

# Non-Wires Solutions

Spring 2019 Program Update

April 17, 2019



# Agenda

- About Con Edison
- Non-Wires Solutions (NWS) Program Overview
- Current and Potential Future NWS Programs
- Current NWS Incentives
- Energy Storage RFP
- Market Solicitation & Portfolio Development Takeaways
- Q & A

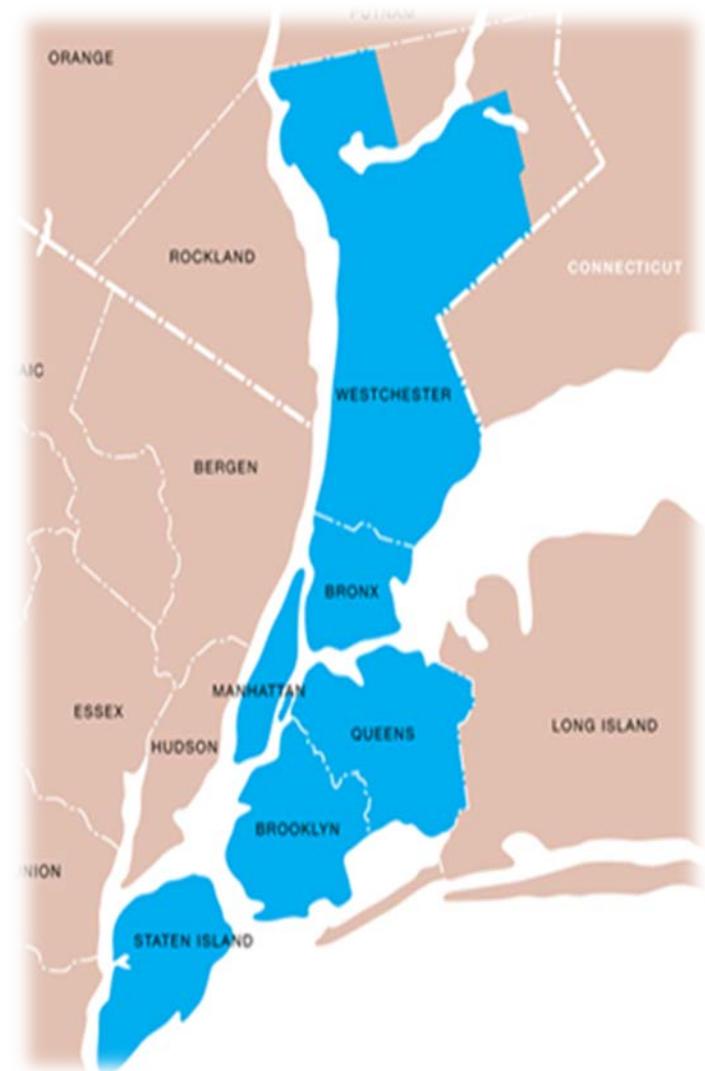


# Consolidated Edison Company of New York

	Customers	Infrastructure	Service Territory
Electric	3.4 million	One of the largest underground systems in the world	All 5 boroughs and Westchester County
Gas	1.1 million	4,333 miles of gas mains and services	3 out of the 5 boroughs and Westchester County
Steam	1,600	Largest district steam system in the world	Manhattan below 96 <sup>th</sup> Street

## Con Edison, Inc. also includes:

- Orange & Rockland Utilities – Gas and Electric
- Con Edison Clean Energy Businesses
- Con Edison Transmission – Electric transmission and gas midstream

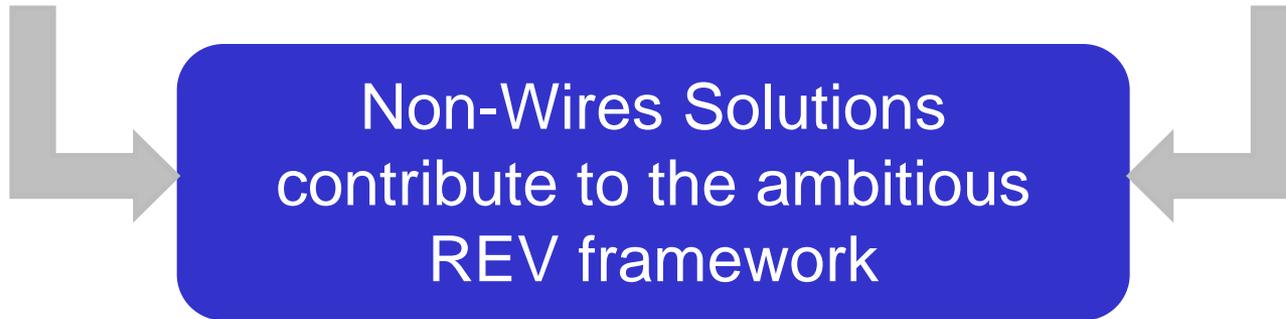


# New York's Reforming the Energy Vision (REV)

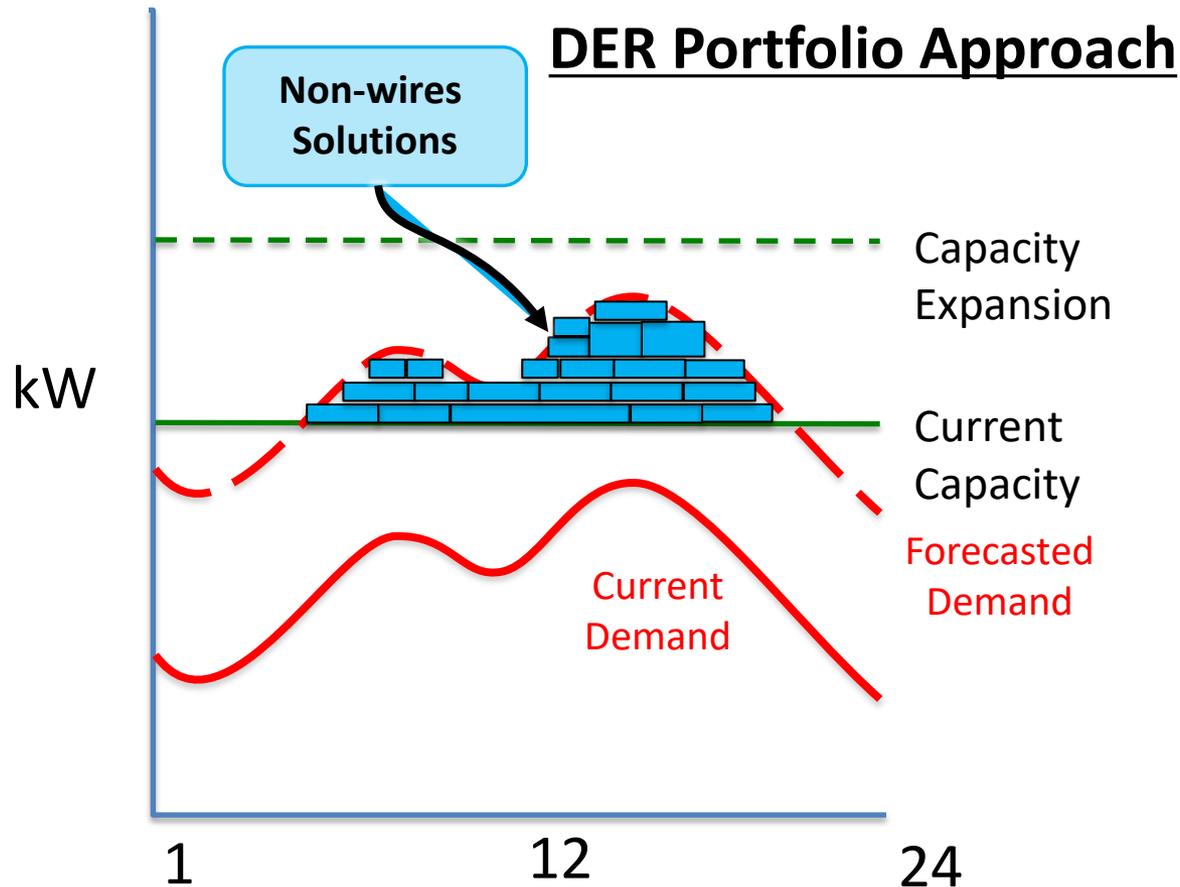
Reduction of  
Greenhouse Gas  
Emissions

Electricity from  
renewable  
energy sources

Decrease in  
building energy  
consumption



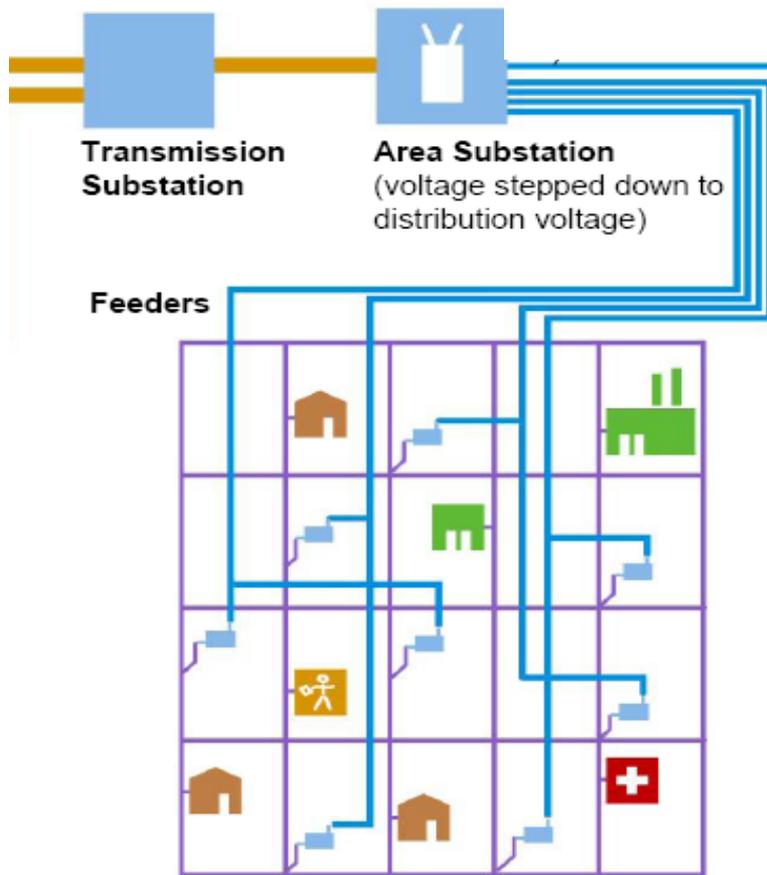
# Deferral/Replacement of Traditional Solutions with DERs



A portfolio of DER technologies are needed to shave the peak.

# Distributed Energy Resources (DERs): Customer Choice and a Utility Tool

## Transmission



**Annual Load Forecast**

↓  
**Analyze impacts to area substation,  
primary feeders, etc.**

↓  
**Forecasted load expected to exceed  
capability of area/network**

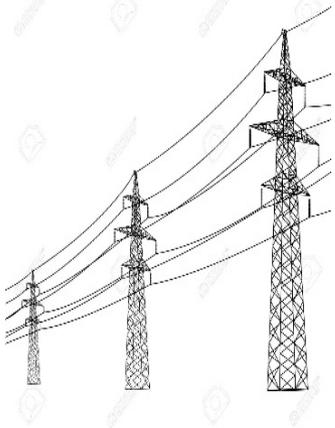
↙  
**Traditional Solution**

Upgrade  
transformers, add  
new feeders, etc.

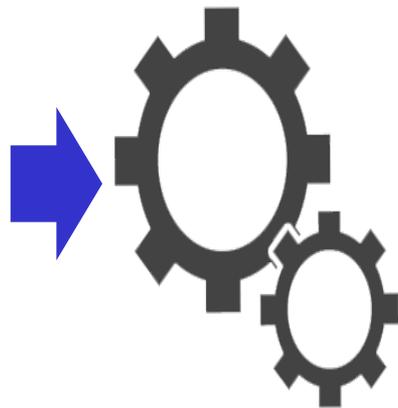
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**Non-Wires  
Solutions**

Pursue demand  
reduction  
strategies

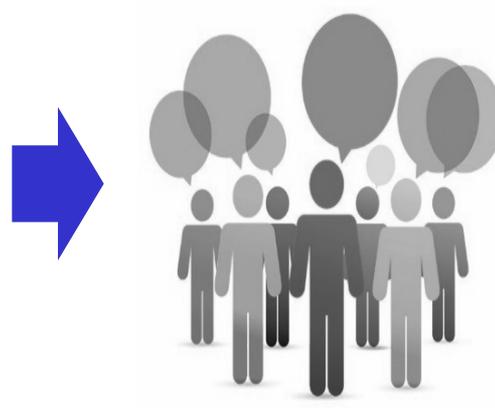
# Non-Wires Solutions Process Overview



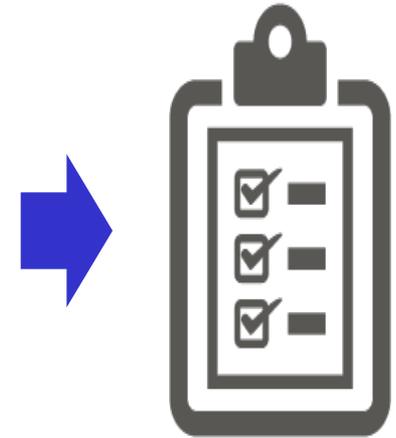
**Identify  
System  
Needs**



**NWS Suitability**

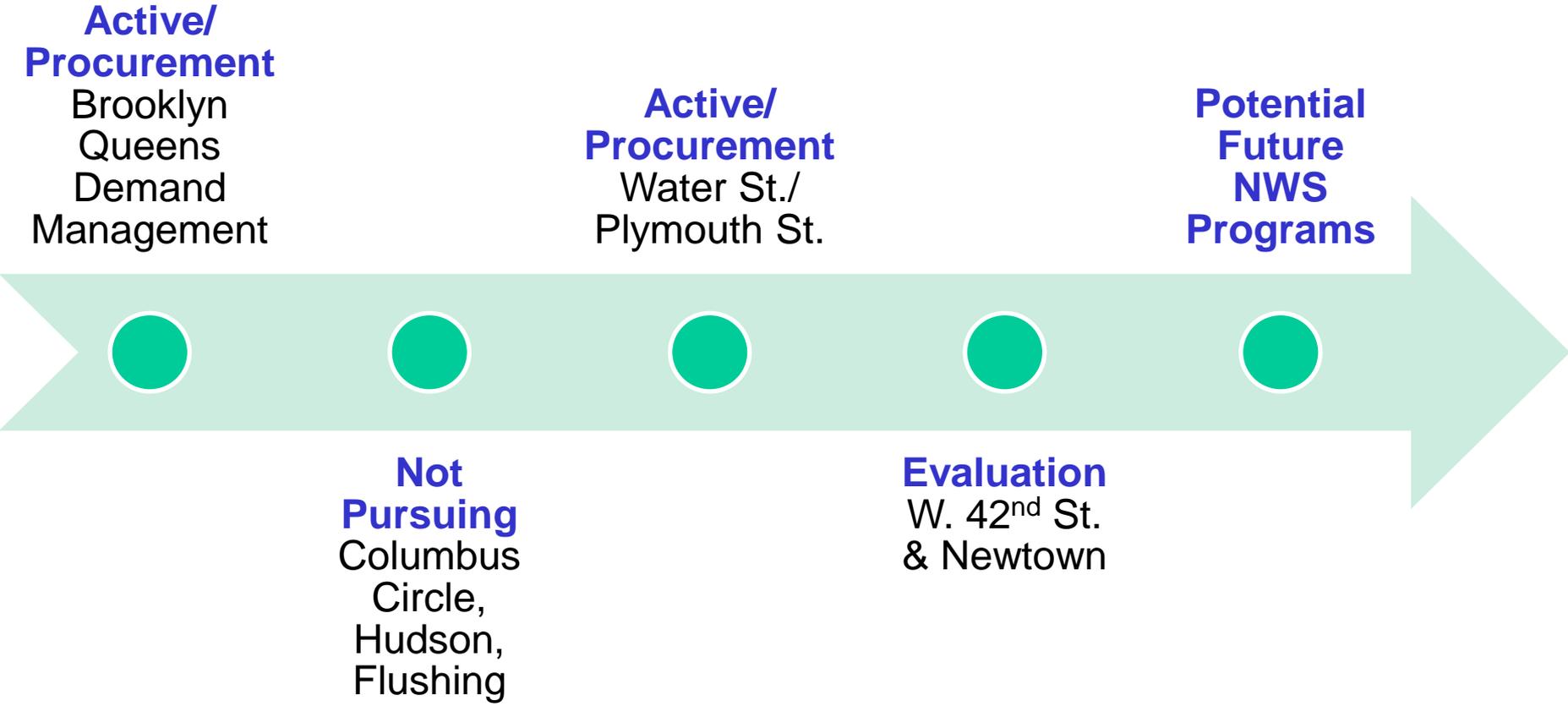


**Competitive  
Solicitation**



**Benefit Cost  
Analysis (BCA)  
Evaluation &  
Procurement**

# Current & Potential Future NWS Programs



# Active Programs in Brooklyn & Queens



To verify site eligibility email Con Ed account # to [DSM@coned.com](mailto:DSM@coned.com)

Hosting Capacity Map: <https://www.coned.com/en/business-partners/hosting-capacity>

# Current Programs: NWS In-progress



## Water St. / Plymouth St.

- **Networks:** Borough Hall, Prospect Park, Williamsburg
- **Load relief need:** 32 megawatts (MW) by 2021
- **Traditional projects:** Feeder replacement and transformer cooling
- **Status:** Active / Procurement



## BQDM

- **Networks:** Crown Heights, Ridgewood, Richmond Hill
- **Load relief need:**
  - 52 MW completed 2018
  - ~11 MW by 2021
- **Traditional projects:** New Substation/Load Transfer
- **Status:** Active / Procurement

# Current Programs: NWS In Development



## West 42<sup>nd</sup> Street

- **Networks:** Pennsylvania
- **Load relief need:** 42 MW over 10 years
- **Traditional projects:** Load transfer
- **Status:** Evaluation



## Newtown

- **Networks:** Borden, Sunnyside
- **Load relief need:** 24 MW over 10 yrs.
- **Traditional projects:** New transformer and sub-transmission feeder
- **Status:** Evaluation

# Current NWS Programs & Incentives

# NWS Portfolio Incentives

Customer Sided Solutions	BQDM	Water St ./ Plymouth St.
<b>Energy Efficiency</b>		
Residential	✓	✓
Multi-Family	✓	✓
Small Business	✓	✓
Commercial & Industrial	✓	✓
<b>Distributed Generation</b>		
Combined Heat & Power	✓	✓
Fuel Cells	✓	✓
<b>Energy Storage Systems*</b>		✓

\*RFP procurement only

# Energy Efficiency: Residential

## Con Edison Neighborhood Program

We offer residents in single-family homes or multifamily buildings with up to 4 units:

- Free LED lightbulbs and installation
- Refer a neighbor incentive
- Rebate of up to \$210 on a smart thermostat

More than 30,000 customers have replaced over 600,000 light bulbs with energy efficient LEDs



[conEd.com/Neighborhood](http://conEd.com/Neighborhood)

# Energy Efficiency: Multifamily

## Con Edison Multifamily Energy Efficiency Program

Multifamily buildings with five or more residential units are eligible for:

- Free installation of approved energy-efficient lighting and controls upgrades in building common areas
- Free in-unit LEDs
- Find qualified Participating Contractors online

More than 2,500 buildings and 9,000 residential units in BQDM and Water Street have participated to date



Learn more and sign up at:  
[conEd.com/NeighborhoodMultifamily](https://conEd.com/NeighborhoodMultifamily)

# Energy Efficiency: Small Business

## Con Edison Commercial Direct Install Program

Small businesses are eligible for:

- Free energy assessment
- Free lighting upgrades
- \$160 rebate on a smart thermostat

Energy efficient upgrades have been installed at more than 7,500 small businesses



Learn more and sign up at:  
[conEd.com/NeighborhoodCommercial](https://conEd.com/NeighborhoodCommercial)

# Energy Efficiency: Commercial & Industrial

## Con Edison Commercial & Industrial Program

- Pre & post installation inspection required
- Custom measures require additional Measurement & Verification
- Incentive paid after post installation inspection

	Incentive
Interior LED Lighting	15% over core existing C&I Incentives
Eligible Custom Measures	\$800/kW



# Distributed Generation: Combined Heat & Power



Source: [manageenergy.coned.com](http://manageenergy.coned.com)

Incentive	Amount
\$ per kW	Up to \$1,800*
Incentive cap	\$1.5 million

\*Incentive rate based on base rate from NYSERDA PON 2568 Incentive Calculator

## Program offered through: Con Edison Incentives

- May 1, 2020 Target Installation
- ½ incentive at install, remainder performance-based
- NYSERDA PON 2568 Closed but technical assistance still available
- Must report system data to NYSERDA website to qualify for incentives
- Black start capability optional

# Distributed Generation: Fuel Cells



Source: ERS, Inc

Incentive	Amount
NYSERDA PON 3841 Incentive	\$1,000
Matching Con Ed Incentive	\$1,000*
Incentive cap	\$1 million

\* Matching base incentive only

## Program offered through: Con Edison & NYSERDA Incentives

- May 1, 2020 Target Installation
- ½ incentive at install, remainder performance-based
- NYSERDA technical assistance available
- Must report system data to NYSERDA website to qualify for incentives
- See NYSERDA PON 3841 for additional requirements

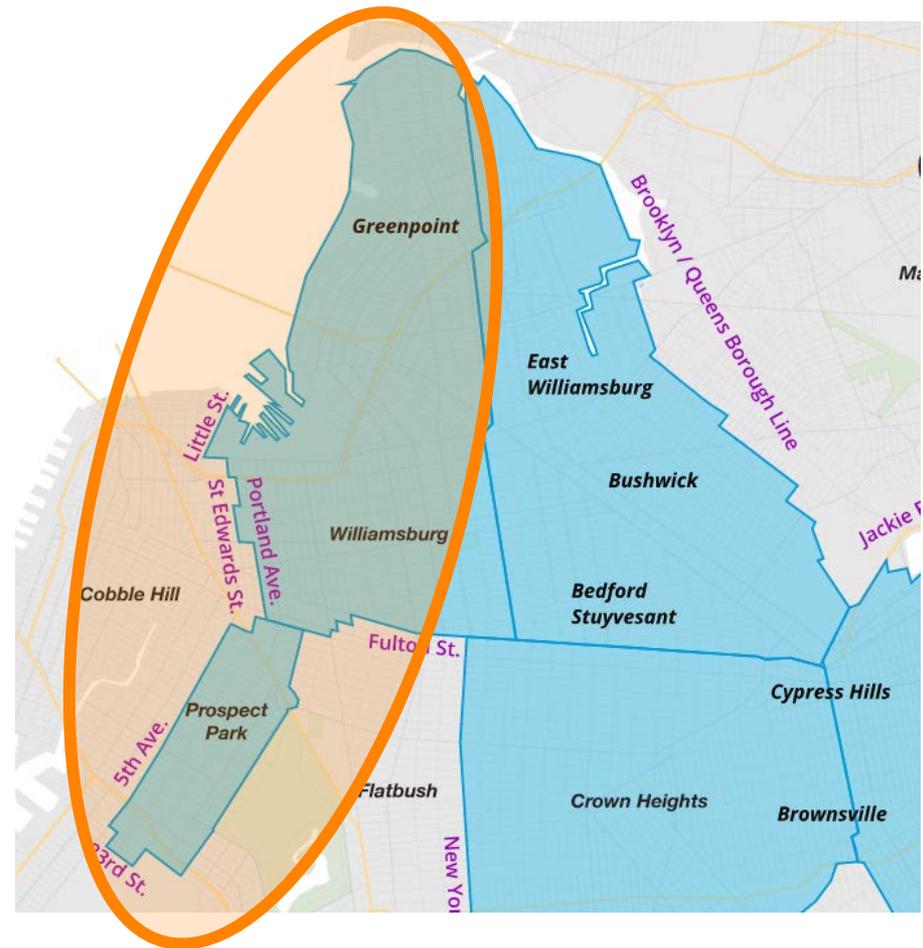
# NWS Energy Storage System (ESS) Request for Proposals

Water Street and Plymouth Street

# Water St / Plymouth St ESS RFP

- **9 - 14 MW** targeted load reduction via ESS
- Minimum 4 hour system duration
- RFP Released: **April 8**
- Responses Due: **May 10**
- ESS needed operational starting: **May 2020 and May 2021**

## Targeted Area



# Water St / Plymouth St ESS RFP: Key Program Terms

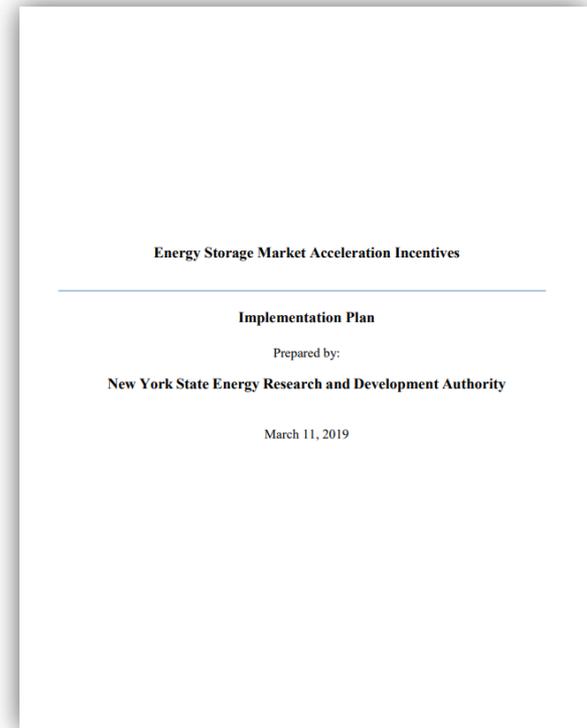
- Con Ed will purchase full ESS dispatch rights for 10 Summer Capability Periods
- NWS ESS projects not eligible for Con Ed's Demand Response or Demand Management programs for duration of contract
- Day-ahead notification of ESS dispatch need
- Con Ed NWS incentive paid 50% at Operational Date; 5% annually for 10 Summer Capability Periods
- Potential future market revenues to be shared between Con Ed and vendor

# Water St / Plymouth St ESS RFP: Timeline

Date	2019 Water St./Plymouth St. NWS ESS Program
<b>April 8, 2019</b>	Release Water St. /Plymouth St. NWS ESS RFP
<b>April 17 2019</b>	NWS Update Webinar
<b>April 19, 2019</b>	Respondents submit clarification questions
<b>April 26, 2019</b>	Con Edison responds to clarification question
<b>May 10, 2019</b>	RFP Response deadline
<b>May 31, 2019</b>	RFP Award/Notification
<b>July 16, 2019</b>	Expected contract execution date
<b>August 16, 2019</b>	Security Requirement due for awarded proposals.
<b>November 1, 2019</b>	Customer Acquisition Deadline for May 1 2020 projects
<b>January 15, 2020</b>	Customer Acquisition Deadline for May 1, 2021 projects
<b>May 1, 2020</b>	Deadline for guaranteed ESS capacity installed and operational for summer performance
<b>May 1, 2021</b>	Deadline for guaranteed ESS capacity installed and operational for summer performance

# Water St / Plymouth St ESS RFP: Energy Storage Market Acceleration Incentives Implementation Plan

- **Eligibility:**
  - Customer must contribute to System Benefit Charge (SBC)
  - See detailed implementation plan for additional eligibility requirements
- **Incentive:** Descending starting at \$350/kWh
- More information:  
[www.nyserda.ny.gov/energystorage](http://www.nyserda.ny.gov/energystorage)



# Market Solicitation & Portfolio Development Takeaways

# Recommendations to Potential RFP Respondents

- Ensure that you are qualified in Con Edison Oracle system
- A project will typically not be selected to address all needs
- Complete all RFP requirements and ensure requested attachments are fully completed
- Reach out to [dsm@coned.com](mailto:dsm@coned.com) if you'd like to verify a customer is eligible (Account Number, name and address needed)
- Utilize additional revenue streams to propose a more cost-effective solution
- Documented customer letter of support and/or Solutions providing more load relief at network peak hour and/or overload period are prioritized
- Lower costs favored to maximize ratepayer benefit

# Portfolio Development Learnings

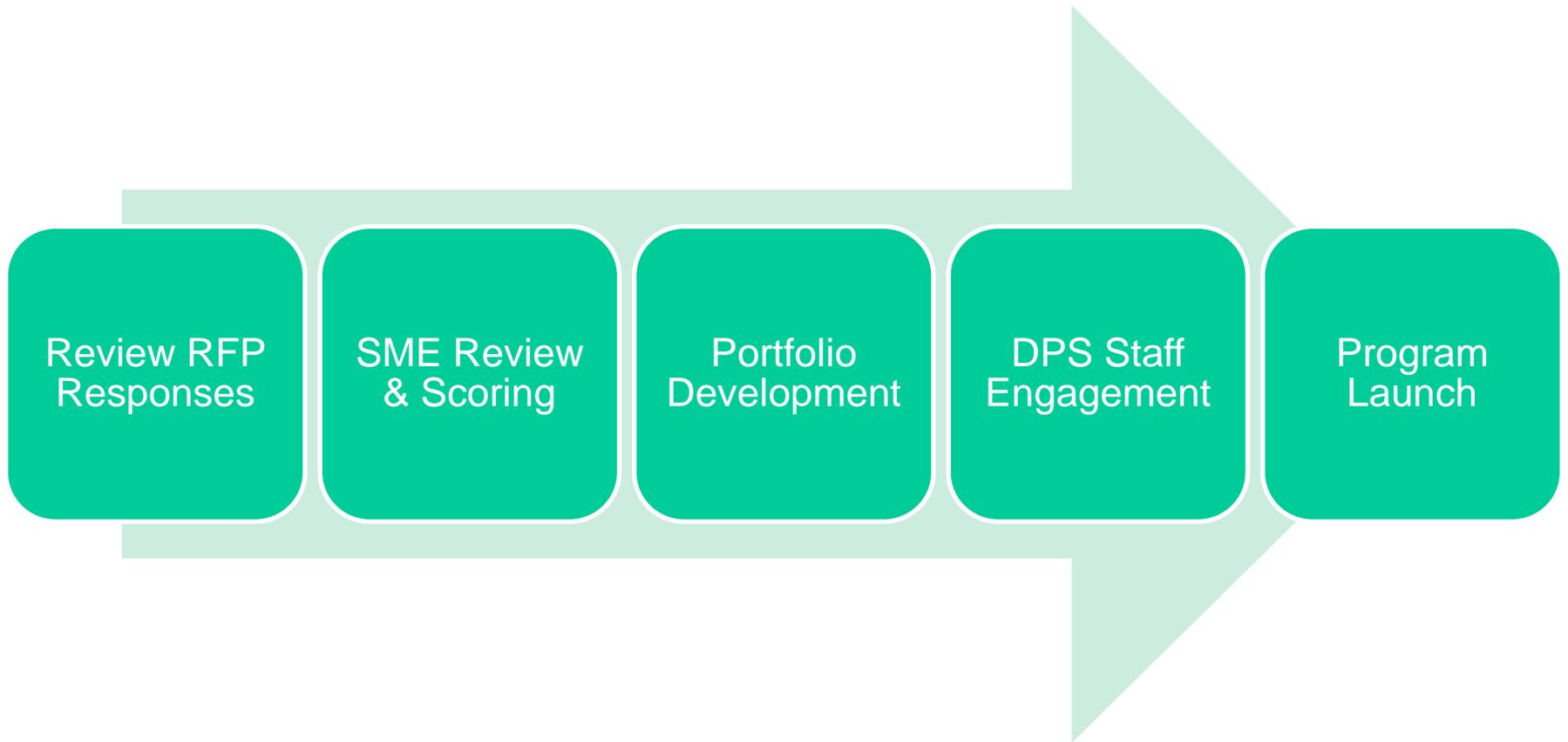
## Disqualification reasons

- Insufficient information provided
- Little to no reduction impact to times of need
- High costs compared to other solutions
- Technology proposed not yet proven

## Selection reasons

- Complete, clear proposal
- Helps to address overall portfolio needs
- Customer support/ understanding of demographics
- Cost competitive offering
- Proven technology

# Program Development Approach



# Some May Also Be Wondering.....

- Why are some projects that have been through an NWS solicitation not moving forward?
- Why are some projects that were initially identified on the Non-wires webpage no longer moving forward?
- How are you providing feedback on a solutions response?
- How long does the program development process last?
- Can a customer respond directly to an RFP?

# Stay Informed...

[www.coned.com/nonwires](http://www.coned.com/nonwires)



Account & Billing

Services & Outages

Save Energy & Money

Our Energy Future

Search

Non-wires solutions have the potential to reduce customers' electric bills, improve reliability, and defer capital infrastructure. We've identified several opportunities to create such change.

## Current Opportunities

Projects	Current Status	Documents
Primary Feeder Relief - Chelsea	Project deferred due to decrease in the projected load	<a href="#">Project Description</a>
Parkchester No. 1 Cooling Project	Project deferred due to decrease in the projected load	<a href="#">Project Description</a>
Newtown Transformer Installation Project	No longer accepting proposals	<a href="#">RFP</a>
Primary Feeder Relief - Williamsburg	No longer accepting proposals	<a href="#">RFP</a>
Water Street Cooling Project	No longer accepting proposals	<a href="#">RFP</a>
Plymouth Street Cooling Project	No longer accepting proposals	<a href="#">RFP</a>

# Other Helpful Links

- Con Edison Non-Wires Solutions:  
[www.coned.com/nonwires](http://www.coned.com/nonwires)
- Con Edison Hosting Capacity Map:  
[www.coned.com/en/business-partners/hosting-capacity](http://www.coned.com/en/business-partners/hosting-capacity)
- NYSERDA: [www.nyserda.ny.gov/](http://www.nyserda.ny.gov/)
- National Grid Metro NY (Gas):  
[www.nationalgridus.com/NY-Home/](http://www.nationalgridus.com/NY-Home/)

# Q&A