CECONY's Updated Local Transmission Plan (LTP)

June 5, 2023

Overview

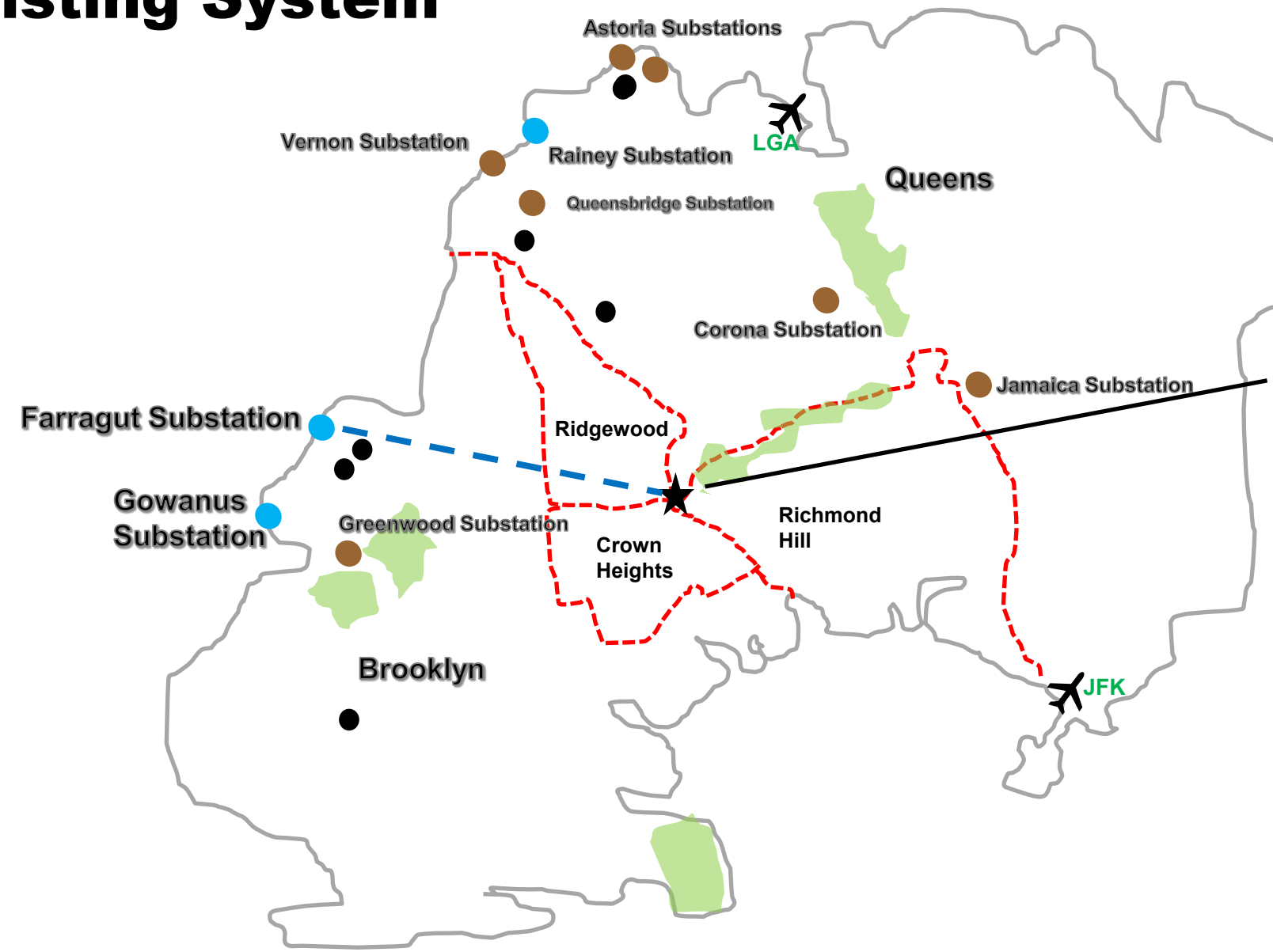
- NYC and Westchester
- 660 square miles
- 9.3 million people
- 3.4 million customers
- All time system peak
  - 13,322 MW (2013)

Brooklyn Clean Energy Hub

Brooklyn Clean Energy Hub

- 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 >1,900 MW

Existing System

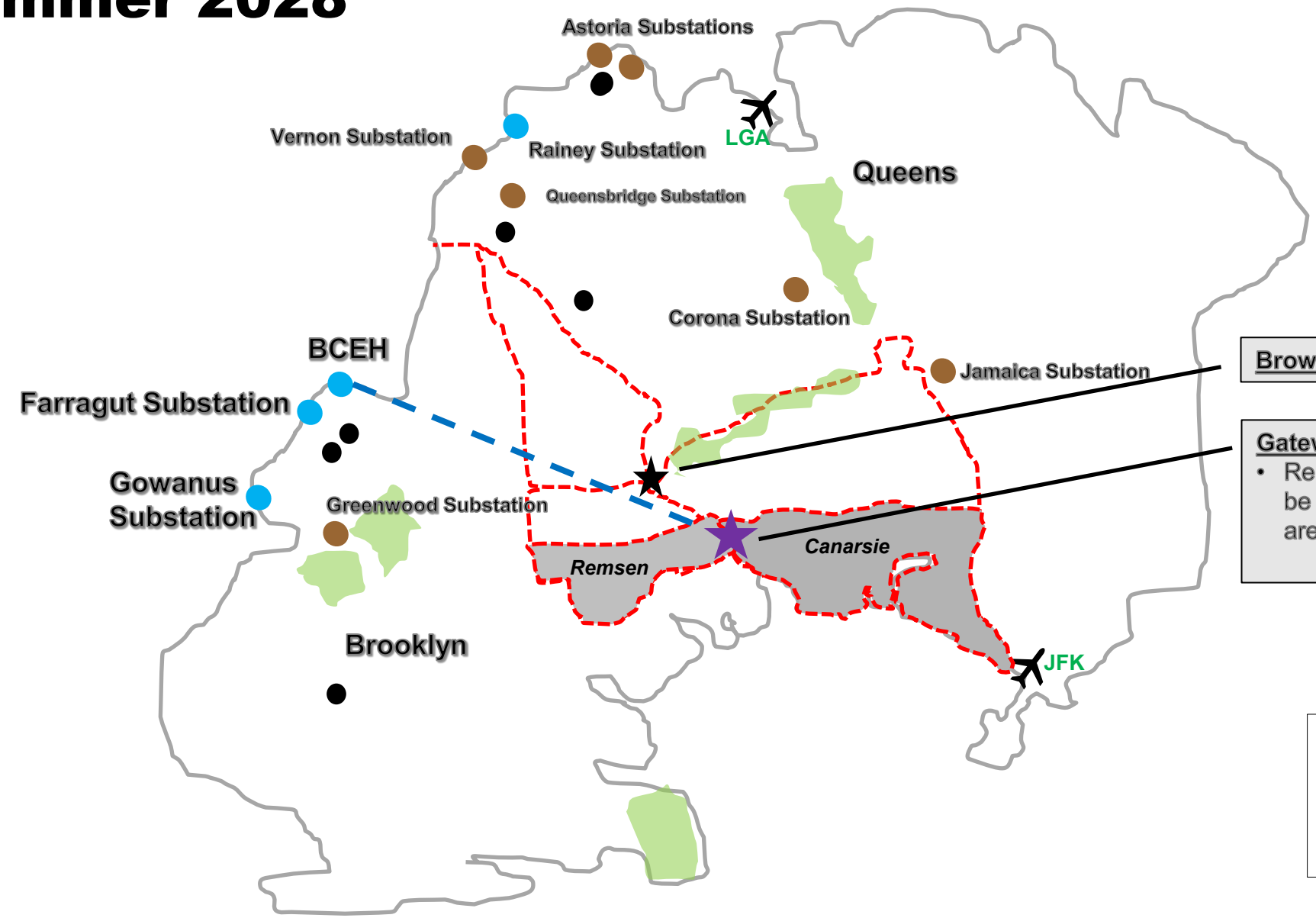


Brownsville Substation Nos. 1 and 2

- Two co-located 27 kV load serving area substations
- Five transformers each
- Supplied from Farragut Substation via five common 138kV underground transmission lines
- Richmond Hill, Crown Heights and Ridgewood Networks are supplied by the two area substations

- 345 kV Transmission Station
- 138 kV Transmission Station
- Distribution Substation

Summer 2028



Brownsville Substation Nos. 1 and 2

Gateway No 1

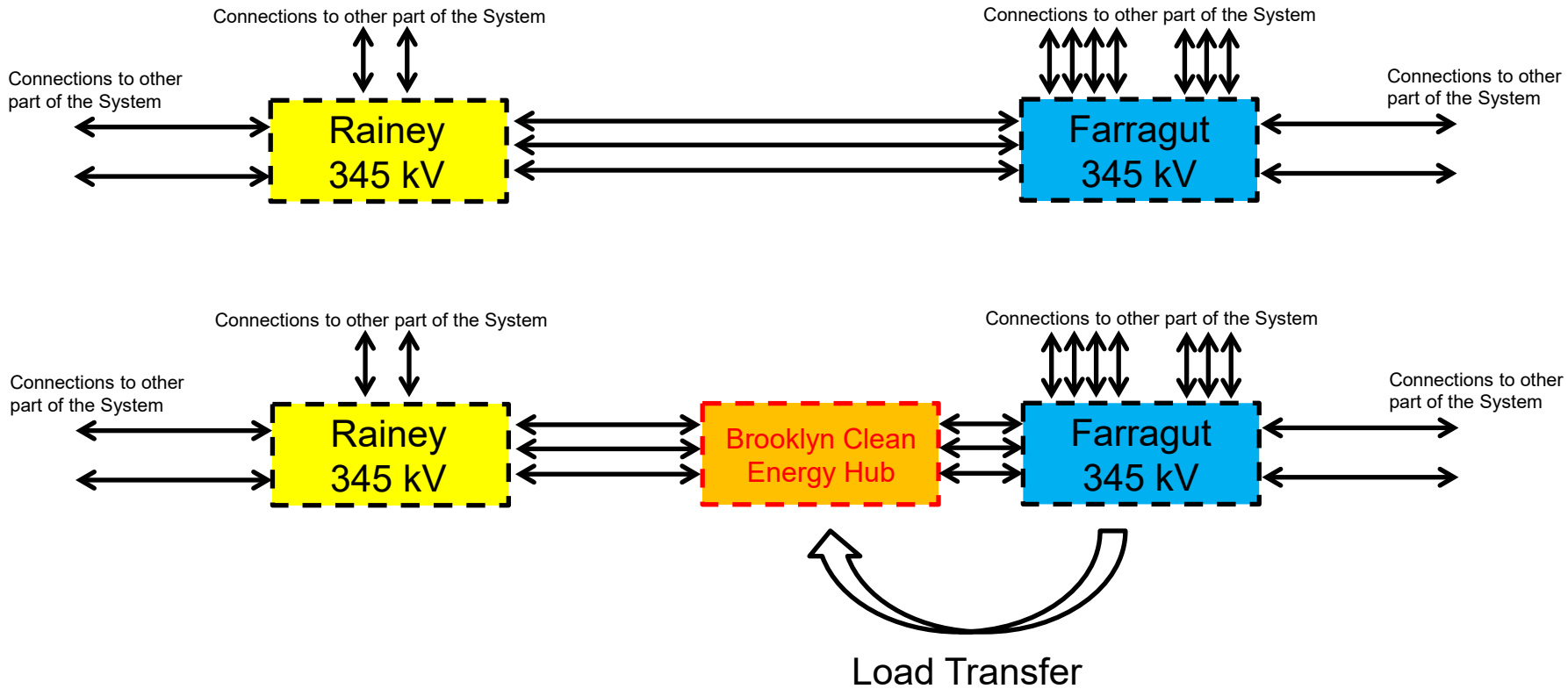
- Remsen and Canarsie Networks will be supplied by the new distribution area substation

- 345 kV Transmission Station
- 138 kV Transmission Station
- Distribution Substation

Design of the Brooklyn Clean Energy Hub

- 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 (5th bank position is the spare)
      - 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

Design of the Brooklyn Clean Energy Hub



BCEH Suitable POI for Renewable Resources

- The current construction will allow for 2 open bus positions where up to 1,500 MW can be connected
  - Ex. Offshore Wind Generation (OSW)
- BCEH will be scalable during construction to be able to create additional Points of Interconnection (POI) suitable for large scale generation projects
  - Injection of 6,000 MW of OSW:
    - 4,500 MW at the Brooklyn Clean Energy Hub, and
    - 1,500 MW at its adjacent Farragut Substation
- BCEH design allows, without additional transmission, for the full energy deliverability of up to 6,000 MW

Thank you!