

*March 21, 2019*  
*Westborough, MA*

# ***Update on New England Natural Gas Developments***

**Presentation to:**

***ISO-NE Planning Advisory Committee***



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Northeast Gas Association

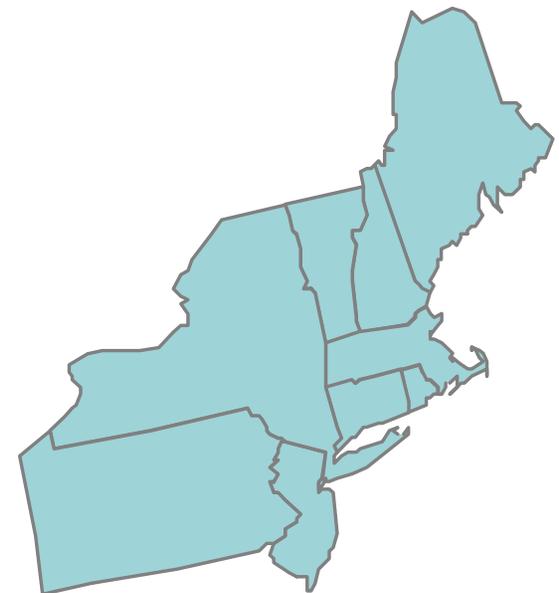
# Topic Areas

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- Recent winter.
- Infrastructure developments.
- Regional developments.
- Safety & mutual aid.

# About NGA

- ◆ Non-profit trade association
- ◆ Local gas utilities (LDCs) serving New England, New York, New Jersey, Pennsylvania
- ◆ Several interstate pipeline companies
- ◆ LNG importers, suppliers and transporters; CNG suppliers
- ◆ Over 400 “associate member” companies, from industry suppliers and contractors to electric grid operators
- ◆ [www.northeastgas.org](http://www.northeastgas.org)



## NGA'S ANTITRUST COMPLIANCE PROCEDURES

*Adopted by the NGA Board of Directors on June 20, 2018*

### **Objective**

The Northeast Gas Association (NGA) and its member companies are committed to full compliance with all laws and regulations, and to maintaining the highest ethical standards in the way we conduct our operations and activities. Our commitment includes strict compliance with federal and state antitrust laws, which are designed to protect this country's free competitive economy.

### **Responsibility for Antitrust Compliance**

Compliance with the antitrust laws is a serious business. Antitrust violations may result in heavy fines for corporations, and in fines and even imprisonment for individuals. While NGA's attorneys provide guidance on antitrust matters, you bear the ultimate responsibility for assuring that your actions and the actions of any of those under your direction comply with the antitrust laws.

### **Antitrust Guidelines**

In all NGA operations and activities, you must avoid any discussions or conduct that might violate the antitrust laws or even raise an appearance of impropriety. The following guidelines will help you do that:

- **Do** consult counsel about any documents that touch on sensitive antitrust subjects such as pricing, market allocations, anti-employee poaching practices, refusals to deal with any company, and the like.

[https://www.northeastgas.org/compliance\\_docs.php](https://www.northeastgas.org/compliance_docs.php)

## RECENT WINTER



# Some Pipeline and Gas Utility Sendout Records Set



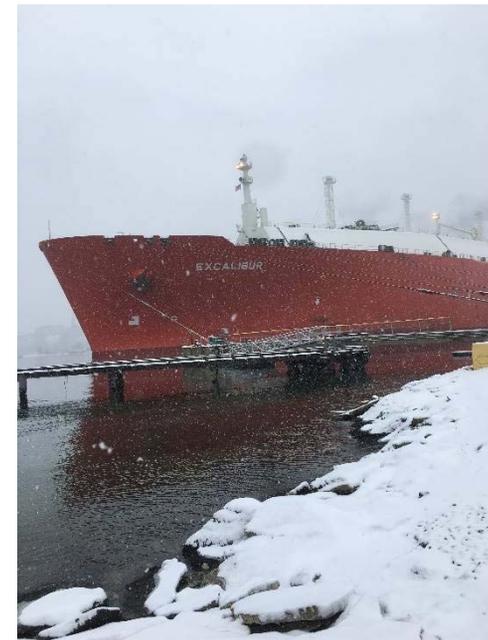
- New U.S. gas sendout record set on Jan. 30, 2019: ~150 Bcf.
- Most LDCs in New England report new peak day set on Mon., Jan. 21, 2019.
- **Algonquin Transmission** set a new system peak day on Jan. 21; its second highest peak day was set Jan. 22.
- **Tennessee Gas Pipeline** set a new systemwide throughput record on January 30.
- **Iroquois Pipeline** set a new peak physical delivery day on February 1.

# LNG Provided Key Supply Input

U.S. EIA: “Estimated deliveries from the LNG facilities located in New England rose from about 360 million cubic feet per day (MMcf/d) on January 19, 2019, to more than 700 MMcf/d on January 21.”

Strong volumes this winter on key delivery days from the **Exelon Generation, Everett LNG** facility; and **Canaport LNG** in New Brunswick.

Offshore facility owned by Excelebrate Energy – **Northeast Gateway** - made its first deliveries in 2 years into New England system. Achieved record sendout on Feb. 1.



*LNG ship Excalibur at dock in Everett, MA this winter during a snowstorm.*

# EIA's "New England Energy Dashboard"

Web site launched this winter. Key daily data on electricity, natural gas, petroleum systems. Address:

<https://www.eia.gov/dashboard/newengland/overview>

Daily deliveries of liquefied natural gas in New England

billion cubic feet per day (Bcf/d)

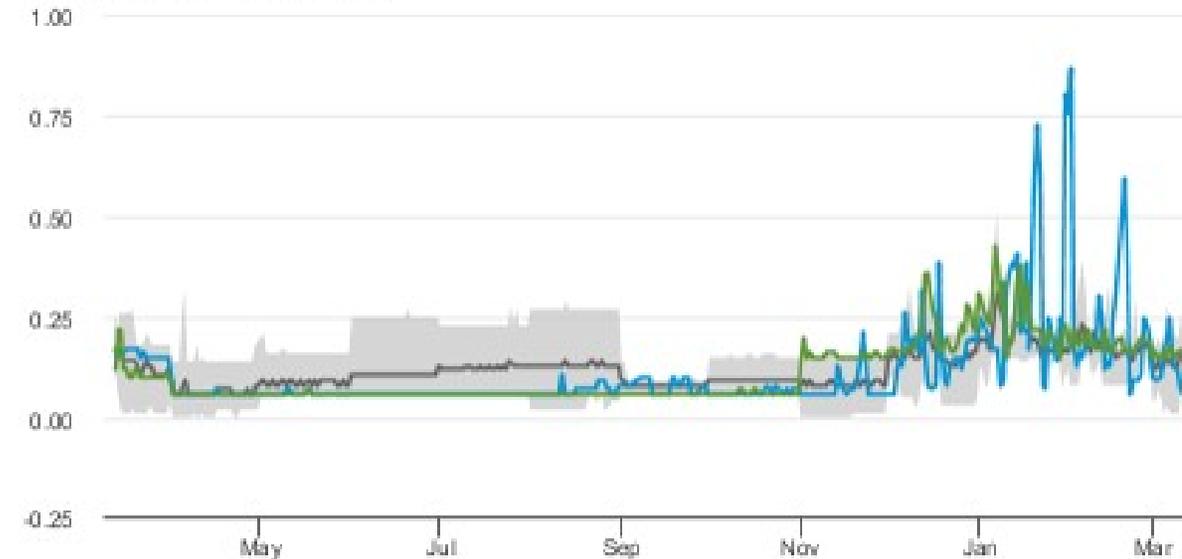


Chart: U.S. EIA, 3-19



Source: OPIS PointLogic

# National Storage Position: *Active Refill Season Ahead*

Working gas in underground storage compared with the 5-year maximum and minimum

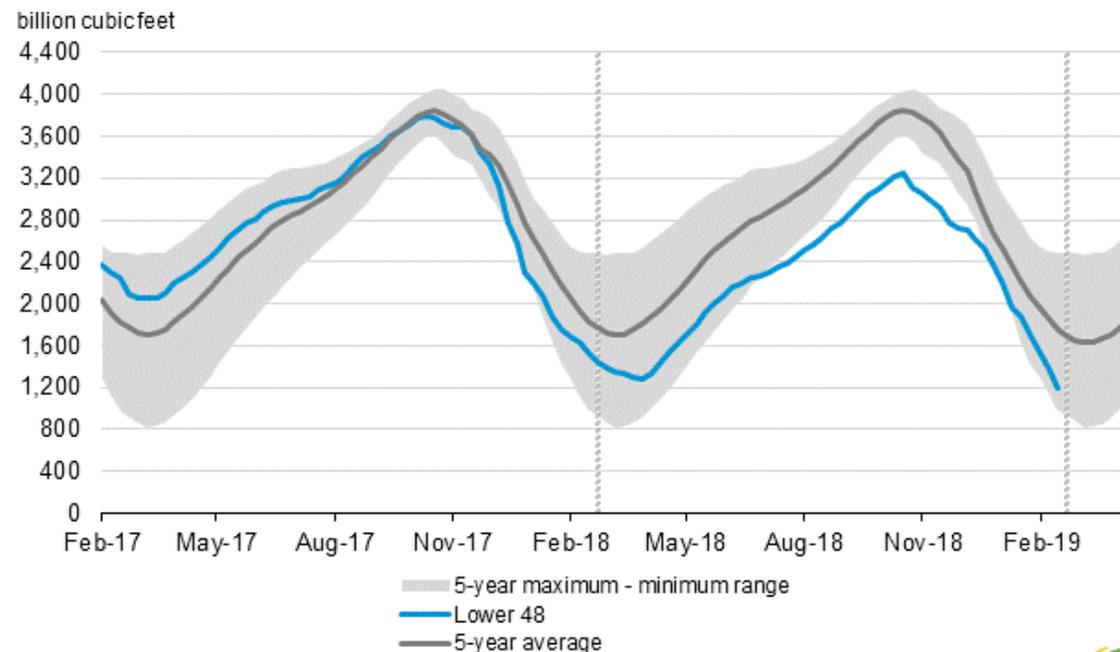


Chart: U.S. EIA, 3-14-19

Source: U.S. Energy Information Administration



EIA expects natural gas inventories will end March at 1.2 trillion cubic feet (Tcf), which would be 14% lower than levels from a year earlier and 28% lower than the five-year (2014–18) average. East region stocks are currently 22% below average.

# INFRASTRUCTURE DEVELOPMENTS



# Recent & Current Pipeline Projects, 2018-20

## ***2018 Projects, New England:***

- ◆ Enbridge: “Atlantic Bridge Project” [partial]
- ◆ PNGTS: “Portland XPress” [phase 1]

## ***2019 Projects, New England:***

- ◆ PNGTS: “Portland XPress” [phase 2]
- ◆ PNGTS: “Westbrook XPress” [phase 1]

## ***2020 Projects, New England:***

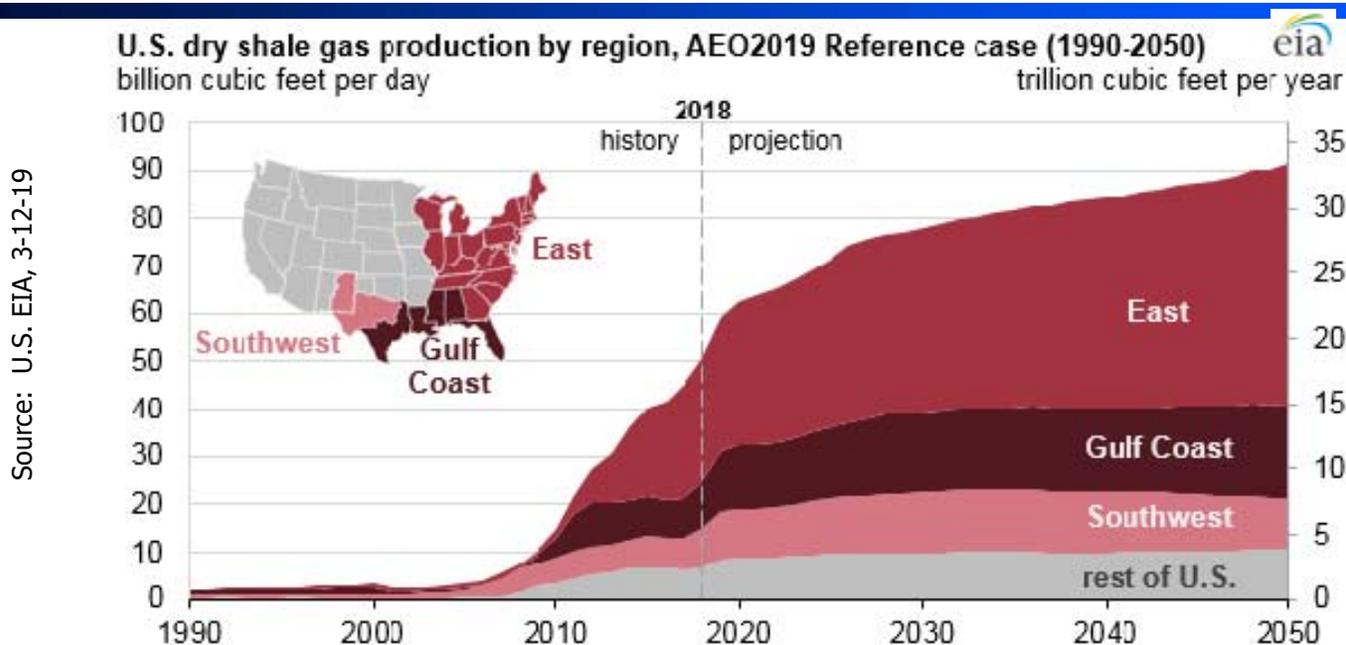
- ◆ Enbridge: “Atlantic Bridge Project” [2nd phase]
- ◆ PNGTS: “Portland XPress” [phase 3]
- ◆ Tennessee: “Station 261 Upgrade”
- ◆ Iroquois, “Wright Interconnect” [2020/21]



# REGIONAL DEVELOPMENTS



# Outlook: Northeast Production Remains Robust



***U.S. natural gas production achieved record annual output in 2018, 11% over 2017 level. Looking ahead to long-term forecast, U.S. EIA, March 12, 2019:***  
“Total U.S. dry natural gas production... is driven by continued development of the Marcellus and Utica shale plays in the East region... Dry shale natural gas production in the East accounts for over half of this growth as production more than doubles during the projection period from 24 Bcf/d in 2017 to 50 Bcf/d in 2050 in the Reference case.”

# Additions to Regional Gas Generation Capacity



**Footprint Power  
Salem Harbor  
Salem, MA  
674 MWs  
Online June 2018**



**CPV Towantic Energy Center  
Oxford, CT  
805 MWs  
Online June 2018**



**Exelon Generation  
Medway Peaker Project  
Medway, MA  
200 MWs  
Expected online, 1<sup>st</sup> half 2019**

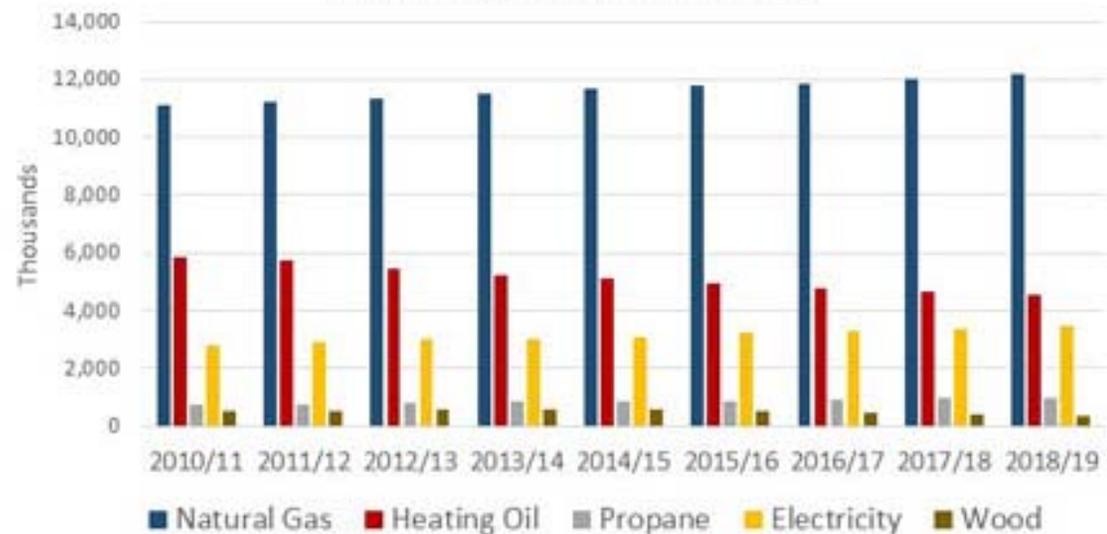


**PSEG Power  
Bridgeport Harbor Station 5  
Bridgeport, CT  
485 MWs  
Expected online, June 2019**

# Gas Utility Growth Has Continued



Households by Primary Fuel Type,  
Northeast U.S., 2010-2018

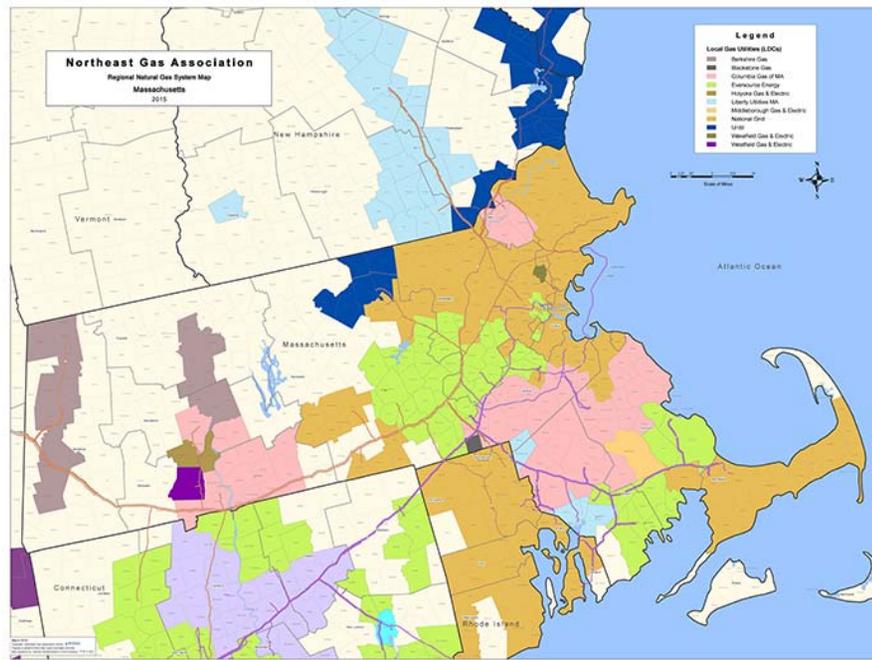


Source: U.S. EIA, 10-10-18

***Since 2010, natural gas has added over 1 million new household customers in the Northeast states.***

# Moratoria Expand within MA (and NY, Westchester Co.)

There are now 4 natural gas utilities in MA that have implemented restrictions on new gas service interconnections, due to limitations on pipeline supply availability in-state.



## Communities impacted:

Amherst  
Deerfield  
Easthampton  
Greenfield  
Hadley  
Hatfield  
Holyoke  
Middleborough  
Montague  
Northampton  
Sunderland  
Whately

# End of Sable Offshore Production

## Canada's National Energy Board (NEB):

“After almost 20 years of producing natural gas, the Sable Offshore Energy Project (SOEP) ceased production on 31 December 2018. The shutdown of SOEP comes after the permanent closure of another offshore facility, Encana's Deep Panuke field, which ceased production in May 2018.”

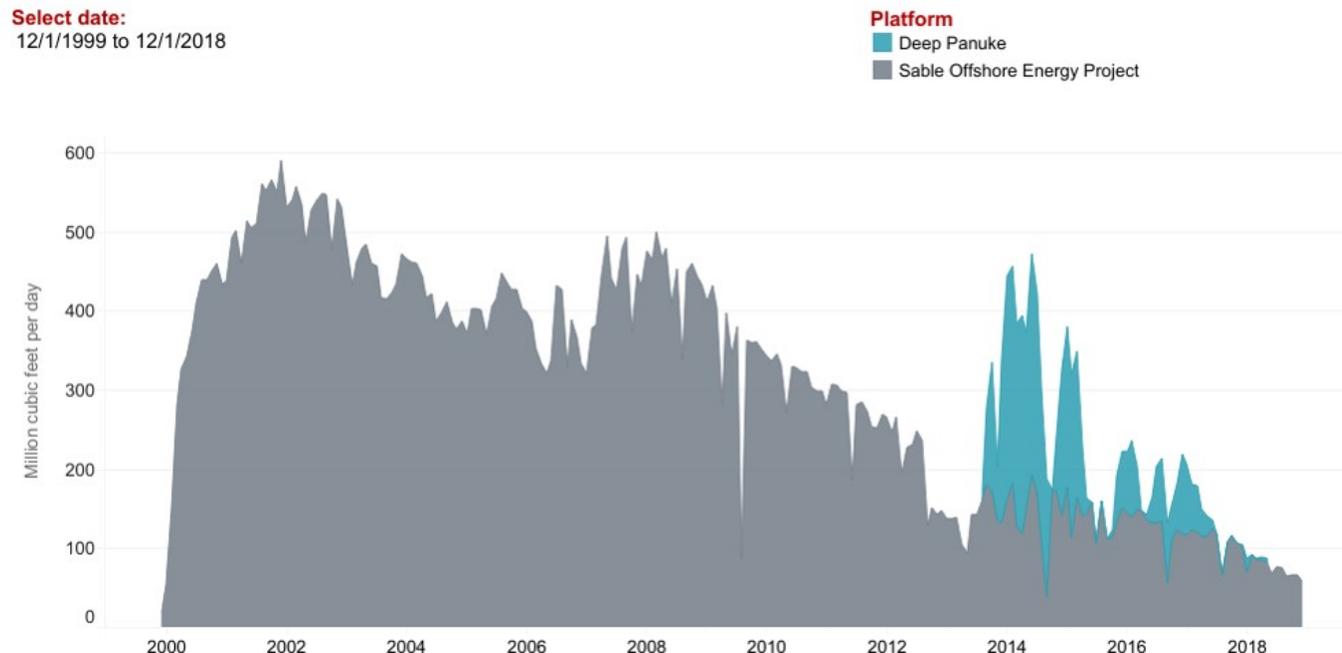


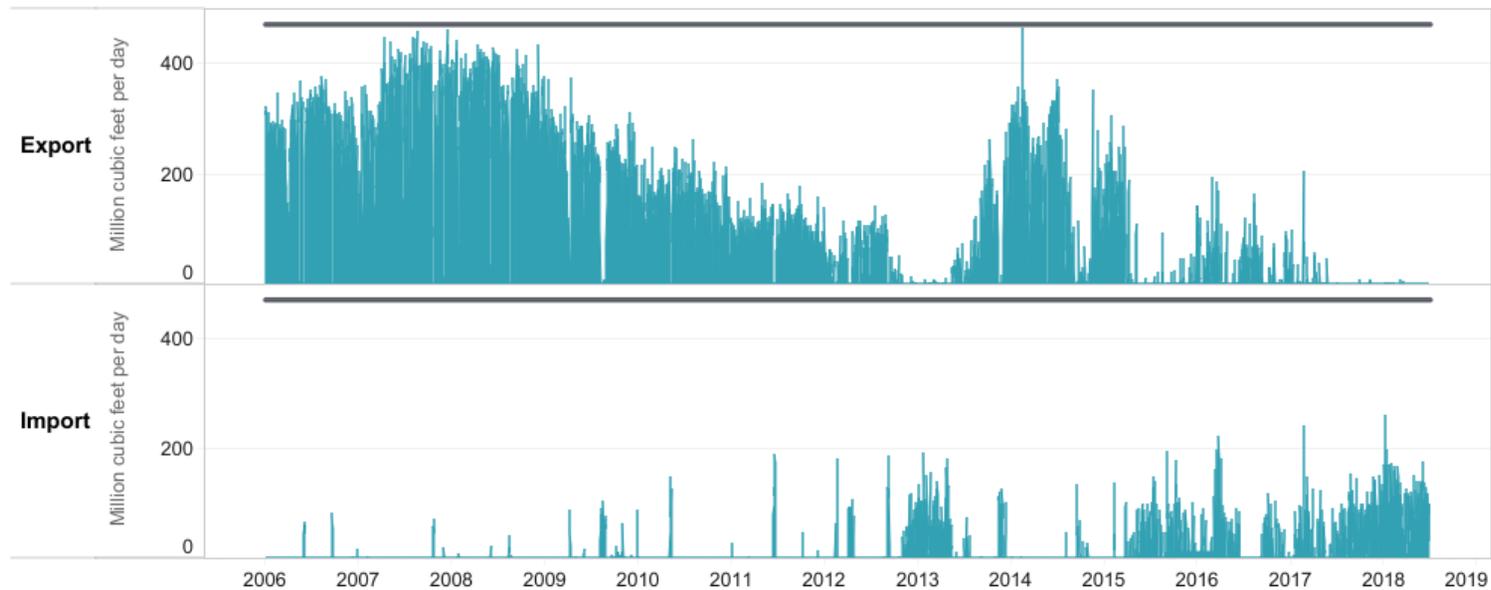
Chart: NEB, 2-19

# Changing Flow Pattern on M&NE Pipeline, 2006-18

## Natural Gas Exports and Imports on the Maritimes and Northeast Pipeline (2006 to 2018)

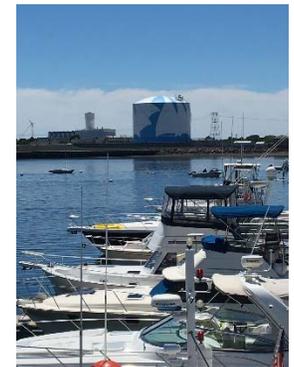
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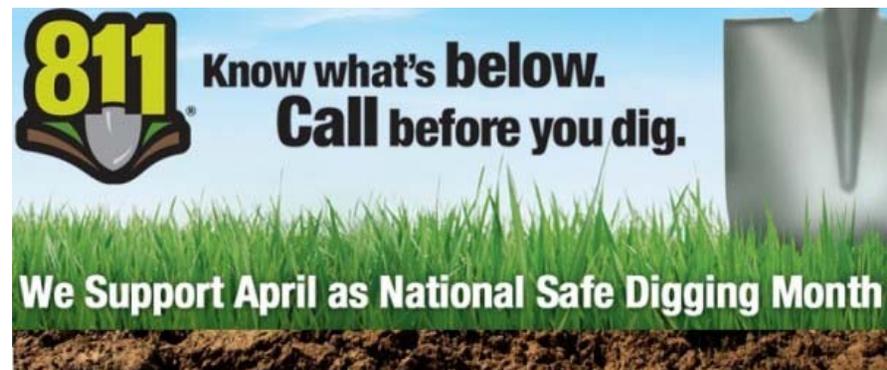


# LNG Developments

- Exelon Generation Everett LNG facility ownership, as of Oct. 2018.
- FERC has approved National Grid's proposal to add liquefaction at its Providence, RI facility.
- Northeast Energy Center (NEC) is an LNG liquefaction, storage and truck loading facility under development in Charlton, MA. The facility will consist of about 25,000 dth per day of liquefaction, 200,000 dth of LNG storage, and four truck loading bays. NEC is currently being reviewed by the MA Energy Facilities Siting Board (Docket EFSB18-04). NEC expects to begin service in late 2020.
- Trucking supply availability from Quebec (Energir/Gaz Metro LNG) and PA (UGI Energy Services). Other entrants emerging as well (e.g., Dominion).



## SAFETY, & MUTUAL AID



# Merrimack Valley Incident

- ◆ Overpressurization incident on Sept. 13, 2018 on Columbia Gas of MA system in Lawrence, MA, impacting Lawrence, Andover, N. Andover.
- ◆ System restoration basically completed by mid-December, including 45 mile pipeline replacement. Some appliance replacements continuing.
- ◆ NTSB released preliminary report on Oct. 11. NTSB issued several urgent safety recommendations in mid-Nov. 2018.
- ◆ MA DPU hired consultant, Dynamic Risk Assessment Systems, to conduct safety & operational assessment of entire state gas distribution system. Assessment underway.
- ◆ NGA committee recently selected consultant (The Blacksmith Group) to develop “Pipeline Safety Management System” for MA (and other states’) gas utilities.



# Mutual Aid Response

- NGA utilized its mutual aid program to organize mutual aid response to assist in turning off – and then restoring – gas services to homes and businesses, from Sept. to Dec.
- Nearly 600 personnel from 34 gas utilities in the Northeast and from around the country were on-site for weeks to assist in the Merrimack Valley.
- NGA's mutual aid program also utilized twice in late Jan. 2019 to help in restoring gas service to customers affected by low-pressure situations starting on Jan. 21 – in Newport, RI, and in the Finger Lakes region in upstate NY.



# NGA's Upcoming Regional Market Trends Forum



**NGA 2019 Regional Market Trends Forum -**

***“Natural Gas in the Northeast:***

***Bridging the Gap”***

**April 25, 2019**

**Hartford, CT**





***Questions?***