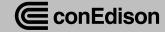
# CECONY's 2023 Local Transmission Plan (LTP)



#### **Overview**

- NYC and Westchester
- 660 square miles
- 9.3 million people
- 3.4 million customers
- All time system peak
  - 13,322 MW (2013)



#### **LTP Assumptions**

• The projected load forecast for the next 10-years:

Year	2023 Reference	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Load (MW)	12,990	13,150	13,180	13,150	13,080	13,000	12,960	13,260	13,400	13,570	13,810	14,040
% Growth	-	1.2	0.2	-0.2	-0.5	-0.6	-0.3	2.3	1.1	1.3	1.8	1.7

- Con Edison FIRM Transmission Projects:
  - Y2025: RCC Gowanus Greenwood Phase Angle Regulated 345/138 kV Feeder
  - Y2025: RCC Goethals Fox Hills Phase Angle Regulated 345/138 kV Feeder
    - Fox Hills 138 kV Substation rebuild as a Ring Bus
  - Y2028: Brooklyn Clean Energy Hub (BCEH)

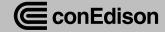


# **Brooklyn Clean Energy Hub**



### **Brooklyn Clean Energy Hub – FIRM Project**

- Con Edison will construct a new 345 kV load serving substation in northwest Brooklyn to provide supply to the new Gateway 27 kV Distribution Area Substation
  - The in-service date for this project is summer 2028
- Driven by growing demand in Brooklyn and Queens
  - The existing Brownsville No.1 27 kV Distribution Area Substation cannot meet customer electric demand beginning in 2028
  - The new Gateway 27 kV Distribution Area Substation will transfer existing load from Brownsville No. 1
    - Y2028 Load: about 120 MW
- The designated load serving capability of the BCEH is about 1,900 MW

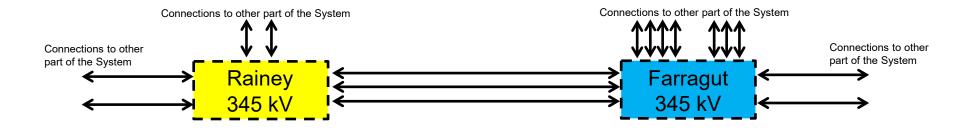


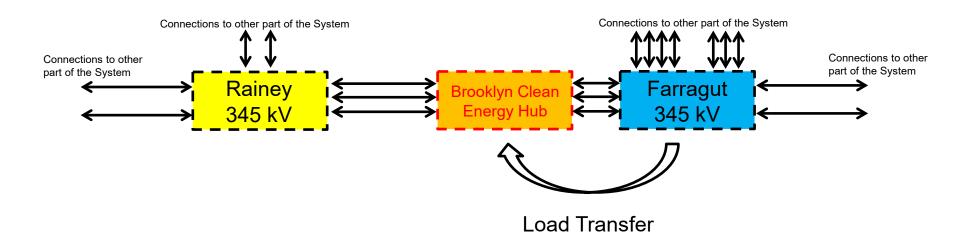
#### **Brooklyn Clean Energy Hub – FIRM Project**

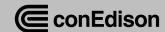
- BCEH will intercept three existing 345 kV feeders (61, 62, and 63) between Farragut and Rainey 345 kV Substations and diverting them into BCEH
- BCEH will be a double ring bus substation
  - Initially with thirteen 345 kV bus sections (expandable to nineteen bus sections)
    - Six bus sections will be utilized for 61, 62, and 63 feeders
    - Five bus sections will be utilized for the 345/138 kV transformer banks
      - The transformer banks will provide sources for 138 kV underground transmission lines that will connect to the Gateway Park 27 kV Distribution Area Substation
    - Two bus sections will remain open (immediately available)
    - Six more breaker additions would create 6 additional bus sections



### **Brooklyn Clean Energy Hub – FIRM Project**

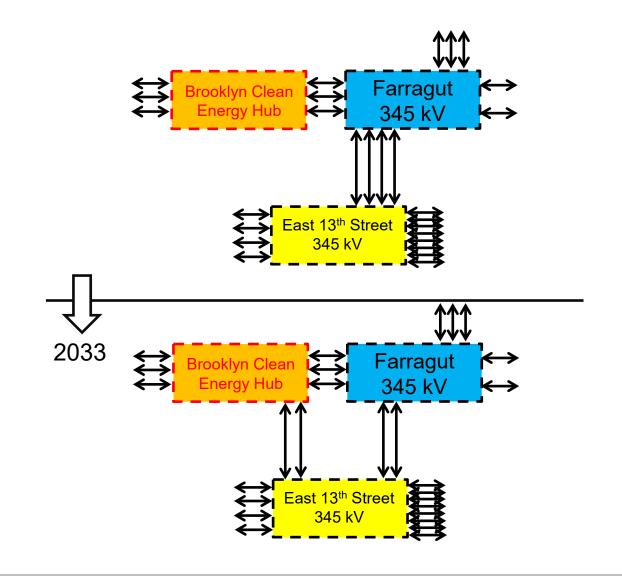






#### **Update to Brooklyn Clean Energy Hub**

- New FIRM redesign of BCEH
- 45/46 feeders to be relocated from Farragut to Brooklyn Clean Energy Hub
  - Develops the full potential of the BCEH
    - OSW Capability: up to 6,000 MW
      - 6 Open Bus Positions at BCEH (4,500 MW)
      - 2 Open Bus Positions at Farragut (1,500 MW)
  - Provides additional system resiliency on the NYC 345 kV transmission system
- In-Service data: 2033

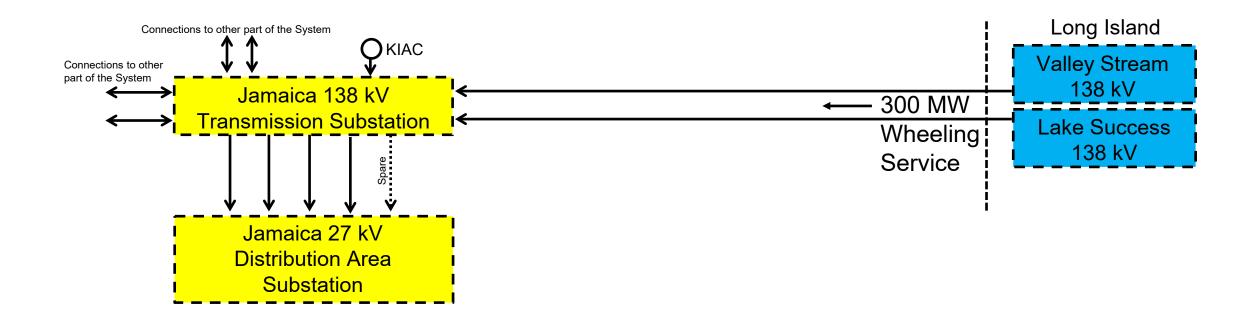




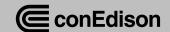
# Reliable Clean City (RCC) Eastern Queens

- Con Edison plans to construct a new 138 kV load serving substation in Eastern Queens to provide supply to the new Idlewild 27 kV Distribution Area Substation
  - The in-service date for this project is summer 2028
- Driven by growing demand in Queens
  - The existing Jamaica 27 kV Distribution Area Substation cannot meet customer electric demand
  - The new Idlewild 27 kV Distribution Area Substation will transfer existing load from Jamaica
    - Y2028 Load: about 170 MW

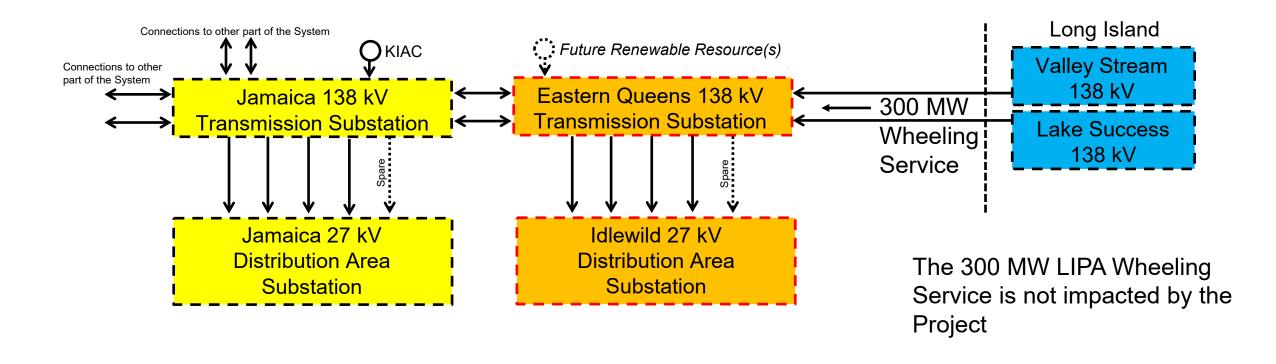




System "as is"







# System with the Project



- The Eastern Queens 138 kV transmission substation provides potential POIs for storage or other clean energy resources
  - Up to 600 MW
- Con Edison filed petition on August 22, 2023
  - ESPWG/TPAS will be update when Con Edison is ready to make the project FIRM

## **Greenwood Transmission Load Area**



### **Greenwood 138 KV TLA – FIRM Project**

 Reliability need has been identified within the Greenwood 138 kV TLA

	Deficiency (MW)	<b>Duration (hours)</b>	Duration
Year 2030	17	6	4 PM - 10 PM
Year 2031	32	8	3 PM - 11 PM
Year 2032	50	9	2 PM - 11 PM
Year 2033	74	10	1 PM - 11 PM

- Solution: Load Transfer
  - Greenwood to be de-loaded by a (138 kV to 345 kV) distribution load transfer to BCEH



#### **Questions & Answers**



**Thank You!** 

#### **Contact**

Interested parties may submit written comments within 30 days to:

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CECONY LTP will be posted on its external (pubic) website:

<u>Transmission Planning | Con Edison</u>