

**ORANGE & ROCKLAND UTILITIES
LOCAL TRANSMISSION PLAN (LTP)
2015 - 2024**

**NYISO KCC
November 10, 2015**

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PRESENTATION OUTLINE



COMPANY BACKGROUND



**LTP ASSUMPTIONS, TOOLS &
METHODOLOGIES**



DEVELOPMENT OF LTP



**PROPOSED LTP
(UPDATES FROM 2013 LTP)**



QUESTIONS

COMPANY BACKGROUND (Service Territory)



Company Profile:

TO & LSE under NYISO/PJM.
Subsidiary of Con Edison, Inc.

Existing Circuit Miles:

Transmission (69 kV to 345 kV) :
554 miles
Distribution (4 kV to 34.5 kV) :
3,764 miles
UG Distribution (13.2 kV) :
1,696 miles

Customer Data:

Electric: 300,700 (NY, NJ, PA)
Gas: 130,000 (NY, PA)

All time Peak Demand for electricity:

1617 MW (8/2/06)

Number of employees ~ 1100

Service Territory ~ 1350 sq. miles



COMPANY BACKGROUND

(Transmission Design Standards)

- **THERMAL**

- Normal Operating Conditions:
 - Below Normal Rating of Equipment
- N-1 Operating Conditions:
 - Below Long-Term Emergency (LTE) Rating of Equipment.

- **VOLTAGE**

- Normal and N-1 Operating Conditions:
 - $0.95 < \text{Nominal Bus voltage} < 1.05$

LTP ASSUMPTIONS

- 2015-2019 Capital Budget
- Load Forecast:
 - 2015 (1645 MW)
 - 2019 (1705 MW)
 - 2024 (1795 MW)

- Factors Affecting LTP:
 - Reliability Requirements
 - Changes in Load Forecast
 - DSM
 - REV Screening
 - Federal and State Programs
 - New Generation
 - Etc...

LTP TOOLS & METHODOLOGIES

- Thermal
- Voltage
- Short Circuit
- Equipment Replacements Due to Condition

DEVELOPMENT OF LTP

- Load Flow Studies
- System Violations Identification
- System Solution Proposal and Evaluations
- Preparation of the Long Range Transmission Plan
- LTP Presentations

DEVELOPMENT OF LTP

- **DESIGN CRITERIA REQUIREMENTS**

- Thermal Overloads and Voltage Violations
- Short Circuit Violations
- Equipment Condition

DEVELOPMENT OF LTP

• METHODS FOR DEFICIT RESOLUTIONS

- Load Transfers
- Equipment Upgrades
- New or Reconfiguration of Transmission Lines
- New Switching Stations with new or reconfigured Transmission Lines
- Transmission Station Reconfiguration or Upgrade
- Reactive Power Compensation (Capacitors or Reactors)
- Short Circuit Remediation/Breaker Upgrade
- REV Screening
- DSM

PROPOSED LTP

- EASTERN DIVISION LOCAL PLANS

GEOGRAPHIC COVERAGE : Rockland County (NY),
Portions of Bergen County (NJ)
DESIGN STANDARD: First Contingency

PROJECT DESCRIPTION	IN-SERVICE DATE	
	2013 Plan	2015 Plan
North Rockland 345 kV Station	June 2018	June 2018
Line 702 Upgrade	June 2014	June 2017
Line 47/Line 751 3-Way Switch	June 2015	December 2016

PROPOSED LTP

- EASTERN DIVISION LOCAL PLANS

PROPOSED TRANSMISSION CAPACITOR BANK INSTALLATIONS (32 MVARs)

STATION	IN-SERVICE DATE	
	2013 Plan	2015 Plan
Little Tor	2014	2017
Montvale (NJ)	2018	2022
Tappan	2015	2023
Pomona	2017	2022

PROPOSED LTP

- EASTERN DIVISION LOCAL PLANS

PROPOSED EQUIPMENT REPLACEMENTS DUE TO CONDITION (138 KV BREAKERS)

STATION	IN-SERVICE DATE	
	2013 Plan	2015 Plan
Ramapo	2016	2016
Burns	2019	2019
West Haverstraw	2020	2020

PROPOSED LTP

- CENTRAL DIVISION LOCAL PLANS**

GEOGRAPHIC COVERAGE : Portions of Orange County (NY)
 Portions of Passaic County (NJ)
DESIGN STANDARD: First Contingency

PROJECT DESCRIPTION	IN-SERVICE DATE	
	2013 Plan	2015 Plan
Sterling Forest New 69 KV Source	May 2015	June 2016
Line 27/271, Line 24 & 25 Corridor Upgrade	-	June 2023

- **CENTRAL DIVISION LOCAL PLANS**

**PROPOSED TRANSMISSION CAPACITOR BANK INSTALLATIONS
(32 MVARs)**

STATION	IN-SERVICE DATE	
	2013 Plan	2015 Plan
West Warwick	2015	2019
Woodbury	2019	2022

**PROPOSED EQUIPMENT REPLACEMENTS DUE TO CONDITION
(138 KV BREAKERS) - NONE**

STATION	IN-SERVICE DATE	
	2013 Plan	2015 Plan

PROPOSED LTP

- WESTERN DIVISION LOCAL PLANS

GEOGRAPHIC COVERAGE : Portions of Orange County (NY),
 Portions of Sullivan County (NY)
 Portions of Pike County (PA)

DESIGN STANDARD: First Contingency

PROJECT DESCRIPTION	IN-SERVICE DATE	
	2013 Plan	2015 Plan
Line 6 Upgrade to 69 kV	Various Stages starting on December 2017	Various Stages starting on December 2019

PROPOSED LTP

- WESTERN DIVISION LOCAL PLANS

**PROPOSED TRANSMISSION CAPACITOR BANK INSTALLATIONS
(16 MVARs or 32 MVARs)**

STATION	IN-SERVICE DATE	
	2013 Plan	2015 Plan
Pocatello (New - 32)	2017	2021
Fair Oaks (New -16)	2018	2023
Bullville (New – 16)	-	2021

**PROPOSED EQUIPMENT REPLACEMENTS DUE TO CONDITION
(69/34.5 KV Bank)**

STATION	IN-SERVICE DATE	
	2013 Plan	2015 Plan
Rio	2020	2025

O & R LTP LINK AND CONTACTS

1 LTP LINK

<http://www.oru.com/aboutoru/tariffsandregulatorydocuments/federal/order890.html>

2. CONTACTS

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