

IROQUOIS GAS TRANSMISSION SYSTEM, L.P.

Northeast Gas Association
Regional Market Trends Forum

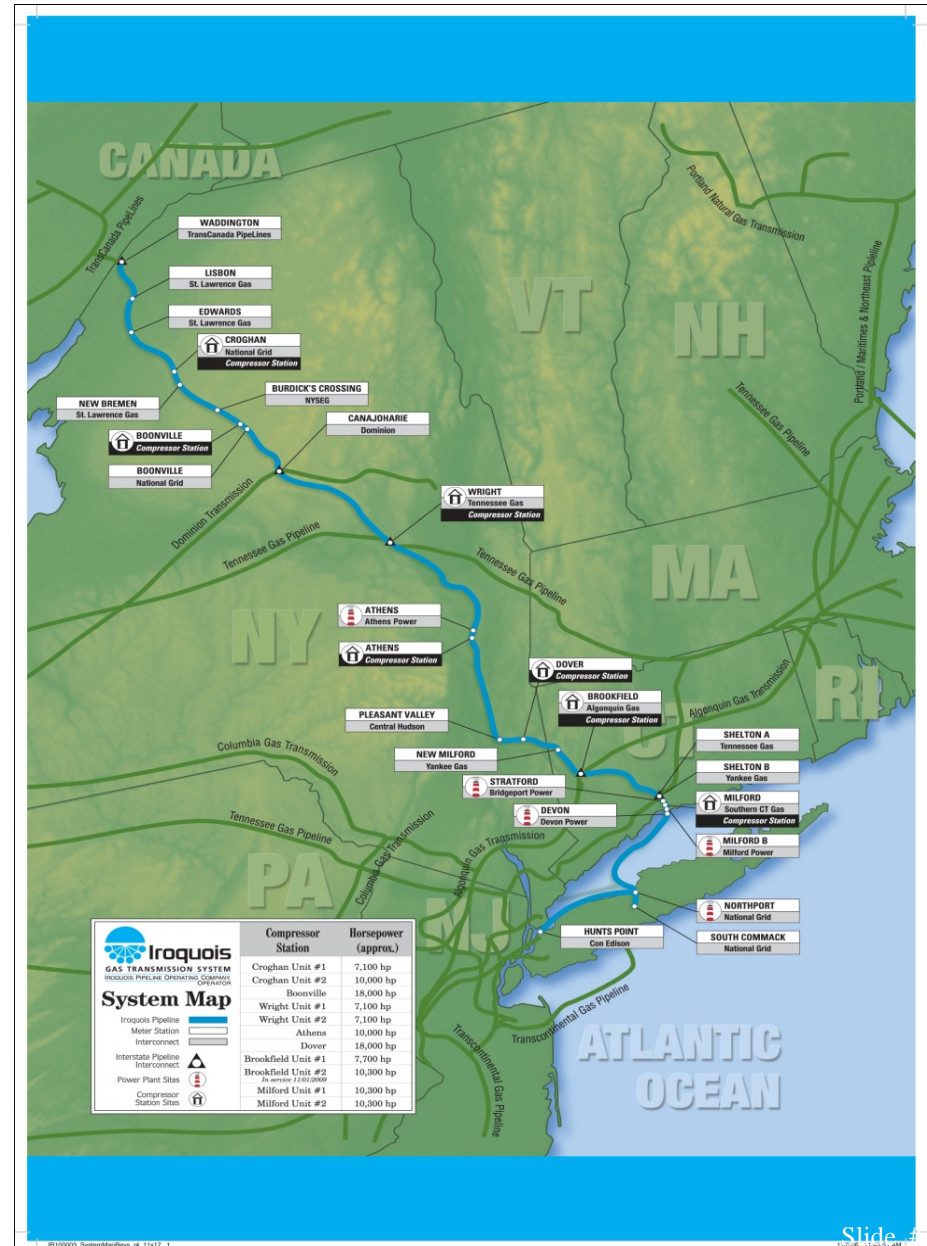
Implications for System Operations & Reliability

May 3, 2018

Hartford, CT

Iroquois Gas Transmission System

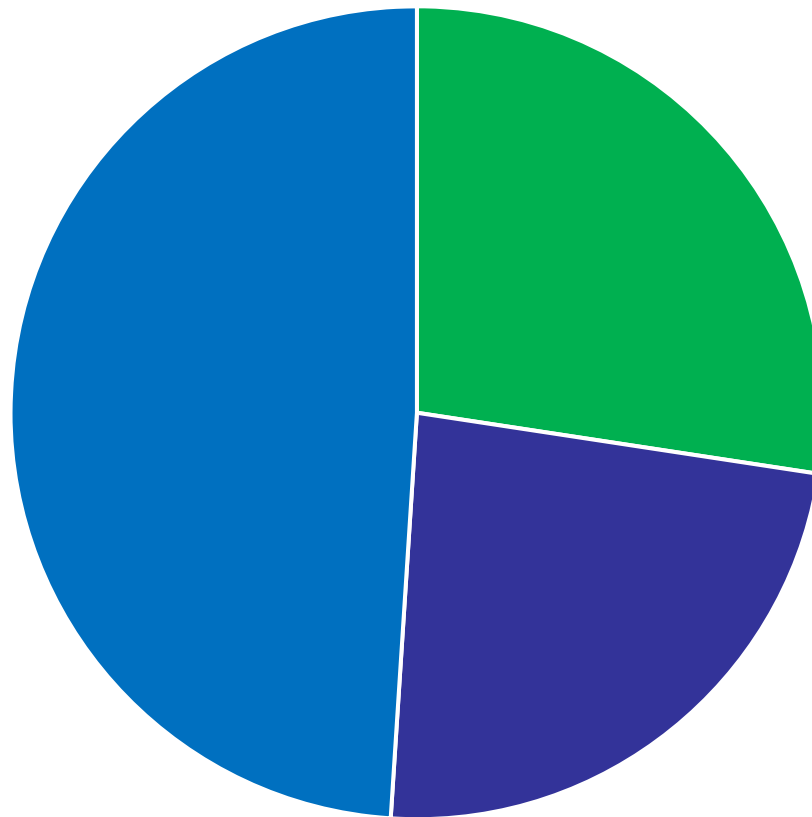
- Commenced Operations in 1991
- Primary Markets
 - New York City
 - Long Island
 - Connecticut
- 1.6 Bcf/d Physical Receipt Capability:
 - TransCanada = 1.2 Bcf/d
 - Algonquin = 0.4 Bcf/d
 - Dominion = 0.1 Bcf/d
- Piping
 - 416-mile of 30" and 24" pipeline
 - MAOP = 1440 psig
- Pipeline Interconnects:
 - TransCanada
 - Dominion
 - Tennessee (200 and 300 lines)
 - Algonquin
- 7 Compressor Stations - 106,400 HP
- Mainline Interzone Rate = ~~\$0.37/Dt~~
 $\$0.35 \gg \$0.33 \gg \$0.295/\text{Dt}$
 (Max. Fuel = 1%)
- Eastchester Rate = ~~\$0.635/Dt~~
 $\$0.455 \gg \$0.455 \gg \$0.395/\text{Dt}$
 (Max. Fuel = 4.5%)



01/10/2003, SystemMap/Rev. 04.11x17 1

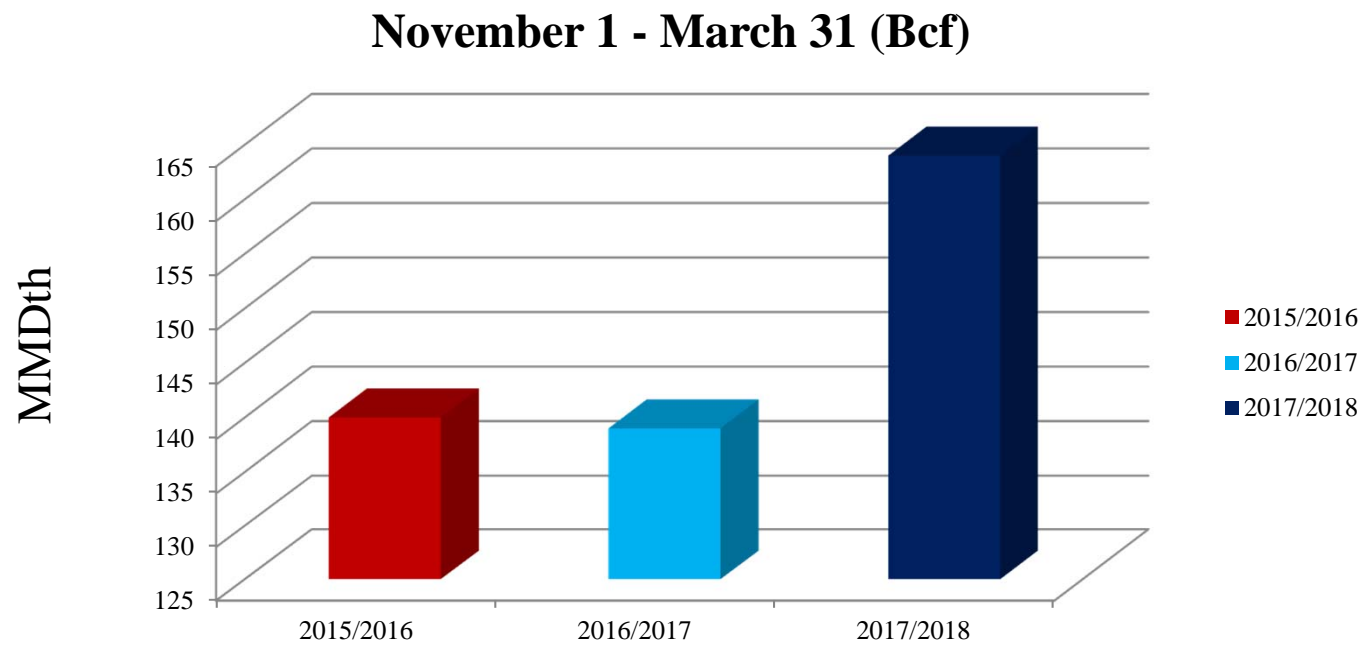
2017/ Volumes Winter Volumes

27.4% Generators, 23.6% Interconnects, 49.0% LDC's



■ Generators ■ Interconnects ■ LDC's

3 Year Winter Volumes



Historical Peak Day/Physical

	Location	Dt/d	Date
Supply	Waddington	1,221,160	2/6/15
	Brookfield	432,790	11/7/17
	Waddington/Brookfield	1,544,556	3/5/15
TGP	Wright TGP	410,471	3/3/16
	Wright & Shelton TGP	509,128	3/3/16
NYF System	South Commack	563,262	2/14/16
	Hunts Point	356,830	1/20/09
	Northport/South Commack/Hunts Point	860,927	2/7/10
	D/S of Milford Compressor Station	912,185	1/12/10
	Total Physical Deliveries – All Meters	1,537,971	12/14/17

Top 10 Total System Deliveries (Dth) 16/17 vs 17/18

2016/2017	2017/2018
DTH	DTH
1,466,400	1,537,971
1,465,202	1,523,820
1,447,007	1,506,366
1,429,957	1,497,344
1,420,189	1,495,866
1,408,065	1,493,712
1,395,943	1,492,180
1,380,718	1,480,789
1,380,115	1,479,013
1,377,680	1,470,207

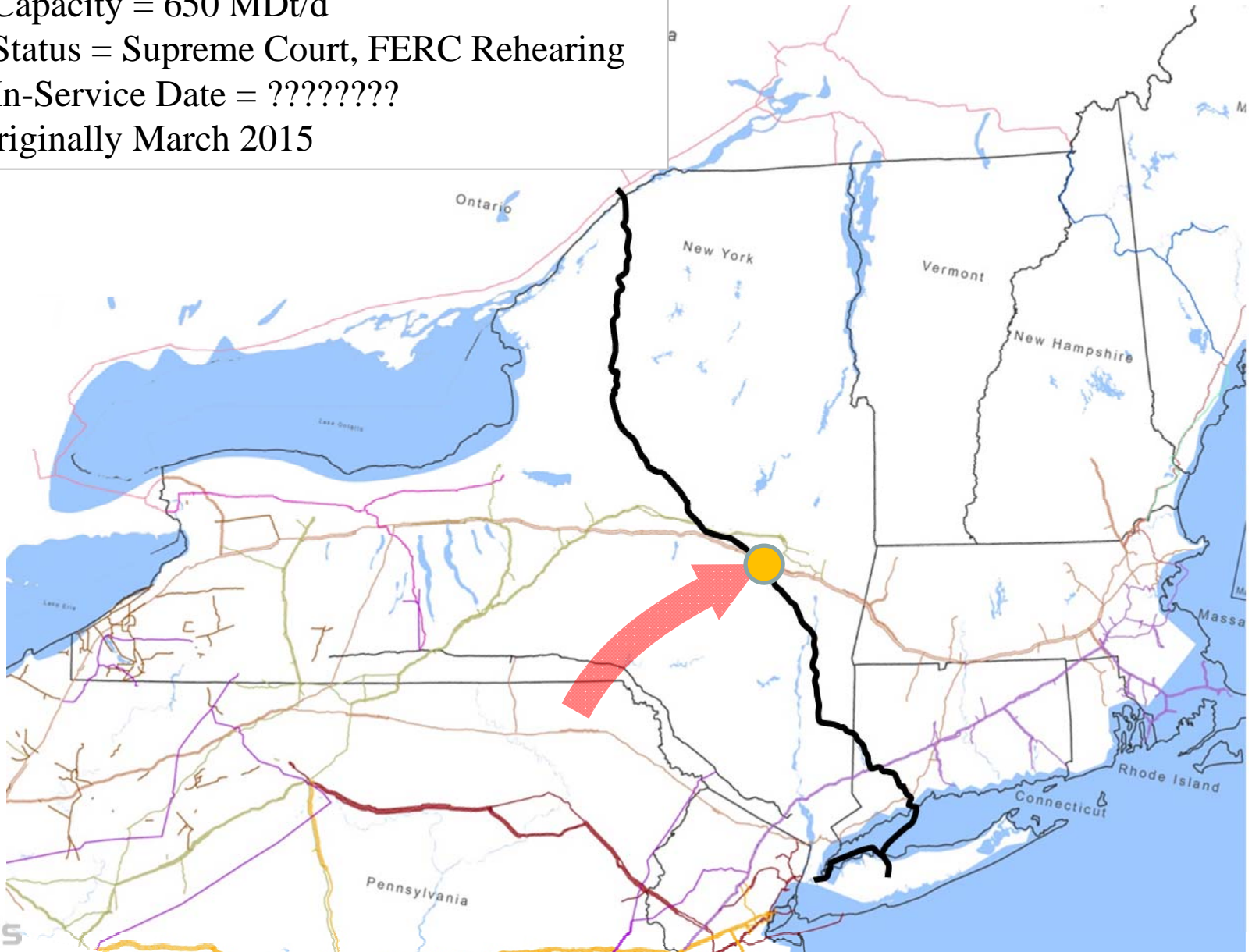
Bomb Cyclone – Winter 2017/2018

- January 5, 2018 NE Gas Spot Prices (High)
 - Iroquois Zone 2 (NYC) \$113.19
 - Algonquin Boston City Gate \$ 92.64
 - TGP Zone 6 (Boston) \$ 95.32
 - Transco Zone 6 NY \$159.60
 - Transco Zone 5 (Virginia/Carolinas) \$145.75
 - Dominion South (Western PA) \$ 4.49

» Source: Platts Gas Daily

Constitution / Wright Interconnect Project

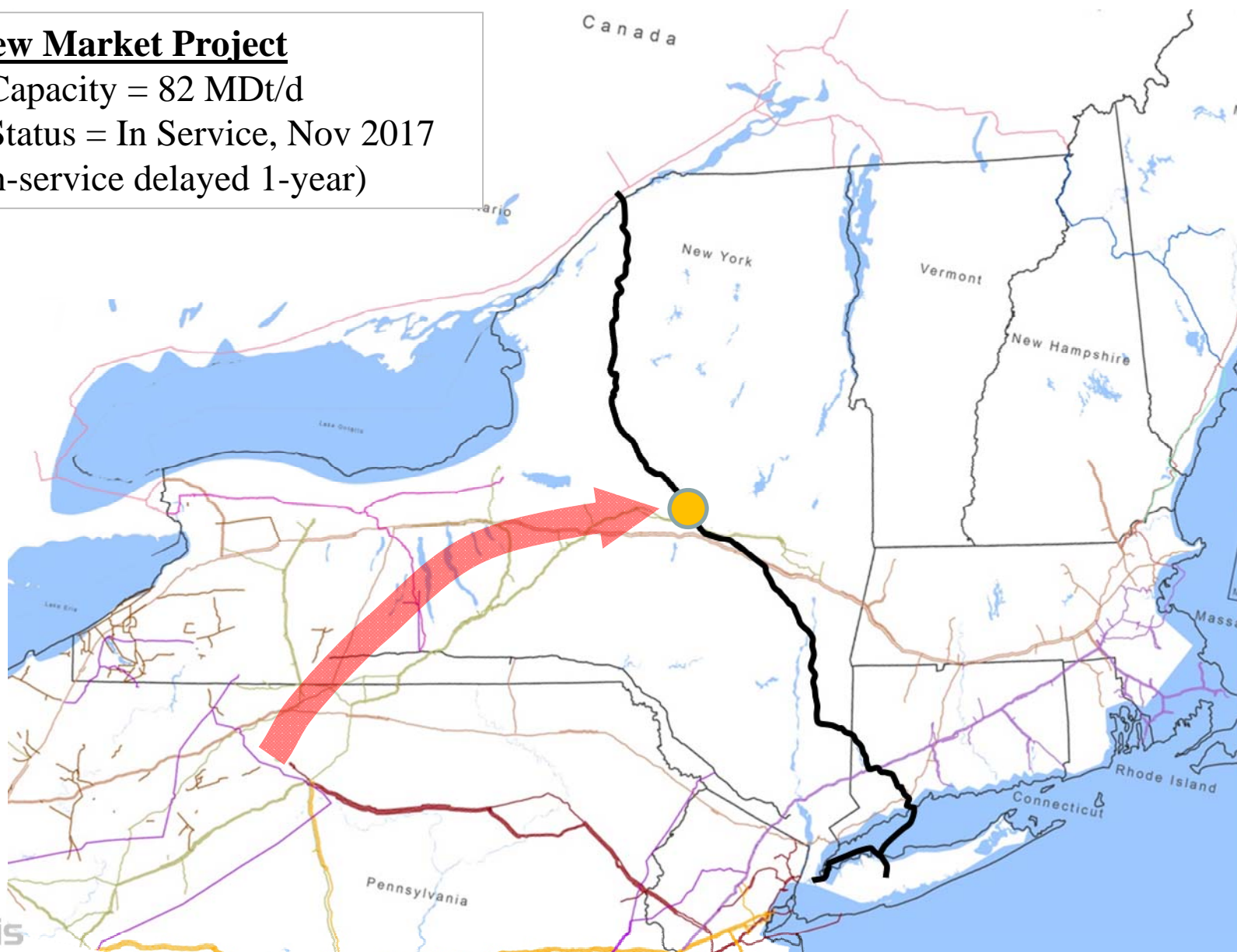
- Capacity = 650 MDt/d
- Status = Supreme Court, FERC Rehearing
- In-Service Date = ????????
originally March 2015



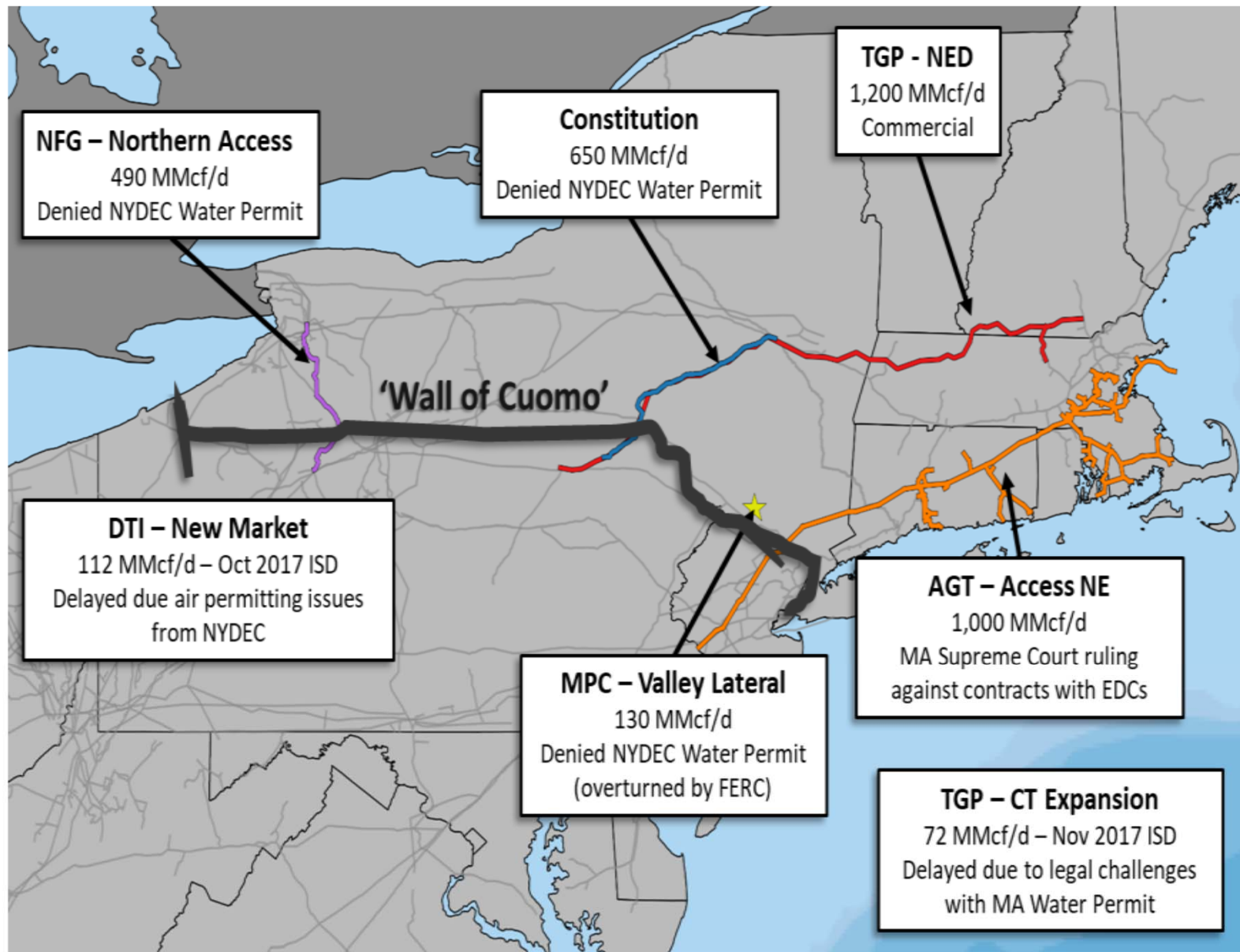
Dominion Projects

New Market Project

- Capacity = 82 MDt/d
- Status = In Service, Nov 2017
(In-service delayed 1-year)

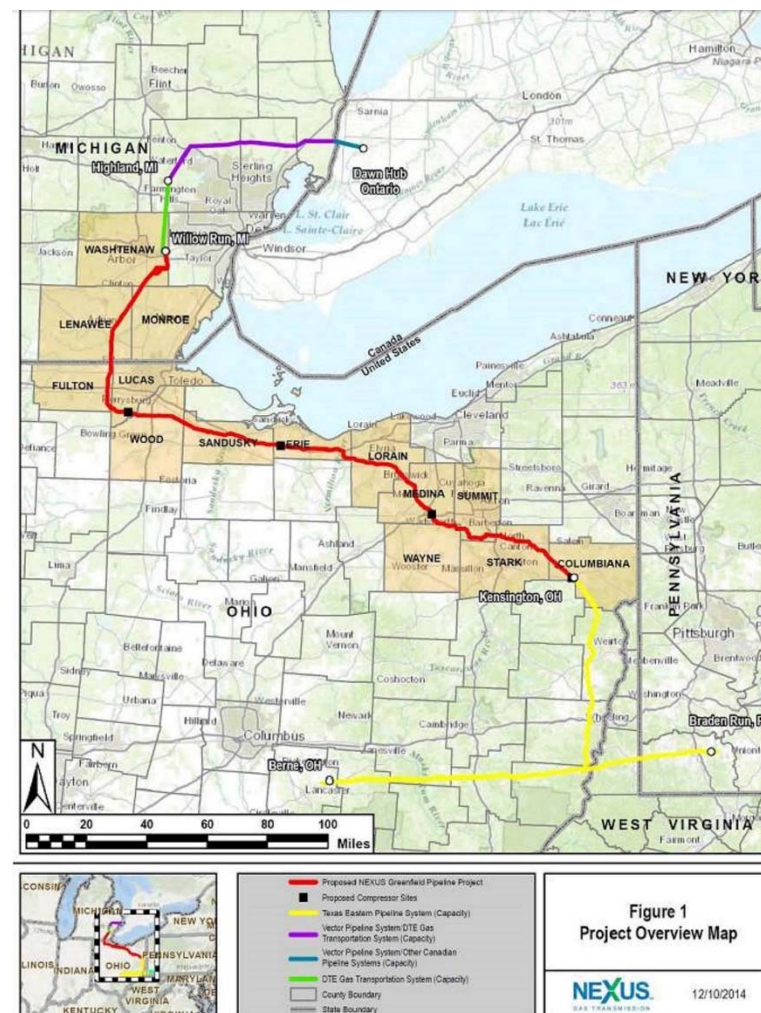


NE Gas Projects and the “Wall of Cuomo”



Nexus Pipeline

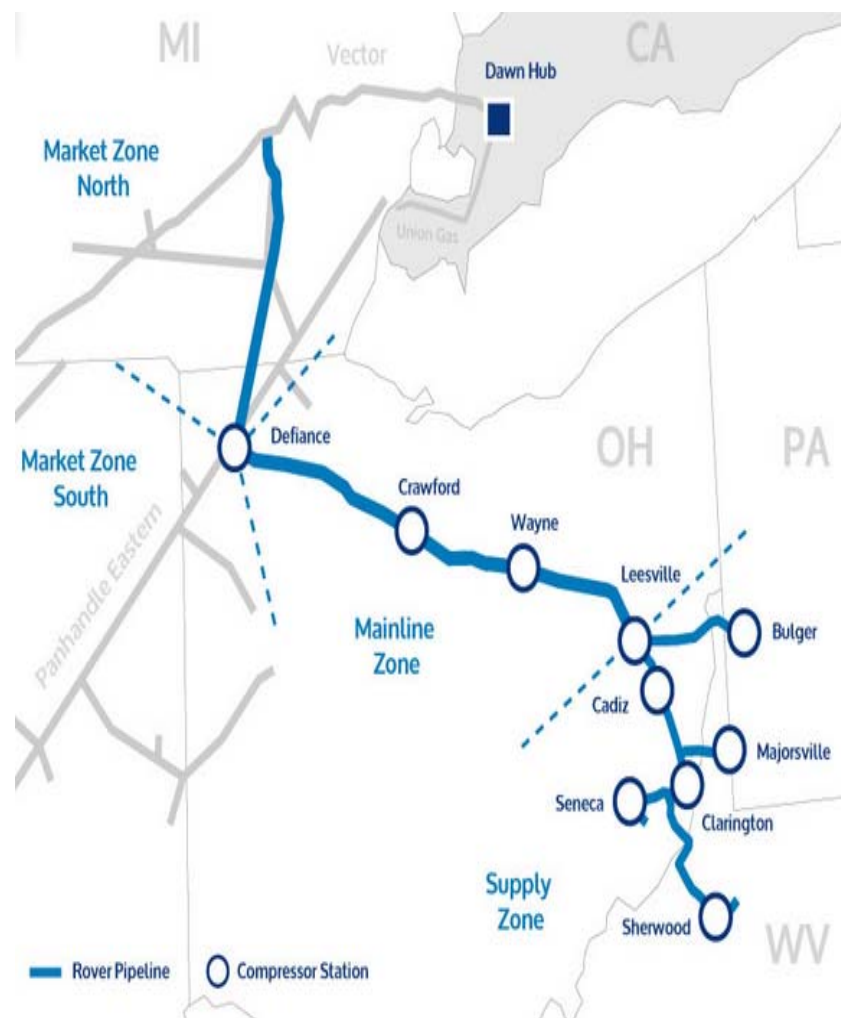
- DTE / Enbridge JV
- 255 miles, 36" pipe
- **1.5 BCF/day**
- Western Marcellus Shale Gas to Dawn Hub
- \$2 Billion
- Anticipated In-service date – late 3Q 2018



Source: FERC

Rover Gas Pipeline

- Energy Transfer Partners / Blackstone Group
- 713 miles, 42" pipe
- **3.25 BCF/day**
- \$4.2 Billion
- Anticipated In-service date – 2Q 2018
- Marcellus Shale Gas to Dawn Hub

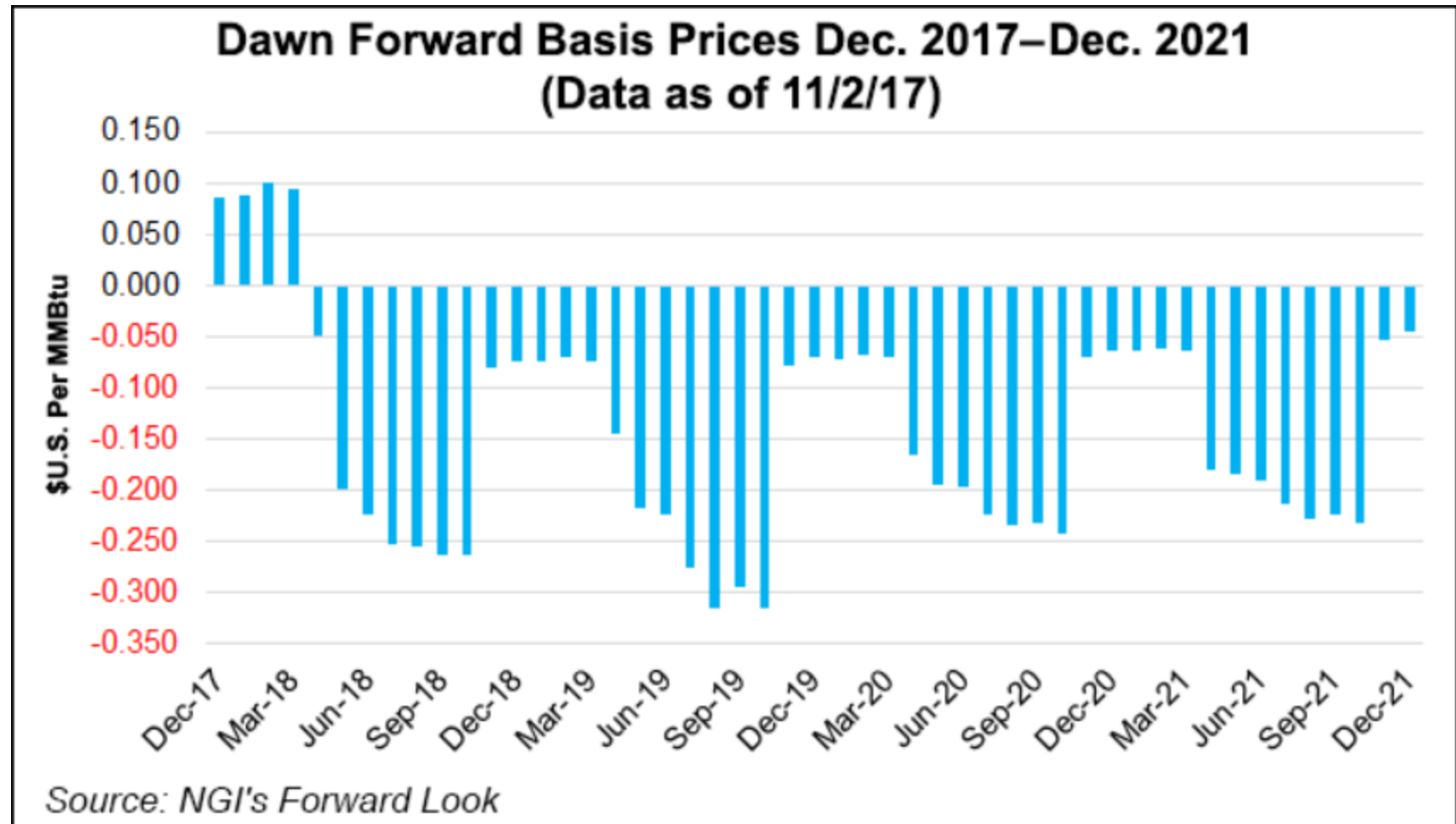


Source: ETP

TransCanada's long term fixed price (LTFP)

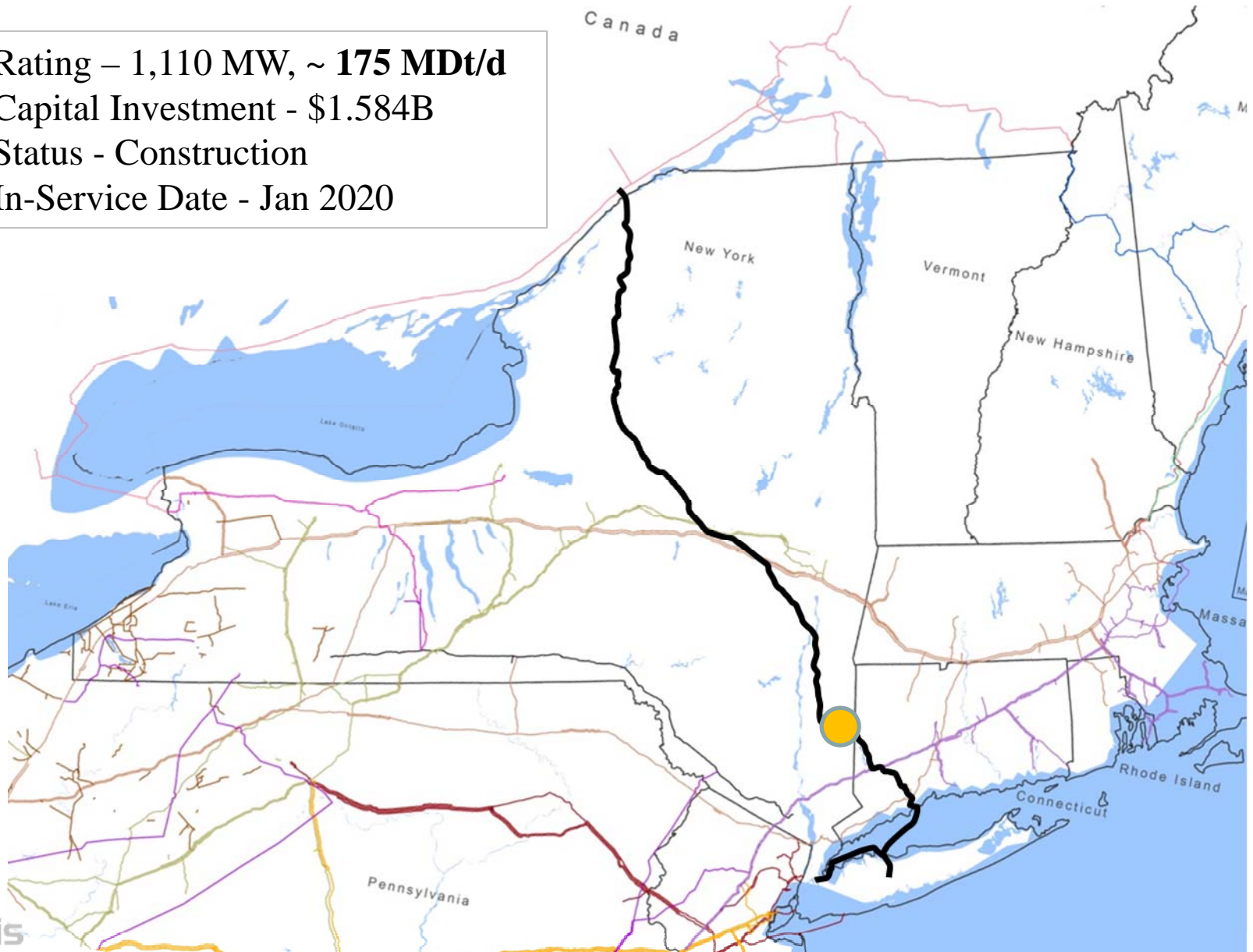
- Toll Certainty
 - Evolution of rate structure due to changes in market
 - Hi tolls – prior to LTFP \$1.86 CDN/GJ
 - Empress (Alberta) to Dawn (Southern Ontario)
 - 27 new long-haul contracts for a total of **1.5 BCF**
 - Secondary deliveries to select points on GLGT
 - \$0.77 CDN/GJ/day ~ \$0.63 US/Dth/day
 - Choose start date between Nov 1, 2017 and Nov 1, 2019
 - Up to 10-year terms with early termination after 5-years
 - Early termination pay higher rates in final two-years of contract

Downward Price Pressure at Dawn



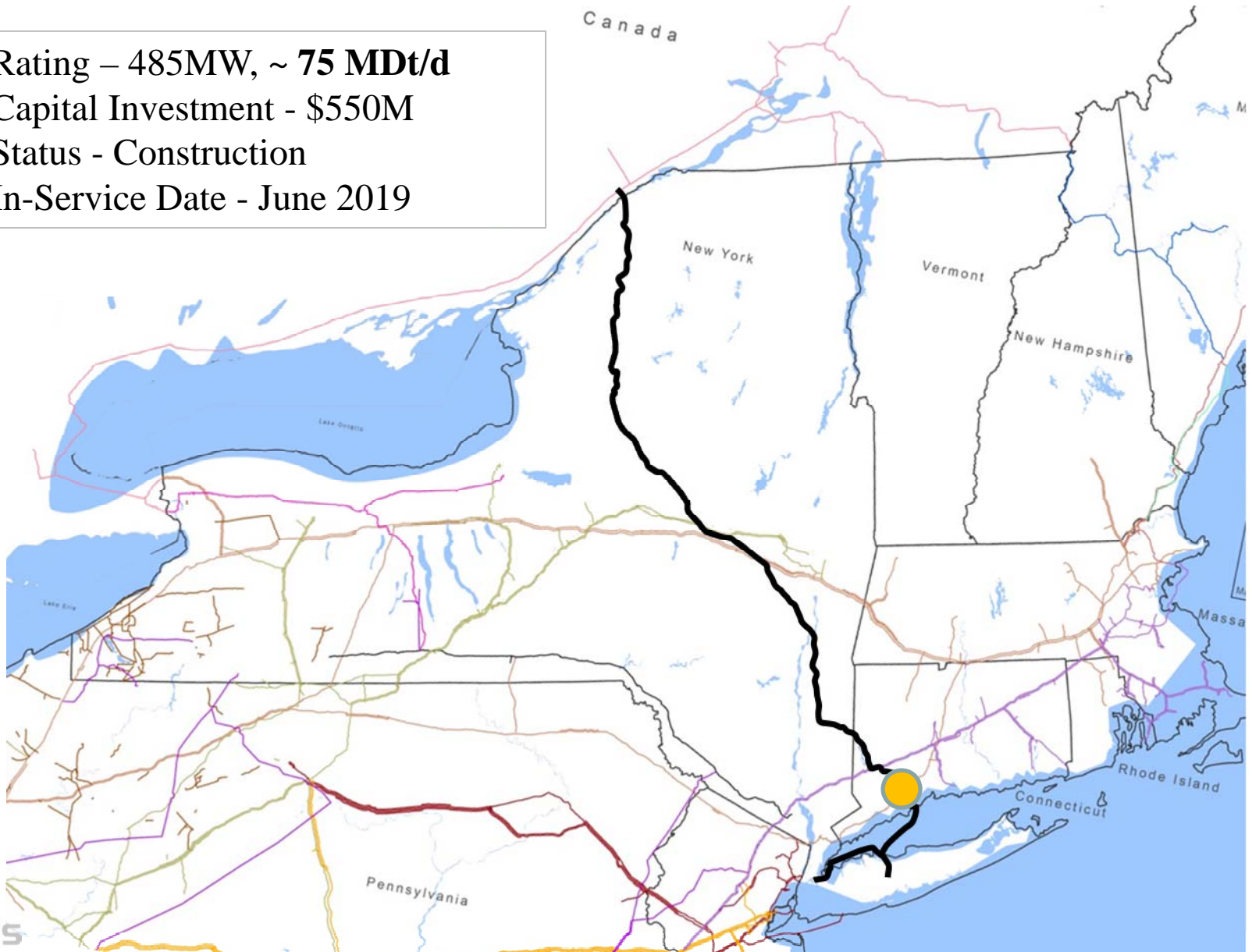
Cricket Valley Energy Center – Dover, NY

- Rating – 1,110 MW, ~ **175 MDt/d**
- Capital Investment - \$1.584B
- Status - Construction
- In-Service Date - Jan 2020



PSEG's Bridgeport Harbor Station – Bridgeport, CT

- Rating – 485MW, ~ **75 MDt/d**
- Capital Investment - \$550M
- Status - Construction
- In-Service Date - June 2019



Thank You

