



Transmission Planning

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2025 Local Transmission Plan

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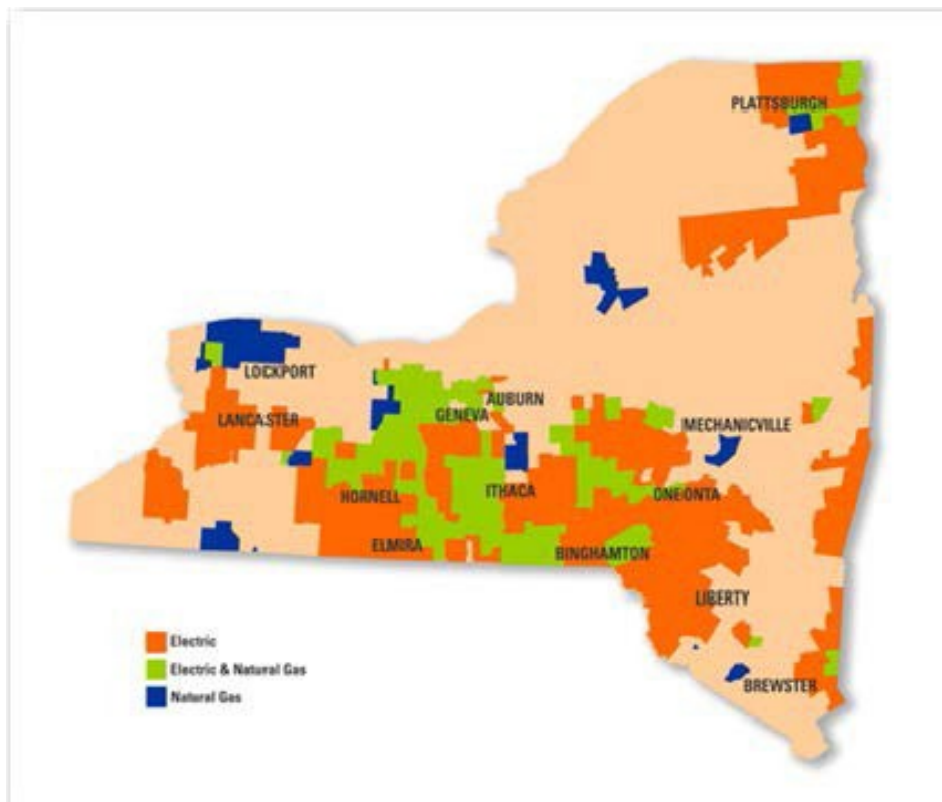
In this presentation

- Overview
 - Avangrid's service areas in New York
- Scope of the projects being presented today
- Criteria to determine “Firm” projects
- Local Transmission Plan (by division/area)
 - Binghamton
 - Brewster
 - Hornell
 - Lancaster
 - Oneonta
 - Rochester

Avangrid's service areas in New York

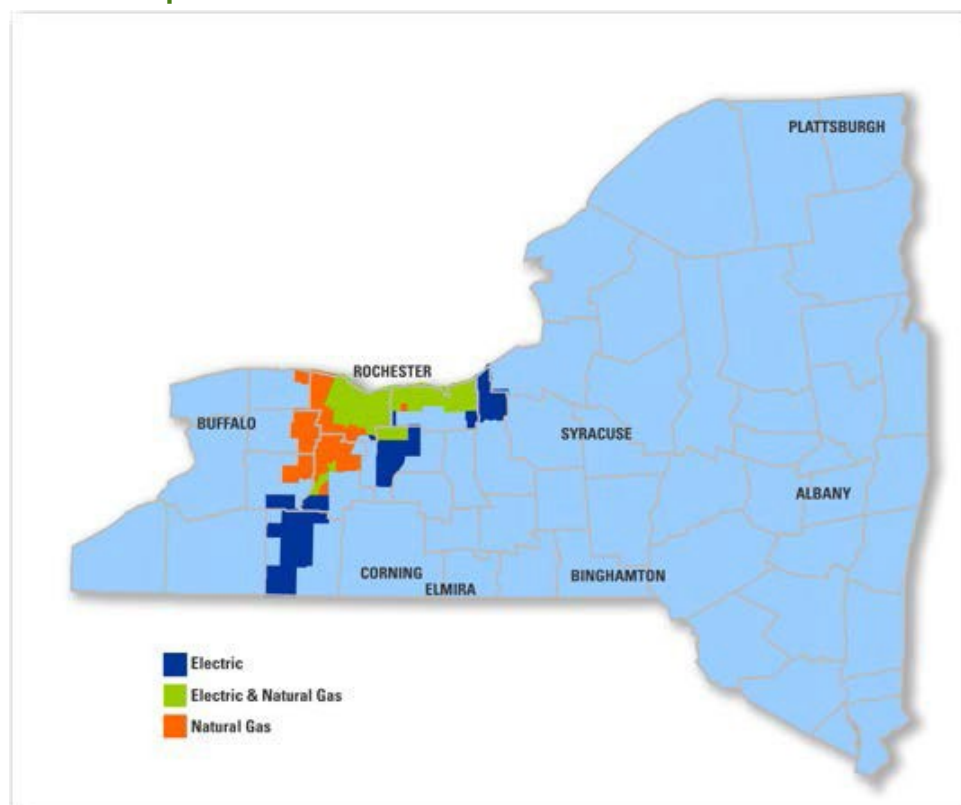
New York State Electric & Gas (NYSEG):

Serves ~921,400 electricity customers across ~18,400 square miles of upstate New York. It operates and maintains an electricity delivery system that consists of 4,549 miles of transmission lines and 44,400 miles of distribution lines.

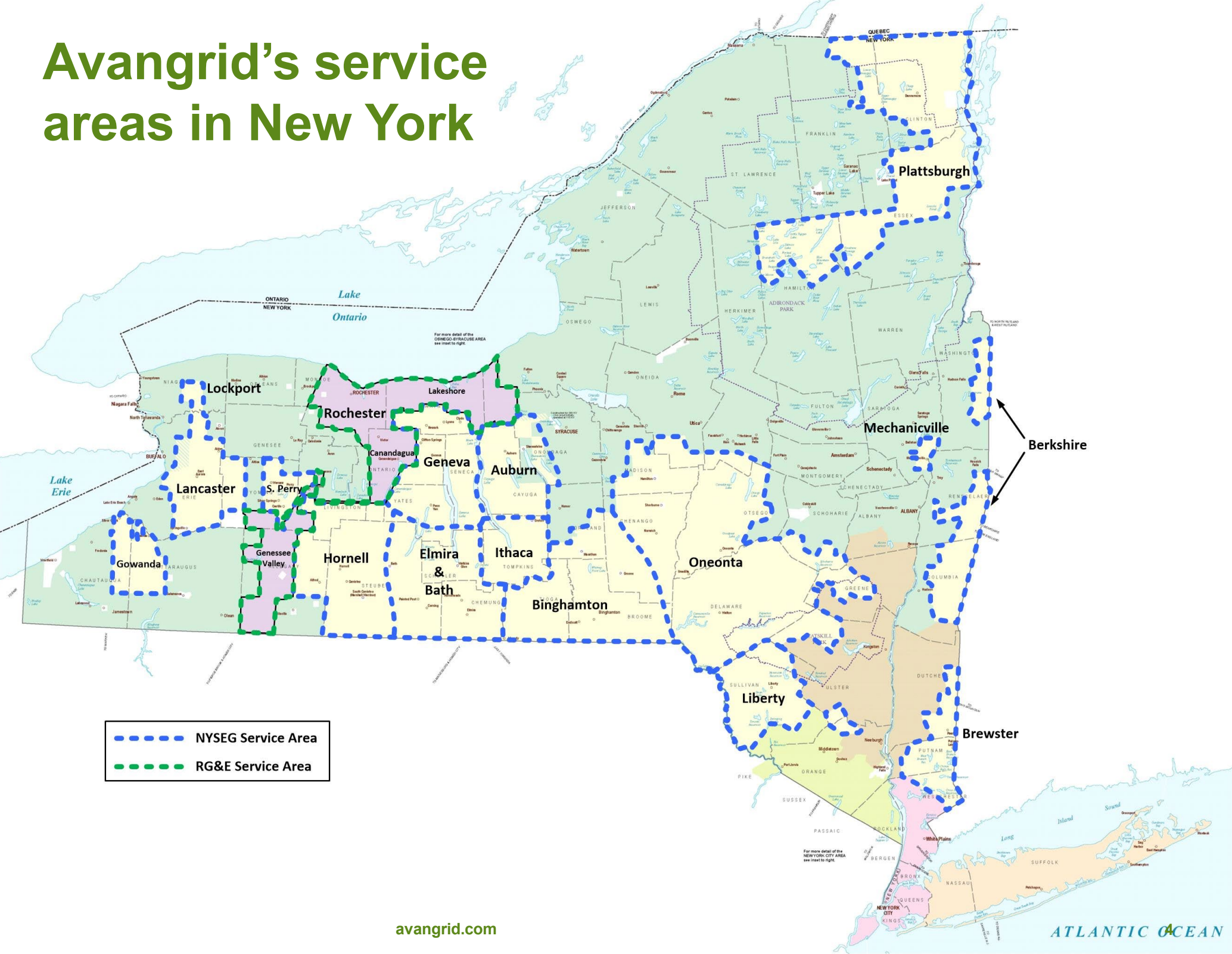


Rochester Gas and Electric (RG&E):

Serves ~393,000 electricity customers in the metropolitan Rochester area and surrounding region, covering an area of ~2,700 square miles



Avangrid's service areas in New York



- NYSEG Service Area
- RG&E Service Area

Scope of the LTP

- Address reliability issues on “local system”
 - NYSEG – include 115kV, 69kV, 46kV, and 34.5kV Some 34.5kV is dedicated to serving customer load and is considered distribution; some is dual purpose.
 - RG&E – include facilities between 115kV and 34.5kV, as well as 11kV facilities that are operated in parallel with the 115kV and 34.5kV systems and are thus considered an extension of the transmission system.
- Use Avangrid’s Local Planning Criteria as the reference
- Focus on projects with the In-Service Date (ISD) within 5 years

Determination of “Firm” projects

- Criteria
 - Internal management approval
 - Budget authorization
 - Has approved System Impact Study (if applicable)
- Status of a project can be one of the following categories

Status	Definition
Planned	Projects that have internal approval and budget, detailed engineering/procurement has commenced, and SIS and Article VII approval are being sought if applicable.
Under Construction	Projects that have all necessary approvals and are under construction.
Complete	Projects that are in service.
On Hold	Projects that were reported in previous LTP revisions but are no longer considered Firm.

LTP: NYSEG – Binghamton/Brewster Divisions

Project	Summary	Status	In-Service Date
Line 956 Rebuild (North Waverly – E. Sayre/PJM)	Reconductor existing 115kV 3-mile line with ACSR 795 26/7 "Drake".	Under Construction	2026
Wood Street New 3rd 345/115kV Transformer	Install a third 345/115kV transformer	Complete	N/A

LTP: NYSEG – Hornell Division

Project	Summary	Status	In-Service Date
South Perry Rebuild	<ul style="list-style-type: none"> (1) Add a second 115/34.5kV transformer (2) 115 kV bus rebuild as BAAH (3) 34 kV bus expansion with tie breaker 	Under Construction	2029
Meyer Upgrades	<ul style="list-style-type: none"> (1) New 230/115 kV transformer (2) Add a second 115/34.5kV transformer (3) 115 kV bus rebuild as BAAH (4) 34 kV bus expansion with tie breaker 	Under Construction	2029

LTP: NYSEG – Lancaster/Oneonta Divisions

Project	Summary	Status	In-Service Date
New Gardenville Upgrades	<ul style="list-style-type: none"> (1) 2 new 115/34 KV transformers (2) Replace 230/115/34 KV transformer (3) New 230 kV ring bus. 115 kV 6 bay BAAH. 34 KV straight bus with 2 tie breakers 	On Hold	N/A
Fraser Expansion and Delhi removal	<ul style="list-style-type: none"> (1) New 115 kV 4-bay BAAH Fraser bus (2) New 2nd 345/115/46 kV transformer (3) Replace existing 345/115 kV transformer (4) Remove Delhi's 115 kV bus and move all 115 lines to Fraser 	Under Construction	2027

LTP: RG&E – Rochester (1/2)

Project	Summary	Status	In-Service Date
Rochester Transmission Project Enhancement (RTPE) (Line 949)	Build a new 115kV line (6.7 miles) from Station 48 to Station 418	Under Construction	2028
Station 127 – New 2nd 115/34.5kV Transformer	<ul style="list-style-type: none"> (1) Add second 115/34 kV transformer (2) Expand the 115KV bus with 2 breakers on either side of 115 kV cap banks (3) Sectionalize National Grid TR 2 with new 115 kV terminal at Station 127. 	Complete	N/A
115 Line 901/902 Upgrade	Upgrade Line 901 (Mortimer-Station 251) and Line 902 (Station 251 - Station 82)	On Hold	N/A

LTP: RG&E – Rochester (2/2)

Project	Summary	Status	In-Service Date
115 Line 942/943 Upgrade	Upgrade Line 942 and Line 943	On Hold	N/A
Monroe County Reliability Project (MCRP)	Rebuild line 947 from Station 418 to Station 70 and reconductor, Rebuild line 946, 945, and 917 from Station 70 to Station 7 and reconductor.	Planned	2031
Station 168 Area Reinforcement	Sectionalize National Grid Trunks #2 and #4 at Station 168 with 115kV circuit breakers and install 34.5kV capacitor banks	Complete	N/A
Station 56	Add 115 kV breaker terminals on Trunk 24 at Station 56	Complete	N/A

LTP Addendum: NYISO Generation Projects

NYISO Generation Interconnection

Projects	Description	Capacity	ISD
Q1148 Agricola Wind Project	New three-breaker ring bus substation on 115 kV Line 973 (Wright Ave to Cayuga)	97 MW	2027
Q880 Brookside Solar Project	New three-breaker ring bus substation on 115 kV Line 911 (Chateaugay to Lyon Mtn)	100 MW	2027
Q519 Canisteo Wind Project	115 kV Bus Bennett Substation	291 MW	2026
Q1003 Clear View Solar Project	34 kV Bus Eelpot Substation	20 MW	2025
Q644 Columbia County 1 Project	115 kV Bus Craryville Substation	60 MW	2026
Q1288 Clean Path New York – X Project	345 kV Bus Fraser Substation	1.3 GW	2028
Q584 Dog Corners Solar Project	34.5 kV Bus Aurora Substation	20 MW	2026
Q706 North Pond Project	New three-breaker ring bus substation on 115 kV Line 946 (East Norwich to Jennison)	100.8 MW	2026

NYISO Generation Interconnection

Projects	Description	Capacity	ISD
Q591 Highview Solar Project	34 kV Bus South Perry Substation	20 MW	2026
Q1080 Mineral Basin Solar Project	New three-breaker ring bus substation on 345 kV Line 30 (Watercure Rd to Mainsburg FE)	401.6 MW	2028
Q716 Moraine Solar Energy Project	115 kV Bus Moraine Rd Substation	93.5 MW	2028
Q592 Niagara Solar Project	34.5 kV Bus Bennington Substation	20 MW	2026
Q801 Prattsburgh Wind Project	New three-breaker ring bus substation on 230 kV Line 68 (Canandaigua to Stoney Ridge)	147 MW	2027
Q590 Scipio Solar Project	34.5 kV Bus Scipio Substation	18 MW	2026
Q1079 Somerset Solar Project	345 kV Bus Kintigh Substation	125 MW	2028
Q720 Trelina Solar Energy Center Project	New three-breaker ring bus substation on 115 kV Line 977/TR8 (Station 168 to Border City)	80 MW	2028

LTP Addendum: CLCPA Projects

NYSEG – Liberty / Oneonta / Plattsburgh

CLCPA

Projects	Description	ISD
Jennison Rebuild	(1) Rebuild Jennison Substation “off-site” as a 4 bay BAAH 0.75 miles away. (2) Bring line 919 in and out.	2029
Line 946 Rebuild (East Norwich – Jennison)	(1) Rebuild the existing 20-mile 115 kV line with 1192 ACSR	2030
Line 949 Rebuild (Jennison – Fraser)	(1) Rebuild the existing 25-mile 115 kV line with 1192 ACSR	2029
Line 910 Rebuild (Willis/NYPA – Malone/National Grid)	(1) Rebuild the existing 11-mile 115 kV line with 795 ACSR.	2031

NYSEG – Binghamton / Geneva

CLCPA

Projects	Description	ISD
Oakdale	(1) Rebuild Oakdale 115 kV as a 6-Bay BAAH (GIS). (2) Expand existing 345 kV (3-bay BAAH) and add one additional 345/115/34.5 kV Transformer (3) Retire 115 kV Westover Substation (4) Rebuild Westover 34.5 kV out of flood zone	2031
Lounsberry Rebuild	(1) New 115 kV four position Ring bus. (2) Install new 22.4 MVA 115/12.5 kV transformer with LTC. (3) Install new 12.5 kV MV GIS and Control Building.	2028
Line 962 Rebuild (Hillside - S. Owego)	(1) Rebuild the existing 35-mile 115 kV line with 1192 ACSR conductor. (2) Modify terminal bay at South Owego. (3) Modify terminal bay at Hillside	2030
Line 961 (S. Owego - Oakdale)	(1) Rebuild the existing 18-mile 115 kV line with 1192 ACSR conductor. (2) Modify terminal bay at South Owego.	2030
Greenidge Capacitor	One (1) new 115 kV circuit breaker for Line 968, Line 968 terminal work, and a new 30 MVAR capacitor bank (with 115 kV circuit breaker).	2031

NYSEG – Ithaca

CLCPA

Projects	Description	ISD
Etna Substation Full Rebuild	Full Rebuild of the 115 kV/34.5 & 4.8 kV in the southern location.	2030
Coddington Substation Upgrades	(1) 115 kV BAAH Full Rebuild with GIS on existing property (2) Two new 50 MVA transformers (3) New 115 kV capacitor and one new 34.5 kV capacitor	2030
Line 982 Rebuild (Montour Falls - Coddington)	(1) Rebuild the existing 21-mile 115 kV line with 1192 Bunting ACSR conductor on the existing centerline with light duty steel monopole structures	2029
Clarks Corners Upgrades	(1) 2 Bay 115 kV Expansion to the north. (2) Two (2) new power transformer positions.	2027

NYSEG – Elmira / Bath (1/2)

CLCPA

Projects	Description	ISD
Bath Rebuild	Full rebuild of substation as 115 kV three-bay breaker-and-a-half (BAAH) air insulated substation (AIS) with two (2) new 115/34.5 kV 50 MVA transformers, a +150/-150 MVAR dynamic VAR compensation unit (STATCOM or SVC)	2030
Line 723 (Bath - Spencer Hill)	Rebuild the existing 15-mile 115 kV line with bundled 795 Drake ACSR conductor.	2031
Line 965 (Bath - Montour Falls)	Rebuild the existing 22-mile 115 kV line with bundled 795 Drake ACSR conductor.	2031
Line 978 Rebuild (Montour - Hillside)	Rebuild the existing 16-mile double circuit line with 1590 Falcon ACSR from Montour Falls to Ridge Road and from Ridge Road to Hillside.	2031
Watercure Expansion	Expand the 345 kV two-bay BAAH with one (1) empty bay position, adding a three-bay 115 kV BAAH. Reroute 115 kV lines to new 115 kV BAAH, Add one (1) new 345/115 kV three winding 448 MVA transformer.	2030
Hillside Upgrades	Re-route the 115 kV lines to new 115 kV station at Watercure, replace two 230 kV breakers, separating the 34.5 kV breaker positions of Bank 3 and 4.	2032
Montour Falls Rebuild	Full rebuild as a four-bay BAAH AIS, two (2) new 115/34.5 kV 50 MVA transformers, two (2) new 115 kV 30 MVAR capacitor banks. Additional sub-transmission and distribution upgrades.	2031
Hillside PAR	Phase Shifting Transformer between Hillside Substation and E. Towanda Substation in PJM	2026

NYSEG – Elmira / Bath (2/2)

CLCPA

Projects	Description	ISD
Line 935 (Hickling - Caton)	Rebuild the existing 9-mile 115 kV line with 2156 Bluebird ACSR conductor.	2029
Line 68 (Canandaigua - Stoney Ridge)	Rebuild the existing 24-mile 230 kV line with bundled 1192 Bunting ACSR conductor.	2031
Line 69 (Hillside - Watercure)	Rebuild the existing 1-mile 230 kV line with 2156 Bluebird ACSR conductor.	2029
Line 72 (Stoney Ridge - Hillside)	Rebuild the existing 27-mile 230 kV line with 2156 Bluebird ACSR conductor.	2031
Line 711 (West Erie - Sullivan Pk)	Rebuild the existing 3-mile 115 kV line with 2156 Bluebird ACSR conductor.	2029
Line 712 (Sullivan Pk - Stoney Ridge)	Rebuild the existing 6-mile 115 kV line with 2156 Bluebird ACSR conductor.	2029
Hickling Rebuild	Full rebuild of the substation as a 115 kV four-bay BAAH AIS design, two (2) new 115/34.5 kV 50 MVA transformers. Additional sub-transmission and distribution upgrades.	2032
Stoney Ridge Transformer	Upgrade the 230/115 kV 1T transformer at Stoney Ridge to 448 MVA.	2029

NYSEG – Hornell

CLCPA

Projects	Description	ISD
Bennett Rebuild	Partial rebuild of the substation with a 115kV bus expansion (extra position for interconnecting a new generator), a 0.05pu Power Flow Control Device, and terminal work on L725.	2031
Eelpot Expansion	Addition of a new 115 kV circuit breaker, a +100/-100 MVAR new dynamic VAR compensation unit (STATCOM or SVC), and 115 kV line terminal work.	2031
Line 932 (Bennett - Andover)	Perform in-kind structure replacements where required to address all asset condition issues.	2026
Line 953 (Bennett - Spencer Hill)	Rebuild the existing 5-mile 115 kV line with 2156 Bluebird ACSR conductor.	2031
Line 722 Rebuild (Eel Pot - Flat Street)	Rebuild the existing 23-mile 115 kV line with 1590 Falcon ACSR conductor.	2031
Line 724 Rebuild (Meyer - Eel Pot)	Rebuild the existing 15-mile 115 kV line with 1590 Falcon ACSR conductor.	2031
Line 968 Rebuild (Flat Street - Greenidge)	Rebuild the existing 5-mile 115 kV line with 1590 Falcon ACSR conductor.	2031
Line 963 Rebuild (Montour Falls - Hillside)	Rebuild the existing 16-mile double circuit line with 1590 Falcon ACSR.	2031
Line 67 Rebuild (Stolle Rd - High Sheldon)	Rebuild the existing 11-mile 230 kV line with bundled 1192 Bunting ACSR conductor on an offset with steel monopole structures.	2031
Line 934 Rebuild (South Perry - Meyer)	Rebuild the existing 19-mile 115 kV line with 795 Drake ACSR conductor on an offset with light duty steel monopole structures.	2030

NYSEG – Lancaster/Lockport

CLCPA

Projects	Description	ISD
Stolle Road 345/230/115/34.5 kV Substation Upgrades	<ul style="list-style-type: none"> (1) Partial Rebuild of 115 kV to a BAAH in the existing yard. (2) 3 Position 345 kV Ring Bus. (3) One (1) 448 MVA 345/115 kV Transformer and one 448 345/230 kV Transformer. (4) 34.5 kV GIS Straight bus with a tie breaker. 	2031
Robinson Road 230/115/34.5 kV Substation Upgrades	<ul style="list-style-type: none"> (1) New 230 kV transformer, New four (4) bay 115 kV AIS BAAH, three new 115/34.5 transformers and new 34.5 kV MV GIS at Robinson Rd (2) Demolish Hinman Rd 115/34.5 kV Station (3) Reroute 115 kV and 34.5 kV circuits from Hinman Rd to Robinson Rd 	2031

RG&E – Rochester

CLCPA

Projects	Description	ISD
Line 906 Rebuild (Station 82 - Station 128)	Rebuild the existing 30-mile 115 kV line with 1590 Falcon ACSR conductor on an offset with light duty steel monopole structures.	2030