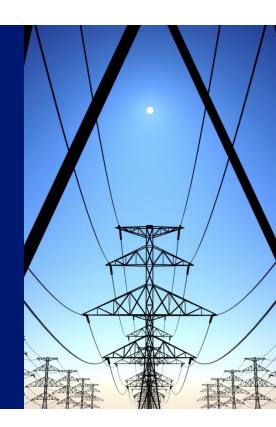
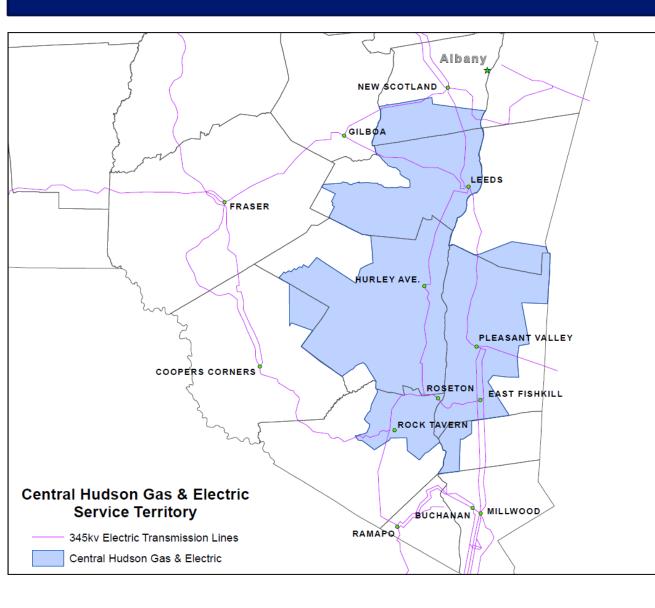


#### **Local Transmission Plan**

#### October 2017



# **Central Hudson's Service Territory**



Own & Operate approximately 610 miles of 69 kV, 115 kV & 345 kV transmission lines and three 345 kV substations



## **Central Hudson's Transmission System**

- Zone G: Majority of Central Hudson's load
- Zone E: One small distribution substation
- Central Hudson interconnects with:
  - Consolidated Edison
  - > Orange & Rockland
  - > NYSE&G
  - National Grid
  - > NYPA
  - > Eversource
  - First Energy



#### **Historic Peak Loads**

Summer Peak Loads				Winter Peak Loads			
Year	NYCA	Zone G	CHG&E+	Year	NYCA	Zone G	CHG&E+
2007	32,169	2,316	1,185	2007-08	25,021	1,727	960
2008	32,432	2,277	1,187	2008-09	24,673	1,634	911
2009	30,844	2,159	1,107	2009-10	24,074	1,527	909
2010	33,452	2,399	1,229	2010-11	24,654	1,586	905
2011	33,865	2,415	1,225	2011-12	23,901	1,618	861
2012	32,439	2,273	1,168	2012-13	24,658	1,539	892
2013	33,956	2,358	1,202	2013-14	25,738	1,700	938
2014	29,782	2,036	1,060	2014-15	24,648	1,556	874
2015	31,139	2,151	1,059	2015-16	23,319	1,496	863
2016	32,075	2,123	1,088	2016-17	24,164	1,549	862
2017	29,699		1,034	2017-18			

+ CHG&E Loads not coincident with other NYCA loads



### Forecast Peak Loads

Summer	Forecast
--------	----------

Year	NYCA*	Zone G*	CHG&E+
2018	33,078	2,218	1,051
2019	33,035	2,197	1,030
2020	32,993	2,180	1,023
2021	33,009	2,169	1,016
2022	33,034	2,157	1,011
2023	33,096	2,151	1,008
2024	33,152	2,145	1,005
2025	33,232	2,140	1,003
2026	33,324	2,136	1,001
2027	33,398	2,132	999

\* From 2017 "Gold Book"
Table I-2a
+ CHG&E 50/50 Forecast (includes impact of energy efficiency and PV)



# Facilities Covered by Central Hudson's Local Transmission Plan

- Central Hudson's Local Transmission Plan is intended to provide safe & reliable service to the load within our franchise area.
- This plan does not address state-wide issues such as intra-state and inter-state transfer limits.
- This plan does not address "in-kind" equipment replacements.



#### Facilities Covered by Central Hudson's Local Transmission Plan

- Transmission lines: 115 kV and 69 kV
- Transmission system transformers:
  - ≻ 345/115 kV
  - > 115/69 kV
- Substation facilities:
  - ≻ 345 kV
  - ≻ 115 kV
  - ≻ 69 kV



Annual planning process:

- First 5 years corporate capital forecast
  - > generally "firm" projects
  - > budgetary cost estimates
  - > estimated in service date
- Additional 5 years (years 6 10)
  - > generally "potential" projects
  - > planning cost estimates
  - > estimated in service date



#### **Data & Models**

- Load Flow cases produced by NYISO Staff
  - > NYISO Staff solicits input from all Transmission Owners
- Individual historic substation loads, updated where necessary, to be coincident with Central Hudson's peak hour



### **Issues Addressed**

- <u>Infrastructure Condition</u>: Central Hudson Transmission System Infrastructure facility inspection reports, condition assessments and diagnostic test data
- <u>Compliance requirements</u>: NESC, NERC, etc.
- <u>Reactive Support</u>: Maintain sufficient reactive support for local needs



## **Issues Addressed**

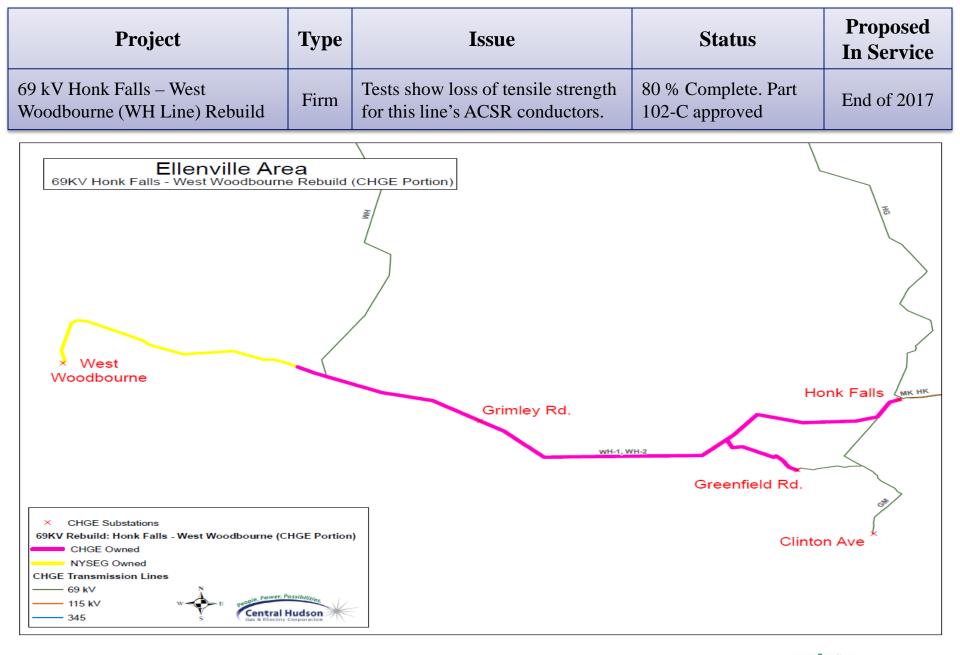
- Central Hudson's <u>System Load Serving Capability</u>
  - Consideration of through-flows
  - Consideration of proposed interconnections
- Central Hudson's <u>Local Area Load Serving</u> <u>Capabilities</u>
  - Northwest 69 kV
  - Southwest 69 kV
  - Southern Dutchess 115 kV
  - Mid Dutchess 115 kV

- > Ellenville Area
- Newburgh Area
- Eastern Dutchess 69 kV
- Kingston Milan

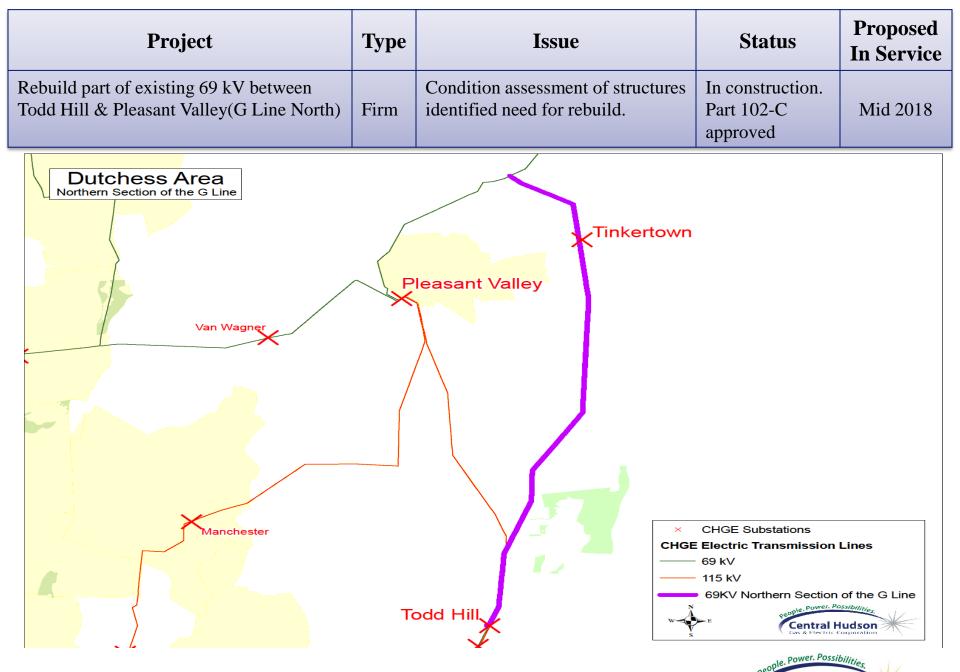


## Projects Addressing Infrastructure Condition Issues

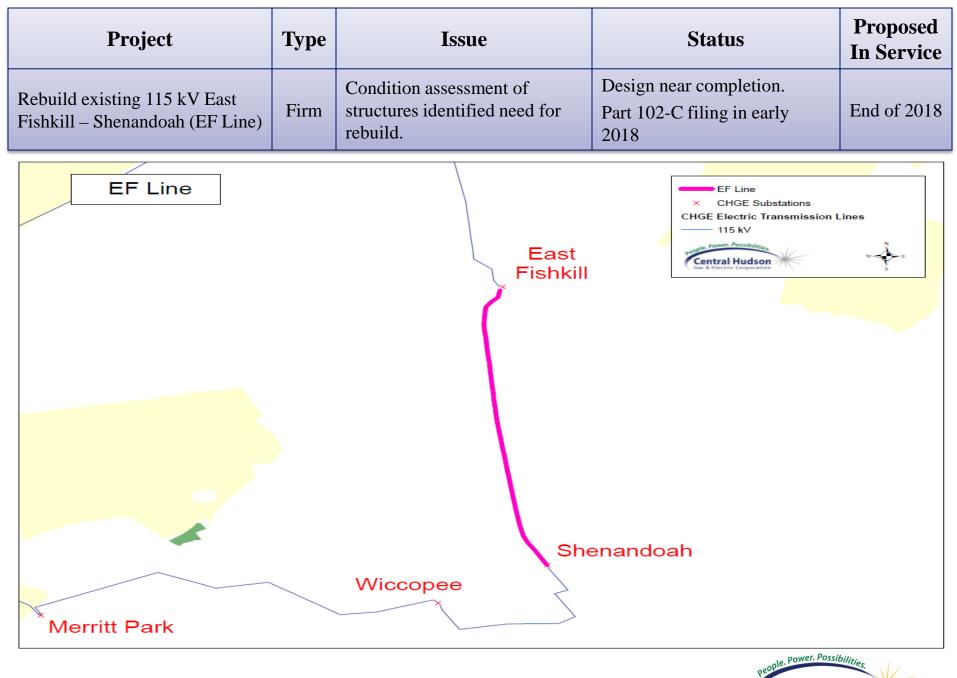


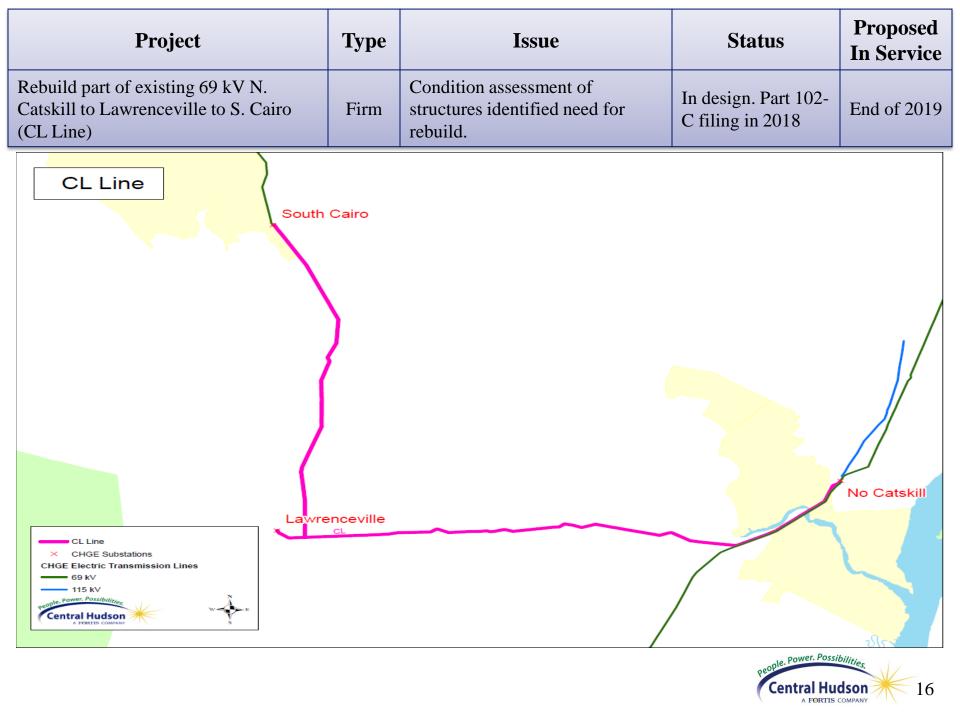


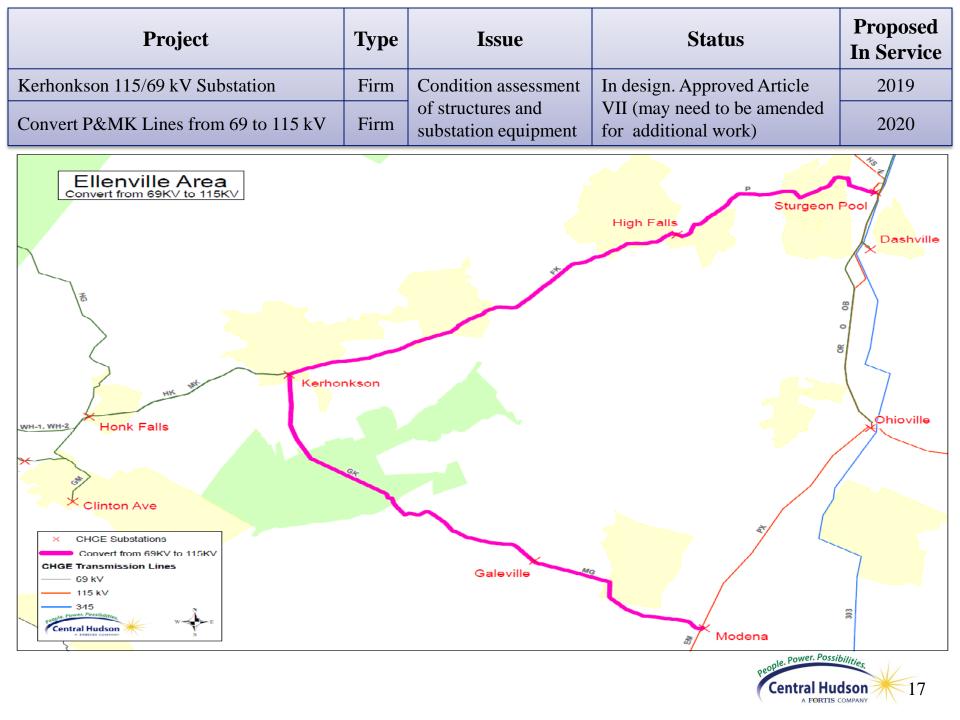


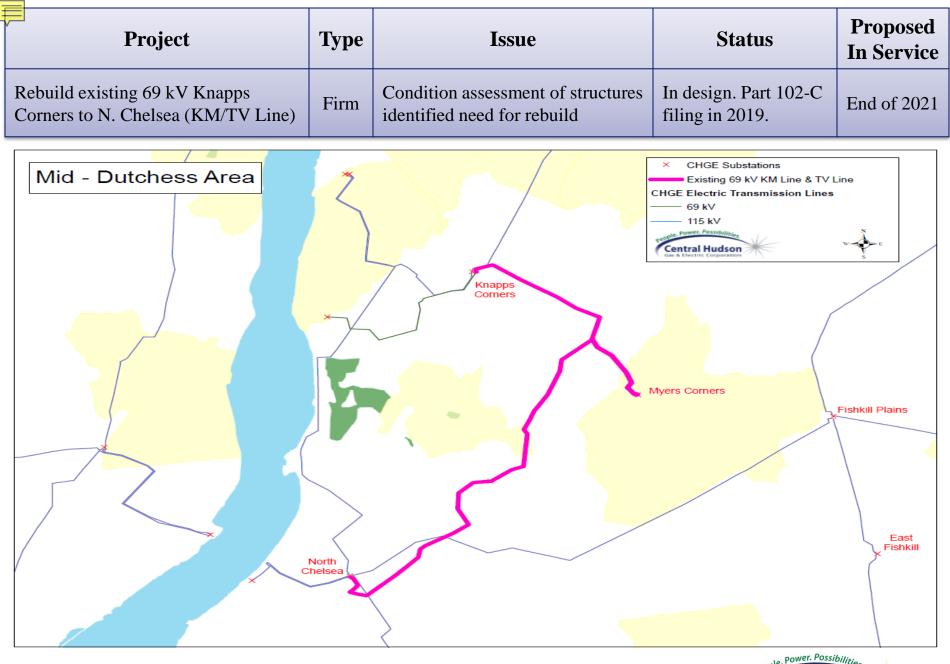


Central Hudson 14









Central Hudson 18

Project	Туре	Issue	Status	Proposed In Service
Rebuild existing 69 kV Hurley Ave to N. Catskill for 115 kV (H&SB)	Firm	Condition assessment of structures identified need for rebuild.	In Design. Article VII filing by end of 2017	End of 2022
Northwest Area         Rebuild existing 69KV Hurley Avenue to North         Hunter         Hunter         Norsson	Catskill for 1	Lewrenceville Catekiii Oermikitowi Saugerties Bugerties Bugerties Catekiii Catekii	4	Claverack "agits O al atin
		Linguin Dant	Milan	Pine Pi

Lincoln Park

5

West 1

East Kingston

LR

ferminal

Rhinebeck

HF

9

Hurley Ave

Converse St Kingston

Jansen Ave ×

MR

× CHGE Substations

National Grid Centerlines

69KV Rebuild: Hurley Ave - North Catskill for 115KV

**Orrie**x

Central Hudson

345

115kV

345kV



Milan

#### Comments

Interested parties should forward any comments to:

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