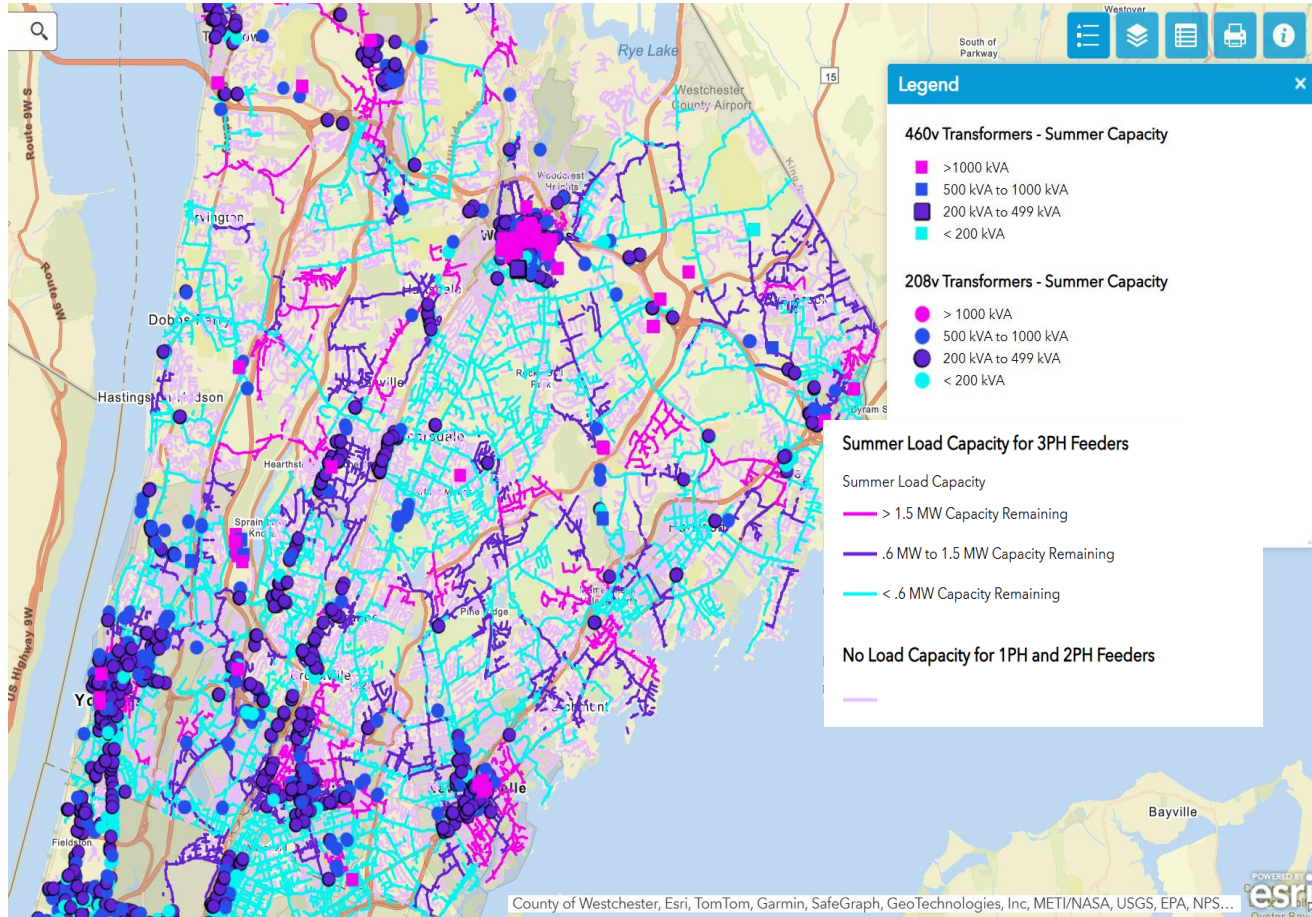
Meshed Network



Non-Network (Overhead / Radial)

1. Aerial color coding indicate regions with locational hosting capacity constraints at area and sub-transmission levels

Electrification Capacity



Provides visualization of available hosting capacity for heating electrification and electric vehicle charging

Additional Resources

- More information on Con Edison's Hosting Capacity Maps is on the "Introduction" tab, including definitions, data system available, and FAQs.
- The maps can be found on the Con Ed website here: <https://www.coned.com/en/business-partners/hosting-capacity>



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[Hosting Capacity FAQs | Con Edison](#)

Helpful Links:

[Hosting Capacity | Con Edison](#)

[About the Platform | Con Edison](#)

Background - SIR Process Overview



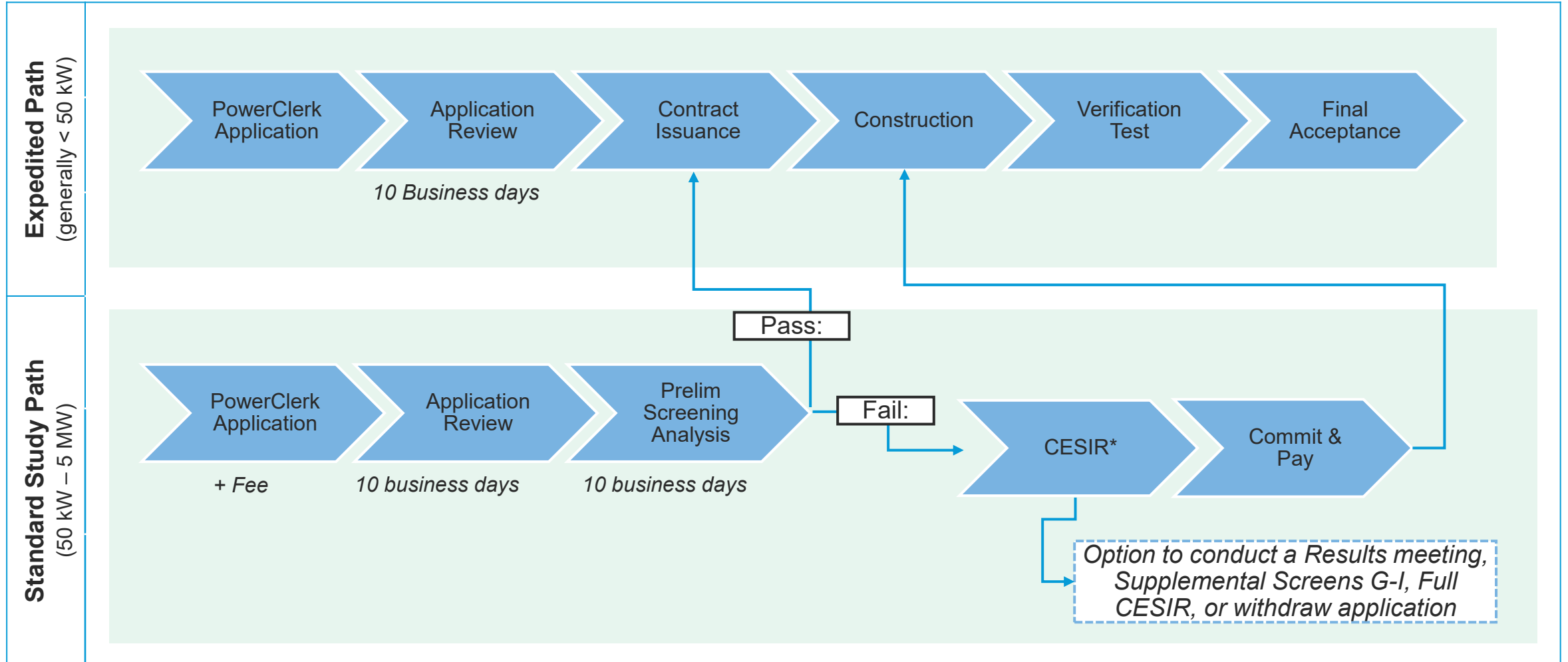
Small Projects ($\leq 50\text{kW}$)

- No application fee
- Mostly residential/small commercial applications
- Timeline for installation is driven by developer's schedule
- Projects generally approved to construction after initial application review

Large projects ($> 50\text{kW} - 5 \text{ MW}$)

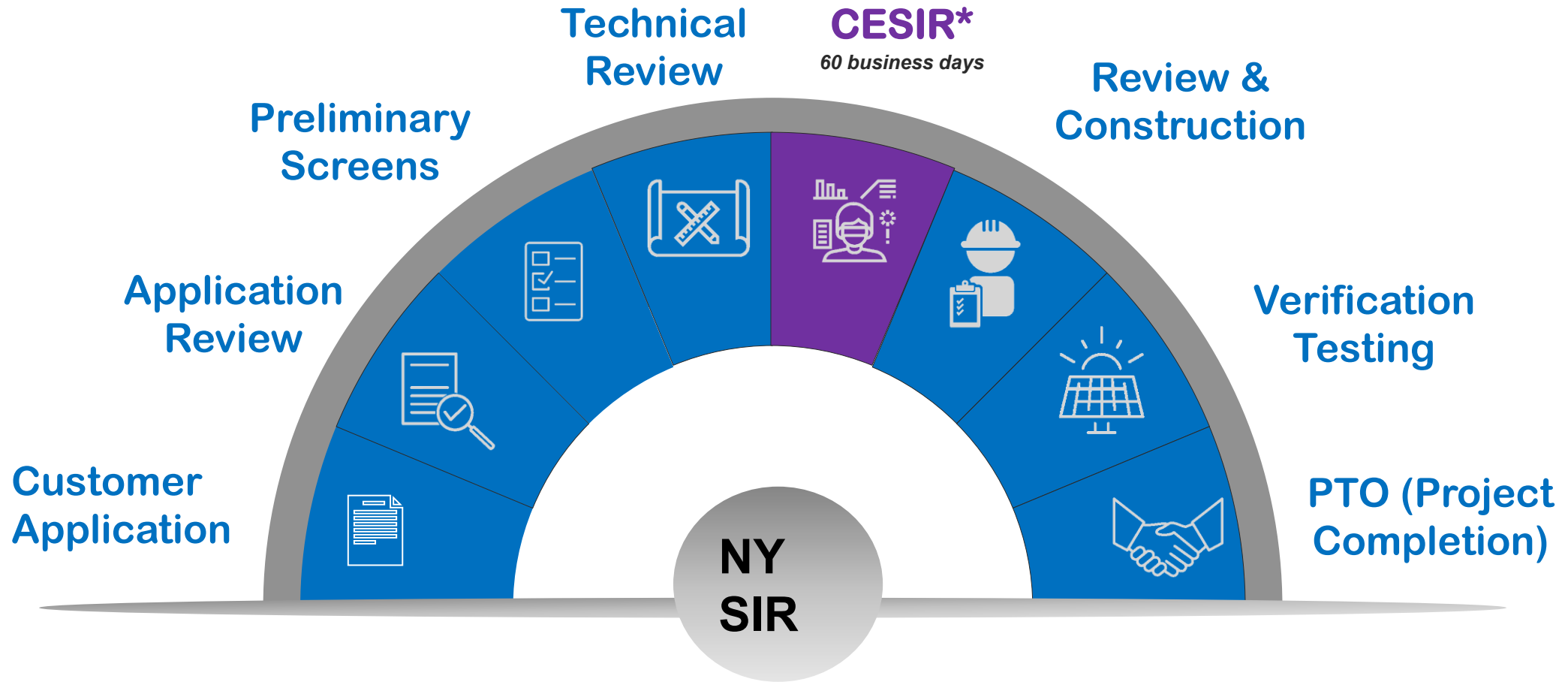
- Application fee of \$750 (non-refundable)
- Typically larger commercial and industrial installations
- We work with the developer's schedule to establish a construction timeline
- Projects undergo a series of standardized questions
 - If screens all pass, project is approved
 - If screens fail, mitigation or an additional study is required

SIR Interconnection Process (50 kW – 5 MW)



*Coordinated Electric System Interconnection Review (CESIR)

Background: SIR Process Overview



Outcome of the CESIR plays a critical role in nature of interconnection to the grid

Thank You!

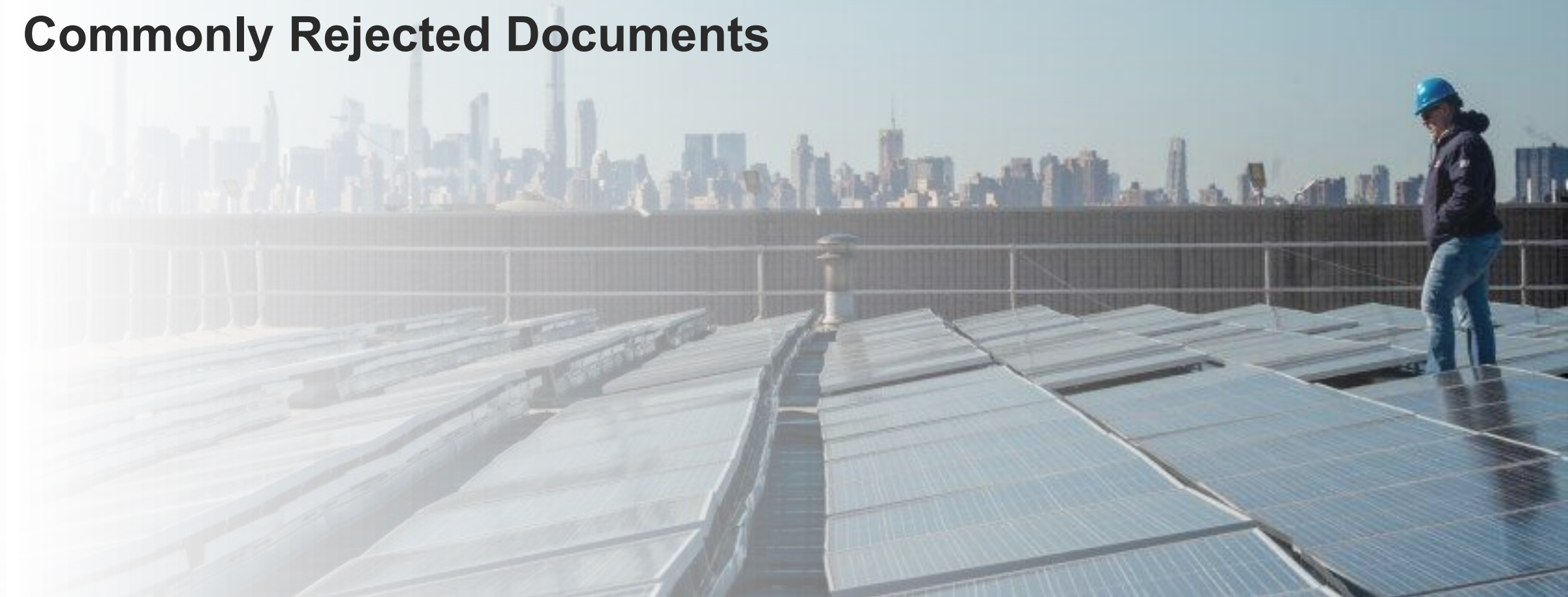
Follow up by e-mail at dgexpert@coned.com

Pre-CESIR Submittal Best Practices

William Littman
Engineer – Distribution Eng.

Agenda

- **Pre-CESIR Application Submittal Guide**
- **Commonly Rejected Documents**



Pre-CESIR Application Submittal Guide

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Account & Billing

Services & Outages

Save Energy & Money

Clean Energy

Q Search

Log In or Register

Home / Using Distributed Generation Energy Sources / Applying for Interconnection

Applying for Distributed Generation Interconnection

Start your interconnection application for distributed generation (DG). Check eligibility, gather forms, and submit your application online through PowerClerk.

START APPLICATION



Eligibility

How to Apply

Forms & Resources

FAQ

Start Your Distributed Generation Project

Before installing any distributed generation (DG) or energy storage system, you'll need to log in to PowerClerk and complete an interconnection application. This ensures your system can safely and reliably connect to the Con Edison grid.

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Account & Billing

Services & Outages

Save Energy & Money

Clean Energy

Q Search

Log In or Register

Eligibility

How to Apply

Forms & Resources

FAQ

Forms and Resources

EXPAND ALL

Required Documentation

+

Pre-CESIR Application Submittal Guide

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Pre-CESIR Application Submittal Guide Version 2 March 2026 (PDF)

Contracts for Government Agencies

+

Cost Sharing and Special Considerations

+

[Link to guide](#)

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Pre-CESIR Application Submittal Guide

- Newly created guide for developers
- Covers all required documents
- Outlines all necessary items we review for in the documents
- Uses the new Appendix K form

Required Document Checklist

This checklist is intended to assist customers in preparing more complete application submissions. It does not cover every possible scenario or project type, and submissions may still be rejected for revision or additional information to ensure accuracy and clarity.

1. Customer Letter of Authorization

Item	Description Detail	Related Document(s)
a.	Service address	All

2. Verification Testing Procedure

Item	Description Detail	Related Document(s)
a.	Service address, account name	All
b.	Project size, capacity	All
c.	Operational parameters (when will the project operate?) If hybrid project, what is the maximum amount of export (will solar be used in addition to battery?)	General: 3-Line Diagram, Site Plan If ESS: Appendix K, Charge/Discharge Curve
d.	Detailed testing plan specifying pre-test plans, relay testing, battery module testing, commissioning plan, and any future testing plans	3-Line Diagram, Site Plan

3. Inverter Manufacturer Specification Equipment Cut Sheet

Item	Description Detail	Related Document(s)
a.	Inverter cut sheet included	3-Line Diagram
b.	Inverter option codes, <ul style="list-style-type: none">• If applying to use a Tesla Megapack, highlight/call out all option codes.	3-Line Diagram, Appendix B, If ESS: Appendix K, ESS Data Sheet
c.	Selected equipment configuration is clearly marked	

Pre-CESIR Application Submittal Guide

Appendix K

9. Appendix K (ESS Projects only)

The item letters referenced below correspond directly to those used in the latest Appendix K form, as per the NYSSIR dated 8/1/2025.

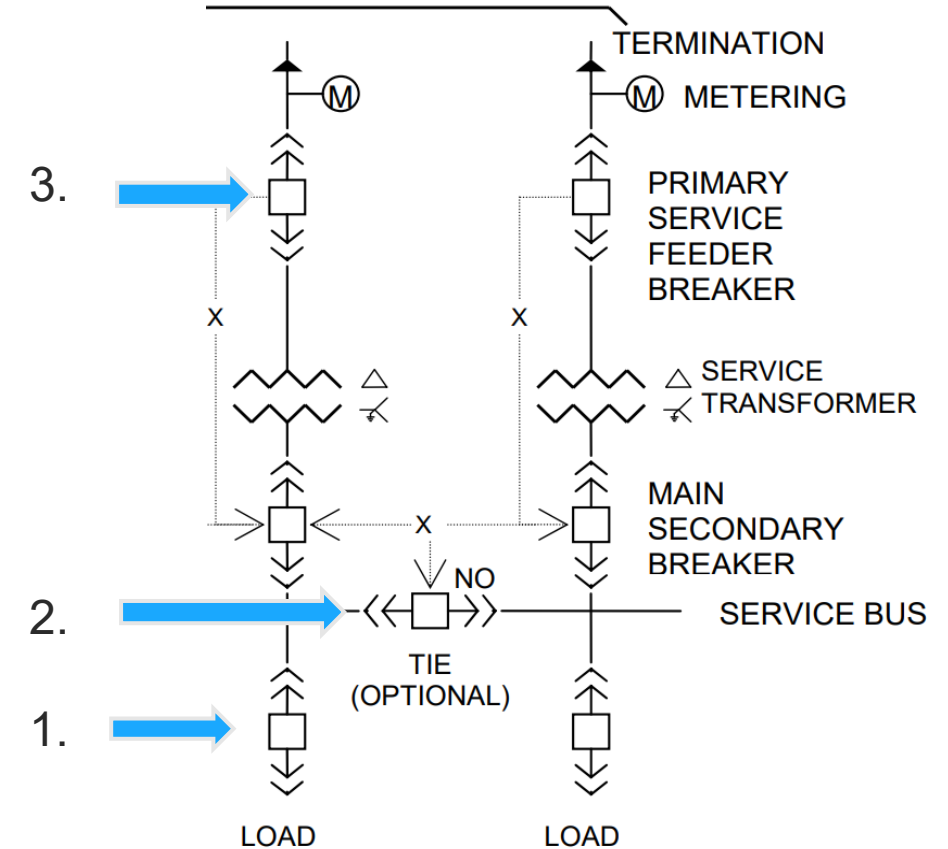
Item	Category	Description Detail	Related Document(s)
a.	General Info.	Information provided includes: <ul style="list-style-type: none"> System type Requested design type Requested design contingency (N-1, N-2) System configurations, inverter codes if applicable Real power (kW) and apparent power (kVA) nameplate Export and import capacity (kWh) Round trip efficiency Point of interconnection Service address BBL (for NYC) or SBL (outside of NYC) 	Inverter Manufacturer Specification Equipment Cut Sheet, ESS Data Sheet, 3-Line Diagram, Site Plan
b.	System type	Select applicable system option	
c.	Market participation	<ul style="list-style-type: none"> Indicate any market participation, be sure to note any service configuration requirements or other items to comply with program requirements Ensure requested operational windows are consistent with any program participation 	Charge/Discharge Curve
d.	DER Nameplate Rating	Fill out tables 1 & 2 for requested system configuration <ul style="list-style-type: none"> Ensure system size/capacity is consistent across all documents and corresponds to the inverter nameplate rating(s) 	Inverter Cut sheet, BESS Data Sheet, Appendix B, 3-Line Diagram
e.	Data/Rating Sheets	Provide data/rating sheets for AC and/or DC components of equipment <ul style="list-style-type: none"> Ensure model marked and capacities are consistent with other submitted documents 	Inverter Cut sheet, ESS Data Sheet, Appendix B, 3-Line Diagram
f.	Type of ESS	Identify equipment type	3-Line Diagram, Site Plan, Appendix B, ESS Data Sheet, Inverter Cut Sheet
g.	Real/reactive power	Indicate what system will provide	

h.	Reactive power control	Indicate what system will provide	
i.	Inverter rating	Indicate applicable inverter compliance	Inverter Cut sheet, 3-Line Diagram
j.	System Import	Specify total system import for ESS and aux loads <ul style="list-style-type: none"> Fill out table 3 	ESS Data Sheet
k.	Ramp rate	Indicate desired ramp rate <ul style="list-style-type: none"> Ensure it is consistent with provided charge and discharge data/curve attachment Ensure ramp rate is compliant with 5 min test per IEEE 1547 	Charge/Discharge Curve
l.	Symmetrical/ Asymmetrical	Provide requested information	
m.	Max Power Magnitude	Provide requested information, ensure it is consistent with item k	
n.	Operational Windows	Fill out tables 4 and 5 <ul style="list-style-type: none"> Ensure requested rates are sufficient for the submitted battery capacity 	Charge/Discharge Curve
o.	Protection and Control	Explicitly specify the equipment that is exporting to the electric grid and magnitude of export, if applicable <ul style="list-style-type: none"> Describe relay models and explanation of protection scheme 	
p.	Control Schemes	Provide requested information	
q.	Short Circuit and Harmonics	Provide requested information	
r.	Behind-the-Meter ESS	Describe operational characteristics	

Commonly Rejected Documents

3-Line Diagram

- **Generator Disconnect Switch**
 - Per the SIR, the disconnect switch shall be clearly marked as:
 - (1) “Generator Disconnect Switch” and shall be indicated as “external, manual, visible, gang-operated, load-break, and lockable in the open position”
 - For EO-2022 and EO-10215 designs:
 - (2) The customer shall clearly indicate the breakers which will be normally open (NO) and normally closed (NC) for EO-2022 designs only
 - (3) The generator disconnect cannot be the primary breaker



Commonly Rejected Documents

3-Line Diagram

- Provide IEEE-1547 Inverter Relay Settings in tabular form on the diagram

- OV1 – 1.1 pu / 2.0 sec
- OV2 – 1.2 pu / 0.16 sec
- UV1 – 0.8 pu / 3.0 sec
- UV2 – 0.5 pu / 1.1 sec
- OF1 – 61.2 Hz / 300 sec
- OF2 – 62.0 Hz / 0.16 sec
- UF1 – 58.5 Hz / 300 sec
- UF2 – 56.5 Hz / 0.16 sec

Frequency Disturbance Trip

Trip Function	Inverter-Based		Synchronous Generator	
	Freq. (Hz)	Clearing Time (s)	Freq. (Hz)	Clearing Time (s)
OF2	62	0.16	62	0.16
OF1	61.2	300	61.2	300
UF1	58.5	300	58.5	300
UF2	56.5	0.16	56.5	0.16

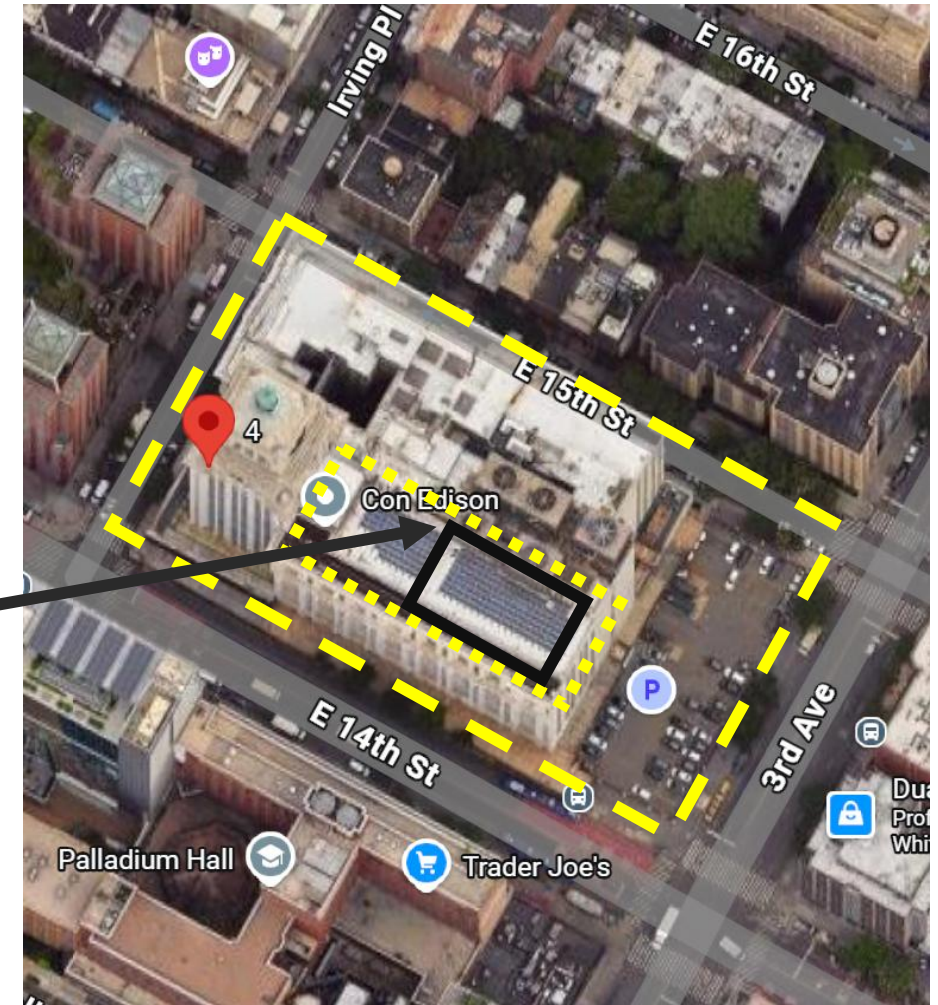
Voltage Disturbance Trip

Trip Function	Inverter-Based		Synchronous Generator	
	Voltage (p.u.)	Clearing Time (s)	Voltage (p.u.)	Clearing Time (s)
OV2	1.2	0.16	1.2	0.16
OV1	1.1	2	1.1	2
UV1	0.8	3	0.8	3
UV2	0.5	1.1	0.5	0.16

Commonly Rejected Documents

Site Plan

- P.E. Stamp required for projects receiving electric service over 1 kV at the POI
- Equipment details align with other documents
- Identify the following device locations using a leader:
 - Inverter(s)
 - Equipment pad
 - Generator Disconnect Switch
 - Underground and overhead cables
 - Point of common coupling (PCC)
 - Property line structure(s)



Commonly Rejected Documents

Appendix J

- Date provided must be a future, non-expired, date in MM-DD-YYY format

Property Owner and Developer entered into the agreement on or about	_____
	(MM/DD/YYYY)
Terms of Agreement (including options to extend)	_____
	(MM/DD/YYYY)
-1-	

- Property Owner or Developer signature is missing

Property Owner	Developer
By: _____	By: _____
Printed Name: _____	Printed Name: _____
Title: _____	Title: _____
Date: _____	Date: _____

Thank you for attending!

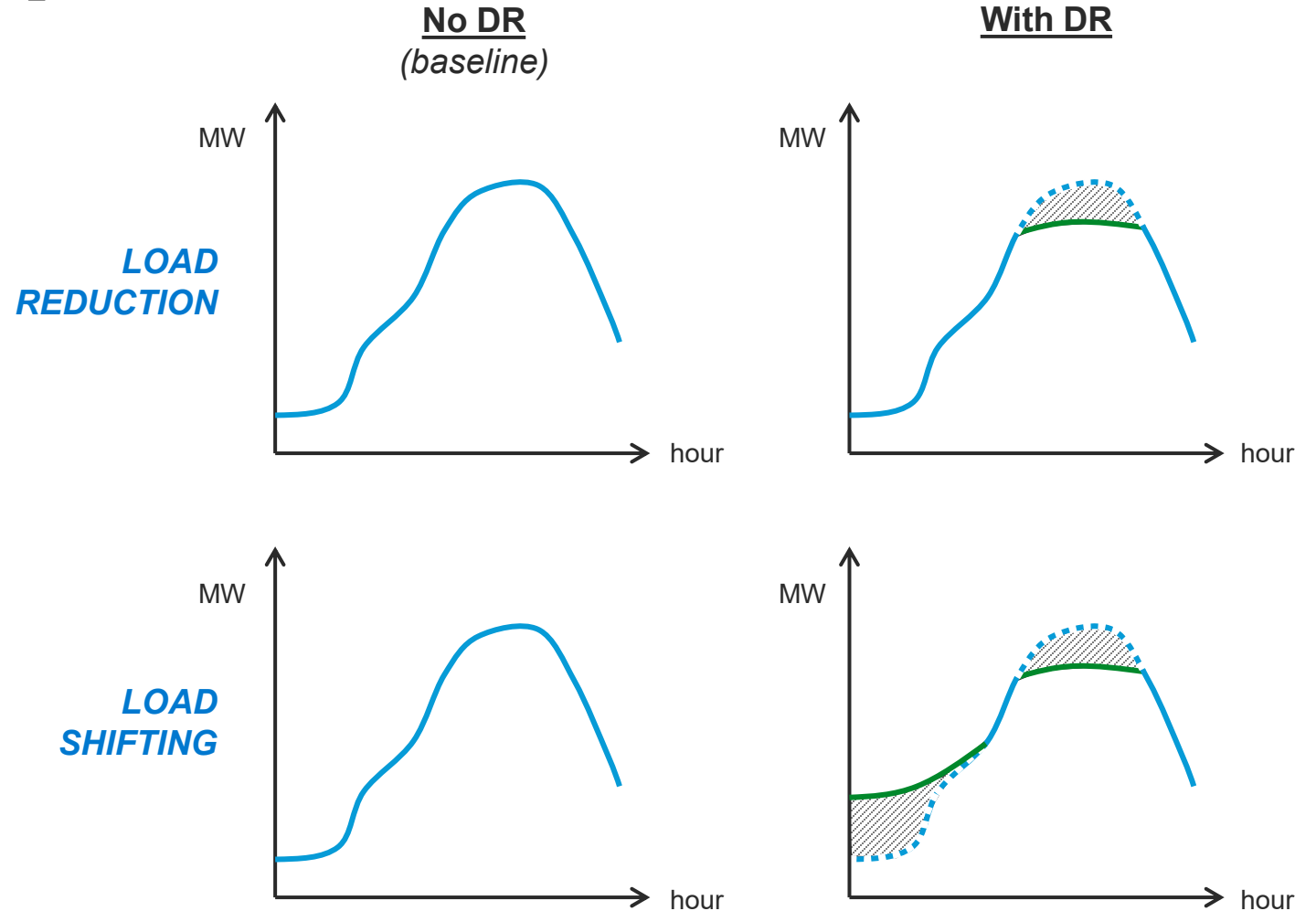
Questions, please reach out to dgexpert@coned.com

Demand Response Program Updates

Dimitris Vantzis
Dept. Mgr., Dist. Planning

DR is the short-term reduction in electricity to support system planning and operations

- DR program incentivizes customers to adjust their energy use to support the distribution grid at times of need
- Dispatched during “events” that are triggered either due to high demand on the distribution system during hot days (peak shaving event), or during distribution system contingencies (reliability event)
- Can be achieved either through load reduction (e.g., turning off equipment) or load shifting (e.g., using energy storage during events)



Common ways to reduce energy consumption

Residential and Small Med Businesses

- Turn off lights and unplug unused electronics
- Reduce AC usage or switch to fan mode
- Shift use of large appliances to after event hours
- Switch to an on-site generator

Commercial and Industrial

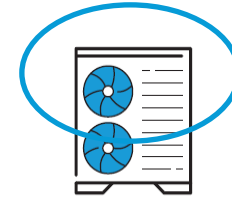
- Use energy management systems to control HVAC system and additional electric load
- Minimize non-essential operations such as turning off industrial equipment or switching to lower power mode if not in use

Common energy loads that can be reduced

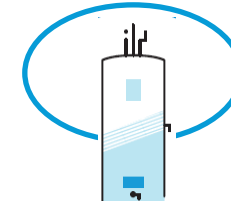
Below list is not exhaustive as energy loads are technology agnostic. Anything that reduces load applies to these programs.



Lighting & Controls



Heating, Cooling, Ventilating (HVAC)



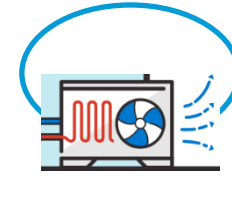
Hot Water System



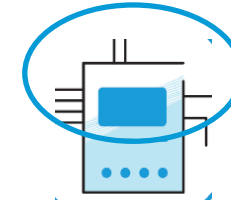
Generator



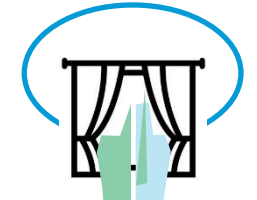
Refrigeration



Heat Pumps



Energy Management System



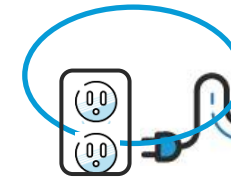
Window treatment



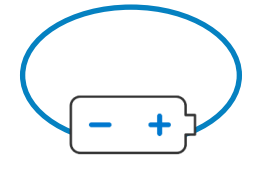
Industrial equipment



EV Charging



Plug load



Storage

Con Edison DR portfolio has close to 1 GW of enrolled capacity across all programs¹

<i>Tariff leaf</i>	Rider T		Rider AC (Dynamic Load Management)		Rider L (Direct Load Control)	
<i>Program</i>	Commercial System Relief Program (CSRP)	Distribution Load Relief Program (DLRP)	Term-DLM	Auto-DLM	Bring Your Own Thermostat (BYOT)	Bring Your Own Battery (BYOB) <i>[NEW in 2026]</i>
<i>Dispatch need</i>	Peak shaving	Reliability	Peak shaving	Peak shaving & reliability	Peak shaving & reliability	Peak shaving & reliability
<i>Technology</i>	Technology-agnostic				Thermostats	Batteries < 50 kW
<i>2025 enrolled MW</i>	441 MW	445 MW	21 MW	18 MW	28 MW	N/A
<i>2025 enrolled customers/projects</i>	~44,000	~43,000	~140	6 projects ²	~37,000	N/A

Contact us at demandresponse@coned.com
with any questions about our DR programs

1. Some customers are enrolled across multiple programs.

2. As of 2025, all active Auto-DLM contracts are for front-of-the meter energy storage projects.

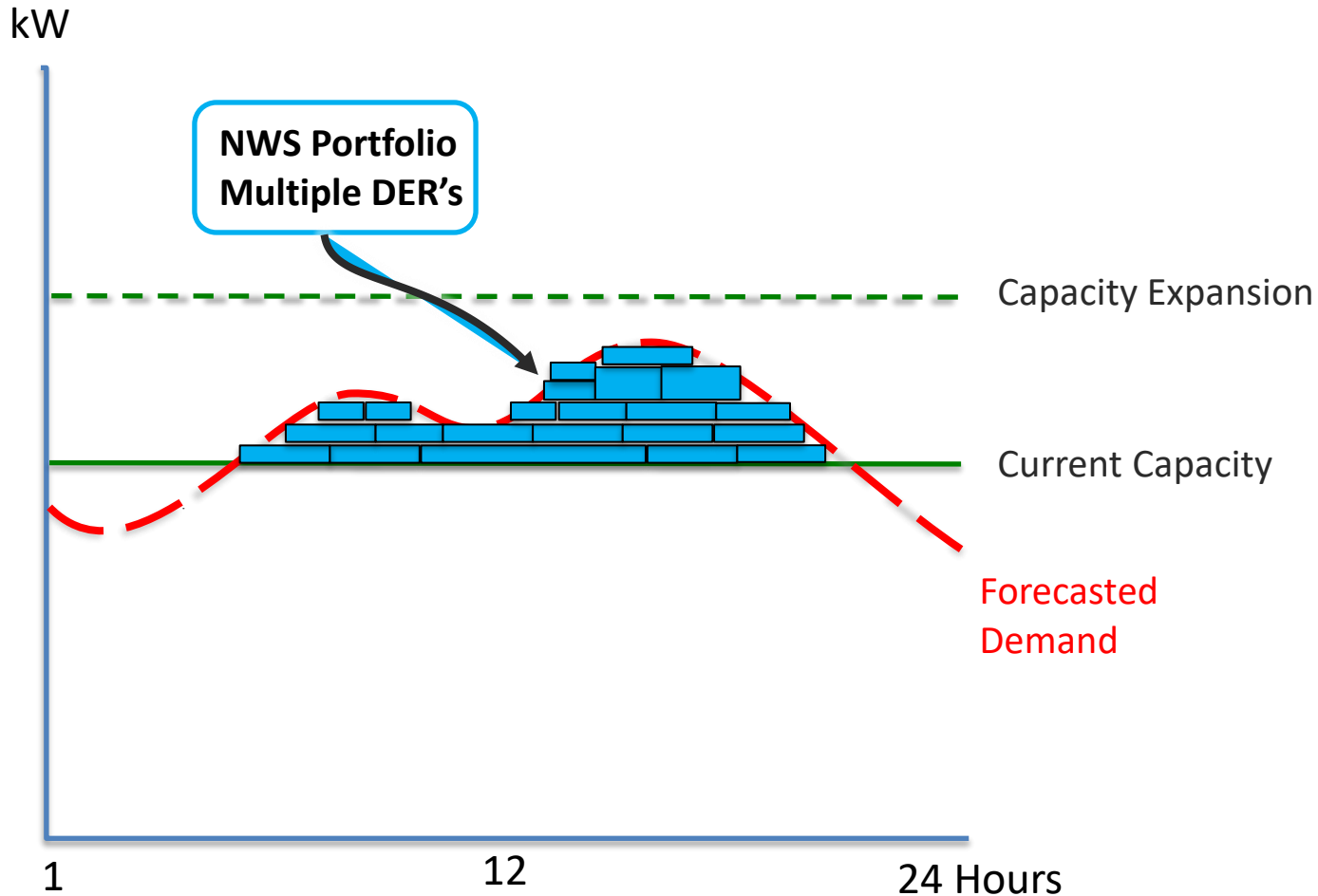
Program Resources

Resource	Details
<u>For Customers from Small/Medium Businesses and Renters/Homeowners</u>	Website to learn more about the program
<u>Find a Smart Usage Partner</u>	Matching tool for customers to find an eligible partner

Non-Wires Solutions Program Updates

Jason Brown
Section Mgr., Dist. Planning

Non-Wires Solution portfolios use non-traditional solutions to defer or eliminate traditional infrastructure projects



- Non-Wires Solution portfolios offer opportunities to deploy Distributed Energy Resources
- These include Energy Efficiency measures, battery energy storage systems, and other grid supporting technologies

Con Edison generally aims to develop diversified portfolios with participation from multiple customer segments and technologies

- NWS portfolios defer or eliminate the need for system infrastructure upgrades
- They provide load relief during projected system overload periods using permanent load reductions (e.g., EE) and load shifting (e.g., energy storage)
- NWS procurements are technology-agnostic

NWS Portfolio	Active Dates	Infrastructure upgrade avoided/deferred	Network Peak Load Relief (MW)
BQDM ¹	2014 – Present	Deferred substation, avoided load transfer	78
Water Street	2018 – 2021	Avoided transformer cooling feeder upgrades	10
Newtown	2019 – 2025	Deferred load transfer	21
Jamaica	2023 – Present	Avoided 27 kV substation bus uprating	13
Total			122

1. BQDM = Brooklyn Queens Demand Management program.

Energy storage has been a critical component in all NWS portfolios; more than 25 MW contracted

	<u>Applicant commits to:</u>		<u>Con Edison commits to:</u>	
<i>Meets local reliability needs</i>	N-2 interconnection design		Pay 50% of incentive when operational	
<i>Dispatch window</i>	Minimum of 4 consecutive hours of load relief		Pay 50% in performance over 10-year term	
<i>First rights of dispatch</i>	Performance Period is May 1 to September 30		Provide 21-hour event notification	
	BQDM	Water Street	Newtown	Jamaica
<i>Number of storage systems</i>	5	1	3	3
<i>Contracted load relief</i>	10 MW	0.5 MW	10 MW	5 MW

Program Resources

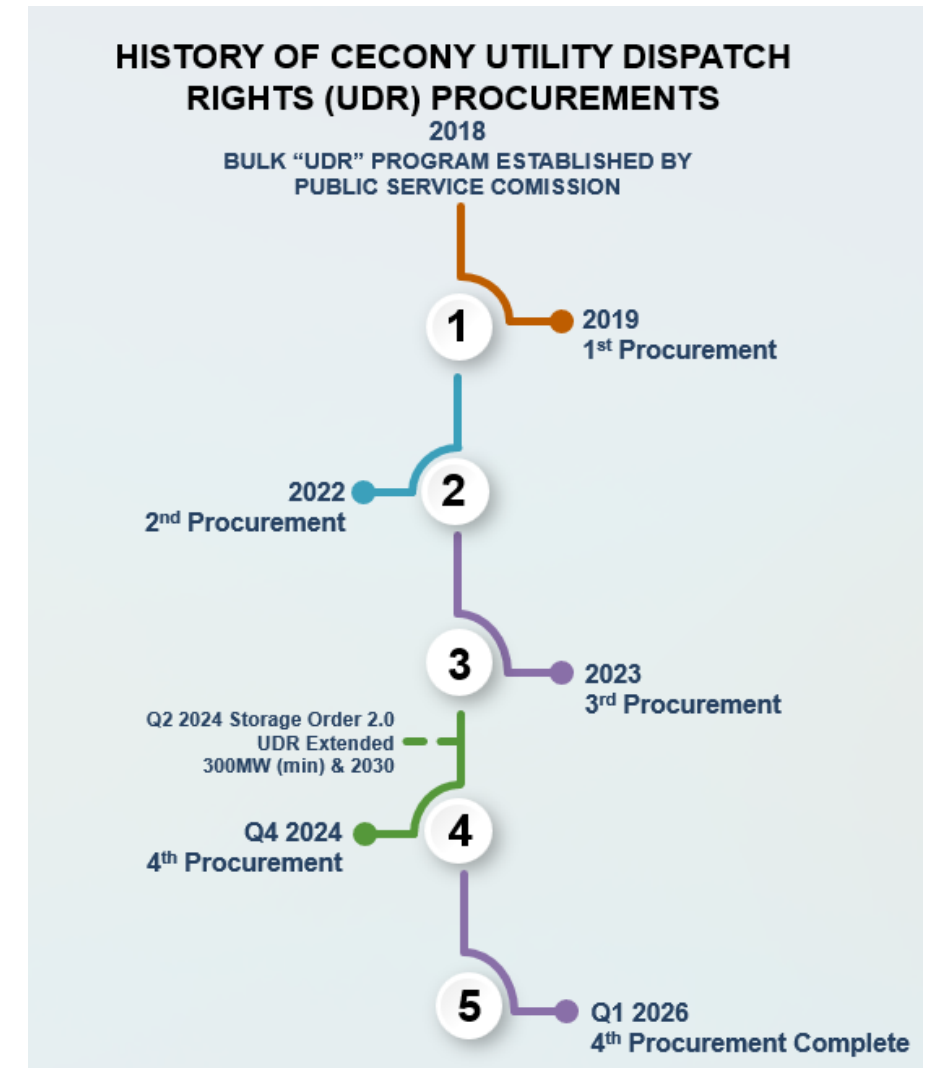
Resource	Details
<u>Non-Wires Solutions</u>	Website to learn more about our NWS programs
<u>DSM@coned.com</u>	Reach out to be added to our distribution list for future RFP's

Bulk Energy Storage Procurements and Road Map

Brian Schaitkin
Clean Energy Manager- Utility Dispatch Rights
Distributed Resource Integration

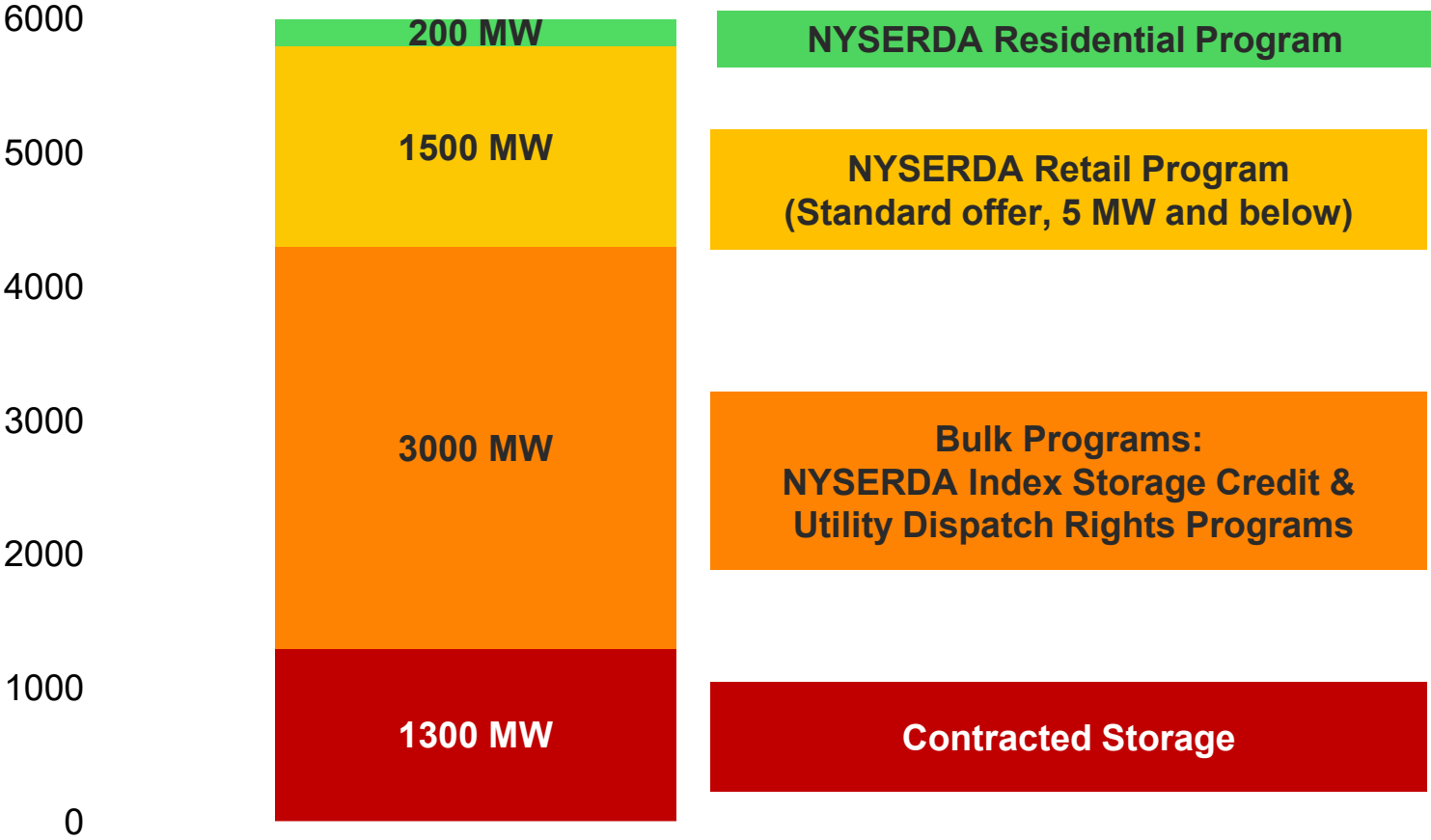
CECONY Bulk solicitation – Procure storage to meet NYS goals

- 2018: PSC Energy Storage [Order 1.0](#) requires Utilities to procure UDR storage through competitive solicitations
- 2019: Climate Leadership & Community Protection Act ([CLCPA](#)) sets 3,000 MW goal by 2030
 - 2022: Gov. Hochul increases to 6,000 MW
- 2024: PSC Energy Storage [Order 2.0](#) renews UDR program for projects able to come online by 2030. UDR 4 RFP released
- Q1 2026: UDR 4 RFP submission and evaluation process completed



Storage Order 2.0 targets for 2030 and beyond

The Order, issued June 2024, establishes new and expanded programs to help the State meet the 6GW goal, with the bulk of new storage procured via NYSERDA-administered programs



Targets

- 6 GW deployed by 2030
- 12 GW deployed by 2040
- 35% of bulk by 2030 must be in Zones G-K
- 30% of bulk by 2030 in Zone J (NYC)
- 35% DAC target
- 20% of bulk storage will be long duration (beyond 8 hours)

Con Edison 3rd Party Bulk Procurement

The procurement buys the rights to dispatch storage systems

Generation

Traditional & Renewable generation continues to supply grid



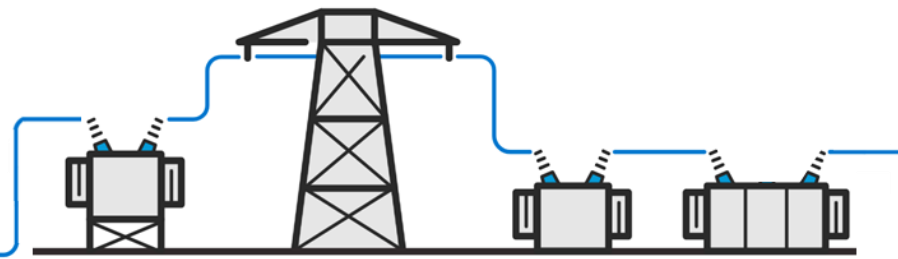
Transmission

Competitive Bulk Purchases Provide:

Peaking capacity support,
Energy arbitrage,
Voltage support,
Frequency regulation,
Renewable balancing

Distribution

Infrastructure deferral,
Voltage support,
Avoided renewable curtailment,
Energy arbitrage,
Renewable balancing,



Customer

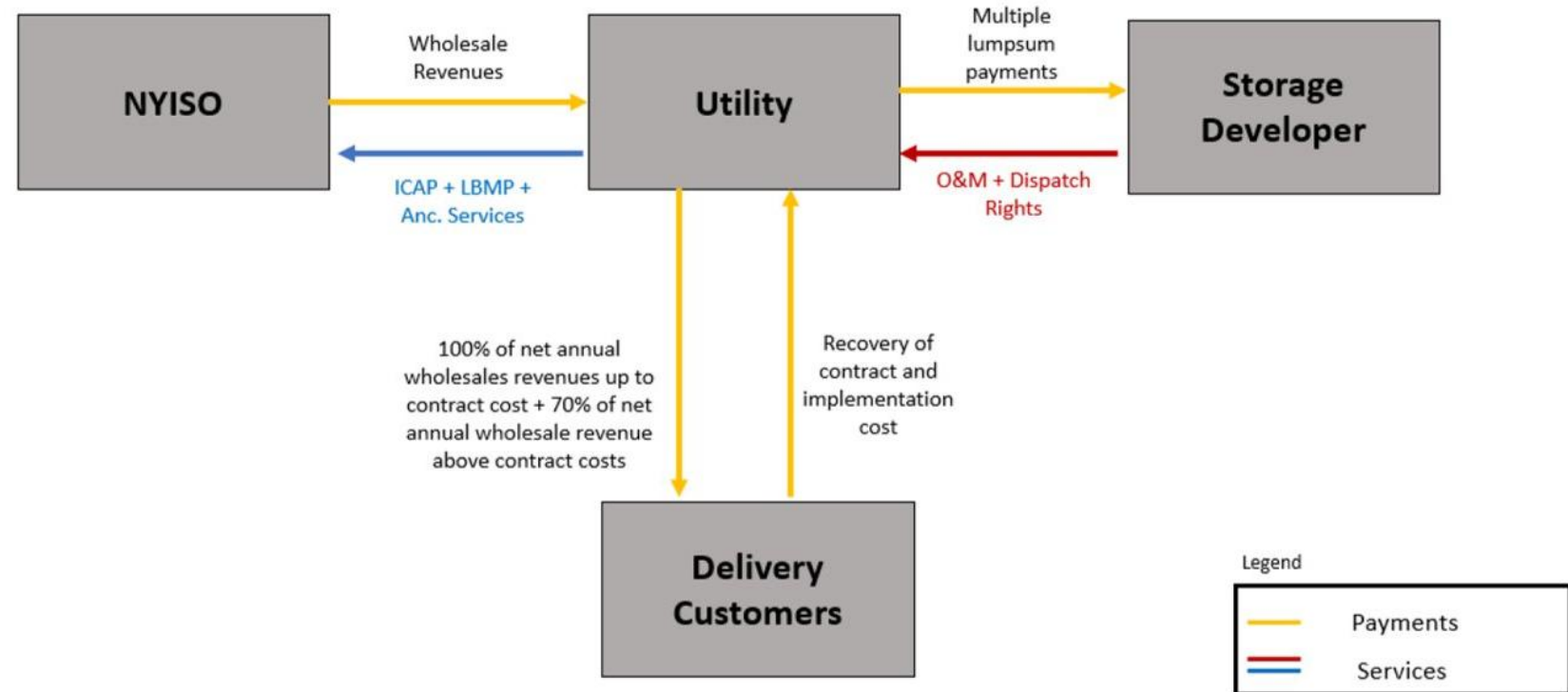
Demand charge reduction,
Reliability and back up,
Voltage support,
Electric vehicle charging,



Opportunities for upcoming Utility Dispatch Rights solicitations

In a UDR contract, Con Edison contracts with developers for large battery projects that the company can dispatch for grid purposes or wholesale market participation

- 185 MW presently under contract
- Transmission and distribution projects
- In-Service dates out to 2030
- Consider regular procurement timeline
- Opportunities to address electrification
- Structural changes to expand participation



Contact Information

- Timing of procurement
 - ConEd RFP Website: <https://www.coned.com/en/business-partners/business-opportunities/bulk-energy-storage-request-for-proposals>
 - Follow [DPS docket 18-E-0130](#) for additional filings and updates
 - Email bulkstoragerfp@coned.com with questions

Integrating EVs with PV & ESS

Chris Russo
Clean Energy Program Manager

Con Edison E-Mobility Programs & Initiatives Overview



PowerReady

EV Infrastructure Incentives
For Widespread Access to EVs

PowerReady Light-Duty

\$613M for light-duty vehicles

PowerReady Medium-Heavy-Duty

\$21.5M Pilot for medium and heavy-duty vehicles

PowerReady Micromobility

\$18M for e-bikes



SmartCharge

Managed Charging Incentives
Integrating Charging with the Grid

SmartCharge NY

For EV Drivers

SmartCharge Commercial

For commercial charging stations

SmartCharge Tech

For installing load management technology



Customer Education and Support

Guiding the E-Mobility Transition

Advisory Services

Providing guidance in the pre-application period for understanding grid capacity and how to plan for upgrades

EV Charging cost calculator

For understanding rates

Connect Services

For sharing opportunities



Innovation and Research

Charting the Path to the Future

Demo Projects

NYC DOT curbside charger demonstration project to install 120 plugs

First Student demo testing cost-effective EV charging solutions for MHD fleets

School bus vehicle-to-grid project

Thank You!

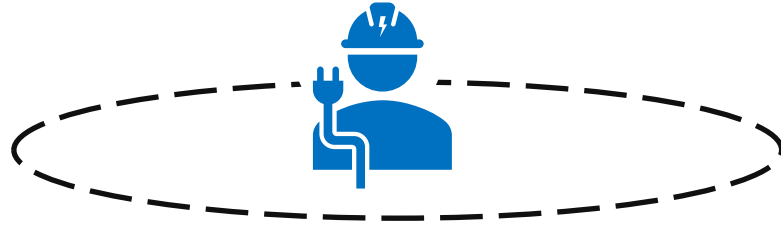
Community Solar Billing

Tom Schaefer
Section Manager, Specialized Activities

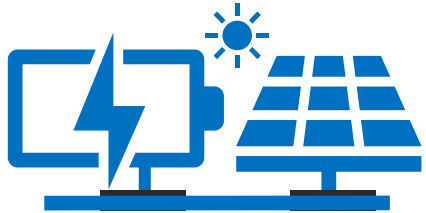
Clean Energy Market Operations

Value of DER Compensation





Value of DER ("V-DER") Market



V-DER Host

- Owner/operator of DER (e.g., Storage, Solar PV)
- Exports energy to the grid
- Designates beneficiaries of credit to itself or subscribers
- CDG, Community Distribution Generation, is the prevailing V-DER program



Subscribers

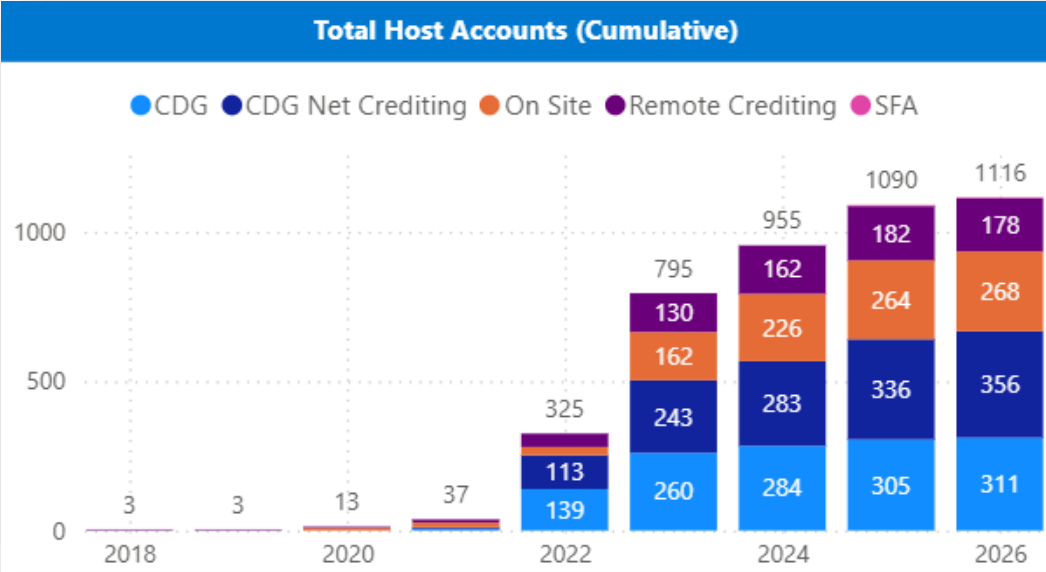
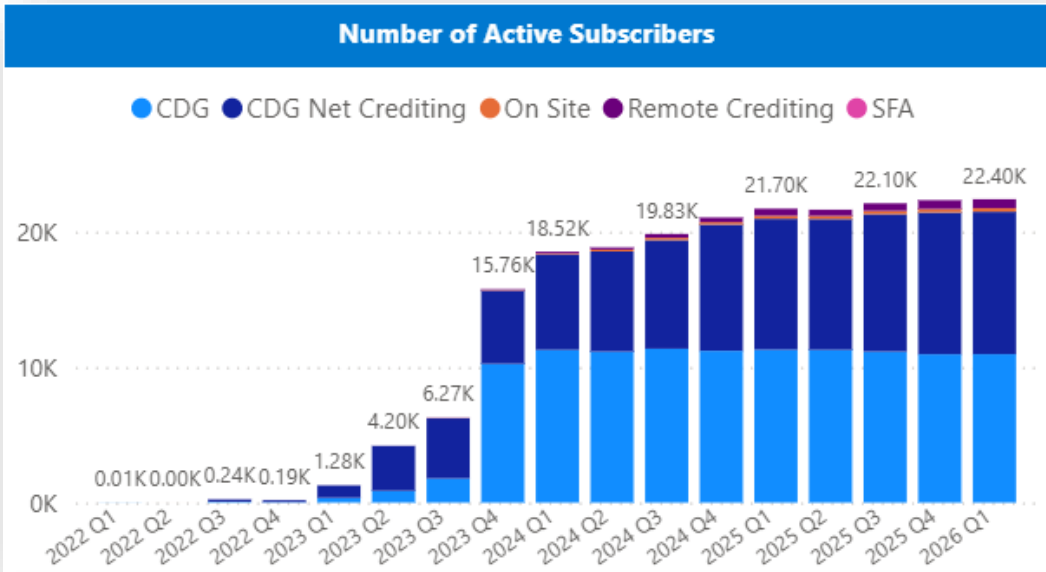
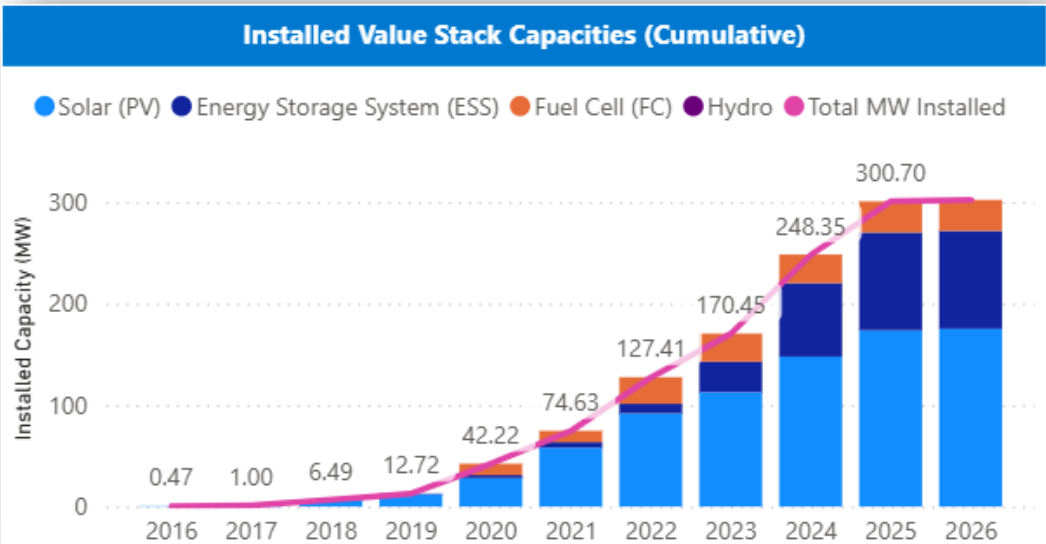
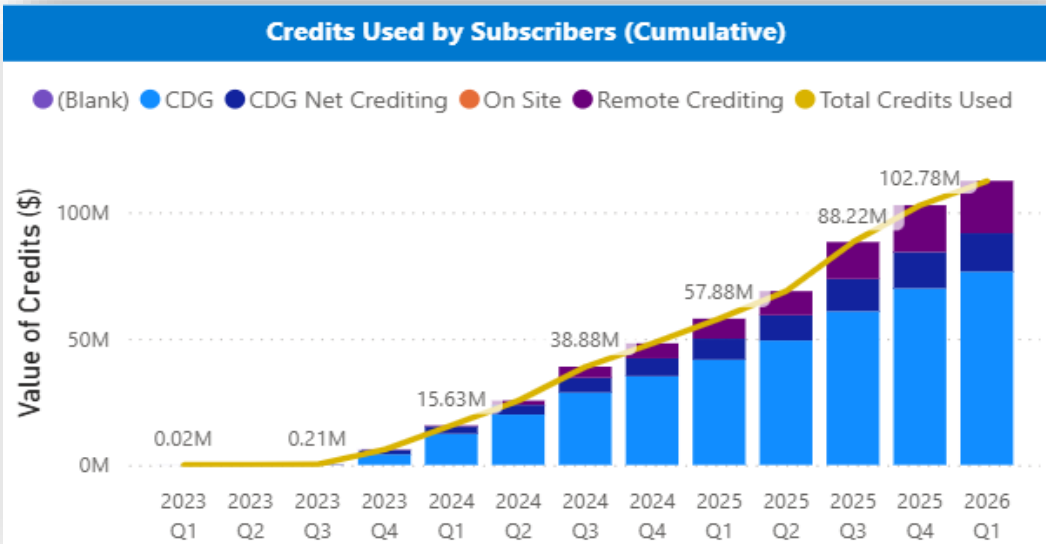
- Electric customers designated by the V-DER Host or 3rd party marketer
- Allocated share of project export
- Receive monthly bill credits
- Typically, pay a subscription fee to the V-DER Host



Utility

- Sets rates, price signals, dispatch windows
- Calculate \$ generated by V-DER Host
- Update subscribers & allocations
- Distribute \$ from Project Host to eligible subscribers
- Issue monthly bill credits

V-DER Market Growth at Con Edison



Customized portal to manage V-DER projects



Home

Accounts

Cases

Resources

Search

Hello Thomas Wida Host

Value Stack Customer

Easily manage your accounts and subscriber allocations.



[Register Here](#)



MY ACCOUNTS



SUBMIT ALLOCATION FILE

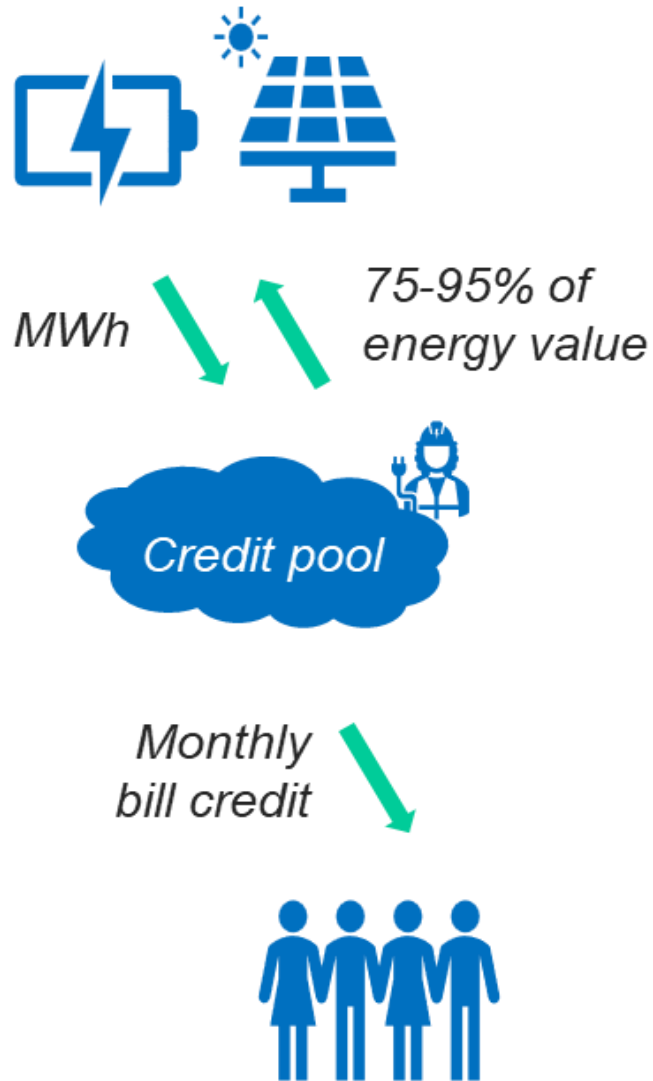


MY CASES



OPEN A CASE

Statewide Solar for All (S-SFA)



- **DER Developer Benefits**

- Unlike opt-in CDG, no subscriber acquisition required
- Immediate host compensation after operation
- Monthly payments based on set compensation levels for DER asset types
- A minimum 1-year program commitment by fully-enrolled projects promotes credit pool stability

- **Project Eligibility & Program Application**

- PV and storage projects < 5MW nameplate capacity may enroll prior to commercial operation
 - Elect the S-SFA form in PowerClerk after SIR downpayment
- May qualify for state or federal low-income community solar incentives

- **Contact Us**

- A dedicated team is available to answer your questions, reachable at customerservice@valuestack.coned.com

Thank you for attending!