Portland Natural Gas Transmission System

NGA Pre Winter Briefing
November 8, 2018
1999 (In Service):
- Delivered Western Canadian Sedimentary Basin (“WCSB”) gas from conventional wells, to New England markets at Dracut

Now:
- Delivers WCSB (conventional and shales) and Marcellus gas to New England markets at Dracut and to Maine/Atlantic Canada markets at Westbrook
PNGTS’ Supply Connections

PNGTS = Partnership of TCPL and Energir (formerly GazMetro)

- TC PipeLines, LP  61.71%
- Energir  38.29%
Current PNGTS Market Mix (by Flow Volume)

- **PNGTS Markets in NH, ME, MA**
  - PNGTS LDC: 20%
  - PNGTS Generation: 17%
  - Dracut: 7%

- **New England Markets**

- **PNGTS Industrial**: 3%

- **Maine/Atlantic Canada Markets**
  - Westbrook: 53%

- **Markets in NH, ME, MA**
Off System Annual Demand:
To New England and Atlantic Canada/Maine

Dracut to New England and Westbrook to Atlantic Canada/Maine

Dracut Avg: 17.9k/day
To New England

Westbrook Avg: 132.1k/day
To AC/Maine

Dth/day


Dracut Westbrook M&NE
The Portland Xpress Project ("PXP")

**Project Scope:**

- **LDC-based Project**
- **Total Project Capacity of ~183,000 Dth/d**
- **Construction (in Canada) on the TransCanada Mainline**
- **Construction of Compression only on PNGTS’ Joint Facilities**
- **Nov-20 Target In-Service Date (phased-in over 3 year period 2018-2020)**
Phase I – In-Service Nov 1, 2018
• Volume 40,000 Dth/day
  • Using Joint Facilities operational capacity on a short term basis

Phase II – Expected In-Service Nov 1, 2019
• Total volume 158,400 Dth/day
  • Recontracting expiring contracts

Phase III – Expected In-Service Nov 1, 2020
• Total volume 183,000 Dth/day
  • Construction of compression to replace Phase I operational capacity and meet total project volume need
PXP Customers, Delivery Points

<table>
<thead>
<tr>
<th>PXP Shippers</th>
<th>Volume, Dth/day</th>
<th>Delivery Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columbia of MA (Renewal)</td>
<td>45,500</td>
<td>Dracut/Haverhill</td>
</tr>
<tr>
<td>Columbia of MA (New)</td>
<td>14,300</td>
<td>Dracut</td>
</tr>
<tr>
<td>Boston Gas</td>
<td>57,068</td>
<td>Dracut</td>
</tr>
<tr>
<td>Berkshire Gas</td>
<td>4,010</td>
<td>Dracut</td>
</tr>
<tr>
<td>Narragansett Electric</td>
<td>29,000</td>
<td>Dracut</td>
</tr>
<tr>
<td>Northern Utilities</td>
<td>10,000</td>
<td>Granite State</td>
</tr>
<tr>
<td>Liberty Utilities</td>
<td>5,000</td>
<td>Dracut</td>
</tr>
<tr>
<td>Heritage Gas</td>
<td>10,000</td>
<td>Westbrook</td>
</tr>
<tr>
<td>EGNB</td>
<td>8,000</td>
<td>Westbrook</td>
</tr>
</tbody>
</table>

**Total**: \(182,878\)
Future Expansions – Post 2020 PXP In-Service

- Working jointly with TCPL and Union Gas to develop market solutions
- Recent TCPL Open Season Empress to PNGTS
- Current Open Season Dawn to East Hereford

We’re Open for Business!