SUMMER PREPARATION 2022

May 18, 2022
T&D CAPITAL PROJECTS

Major projects completed or expected to complete for summer 2022:

Transmission System Installations/Upgrades
- New Ruland to Round Swamp to Plainview 69 kV cable
- Robert Moses to Captree 23 kV Cable Replacement
- MTA 67th Street 33 kV circuit Relocation

Substation Installations/Upgrades
- Round Swamp: Install one 33 MVA bank
- Navy Road: Install two 14 MVA banks and associated distribution
- Ronkonkoma: Install one 33 MVA bank and associated distribution
- Riverhead: Replace two 14 MVA banks with one 33 MVA bank
- Brightwaters: Install new 33 MVA bank and associated distribution

Distribution System Installations/Upgrades
- Ocean Beach: New 4KV feeder
- Far Rockaway: Two new 13.8kV feeders
- Round Swamp: Two new 13.8kV feeders
- Ronkonkoma: Three new 13.8kV feeders
- Southampton: New 13.8kV feeder
- Eastport: Overhead Reconductoring
- Navy Road: 4kV to 13.8kV feeder conversion
T&D MAINTENANCE

Scheduled work scope to be completed prior to summer period:

- Inspect 1,629 capacitor banks and make repairs by June 30
- Trim 100% of 2022 transmission circuit mileage plan
- Trim 50% of 2022 distribution circuit mileage plan
- Perform thermographic analysis of critical substation facilities
- Make reliability improvements to prioritized circuits
- Install and commission new switches on distribution circuits
- Complete pre-summer substation equipment maintenance as required
The new Far Rockaway to Arverne 33kV circuit was originally projected to be in service for summer 2022.

Updates:

- This project is currently delayed due to outstanding dewatering permits
- Currently targeted to be in service by end of year 2022
- Alternative operational solutions are developed to ensure no impact on system reliability
Interties

• Y49 is out of service due to a failure at Con Edison side (Westchester). The current tentative return date is May 25, 2022.
• Neptune Intertie is derated to 375 MW due to the transformer failure at Newbridge. New transformer is expected to be delivered and cable is expected to be at 660 MW by August 1, 2022.
• Due to the uncertainty of interties, the Con Edison / LIPA Supplemental Support Agreement will be renewed for summer of 2022.

Major Transmission

• The Northport to Elwood 138-681 pipe type cable failed on March 30, reducing the power transfer capability out of Northport substation by 287 MW. The tentative return date is June 15, 2022.

Generation

• West Babylon GT & Glenwood GT1 are available to support emergency conditions for summer 2022.
• LIPA executed five-year Capacity Supply Agreement with NYPA for Flynn Power Plant. NYPA Flynn unit will be available to support for summer 2022.

Emergency Generation / Mobile Transformers

• 2 MW of emergency generation was installed at the Montauk substation and a mobile bank will be available at 9Z Amagansett to support South Fork.
• Mobile bank at 2G Rockaway Beach to support for contingency purposes.
POWER SUPPLY – STEAM UNITS

Northport Units No. 1-4

✓ Routine Maintenance - all units
✓ Unit 1: Major Overhaul, Installed 316b upgrades
✓ Unit 4: Main Transformer Overhaul, Excitation upgrade

E.F. Barrett Units No.1-2

✓ Routine Maintenance – all units
✓ Unit 2: Main Transformer replacement
  ✓ The Barrett Unit 2 main transformer is expected to be in service by end of June
✓ Unit 1: Completed Periodic Overhaul

Port Jeff Units 3-4

✓ Routine Maintenance
✓ Unit 4: Boiler safety valve repair
Combustion Turbines

- Annual routine maintenance has been completed
- All combustion turbine units are expected to be available for summer 2022 with the exception of one Holtsville unit, which is expected to be available by end of July

Balance of Long Island Fleet

- All units will have undergone maintenance, inspections, and repairs as required
- There are derates of 70 MW on two units. 45 MW will be available by end of August and the remaining by the end of this year
- Engie Nassau Cogen unit is currently going through NYISO deactivation process
- All other units are expected to be available for summer 2022
15 HIGHEST LONG ISLAND CONTROL AREA LOADS

2022 Normal Weather Forecast 5250 MW

2022 Extreme Weather Forecast 5666 MW

Summer Preparation 2022
## System Demand & Capability (MW)

<table>
<thead>
<tr>
<th></th>
<th>Base</th>
<th>Extreme Weather</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation</td>
<td>4,699</td>
<td>4,684</td>
</tr>
<tr>
<td>Inter-ties</td>
<td>1,832</td>
<td>1,832</td>
</tr>
<tr>
<td>Total Supply</td>
<td>6,531</td>
<td>6,516</td>
</tr>
<tr>
<td>Peak Load</td>
<td>5,250</td>
<td>5,666</td>
</tr>
<tr>
<td>Load Reduction + Load Modifiers</td>
<td>-125</td>
<td>-125</td>
</tr>
<tr>
<td>Net Load</td>
<td>5,125</td>
<td>5,541</td>
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<tr>
<td><strong>Margin</strong></td>
<td><strong>1,406</strong></td>
<td><strong>975</strong></td>
</tr>
</tbody>
</table>

## System Margins & Contingencies

- Sufficient margins exist for all major contingencies under 2022 forecast.
- Operating procedures will be implemented, as required, to maintain system reliability during both normal and extreme weather conditions.
## T&D Storm Restoration – Training/Drills

### 2022 Major Emergency Response Drills

<table>
<thead>
<tr>
<th>Event</th>
<th>WHEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restoration Contingency Plan Table Top Exercise</td>
<td>May 23, 2022</td>
</tr>
<tr>
<td>Emergency Capacity (Load Shedding) Event Table Top Exercise</td>
<td>May 3, 2022</td>
</tr>
<tr>
<td>Alternate Control Center Drill</td>
<td>May 25, 2022</td>
</tr>
<tr>
<td>Annual Hurricane Tabletop Exercise</td>
<td>June 22, 2022</td>
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<tr>
<td>Annual Dispatch Area Operation Exercises: (4)</td>
<td>May – June 2022</td>
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<tr>
<td>Division Leadership, Damage Assessment Coordination &amp; Dispatch, and Primary Control</td>
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<tr>
<td>Annual Division Operation Exercises: (8)</td>
<td>June 2022</td>
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<tr>
<td>Dispatch Area Leadership, Coordination and Dispatch personnel</td>
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</tr>
<tr>
<td>Situation Status and Documentation Unit Exercise – Planning Section</td>
<td>September 2022</td>
</tr>
<tr>
<td>Customer Communications Drill (4 – divisions)</td>
<td>July – September 2022</td>
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</tbody>
</table>

### Training

<table>
<thead>
<tr>
<th>Event</th>
<th>WHEN</th>
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</thead>
<tbody>
<tr>
<td>Damage Assessment (Field Survey Personnel) Initial &amp; Refresher Training</td>
<td>April – August 2022</td>
</tr>
<tr>
<td>ETR Training (E-Learning)</td>
<td>4/7/22 to 6/17/22</td>
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<tr>
<td>Two-Person Restoration Low Voltage Training</td>
<td>May - June</td>
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<tr>
<td>Operational Refresher Training:</td>
<td>May 2022</td>
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<tr>
<td>Damage Assessment Coordination and Dispatch</td>
<td></td>
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<tr>
<td>Primary Control</td>
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<tr>
<td>Decentralized Dispatch Areas Refresher Training</td>
<td></td>
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<tr>
<td>Crew Guide Training</td>
<td>May 9th &amp; 17th 2022</td>
</tr>
</tbody>
</table>
• OMS upgrade to Version 6.7.8 completed on February 5, 2022
• OMS/AMI integration scheduled for June 2022
• 60 additional Tag Holder Roles identified and trained – completed on March 31, 2022
• Material stockpiles reviewed and updated