

## CUNY 2025 Solar + Storage Installer Workshop

3/27/2025





### **Opening Remarks**

James Gaughan
Director, Distribution Planning

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### **CUNY Workshop 2025 Agenda**

Presenter	Topic
Gerrianna Cohen	Demand Response Program Overview
Libin Mao	Best Practices – Interconnecting Energy Storage
Keegan Edward	E-Mobility & Demonstration Incentive Program
Joshua Brown	Non-Wire Solutions Program Updates
Constantine Spanos & Brittany N. Allerdings	Interconnection Updates & Policy Updates



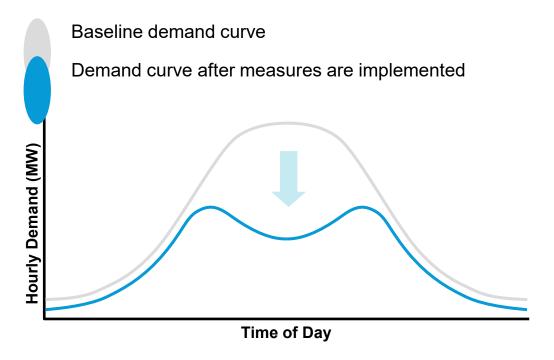
### Program Opportunities and Enrollment Deadlines

**Demand Response** 

Gerrianna Cohen

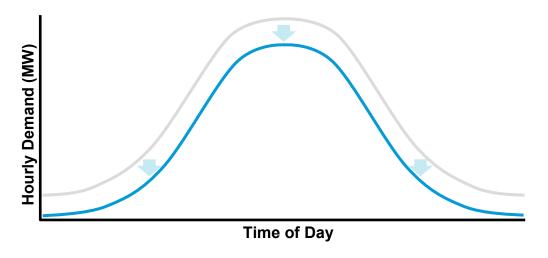


### The Difference between Demand Response and Energy Efficiency for reducing demand on the grid



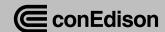
### **Demand Response**

- Short-term reduction in energy consumption
- Targets time frames where systems reach a peak and incentivizing them to reduce



### **Energy Efficiency**

- Long-term, sustained reduction in energy consumption
- Improvements through upgrading technologies to use less energy or insulation to maintain temperatures



### **Con Edison DR Offering**

Customers provide load relief by curtailment or generation pledge

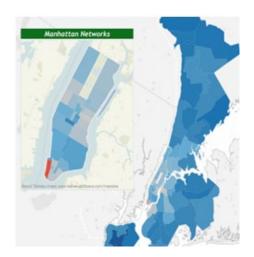
### System-Wide Peak Shaving (CSRP, Term-DLM)

- •>21-hour notification if Day-Ahead Forecast ≥ 92% of summer peak
  - •TV Forecast ≥ 84 degrees or Day-Ahead Forecast ≥ 88% of summer peak (optional)
- Each network has 4-hour call window aligned with network peak



### **Network-Specific Reliability (DLRP, Auto-DLM)**

- 2-hour or less notification based on network contingency
  - If next contingency = Condition Yellow or Active voltage reduction
- Events are 4-6 hours long





### **Demand Response and Smart Usage Rewards**

Load Relief: System-Wide Peak Shaving (Day-Ahead Notice) & Network Reliability (2-hour Notice)









Rider T – CSRP
System-wide

Rider T – DLRP

Network Level

Rider AC – Term-DLM System-wide Rider AC – Auto-DLM
Network Level

### **Aggregator Model** Technology Agnostic

### \$1/kWh Performance Payment and/or Monthly Reservation Payment

Up to \$18/kW

- Tier 1: \$18/kW
- Tier 2: \$25/kW

- 3-5 year contracts via RFP with bid price
- Lower Triggers
- Pay-for-performance
- Penalties for under-performance

### **Smart Usage Rewards**

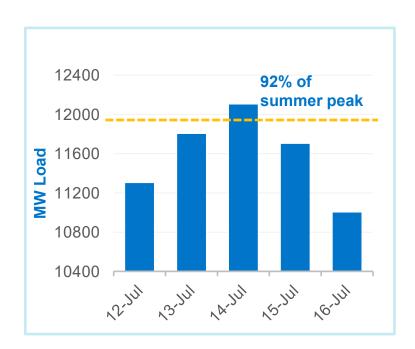
Incentivize customers to reduce energy usage during high demand periods



### Triggers that can cause an event CSRP & DLRP

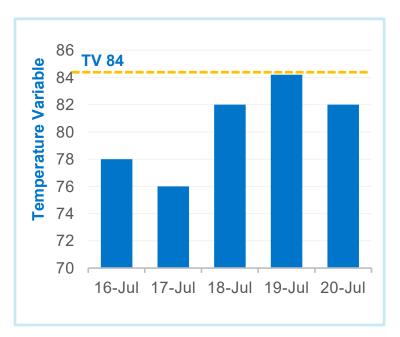
### Forecasted Load at 92%

Established load is calculated based on the annual forecasted peak summer load



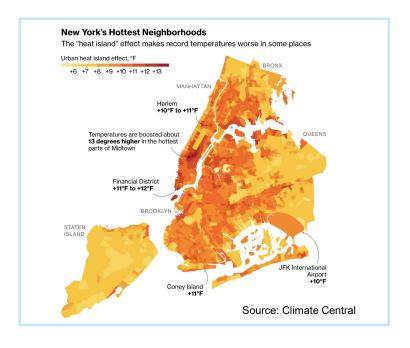
### **Temperature Variable > 84**

Indicates increased demand for electricity due to building cooling usage (like AC) in high temperature conditions



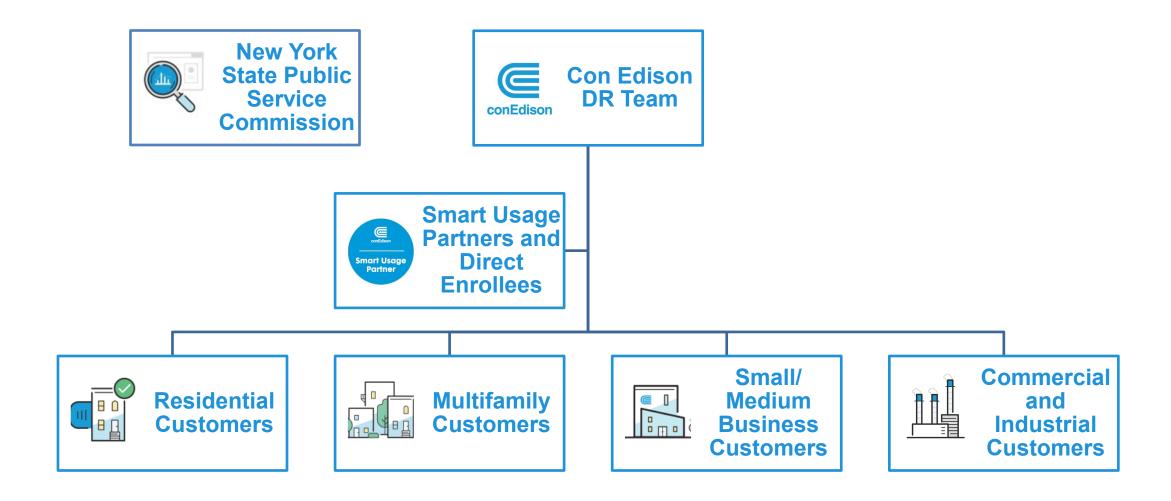
### **Condition Yellow**

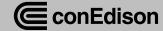
Determined with increased stress to a local area to minimize risk of customer outages or utility equipment being overworked





### **Program Participants**





## Common ways to reduce energy consumption

#### **Residential and Small Med Businesses**

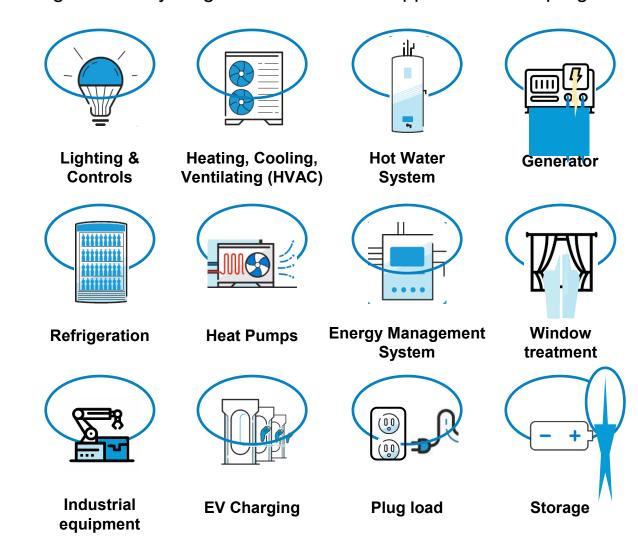
- Turn off lights
- Reduce AC usage or switch to fan mode
- Shift use of large appliances
- Unplug unused electronics

#### **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.





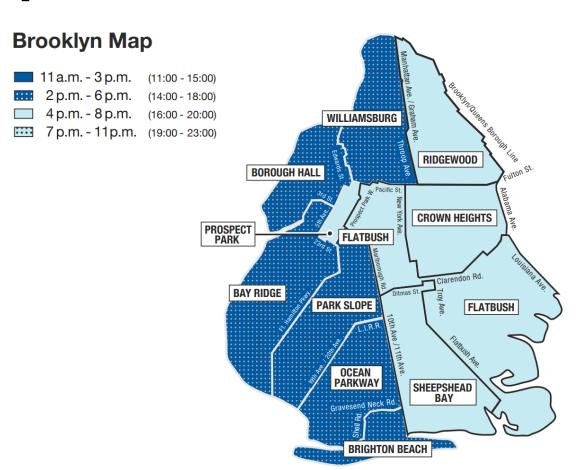
### **Network Peak Call Window Map**

### What is a Network Peak Call Window?

Window of time when energy usage is the highest in a designated area

### How is Network Peak different than ConEd System Peak?

**System peak** is the window of time where the most energy is used across the entire Con Edison service territory whereas **network peak** is the window of time when energy usage is the highest in a specified geographic area.

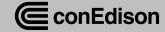




### **CSRP&DLRP**

### **Customer Journey**





### Rider AC RFP



### Rider AC RFP: Long-term Contracts for DR Resources

RFP Process	Capability Period	Contract Length
November through February with contracts signed by July	May 1 through September 30	3-5 Years

- Competitively procured long term contracts with more demanding performance standards vs.
   yearly enrolled Rider T CSRP/DLRP programs
  - Penalties for underperformance
  - Ex. 100kW with \$100/kW incentive and performance of -0.20 = -\$2000
- Applicants provide a single per kW Incentive Rate for each bid which determines annual per kW compensation
- Once clearing bids are determined, Participants are given the chance to accept or reject a contract including all clearing bids



### **Details**

DR RFP Website: <u>Dynamic Load</u>

<u>Management Request for Proposals</u>

Filed on the **PSC Filing Website** 

**Network Peak Call Windows: Call Windows** 

and Network Tiers

Manhattan	SUTTON	11:00 AM - 3:00 PM
Manhattan	TIMES SQUARE	11:00 AM - 3:00 PM
Manhattan	TRIBORO	2:00 PM - 6:00 PM
Manhattan	TURTLE BAY	11:00 AM - 3:00 PM
Manhattan	WASHINGTON HEIGHTS	4:00 PM - 8:00 PM
Manhattan	YORKVILLE	2:00 PM - 6:00 PM
Queens	BORDEN	2:00 PM - 6:00 PM
Queens	FLUSHING	4:00 PM - 8:00 PM
Queens	JACKSON HEIGHTS	4:00 PM - 8:00 PM
Queens	JAMAICA	4:00 PM - 8:00 PM
Queens	LONG ISLAND CITY	2:00 PM - 6:00 PM
Queens	MASPETH	4:00 PM - 8:00 PM
Queens	REGO PARK	4:00 PM - 8:00 PM
Queens	RICHMOND HILL	7:00 PM - 11:00 PM
Queens	SUNNYSIDE	4:00 PM - 8:00 PM
Staten Island	FOX HILLS	4:00 PM - 8:00 PM
Staten Island	FRESH KILLS	4:00 PM - 8:00 PM
Staten Island	WAINWRIGHT	4:00 PM - 8:00 PM
Staten Island	WILLOWBROOK	4:00 PM - 8:00 PM
Staten Island	WOODROW	4:00 PM - 8:00 PM
Westchester	BUCHANAN	4:00 PM - 8:00 PM
Westchester	CEDAR ST.	4:00 PM - 8:00 PM
Westchester	ELMSFORD #2	4:00 PM - 8:00 PM
Westchester	GRANITE HILL	4:00 PM - 8:00 PM
Westchester	GRASSLANDS	2:00 PM - 6:00 PM
Westchester	HARRISON	2:00 PM - 6:00 PM
Westchester	MILLWOOD WEST	2:00 PM - 6:00 PM
Westchester	MOHANSIC	4:00 PM - 8:00 PM
Westchester	OSSINING WEST	4:00 PM - 8:00 PM
Westchester	PLEASANTVILLE	2:00 PM - 6:00 PM
Westchester	ROCKVIEW	4:00 PM - 8:00 PM



### **Application Incentives & Payment Example**

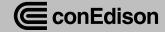
### **Aggregator Earnings Potential**

Program	Monthly per kW Incentive Rate (Fixed)	Annual per kW Incentive Rate(Bid)	Annual Reservation Payment with 100% Performance
CSRP	\$18	-	\$18 x 5 months = \$90
CSRP + DLRP	\$18 + \$18 = \$36	-	\$36 x 5 months = \$180
Term-DLM	-	\$90	\$90
Auto-DLM	-	\$180	\$180



### **Term – DLM**Load Forecast Threshold + Event Frequency

Year	92 Percent of Forecasted Summer System Peak (kW)	88 Percent of Forecasted Summer System Peak (kW)	Weekdays above 92 percent of Forecasted Summer System Peak (Days)	Weekdays above 88 percent of Forecasted Summer System Peak (Days)
2020	12,100	11,600	0	3
2021	11,900	11,400	1	6
2022	11,600	11,100	6	8
2023	12,000	11,400	0	4
2024	11,800	11,300	3	7



### **Auto – DLM**Past DLRP Event Calling Frequency

Year	Days with DLRP Events	Maximum Events any Network was Called For	Test Events
2020	18	13*	1
2021	9	4	1
2022	8	2	1
2023	11	3	1
2024	14	5	1



<sup>\*</sup> In 2020 three networks faced a multiday contingency causing a large number of events to be called in a short period

## Rider AC RFP Customer Eligibility

Customer falls under the following category	Eligibility		
Customer enrolled in DLRP	Cannot enroll in Auto-DLM		
Customer enrolled in CSRP			
Customer enrolled in Rider L			
Customer under Contract for Non-Wires Solution Project	Cannot enroll in Term- or Auto-DLM		
Customer enrolled in Net Energy Metering			
Diesel Generator			
	Forgo DRV and LSRV payments for as long as the Applicant's contractual obligations		
In Term- or Auto-DLM	Must meet permit and emissions requirements, if relying on generation		
III IEIIII- OI AUIO-DLIVI	Aggregator/ customer relationship is exclusive *does not apply to the existing 2021/2022 Vintage Year Contracts		
	May bid additional Load Relief capacity into future Non-Wires Solutions projects		



### **Milestones & Deadlines**

	2024			2025						
	November  15 RFP Released for	6 Clari	fication	Februa 7 RFP Res	sponse	March 7 RFP Award		July 11 Contract		November  1 Early Exit
DLM Competitive Procurement	Vintage Year 2026 & 2027  20 Con Edison Stakeholder Webinar	Subr Dead 13 Ques	dline	Deadline		Notification/ Assessmen		Execution 120 days after start risk assessmen		Deadline for 2026 Capability Period
	2026									
	March  1 Enrollment Period Opens for 2026 Capability Period		April		May		Sept	ember	1 Ea for	ovember  orly Exit Deadline or 2027 Capability oriod
Program Implementation			1 Enrollment Pe closes for 202 Capability Pe	26	5/1	Summer Cap	ability	Period 9/30		



### **Smart Usage Rewards Relevant Schedules**

### **CSRP & DLRP**

Enrollment Period Opens	Enrollment Period Closes	Capability Period Start			
Reservation Payment Option					
Wednesday, March 1, 2025	Monday, April 3, 2025	May 2025			
Monday, April 3, 2025	Monday, May 1, 2025	June 2025			
	Voluntary Payment Option				
Wednesday, March 1, 2025	Friday, September 29, 2025	May – September 2025			

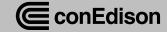
### **Rider AC RFP**

RFP Release	<b>Questions Deadline</b>	Submittal Deadline
Friday, November 15, 2024	Friday, December 6, 2024	February 7, 2025



# Become a Smart Usage Partner Today

- The application takes 3 minutes to fill out!
  - "How To Enroll" section PDF
- API: Get access once you're approved
- You will show up as an aggregator on the customer facing site & can market yourself as a Smart Usage Partner to your chosen market!
  - Find a Smart Usage Partner (customer site)
- Enroll customers before the enrollment deadlines!
  - Opens March 1<sup>st</sup>, and ends April 1 and May 1 for the 2024 season

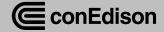


### **Learn More**

- Details on the <u>Demand Response</u> <u>Website</u>
- Find out more about our Programs in Rider T, and AC in <u>Con Edison's Electric</u> <u>Tariff</u>

### **Questions?**

DemandResponse@coned.com www.coned.com/dr





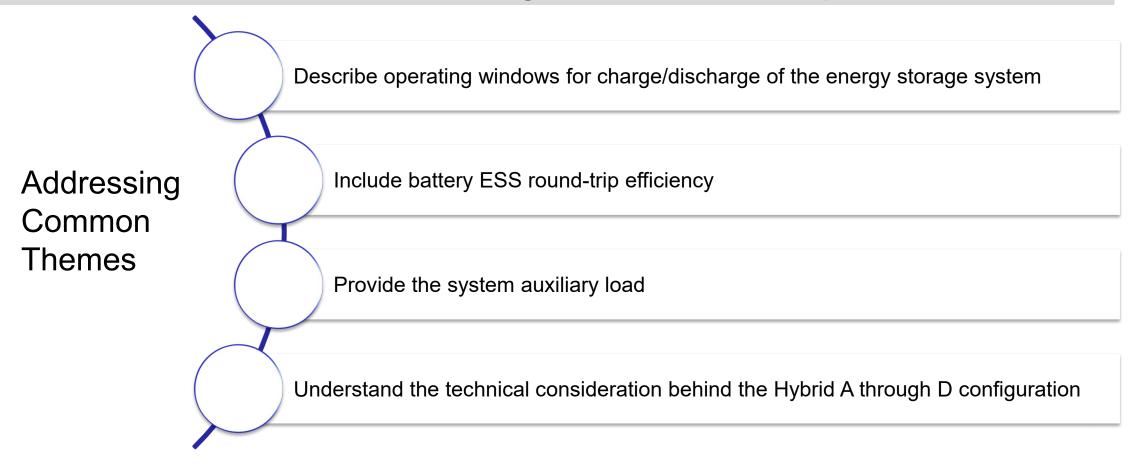
### **Best Practice - Interconnecting Energy Storage**





### **Appendix K Information**

Increase communication and enhance alignment between developers and Con Edison





### **Scope of Work**

- Appendix K provides inputs to the engineering CESIR technical analysis
- Critical components of the appendix:
  - Scope of work
  - System auxiliary loads
  - Operational characteristics
  - Hybrid configuration option A through D

### **Applicant Enters**:

- HT or LT
- Export Rate
- BESS Capacity (RTE Included)
- DER technology type and nameplate
- Contingency Design
- System Configuration
  - For HT service with an open tie, specify inverter split (e.g. 50/50 or 60/40)



### **System Auxiliary Loads**

- Appendix K provides inputs to the engineering CESIR technical analysis
- Critical components of the appendix:
  - Scope of work
  - System auxiliary loads
  - Operational characteristics
  - Hybrid configuration option A through D

### **Applicant Enters**:

- System Auxiliary Loads Description
- Size in kVA
- Itemized List, e.g., HVAC, alarms, lighting, communication equipment and etc.



### **Operational Characteristics**

- Appendix K provides inputs to the engineering CESIR technical analysis
- Critical components of the appendix:
  - Scope of work
  - System auxiliary loads
  - Operational characteristics
  - Hybrid configuration option A through D

### **Applicant Fills:**

- Requested charging window
- Requested discharging window
- Applicants must ensure that the submitted windows align with intended program(s).



### **Hybrid Configuration**

- Appendix K provides inputs to the engineering CESIR technical analysis
- Critical components of the appendix:
  - Scope of work
  - System auxiliary loads
  - Operational characteristics
  - Hybrid configuration option A through D

### **Applicant Selects:**

- Option A through D
- Note that the customer needs to prove the ESS is being charged by DG exclusively if Hybrid Option A is chosen. The system cannot be charged by the grid.
- Example: this is a Hybrid ESS proposal under Hybrid Option D (stand-alone system with no customer load).



### **CESIR Study**

### **Contingent Design and Design Options**

- Contingency Design
  - To reduce interconnection costs, when requested Con Edison will provide N-1 service design in N-2 areas for "DER only" projects.
  - Any additional requested solution(s) will require a 40-business-day extension to the CESIR.
- Construction of Service
  - Initiated upon receipt of payment for necessary system upgrades outlined in the CESIR.
  - Customers and developers that are offered high tension service will enter an iterative technical design review.





### CUNY – 2025 NYC Solar + Storage Annual Installer Workshop

March 2025

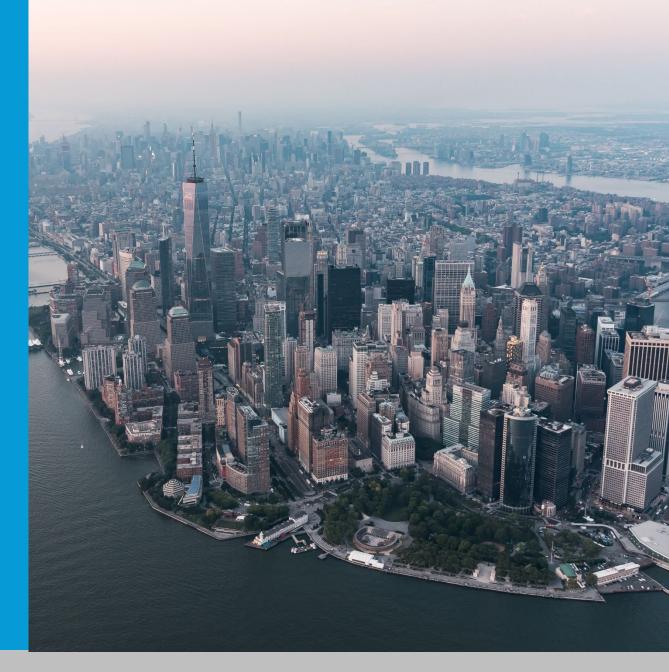
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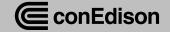






# Con Edison Electric Vehicle Incentive Programs





### 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



# **EV**Infrastructure Programs







### **Program Overview**

**Program Description** 

Providing funding to offset customer and utility-side costs of ensuring that a site has adequate power to install EV chargers for light-duty vehicles

\$613M

Program Dates

Start: July 2020

End: December 2025

Program Goals

**L2 Plugs:** 21,371 **DCFC Plugs:** 3,157

Resources

**Website Email** 

#### **Incentive Overview**

	Non-Public	Public
Level 2 Plugs	Up to 50% \$5-7.5k per plug cap*	Up to 90% \$9-13.5k per plug cap*
DCFC Plugs	Up to 50% \$400+ per kW cap*	Up to 90% \$720+ per kW cap*

- · Project caps can be increased based on specific criteria and characteristics
- Additional incentives are available to projects located within DACs (Disadvantaged Communities)

### **Eligibility and Requirements**

**Con Edison** Receive, or plan to receive, service from Con Edison

Plugs L2: Minimum of 2 plugs

**DCFC**: 6MW cap for 30+ plugs

Contractor Customer-side work must be completed by approved contractor

**Reporting** 5-year reporting requirement pulled on a quarterly basis

Technical Chargers that participate in PowerReady must comply with ISO

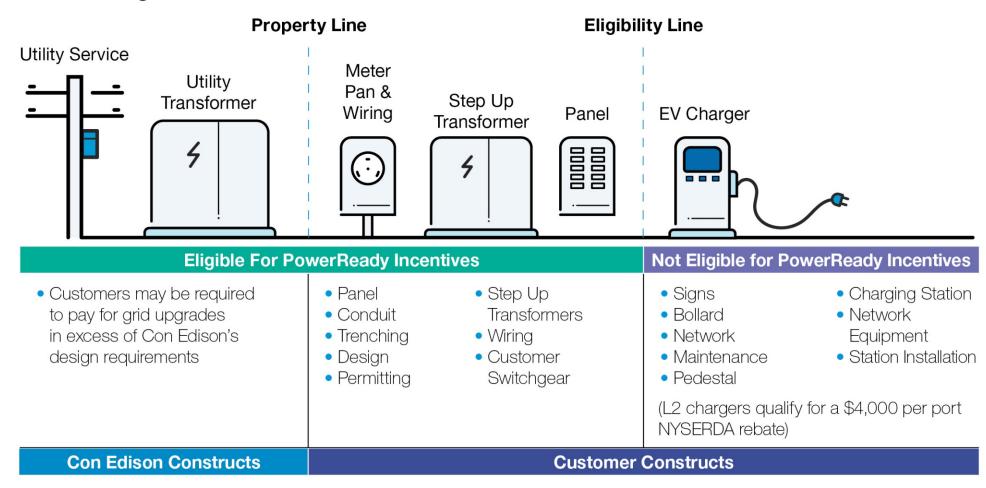
Standards and OCPP standards see "Additional Eligibility Requirements"

Standards and OCPP standards, see "Additional Eligibility Requirements"



### Con Edison's PowerReady Program provides incentives for utility-side and customer-side work

### What's Eligible?









### **Program Overview**

**Program Description** 

To encourage the development of medium- and heavy-duty charging infrastructure, we are offering incentives that can offset utility and customer-side costs for qualifying commercial sites.

Funding

\$21M

Program Dates

Available now, while funding is

available

Resources

**Website Email Application** 

### **Incentive Overview**

	Publicly Accessible				
Located within, partially within, or adjacent to a Disadvantaged Community*	Yes	Utility-side costs:	Up to 90% of costs	Utility-side costs:	
		Customer-side costs:	Up to 50% of costs Or \$490/kW cap	Up to 90% of costs	
	No	Utility-side costs:	Up to 90% of costs	Customer-side costs: Up to 50% of costs	
		Customer-side costs:	N/A	Or \$490/kW cap	

<sup>\*&</sup>lt;u>Disadvantaged communities</u> (DAC) are defined as communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high concentrations of low- and moderate-income households. See map to determine if your site is in a DAC zone.

## **Program Requirements**

**MHDV** 

For charging MHDV over 10,000 lbs. gross vehicle weight

Chargers

L2, DCFC, or mixed

Non-Publicly Accessible Sites

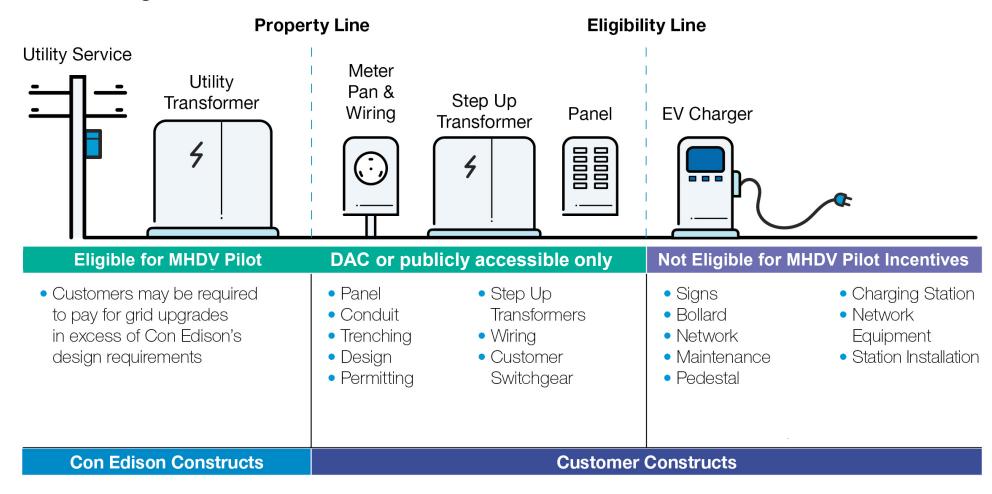
Must be participating in one of the following voucher programs:

- NYSERDA Truck Voucher Incentive Program
- NYC DOT NYC Clean Trucks Program
- EPA Clean Heavy-Duty Vehicles Program
- EPA Clean School Bus Program
- NYSERDA NY School Bus Incentive Program



# Con Edison's MHD Make-Ready Pilot can provide incentives for both utility side and customer side work

## What's Eligible?









# PowerReady Micromobility Program

### **Program Overview**

Program Description

As e-bikes gain popularity, safe and reliable charging becomes even more crucial. Con Edison is offering incentives to offset electric infrastructure costs associated with installing chargers for e-bikes

**Funding** 

\$18M

Program Dates

Start: November 2023

Website

coned.com/micromobility

**Email** 

dl-micromobility@coned.com

### **Incentive Overview**

Utility-Side Costs	Customer-Side Costs
Up to 100% of utility-side costs*	Up to 50% of customer-side costs

### **Program Requirements**

Electric Service Must receive, or plan to receive, electric service from Con Edison

Eligible Sites

Publicly accessible and located within a Disadvantaged a Disadvantaged Community (DAC)\*\*

In or adjacent to a multiunit dwelling where 25% of the units are at or below 80% of the Area Median Income (AMI)

**Data Reporting** Quarterly basis



<sup>\*</sup>Participants may be responsible for some utility-side costs if the project is located on the curb

<sup>\*\*</sup>For more information on DAC and to view the map, visit: Disadvantaged Communities - NYSERDA

# Micromobility chargers can be categorized into two main types

# **Docking Stations**

Park e-bike & charge







# **Battery Charging Cabinets\***

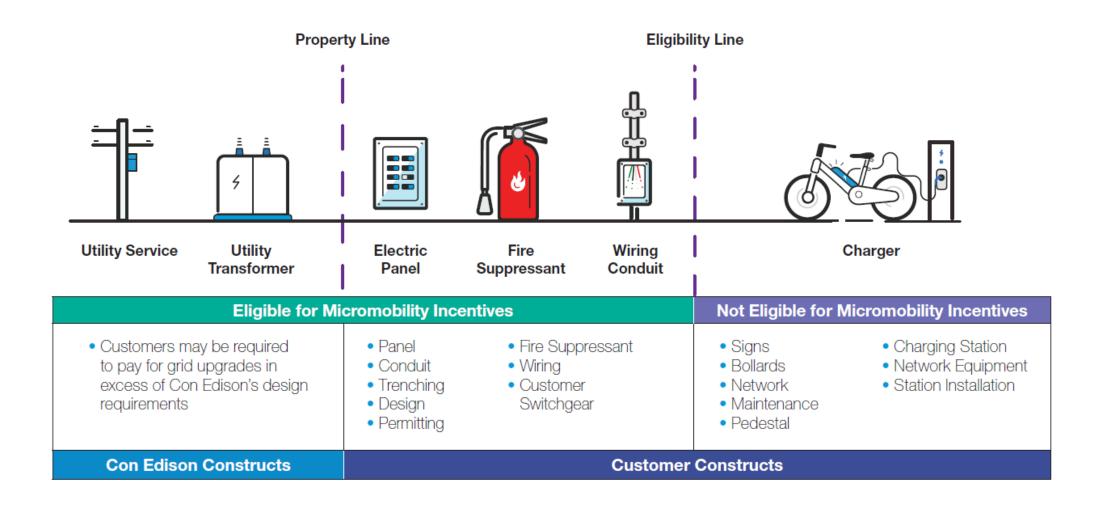
Remove battery to charge. Will require additional approvals and permits in NYC.







# Con Edison's Micromobility Incentive program provides incentives for both utility side and customer side work

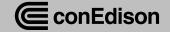


INTFRNAL



# Managed Charging Programs









# SmartCharge New York

### **Program Overview**

Program Description

The program offers cash incentives to EV drivers for charging their EVs at off-peak times, which reduces stress on

the energy grid

Funding \$100M

Program Start: 2017, updated Jan 2023

Dates End: December 2025

Website https://scny.ev.energy/

Email scny@ev.energy.com

**Support No.** 419-909-6237

### **Charging Incentive Overview**

Off-Peak Charging Incentive

(Year-round, baseline)

 \$0.10 per kWh incentive for off-peak charging: All days, year-round, between 12 AM - 8 AM

Summer Peak Avoidance Incentives (Jun 1 – Sep 30) \$35 per month for avoided Summer Peak Incentive: Earn per vehicle or charging station for avoiding charging throughout the whole month, weekdays 2-6PM

 Bonus for avoiding the full peak window all summer Earn an additional \$35 for avoiding peak charging during entire summer from Jun 1 – Sep 30

### **Eligibility and Requirements**

Participants Residential EV Drivers and Commercial Light-Duty Fleets

Locations Charge with any charger in New York City or Westchester

Rate Must be on standard rate (not Time-of-Use rate)

Connection Must have compatible EV telematics or charger to participate

Eligible Models Currently 56 models, 5 chargers. See FAQ for latest list







# SmartCharge Commercial

### **Program Overview**

**Program Description** 

The program offers a predictable cash incentive revenue stream for charging during off-peak periods and overnight

**Funding** 

\$239M

Program Dates

Start: January 2024

Resources

Website **Email** 

## **Charging Incentive Overview**

The more you shift to overnight and off network peak, the more you earn

				L2 Charger	DCFC Charger
ਬੱਚ Earn incentives <b>all days,</b> year-round for charging overnight		\$0.03 per kWh earned while charging from 12 AM – 8 AM			
	Earn incentives during 4-hour		Private	<ul><li>\$10 per kW avoided from Jun – Sep</li><li>\$2 per kW avoided from Oct – May</li></ul>	
window with window window with window with window window with window window window window with window window window with window window window window w	network peak window with every kW avoided relative to nameplate capacity	Public	\$17 per kW avoided from Jun – Sep \$6 per kW avoided from Oct – May	\$20-26 per kW avoided from Jun - Sep \$8 per kW avoided from Oct – May	

### Requirements

**Con Edison** Receive, or plan to receive service from

Con Edison

Charger Ownership Show proof of ownership/operating agreement of chargers or provide an application and data management

application and data management

authorization letter

**Eligible** Rates

SC8 I, II, III; SC 9 I, II, III; SC12 I, II, or III billed for both energy and demand; SC13

Rate I; PASNY Rate I or II

**Charger Data** 

Provide 15-minute interval data

### **Eligible Stations**

- Public station
- Workplace
- Light-duty, mediumduty, heavy-duty fleets
- Multifamily housing
- Industrial locations



# Con Edison's Charging Calculator will help you understand your future electricity costs

### **Description**

A web tool designed to help you understand the potential electric costs associated with EV charging and the best rate for you, as well as how our operating cost relief programs can benefit you

Directions are included on the web tool. You can also reach out the advisory services team to help you navigate the web tool.

Website: <a href="mailto:charging.coned.com">charging.coned.com</a>



# The more you shift off network peak, the more you earn Standard(Private) Peak Avoidance ~Incentives

	Charging Station Size and Associated Standard Offering Annual Incentive <sup>2</sup>						
% of nameplate	Total kW based on nameplate capacity						
capacity <u>reduced</u>	100 kW	500 kW	1000 kW	1500 kW	2000 kW		
during 4-hour peak window <sup>1</sup>	Approximate # of L2 or DCFC Chargers						
	~ 14 L2 Chargers OR ~1 DCFC Chargers	~70 L2 Chargers OR ~5 DCFC Chargers	~140 L2 Chargers OR ~10 DCFC Chargers	~210 L2 Chargers OR ~15 DCFC Chargers	~280 L2 Chargers OR ~20 DCFC Chargers		
100%	\$5,600/yr	\$28,000/yr	\$56,000/yr	\$84,000/yr	\$112,000/yr		
75%	\$4,200/yr	\$21,000/yr	\$42,000/yr	\$63,000/yr	\$84,000/yr		
50%	\$2,800/yr	\$14,000/yr	\$28,000/yr	\$42,000/yr	\$56,000/yr		
25%	\$1,400/yr	\$7,000/yr	\$14,000/yr	\$21,000/yr	\$28,000/yr		
0%	\$0/yr	\$0/yr	\$0/yr	\$0/yr	\$0/yr		

<sup>1.</sup> See appendix for peak window by network

You can earn more with \$0.03/kWh for overnight charging!



<sup>2.</sup> Assuming 7.2 kW for L2 charger and 100 kW for DCFC charger





### **Program Overview**

**Program Description** 

Providing funding to offset costs of load management systems and battery storage to enable a site to balance and shift EV charging load

Funding

~\$6M

**Program Dates** 

Program Launch: Oct

18,2024, 2024

Website

coned.com/smartchargeted

<u>h</u>

**Email** 

<u>dl-</u>

SCTApplications@coned.cor

### **Incentive Overview**

Technology Segments	Tier 1: Enrollment to SCC	Tier 2: Enrollment to DCR*	
Load control software	Up to 90%	Up to 45%	
Battery storage	Up to 60%	Up to 30%	
Load limiting hardware	Up to 60%	Up to 30%	

NOTE: Tier 2 includes participants enrolled in SCC & DCR

## **Eligibility and Requirements**

**Con Edison** 

Receive, or plan to receive, service from Con Edison

Participants Requirement Participants are required to be enrolled in one of following:

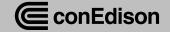
- SmartCharge Commercial or
- Demand Charge Rebate program

**Site Eligibility** 

New and existing sites are eligible, technology adopted post

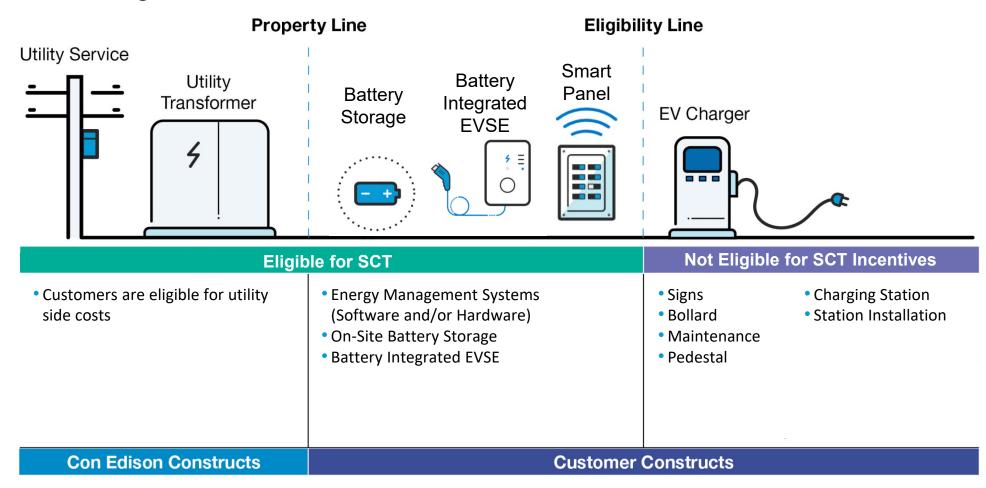
Order (August 19, 2024)

\*Novel technologies can be submitted for review for potential eligibility



# SmartCharge Tech can provide incentives for both utility side and customer side work

## What's Eligible?



# **SmartCharge Tech Technology List**

Novel technologies can be submitted for review for potential eligibility. See <a href="https://jointutilitiesofny.org/ev/lmtip">https://jointutilitiesofny.org/ev/lmtip</a> for latest details

Technology	Eligible Costs	Minimum Capabilities	Technology Types	Required Certifications
Load Management Software	Up to five years of software costs that provides active load management for EV charging stations	<ul> <li>Manage the charging of all EVSE included in the application</li> </ul>	All Software	<ul><li>NEC 625.42</li><li>OCPP conformance</li><li>Open ADR conformance</li></ul>
			Storage Applications	• Modbus
Load	Equipment with load-limiting functionality to	Manage the charging of all EVSE included in the application	All Hardware	• NEC750
Management Hardware	EV charging stations, without energy storage.		Control Panels	• UL916
naiuwaie	Examples: power cabinets, switches to enable power sharing, load monitoring,		Power Control Systems	• UL3141
	communications, or safety hardware		Inverters & Converters	• UL 62109
On-Site Energy Storage	Behind-the-meter battery energy storage systems that support EV charging stations.	Meet utility requirements for sizing (discharging the minimum power to the minimum number of plugs simultaneously)	All Storage Applications	• NEC 750 • UL1973 • UL9540
	Example Use cases: to minimize demand charges, avoiding disruption to power, and delivering the maximum capacity to chargers using power sharing at a site.	<ul> <li>Min of 70% round-trip efficiency maintained</li> <li>Connected to the grid</li> <li>10+ year manufacturer warranty for system</li> </ul>		
Energy Storage- Integrated EVSE	EV charging station and ports are not eligible, but incentives are available for the incremental price of the energy storage component of battery-integrated EV chargers.	<ul> <li>Meet utility requirements for sizing (discharging the minimum power to the minimum number of plugs simultaneously)</li> <li>Min of 70% round-trip efficiency maintained</li> <li>Connected to the grid</li> <li>10+ year manufacturer warranty for system</li> </ul>	All Storage Applications	• NEC 750 • UL1973 • UL9540

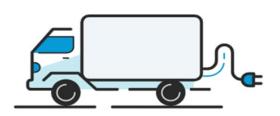


# Con Edison Resources



# Con Edison Advisory Services available to provide guidance during electrification process

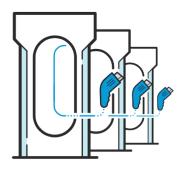
Con Edison has developed an EV Advisory Service to help you understand the grid capacity where you operate, how to plan for any upgrades that may be needed, and what electric rates may be best for you. You should engage with advisory services if you are:



A Light, Medium, Heavy Duty Fleet Operator



A Developer unsure of where to site your next project



Interested in installing a charging hub



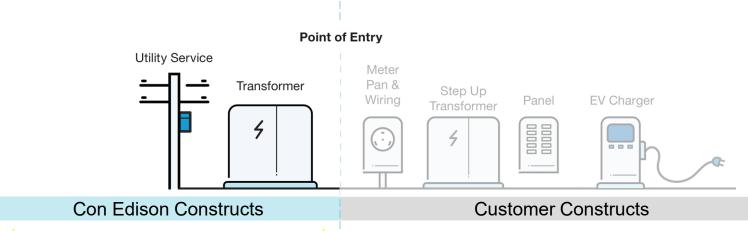
Unsure of where to start on your EV charging journey!

# A Site Assessment provides a preliminary look at utility-side upgrades needed to support your EV project

### **Results**

- Whether an existing service is expected to be adequate to support a proposed EV load
- The type and magnitude of utility-side work that may be required
- General timeline to expect for utility-side work if needed

A site assessment is not an authorization to install chargers or begin construction. Results are not guaranteed and do not replace a formal service application



Site Assessment

### **Site Assessment Process**



 Customer submits a request form with EV load details and a Letter of Authorization if applicable



Advisory team performs a Site Assessment within two weeks or less



 Results are shared with customer. Advisory is available to explain results and next steps

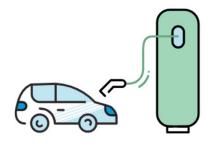
# **Program Resources**

Resource	Details
ConEdison PowerReady Website	Incentive website including program information and resources.
PowerReady FAQs	Program Frequently Asked Questions.
Capacity Map/DAC Map	Look up your address on Con Edison capacity map.
Register – PowerReady Program Portal	Register for the PowerReady Program Portal.
Apply Now – PowerReady Program  Portal	Apply for the PowerReady Program Portal.
PowerReady Program Portal <u>Directions</u>	Step by step directions to apply to the program.
Approved Contractor List	List of charger installers approved to participate in PowerReady.
Participant Guide	Includes program specifics, such as eligibility criteria and requirements.
EV Charging Cost Calculator	EV Charging cost calculator to determine bill impacts of charging.
EV Rates Webinar Replay	Video reviewing rate options for EV developers and customers.
EVMRP@coned.com	Reach out with any program questions or to start your project.

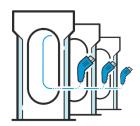
## Lead the Charge!



Forecasts indicate EVs will be responsible for 1/3rd of all car sales by 2025



EV Drivers save over \$500 and 72 lbs of CO2 on average a year vs. gas drivers



Studies have shown EV charging stations at commercial sites increased average EV driver dwell time by 50 minutes





# **Non-Wires Solutions Overview**

March 27, 2025





# **Agenda**

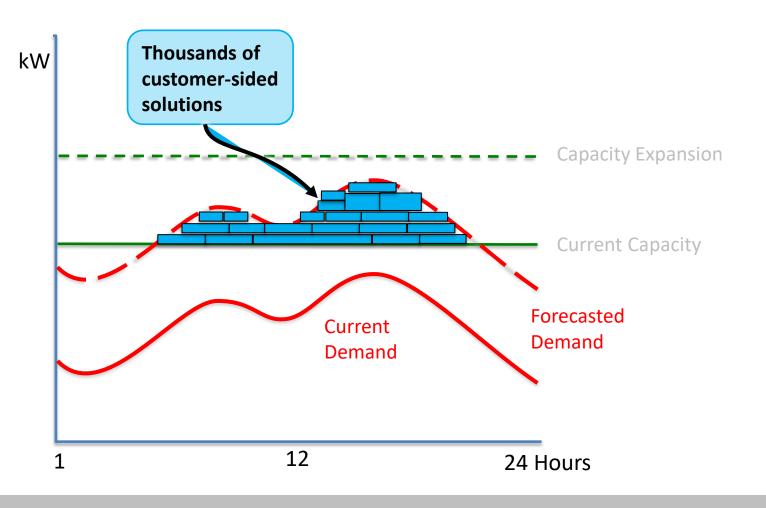
- Non-Wires Solutions Overview
- Portfolios and Program Structure
- Future NWS Opportunities





# **Non-Wires Solution (NWS) Overview**

An NWS Project is a portfolio of non-traditional solutions that seek to defer or eliminate traditional infrastructure projects for the benefit of the distribution system

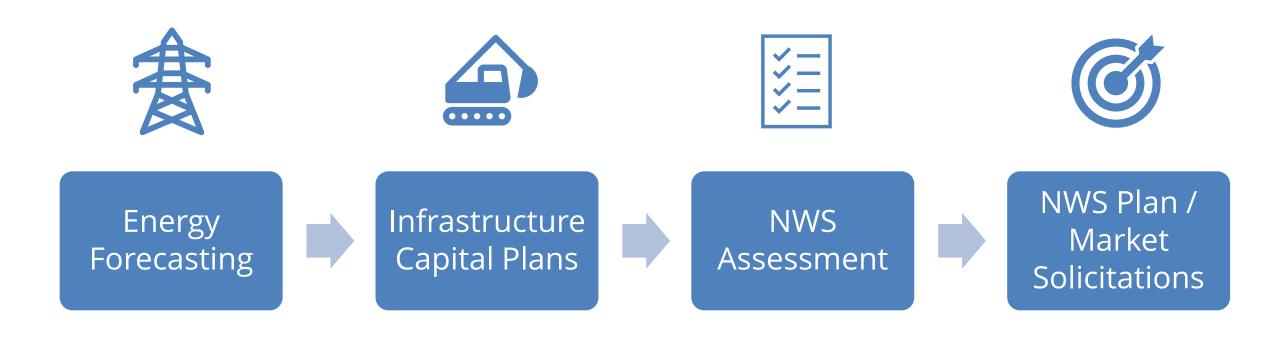


NWS provides benefits by:

- Working with customers to implement cost effective solutions that benefit communities
- Implementing portfolios that provide a net benefit to society
- Incentivizing innovative technologies
- Accelerating adoption of EE technologies



# Selecting the Neighborhood for the Neighborhood Program



# **Summary of NWS Portfolios**

#### **Jamaica**

- Designed to eliminate equipment upgrades at Jamaica Substation
- Released RFP in 2023 to seek load relief through 2027

## Brooklyn Queens Demand Management (BQDM) Program

- Designed to defer new Gateway Substation
- Launched in 2014 and extended in 2017
- Released Prescriptive ESS program in 2022

#### Newtown

- Designed to defer load transfer from Newtown to North Queens
- Released RFP in 2019 for deferral from 2021 to 2025

## Water Street (Closed)

- Successfully eliminated equipment upgrades at Water Street, Plymouth Street, and Farragut Supply Stations
- Commenced in 2018 for reductions needed for 2019 through 2021





# **Current Battery Storage Projects in NWS**

	Jamaica	BQDM	Newtown	Water St
Battery Energy Storage Systems	3	5	3	1
Contracted Load Relief	5 MW	10.1 MW	9.8 MW	0.5 MW
Operational Date	Summer 2026	Summer 2026	Summer 2024	Summer 2021
Procurement Pathway	RFP	Prescriptive	RFP	RFP
BTM or FTM	FTM	Mix of BTM & FTM	FTM	FTM

ConEd called 18 NWS events in 2024 from May 1<sup>st</sup> – September 30<sup>th</sup>, where operational Battery Energy Storage Systems dispatched to the grid during peak demand times based on NWS event criteria



# Case Study – Borden Ave Newtown Energy Storage System

- Newtown NWS Portfolio provided 21 MW of Total Peak Demand Reduction (kW)
- Front of the Meter BESS (4.7 MW)
- 50% installation incentive upon commercial operation date,
   50% annual performance incentive
- Installed in summer 2024, performance contracted through summer of 2033
- Each BESS is contracted for summer dispatch to provide associated load reduction
- ConEd NWS has First Rights of Dispatch
- Multiple value streams for customer



Borden Ave - NWS Battery Energy Storage System



# **General Program Structure and Requirements**

### **Applicant commits to:**

- Limit projects to 5 MW of load reduction
- Follow NYS Standardized Interconnection Requirements (SIR)
- Use BESS technology approved for use in NYC
- Choose service connection that meets local reliability standard (e.g. N-2)
- Provide first-right-of-dispatch during the Summer
   Performance Period (May 1<sup>st</sup> September 30th)
- Min. of 4 consecutive hours guaranteed load reduction
- Not participate in conflicting programs/markets
- Comply with Measurement & Verification plan

### Con Edison commits to:

- Pay 50% of incentive upon approved operationality
- Pay up to 50% over 10-year contract term based on performance
- Provide 21-hour notification of NWS Events



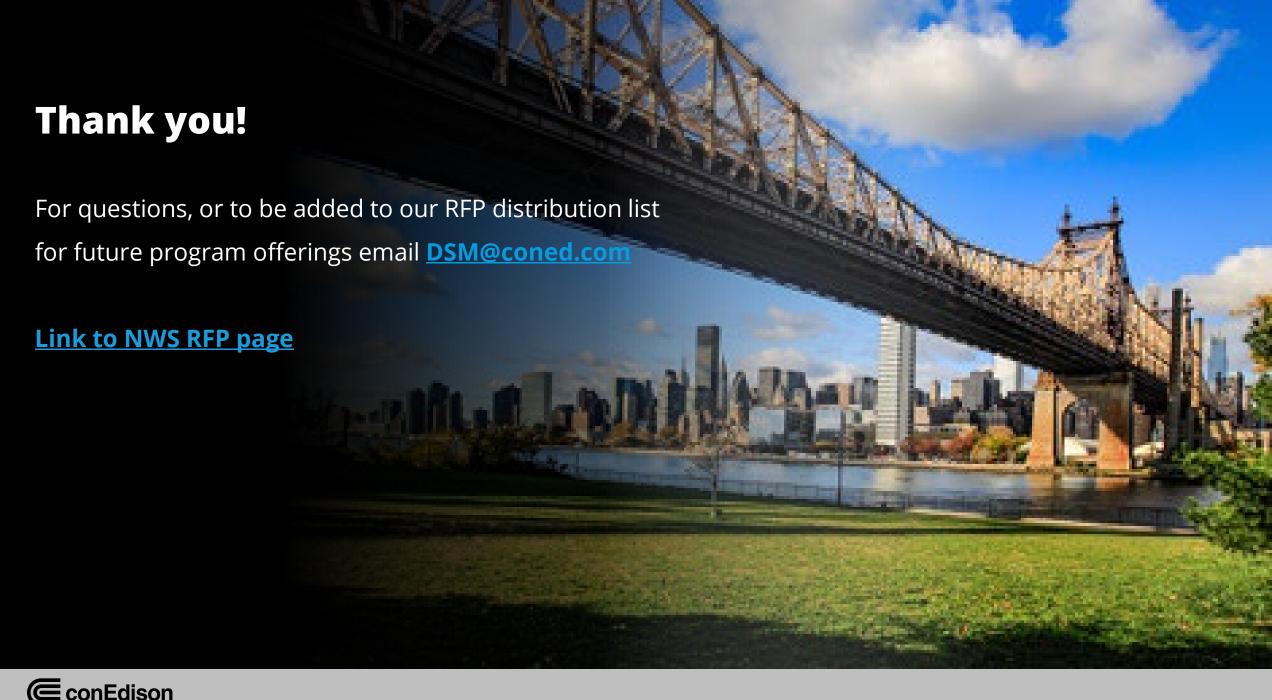
Battery Energy Storage System in Woodside, Queens



# **Future NWS Opportunities**

- For the latest program info check out:
  - NWS RFP page, view past opportunities
- To make sure you don't miss announcements please reach out to us to be added to our distribution list at <a href="DSM@coned.com">DSM@coned.com</a>
- Interested developers, email us to set up an introduction meeting











# **New Additions to the DG Team**



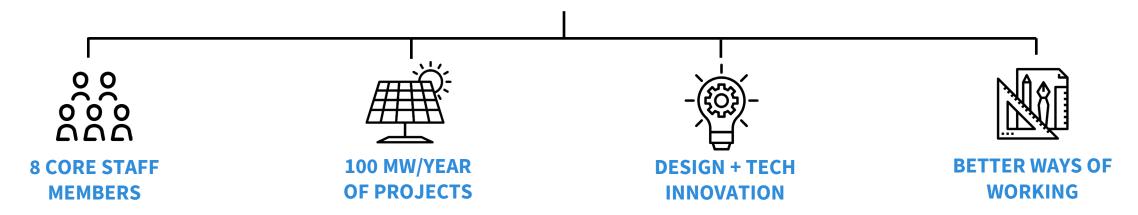
**Brittany Allerdings** 



**Constantine Spanos** 

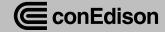
# **DG Team Roles and Responsibilities**





- PROJECT MANAGERS SPANNING TECHNICAL AND POLICY
- **CUSTOMER DG TO-DATE:** 
  - OVER 1GW OF DG INSTALLED
  - 700 MW CUSTOMER SOLAR
  - 96 MW CUSTOMER ESS

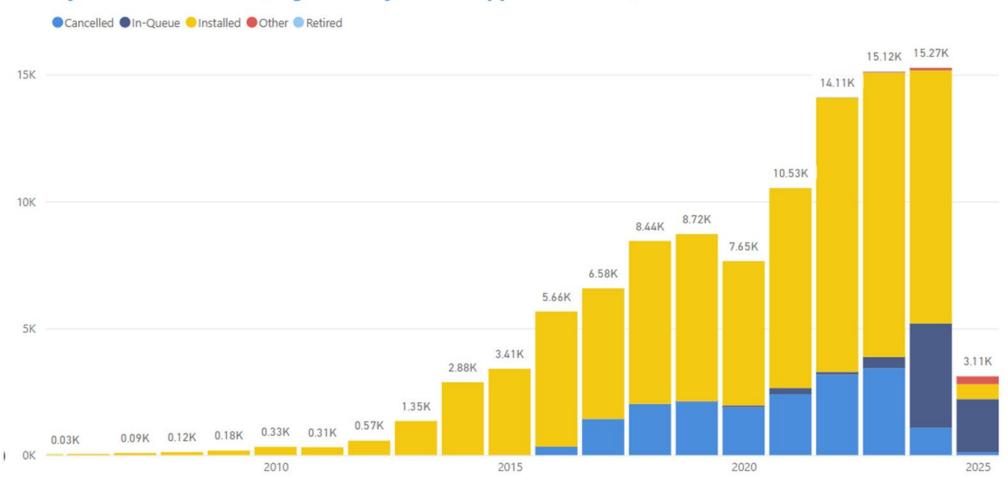
- NOVEL PROTECTION & CONTROLS HARDWARE
- NEW INTERCONNECTIONS
- SYSTEM ENHANCEMENTS
- IMPROVED COORDINATION WITH T&D SME's



## **DG Interconnections Over Time**

### Assets by Installation Status (Organized by Year of Application Start)

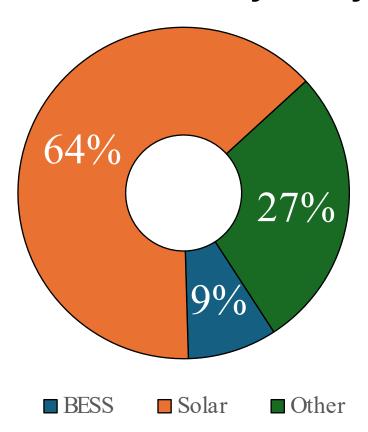




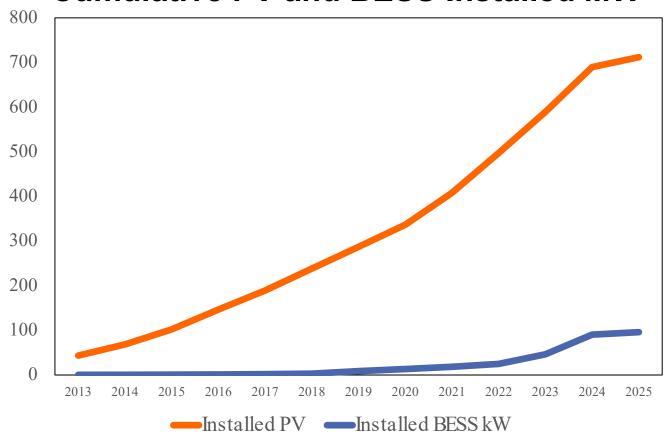


# **Installed DG by Technology Type**

# **ICAP Breakdown by DG Type**



## **Cumulative PV and BESS Installed MW**



## **DG Team Vision**

Improving the interconnection experience is being approached through three priority tracks, organized by impact and complexity, aiming to achieve early wins while simultaneously addressing complex, longer-term challenges.

Increase Automation

Enable Flexible IX

Reform Queue Management

Pilot New Interconnection Technology

**Streamline Material Modifications** 

Mitigate Engineering Review Roadblocks

**Hosting Capacity Map Enhancements** 

Analyze Upgrade Cost Trends

**Reduce Financing Barriers** 

Lowest-complexity items

**Medium-high complexity** 

**High complexity** 



# Thank You!