



# Portland Natural Gas Transmission System

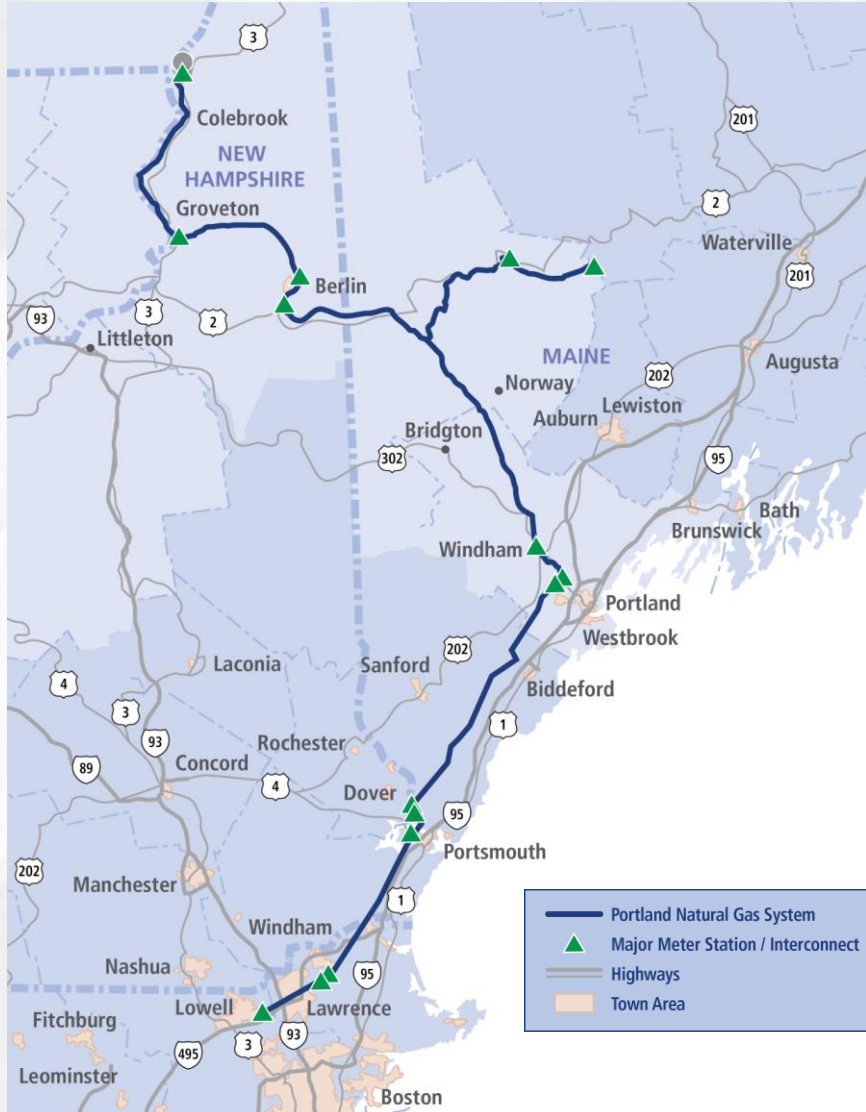
Pre-Winter Briefing, November 5, 2020

Northeast Gas Association





# Portland Natural Gas Transmission System (PNGTS) Footprint



- Linear System with no storage
- Built to bring Western Canadian gas to northern New England
- Supplies into the system are primarily from TC Energy's Canadian Mainline (TCPL) via the Trans Québec & Maritimes Pipeline (TQM) near East Hereford, Québec
- Historically, receipts are limited by upstream capacity on TCPL
- Physical flow is North to South with no compression on the northern half of PNGTS
- Compression on the southern half of PNGTS starts at Westbrook, Maine
- Recent PNGTS projects seek to add more compression





# The PNGTS Marketplace

PNGTS back feeds the New England and Atlantic Canadian Grids, serving mostly LDCs, Commercial & Industrial End Users and Generators.

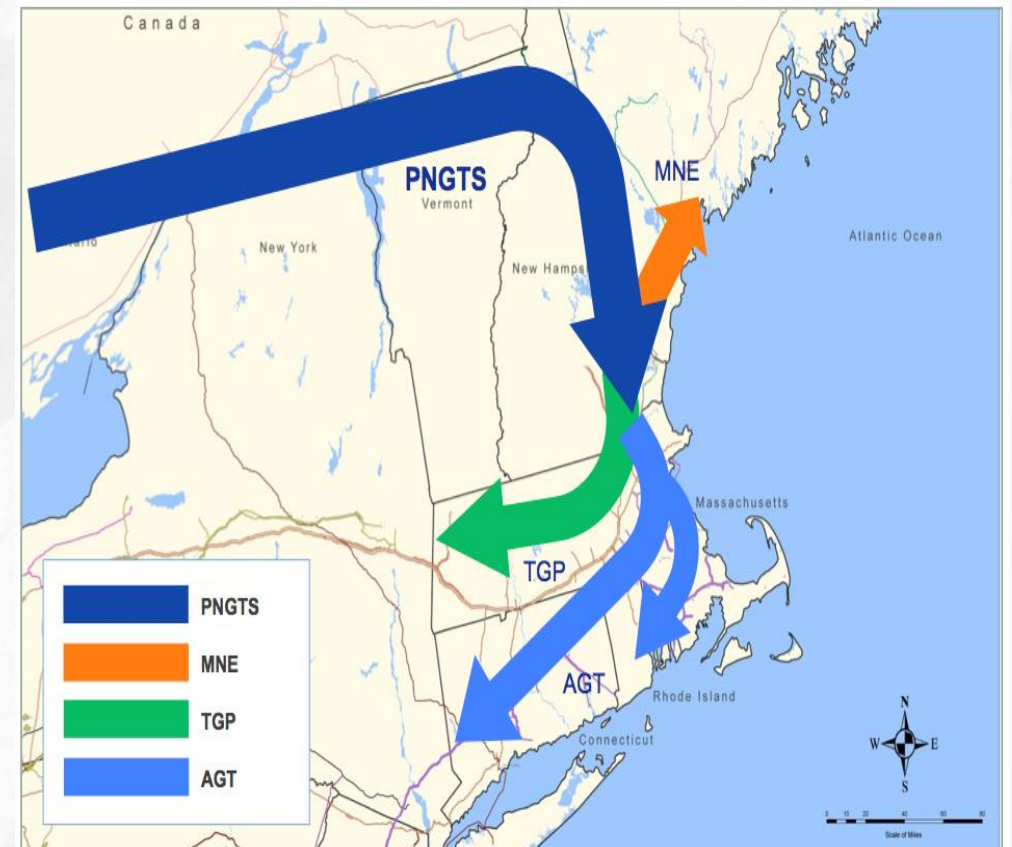
LDCs are main markets, but their Marketer Asset Managers optimize the system.

## New England Markets via Dracut, Haverhill or Westbrook

- TGP Zone 6 200 Leg – MA and NH
- Algonquin – MA, CT and RI

## Atlantic Canada & Maine Markets via Westbrook

- New Brunswick, Nova Scotia and Maine

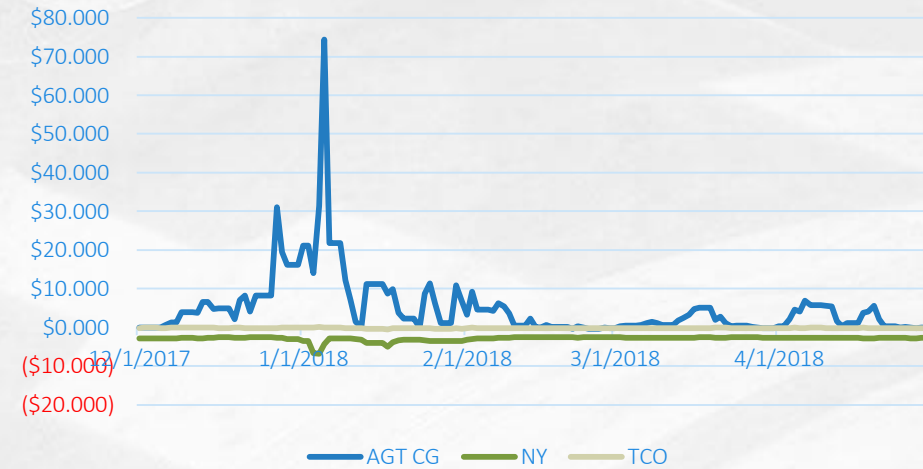


# Extreme Pricing Volatility in PNGTS Markets

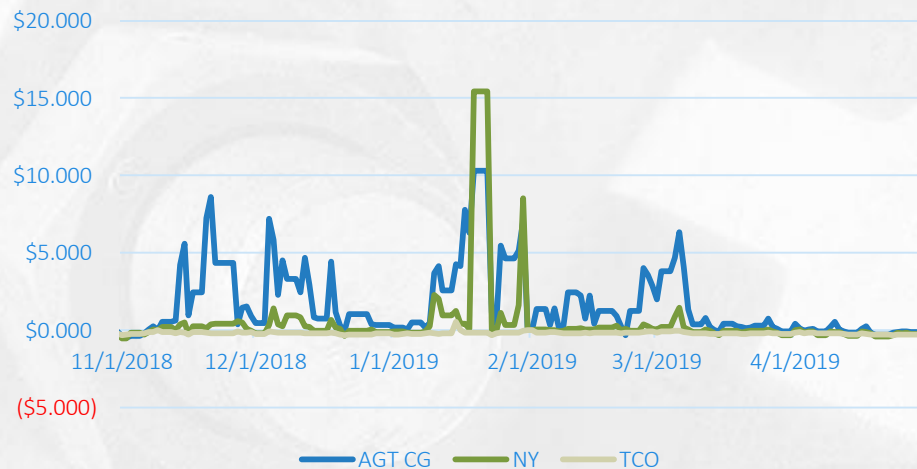
## New England, Atlantic Canada & Maine Markets

- At a premium due to supply constraints
- Decline of previously available supply from Sable Island and Deep Panuke
- Peaking supply from Repsol's Canaport

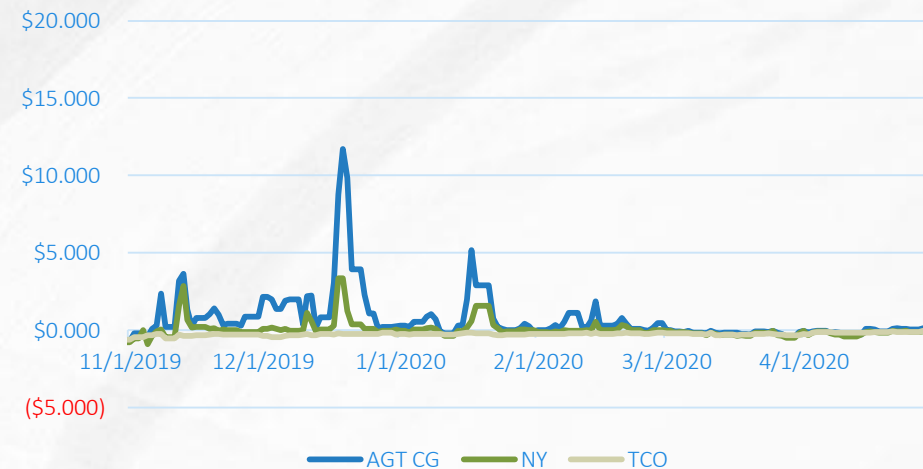
Natural Gas Spreads Winter 2017-2018



Natural Gas Spreads Winter 2018-2019

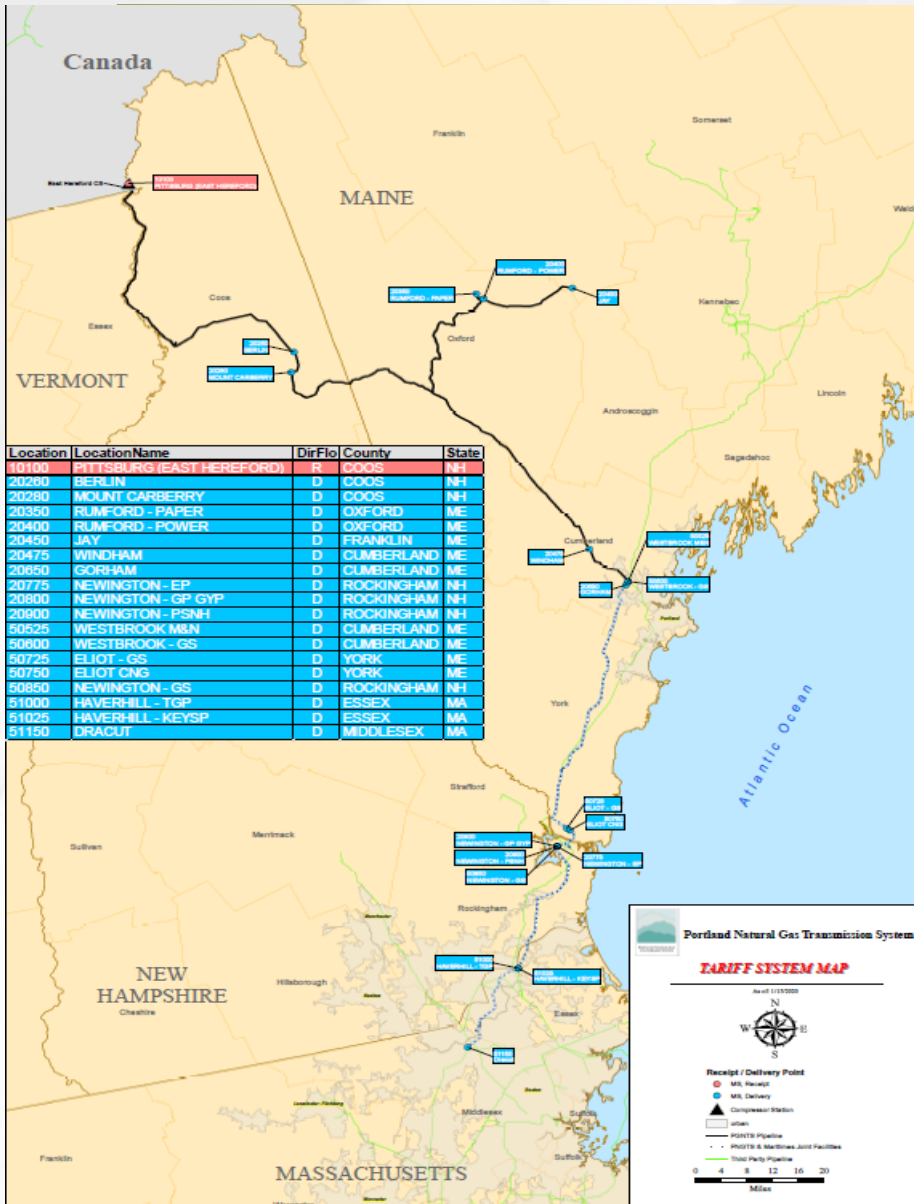


Natural Gas Spreads Winter 2019-2020



# Portland Natural Gas (PNGTS) – System Map

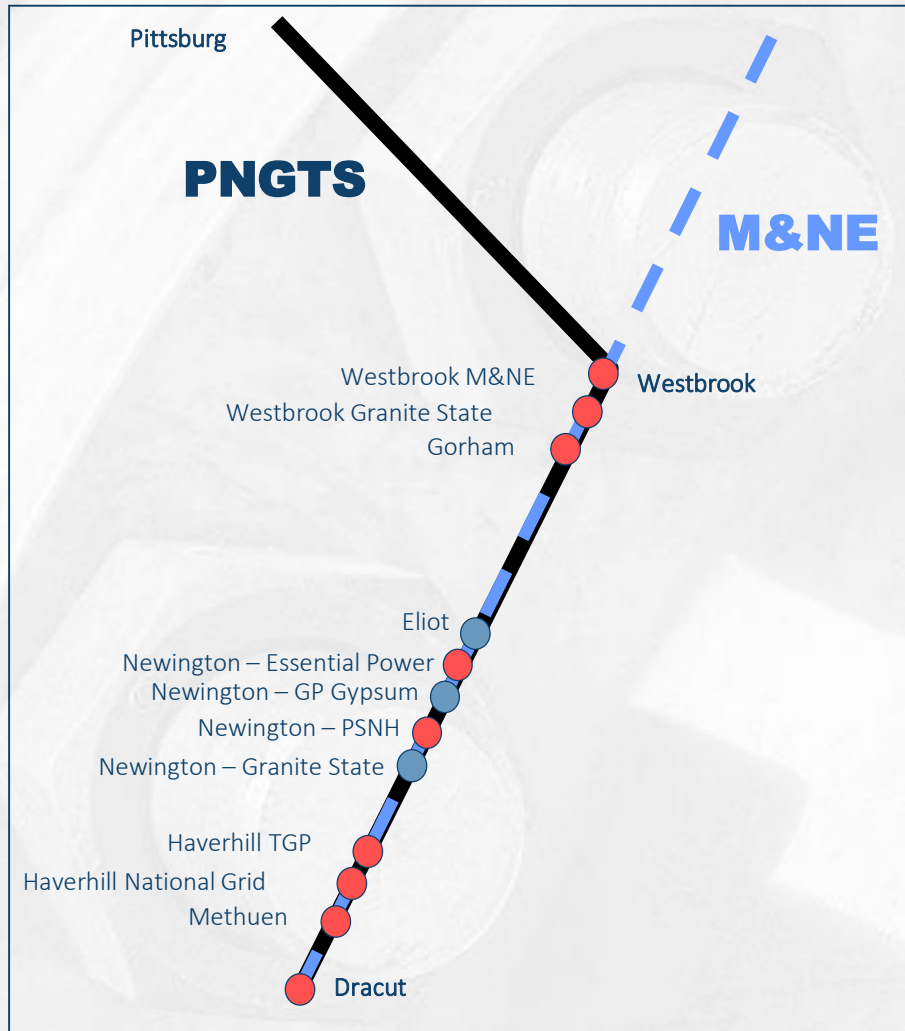
- 1 Receipt Point at Pittsburg, NH
- 18 Delivery Points
- 12 of these 18 Delivery Points are on the Joint Facilities (JF) operated by Maritimes & Northeast Pipeline (MNE)
- Westbrook meter is a bi-directional location, but is operated as a Delivery and allows Receipts by displacement only



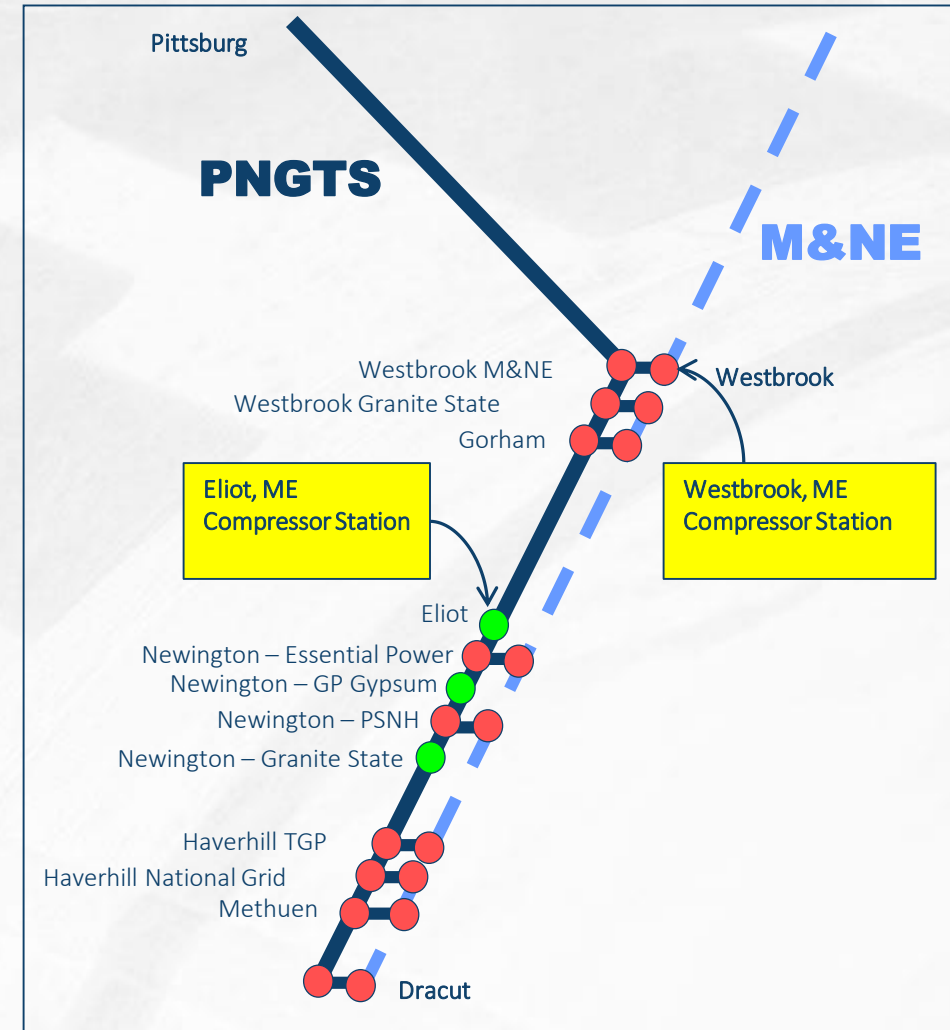
To enlarge for detail, visit Portland Natural Gas Transmission System (PNGTS) Maps at <http://www.columbiapipeline.com/infopost>

# PNGTS/MNE Joint Facilities

One Physical Pipe



Two Commercially Separate Pipelines, each with their own capacity





# PNGTS Volumes and Projects - Past, Current and Planned

	2016	2017	2018	2019	2020	2021	2022
Contracted	Qty	Qty	Qty	Qty	Qty	Qty	Qty
LongTerm	10,030	10,030	10,030	10,030	10,030	10,030	10,030
Expiring 2019	108,405	108,405	108,405	moved to PXP II			
Operational Capacity	20,000	moved to C2C					
Short Term Capacity	40,600	moved to C2C					
C2C		82,404	82,404	82,404	82,404	82,404	82,404
PXP I			40,000	moved to PXP II			
PXP II				158,405	moved to PXP III		
PXP III					182,878	182,878	182,878
WXP I				42,652	42,652	42,652	42,652
WXP II						63,242	63,242
WXP III							18,040
<b>Total Capacity</b>	<b>179,035</b>	<b>200,839</b>	<b>240,839</b>	<b>293,491</b>	<b>317,964</b>	<b>381,206</b>	<b>399,246</b>
Increase			40,000	52,652	24,473	63,242	18,040
Project action		Added compression on TCPL	Increase pressure TCPL (Pitt), decrease pressure MNUS (WB), no construction	Added compression on TCPL, decreased pressure remains at WB on MNUS	Pipe config on TCPL, increase pressure; added compression on MNUS (Eliot); restore pressure on MNUS (WB)	Add compression on MNUS (WB)	Add compression on TCPL



# PNGTS Top Customers

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## Local Distribution Companies (LDC)

Eversource MA (formerly held by BayState dba Columbia Gas of Mass.)

Boston Gas dba National Grid

Northern Utilities/Unitil

Berkshire Gas

Liberty Utilities/EnergyNorth and New Brunswick

Heritage Gas

## Commercial and Industrial

Pixelle

Gorham Paper and Tissue

GP-Gypsum

ND Paper

## Marketers and Asset Managers

Direct Energy Business Marketing, LLC

DTE Energy Trading, Inc.

Emera Energy Services, Inc.

Freepoint Commodities LLC

Irving Oil Terminals Operations LLC

New England Natural Gas Supply Limited

Repsol Energy North America Corporation

Sprague Operating Resources LLC

Tenaska Marketing Ventures

# Thank you

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For any future questions or concerns:

Tom Lockett

TC Energy

281-703-5965

[Tom\\_Lockett@TCEnergy.com](mailto:Tom_Lockett@TCEnergy.com)