

National Grid's Local Transmission Plan Update

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LTP Information Available On Line

- The NYISO website provides a link to the National Grid project list:
 - Choose **Planning For The Future**
 - Then **NYISO Planning**
 - Select **Documents & Resources** in menu at left
 - Click link to **Local TO Planning Process**
- National Grid's project list can also be accessed directly at:
www.nationalgridus.com/oasis/filings_studies.asp
- The National Grid Transmission Planning Guide is posted on our website under:
 - www.nationalgridus.com/transmission/c3-8_standocs.asp
 - Click the link to: Transmission Planning Guide

Transmission Facilities Studied

National Grid organizes its study reports by Transmission Planning Study Areas

Transmission Planning Study Areas

West

F – Frontier

G – Genesee

SW – Southwest

Central

SOC – Syracuse Oswego Cortland

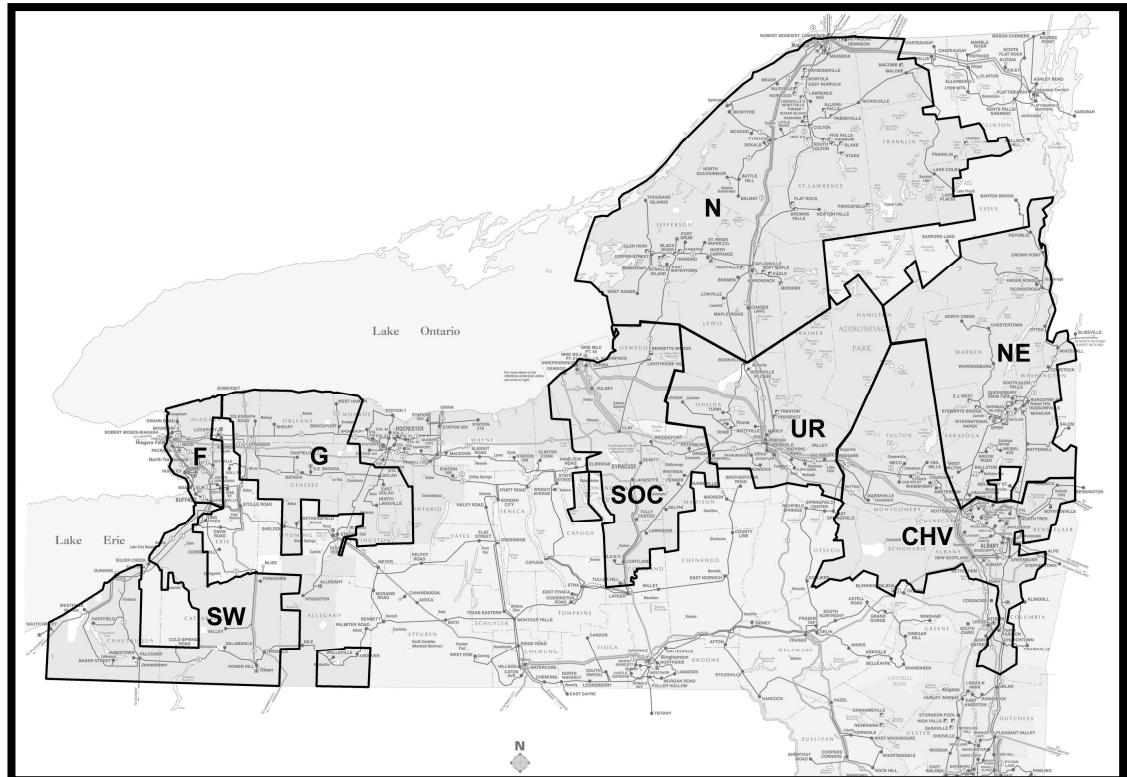
N – Northern

UR – Utica/Rome

East

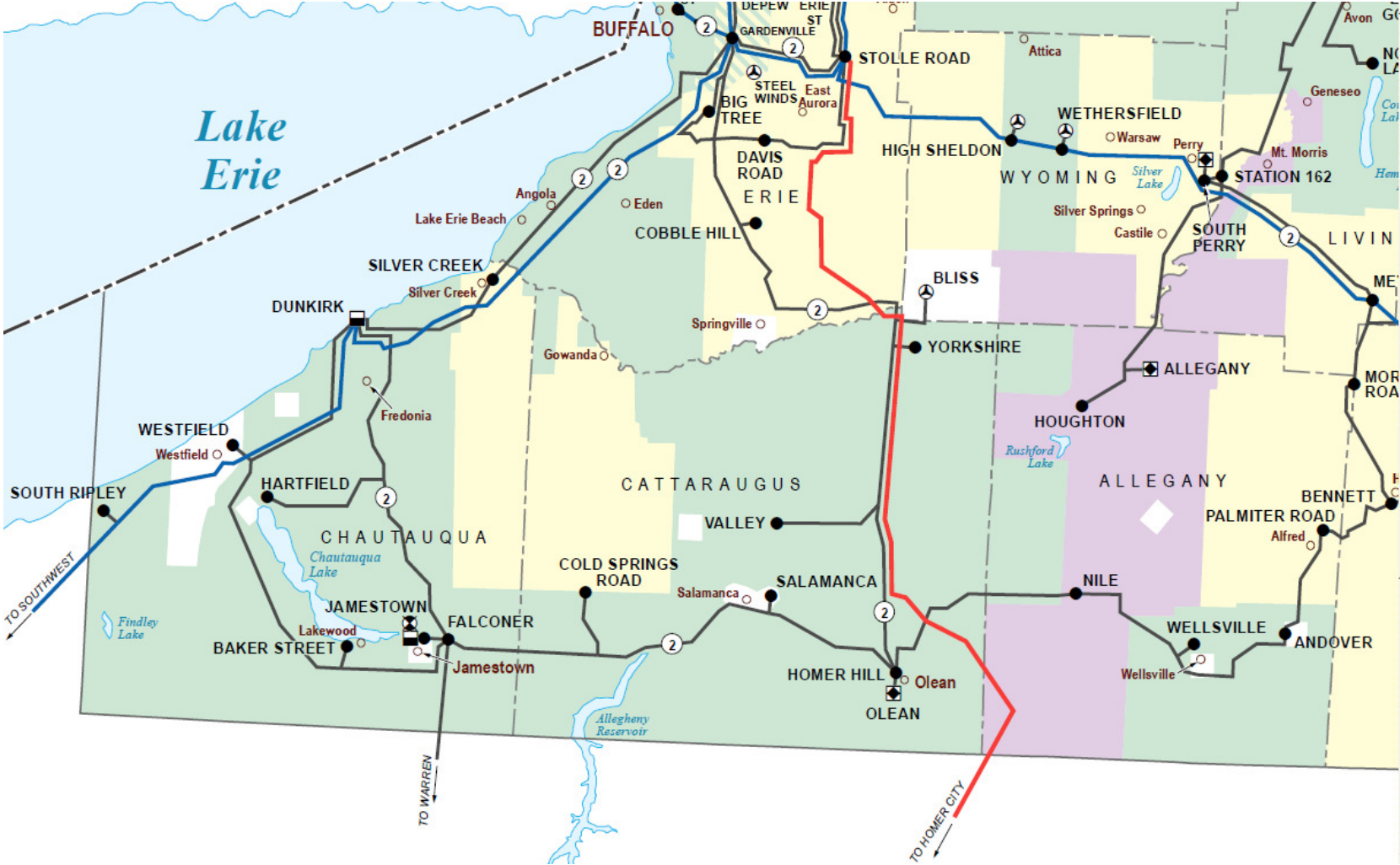
CHV – Capital Hudson Valley

NE - Northeast

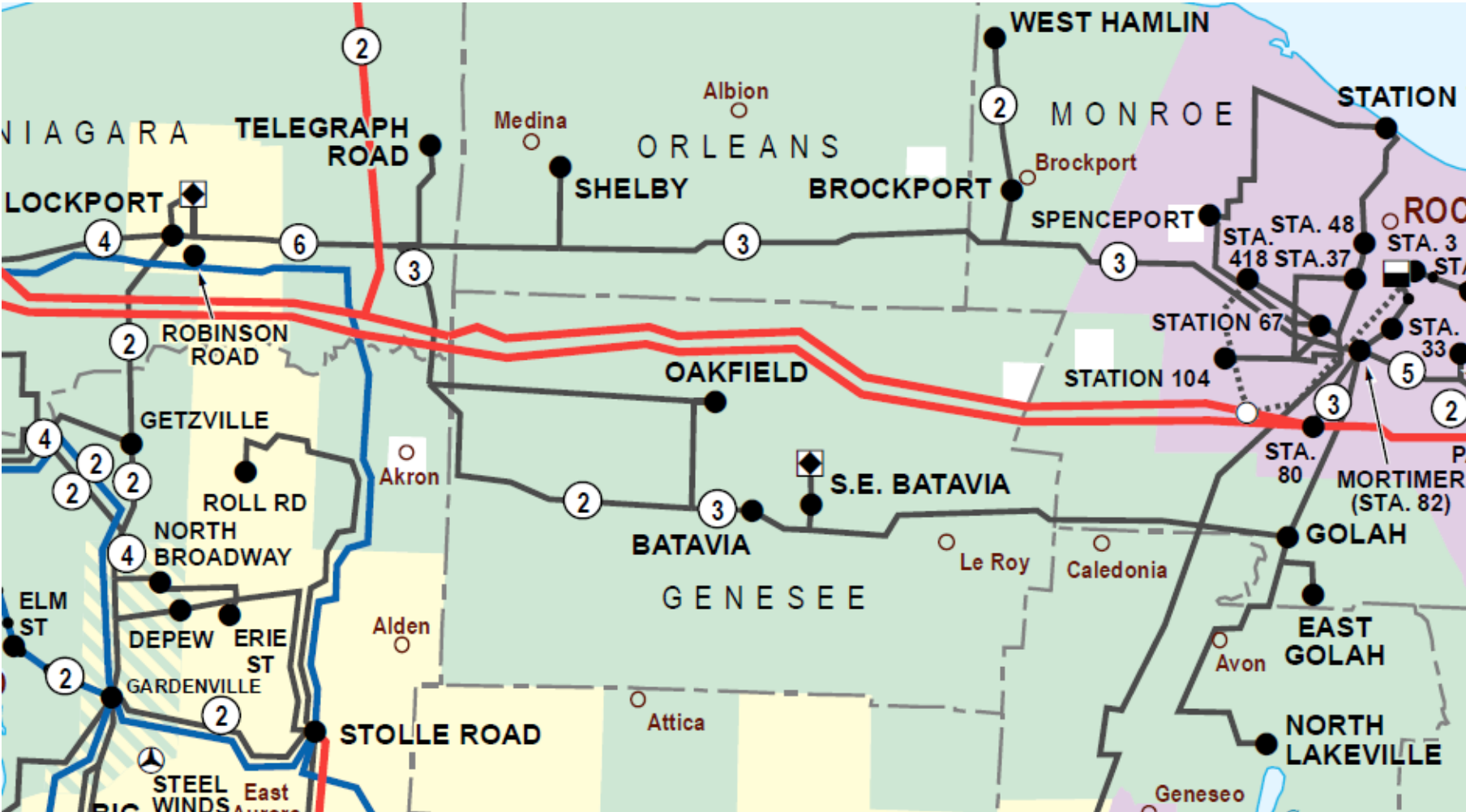


Note: Some National Grid transmission lines extend outside its retail service areas.
Some lines within National Grid's retail service areas are not owned by National Grid.

Western NY – Southwest area



Western NY – Genesee area



LTP List 2014 Update– Western NY (1 of 2)

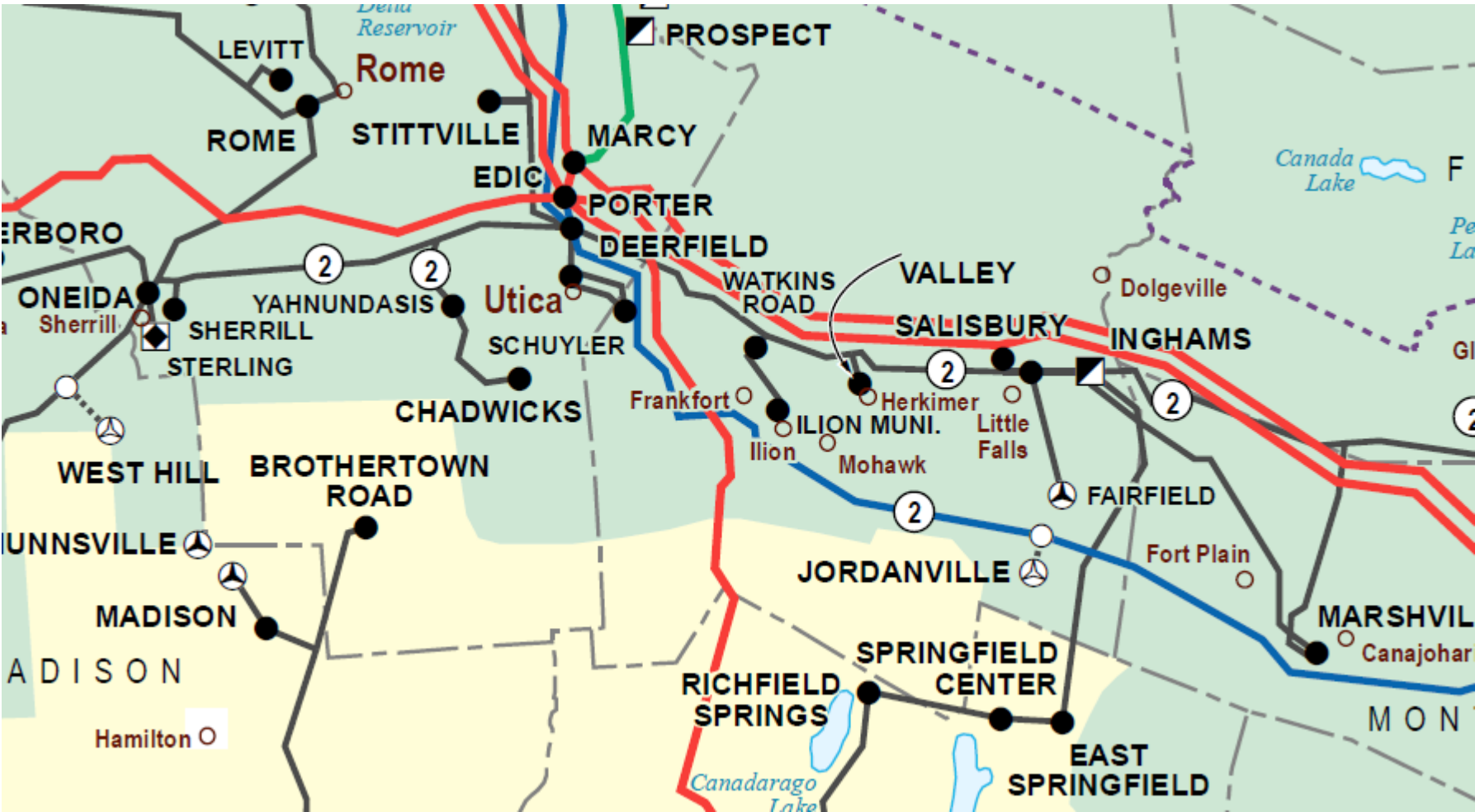
The Dunkirk refueling project is a firm component of the National Grid local transmission plan.

Primary Driver	Primary Equipment Owner	Other Equipment Owner(s)	Projected In-Service Month/Year	Major Project	Project	Updated Status	NYSO System Impact Study Status	Comments
Western New York								
Reliability	National Grid, USA		6/2015	Western NY Reinforcement Project	Reconductor part of Gardenville - Erie 115 kV circuit #54	Planned	TPAS Approved	
Reliability	National Grid, USA		TBD		Install Reactors on Falconer - Warren 115 kV circuit #171 (795 ACSR)	Concept	TPAS Approved	
Reliability	National Grid, USA		6/2018		Add a second 115 kV bus tie in series with existing Dunkirk 115 kV bus tie breaker	Planned	TPAS Approved	
Reliability	National Grid, USA		12/2015		Construct Five Mile Rd 345/115 kV station connecting 345 kV Homer City-Stolle #37 circuit and 115 kV Gardenville-Homer Hill #151/152 circuits with single 345/115 kV 448 MVA transformer and single 25 MVA capacitor bank	Under Construction	TPAS Approved	
Reliability	National Grid, USA		6/2015		Addition of second 75 MVA capacitor bank Huntley 115 kV switchyard	Under Construction	TPAS Approved	
Reliability	National Grid, USA		05/2016		Add a second 115 kV bus tie in series with existing Lockport bus tie breaker	Planned	TPAS Approved	
Reliability	National Grid, USA		6/2015		Add two 33.3 MVA capacitor banks on two Dunkirk 115 kV bus sections	Under Construction	N/A	
Reliability	National Grid, USA		6/2016		Reconductoring of two 115 kV lines between Five Mile Rd and Homer Hill, each approx. 7.4 miles long	Planned	Approved	
Reliability	National Grid, USA		6/2016		Reconductor 2.3 miles of #182 line	Concept	N/R	
Reliability	National Grid, USA		06/2018	Gardenville Subst.	Replace Gardenville 230:115 kV transformers TB#3 and TB#4	Planned	Approved	
	National Grid, USA		06/2018		Complete rebuild of Gardenville 115 kV station	Planned	Approved	
Reliability	National Grid, USA		06/2016	Niagara-Packard #195	Niagara-Packard #195 115 kV line rebuild	Planned	Approved	
Reliability	National Grid, USA		12/2017	Reconductor of #181 Line	Reconductor 17 miles of Packard-Erie #181 line	Concept	N/A	

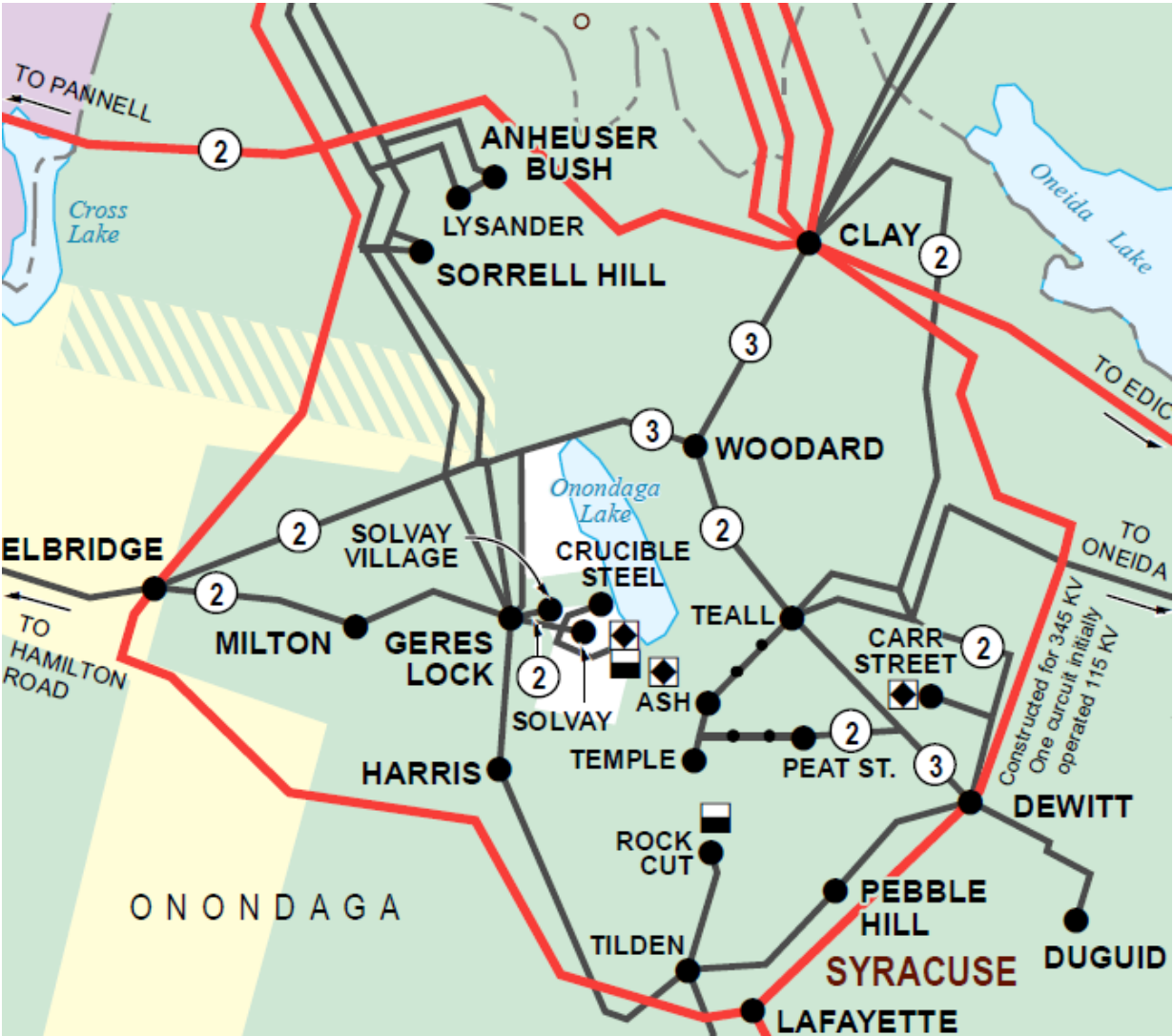
LTP List 2014 Update– Western NY (2 of 2)

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Western New York									
	Reliability	National Grid, USA		06/2018	Mortimer-Golah area 115 kV reinforcements	Install new West Golah 115 kV substation	Concept	N/R	
	Reliability	National Grid, USA		-06/2016		Install mobile 115kV 20 MVAr cap bank at Golah substation	Concept	N/R	
	Reliability	National Grid, USA		06/2017		Add second 115 kV breaker in series with the existing bus tie breaker at Mortimer	Proposed	N/R	
	Load Growth	National Grid, USA		10/2014	New Distribution Stations	Addition of new Frankhauser 115/13.2 kV station	Planned	N/R	
	Load Growth	National Grid, USA		12/2017		Addition of new North Lakeville 115/13.2 kV station	Planned	N/R	
	Load Growth	National Grid, USA		06/2017		Addition of new New Tonawanda 115/13.2 kV station	Planned	N/R	
	Reliability	National Grid, USA		12/2015	Bank Replacement	Replace TB #4 at Elm Street	Planned	N/R	
	Reliability	National Grid, USA		12/2018	Addition of 4th Elm Street 230-23 kV station	Addition of 4th Elm Street 230-23 kV station	Planned	N/R	
	Reliability	National Grid, USA		TBD		Swap 115 kV line positions for 111 & 113 lines at Mortimer	Concept		
	Reliability	National Grid, USA		TBD		Dunkirk 115 kV Rebuild	Concept		

Central NY – Utica/Rome area



Central NY – Syracuse area



LTP List 2014 Update– Central NY (1 of 2)

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Central New York								
Reliability	National Grid, USA		06/2016	Cayuga Station Reliability Study	Reconnect 345-115 kV bank TB2 at Clay substation	Planned	Uncertain	Interim Operating Procedure in place to prevent the SB scenario at Clay
Reliability	National Grid, USA		12/2017		Reconductor Clay-GE #14	Under Construction	Uncertain	
Reliability	National Grid, USA		06/2016		Add line position at Elbridge. NYSEG to construct new 115kV line. Bus together existing Line5/15 to create new 5 line.	Planned	Uncertain	
Reliability	National Grid, USA		12/2017	Central Division Reconductoring	Reconductor Clay - Dewitt #3	Planned	N/R	
Reliability	National Grid, USA		06/2017		GE - Geres Lock #8 Reconductor	Proposed	N/R	
Reliability	National Grid, USA		12/2017		Reconductor Clay - Teal #10	Planned	N/R	
Reliability	National Grid, USA		09/2015		Replace TB1 at Clay Station	Under Construction		
Reliability	National Grid, USA		6/2018	Porter Station Bulk Power Upgrades	Porter 115 and 230kV substation bulk power upgrades	Construction	Uncertain	
Reliability	National Grid, USA		10/2014	Porter 230kV Breaker Overduty Mitigation	Install relays to add two cycle delay to the fault clearing times of nine 230 kV breakers	Completed	N/R	
Reliability	National Grid, USA		06/2014	Clay Station Bulk Power Upgrades	Clay 115 kV substation bulk power upgrades	Completed	Approved	
Reliability	National Grid, USA		11/2017	Edic 345-230kV TB2 Reconnect	Create a new bay by adding two new 345 kV breakers, then reconnect the TB2 to the newly created position.	Planned	Uncertain	
Reliability	National Grid, USA		12/2019	Inghams Substation Rebuild	Replace 115 kV breakers; adding a new phase shifter	Concept	Uncertain	

LTP List 2014 Update– Central NY (2 of 2)

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Central New York								
Reliability	National Grid, USA		7/31/2014	Rome Capacitor Bank Installation	New 115kV 28.8 MVAR capacitor bank installation on the north bus at Rome to support the 115 kV system	Completed	N/R	
Reliability	National Grid, USA		06/2014	Northern Area Projects	Replace three 115 kV circuit breakers at ALCOA substation	Completed	N/R	
Reliability	National Grid, USA		04/2014	Wetzel Road Substation	Install new distribution substation in north Syracuse area	Completed	N/R	
Load Growth	National Grid, USA		06/2017	Maple Ave Substation	Install new distribution substation in north Syracuse area	Planned	N/R	
Load Growth	National Grid, USA		06/2017	Watertown Substation	Install new distribution substation in Watertown area	Planned	N/R	
Reliability	National Grid, USA		12/2017	Central Division	Install Reactors on Yahnundasis-Porter #3	Proposed	N/R	
			12/2018	Central Division	Install Reactors on Onedia -Porter #7	Proposed	N/R	
Reliability	National Grid, USA		06/2014		S.Oswego-Clay #4 - Remove thermal restrictions associated with Conductor Clearance	Completed		
Reliability	National Grid, USA		12/2015		Clay -Woodard #17 Line - Remove thermal restrictions associated with Conductor Clearance	Planned		
Reliability	National Grid, USA		06/2016		Gereslock -Woodard #4 Line Install Reactors	Proposed		-
Reliability	National Grid, USA		06/2016		Dewitt-Pebble Hill #19 Re-conductor 1/2 mile line	Proposed		

Eastern NY – Northeast area



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Eastern New York									
Reliability	National Grid, USA			06/2018	Northeast Region Reinforcement Project	Reconductor Eastover Rd-Luther Forest #3 115 kV (10.4 miles), Ballston #2 115 kV Tap (Ballston-Malta; 5.1 miles), and Mohican-Butler #18 (3.5 miles).	Cancelled	N/R	
Reliability	National Grid, USA			06/2015		230-115 kV station at Eastover Road in Schaghticoke, supplied by the Rotterdam-Bear Swamp #E205 230 kV	Under Construction	Approved	
Reliability	National Grid, USA			06/2016		Reconductor Mohican-Battenkill #15 115 kV (14.2 miles)	Planned	Approved	
Reliability	National Grid, USA			6/2013		Spier-Rotterdam #1/#2 115 kV reconductoring, reconfiguration, and addition of new Spier-Rotterdam #3 115 kV	Complete	Approved	
Reliability	National Grid, USA			06/2017	New Distribution substations and Banks	Build a 115-13.2 kV substation @ Sodeman Road	Planned	N/R	
Load Growth	National Grid, USA			06/2015		Addition of two new 115/13.2 kV banks at Riverside station	Planned	N/R	
Load Growth	National Grid, USA			06/2017		New Randall Rd 115-13.2kV sub outside Ballston, NY	Planned	N/R	
Load Growth	National Grid, USA			06/2017		New Van Dyke 115-13.2kV sub Bethlehem, NY	Planned	N/R	
Reliability	National Grid, USA			12/2017		Convert Ephratah sub from 69 to 115kV	Concept	N/R	
Reliability	National Grid, USA			6 2015		Thermal Upgrades on the Greenbush-Schodack/Hudson #13 & #15 115 kV Lines	Planned		

LTP List 2014 Update– Eastern NY (2 of 2)

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Eastern New York								
Reliability	National Grid, USA		6 2015		Install Series Reactors at Unionville substation for the New Scotland-Long Lane #7 and New Scotland-Feura Bush #9 115 kV lines	Planned		
Reliability	National Grid, USA		6 2018		Install Series Reactors at Rotterdam station on the #19 and #17 115 kV lines	Proposed		
Reliability	National Grid, USA		N/A		Replace New Scotland #1 Transformer with a larger Transformer	Cancelled		Project Cancelled when Selkirk withdrew Mothball notice
Reliability	National Grid, USA		N/A		Add a second 345-115kV Transformer at Reynolds Road	Cancelled		Project Cancelled when Selkirk withdrew Mothball notice
Reliability	National Grid, USA		06/2018		Increase 230-115kV transformation capacity at Eastover Road and/or Rotterdam	Proposed		
Reliability	National Grid, USA		06/2019		Reconductor/rebuild 2.1 miles of the Wolf Rd-Menands #10 115kV	Proposed		
Reliability	National Grid, USA		06/2019		Reconductor/rebuild 3.2 miles of the State Campus-Patruon-Menands #15 115kV	Proposed		
Reliability	National Grid, USA		06/2019		Reconductor/rebuild 6.8 miles of the Rotterdam-Curry Rd #11 115kV	Proposed		
Reliability	National Grid, USA		06/2018		Upgrade station equipment/terminations for Menands-Riverside #3 115kV	Proposed		
Reliability	National Grid, USA		06/2018		Reconfigure Rotterdam Station as part of planned Rebuild to eliminate R1 and R82 breaker failure contingencies	Proposed		
Reliability	National Grid, USA		06/2018		Upgrade station equipment/termination at Spier Falls for Queensbury-Spier #5 115kV	Proposed		
Reliability	National Grid, USA		06/2019		Add a second 115kV bus-tie breaker in series at Spier Falls, and add a two-stage 20MVAR Capacitor at Ticonderoga	Proposed		

LTP Communication

- Interested parties may submit written comments on National Grid's LTP within 30 days (October 23,2014) to:

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National Grid

1125 Broadway

Albany, NY 12204

- Comments will be posted on the NYISO website.
- Modifications to the LTP discussed at the next LTP meeting.

Questions?

