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# Connecticut Energy Infrastructure Outlook - Gas

## AEE CT Chapter

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# Overview Map and Verbal Description of LDC Portfolios




New England is located in the most gas infrastructure capacity constrained area of North America and facing related issues to achieve gas growth and ensure reliability for electric and gas. The CT LDC's have placed themselves in a good position to address customer growth in conjunction with the state's Comprehensive Energy Strategy process.

# CT LDC Gas Portfolios Adapting to Higher Growth

**Connecticut Gas Capacity LDC Ramp Up for Growth and CES (in Mdth)**
**Five year period 2013 - 2018 Compared**

| | 2013 Pre-CES | +/- | 2018 |
|---|---|---|---|
| Firm transportation from supply | 380 | | 380 |
| East receipts and city gate | 75 | -65 | 10 |
| Firm transportation from storage | 313 | | 313 |
| LNG peaking | 279 | | 279 |
| Incremental capacity- Algonquin AIM 2016 | - | 165 | 165 |
| Incremental capacity- TGP CT 2017 expected | | 72 | 72 |
| Re-routed : Iroquois and AGT/TGP X-65 2014 | | 46 | 46 |
| LNG expansion CNG and SCG | | 30 | 30 |
| total | 1047 | 248 | 1295 |

**The CT LDCs are increasing state capacity by 23% over 5 years for growth and this is critical to meet customer demand reliably and cost effectively.**

# The Algonquin AIM Project is Now Providing 165 Mdth of New Capacity into CT

## Project Scope:

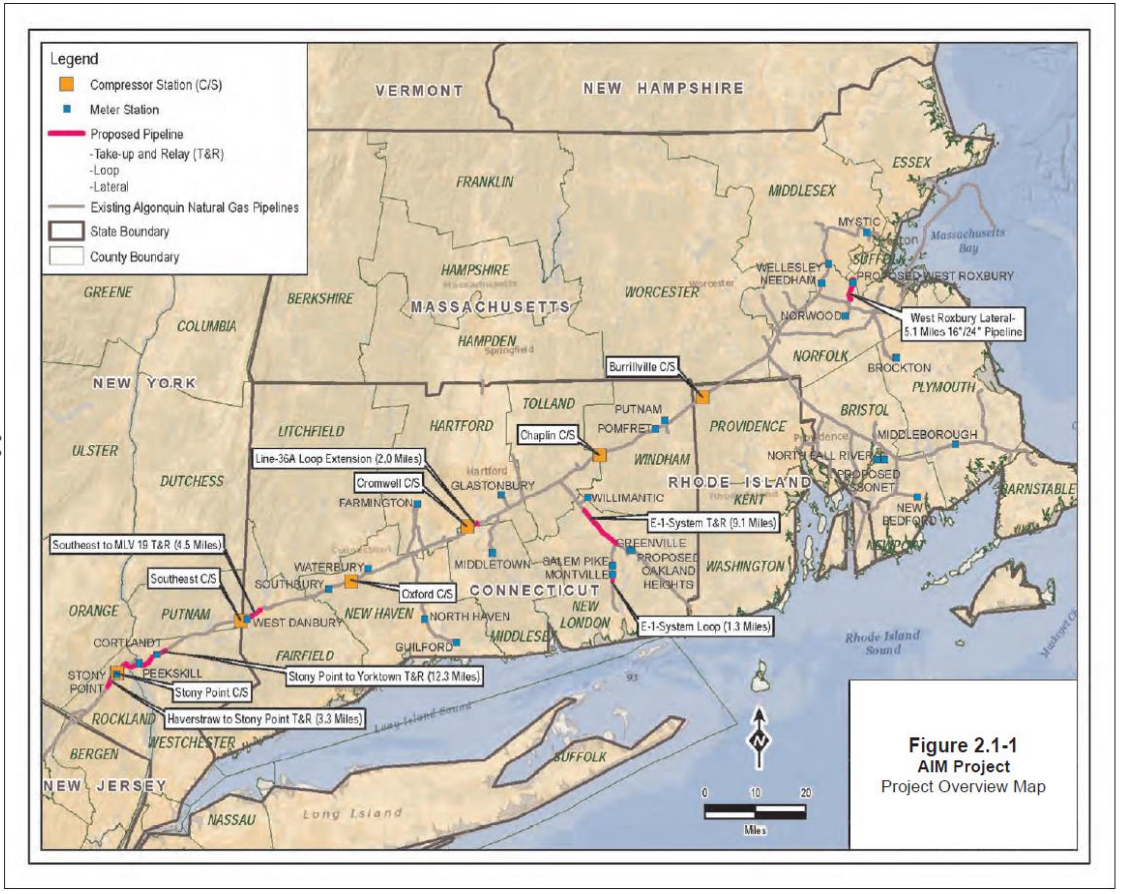
- Providing 342 MMcf/d of additional capacity to move Marcellus production t Algonquin City Gates

## Customers:

- UIL Holdings
- Eversource Energy
- National Grid
- NiSource
- City of Middleborough, MA
- City of Norwich, CT

## Project Status:

- Received FERC certificate, Mar. 3, 2015
- Completed, recently entered service




Map and info: FERC and Spectra Energy

# The Tennessee Gas Pipeline Connecticut Project is Contracted for 72 Mdth and Expected In Service 2017

**Project Scope:**

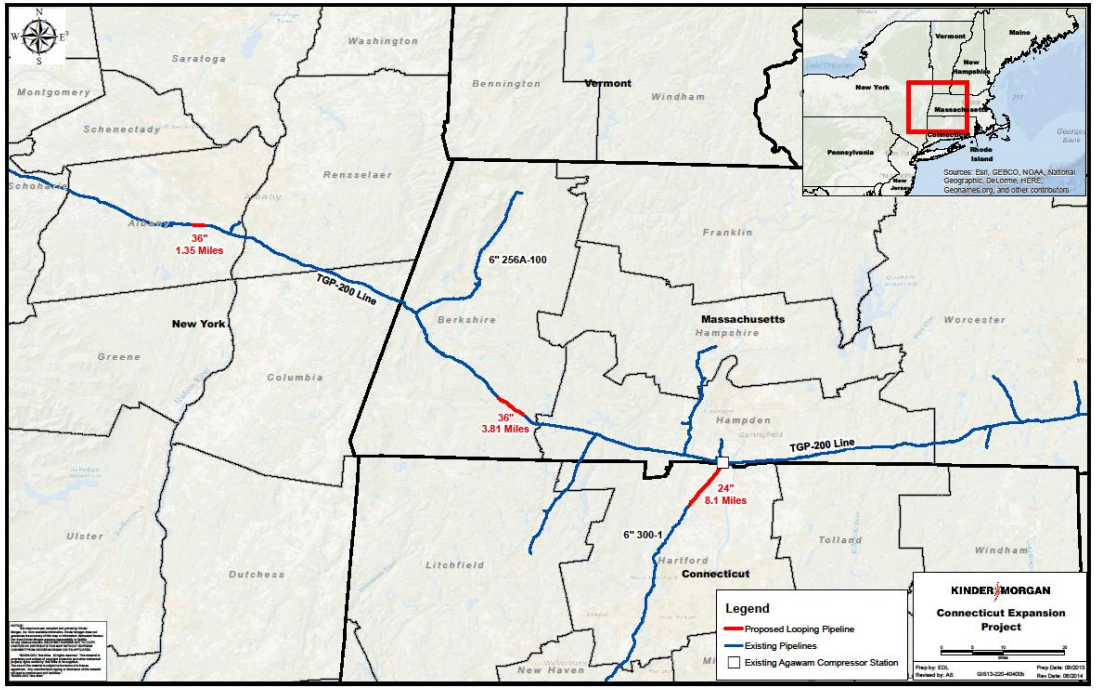
- 72 Mdth/d of additional capacity to meet utility demand

**Customers:**

- UIL Holdings (CT Natural Gas & Southern CT Gas)
- Eversource (Yankee Gas)

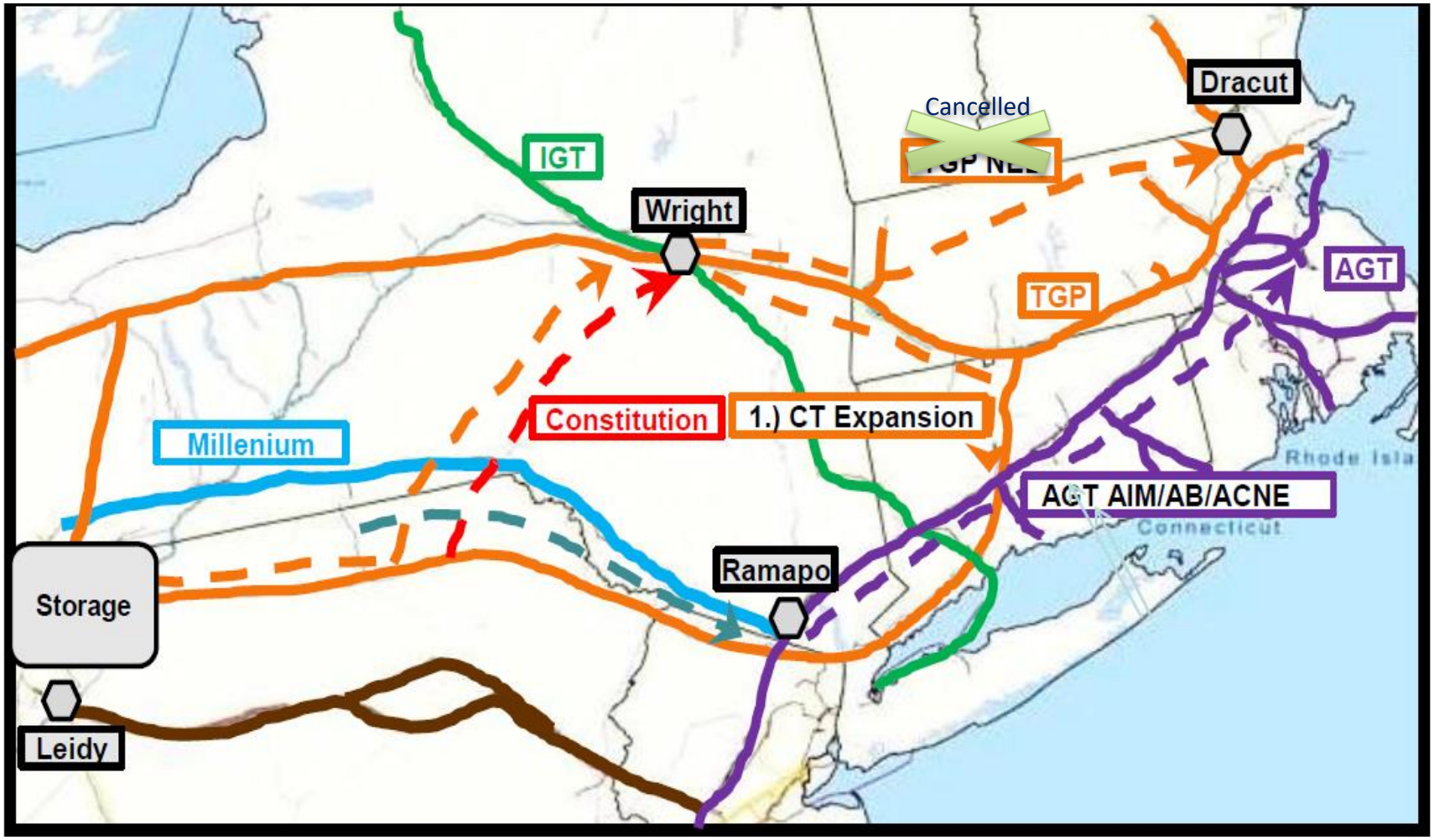
**Project Status:**

- FERC issued certificate, Mar. 2016
- In-Service Date
  – originally November 2016, now 2017

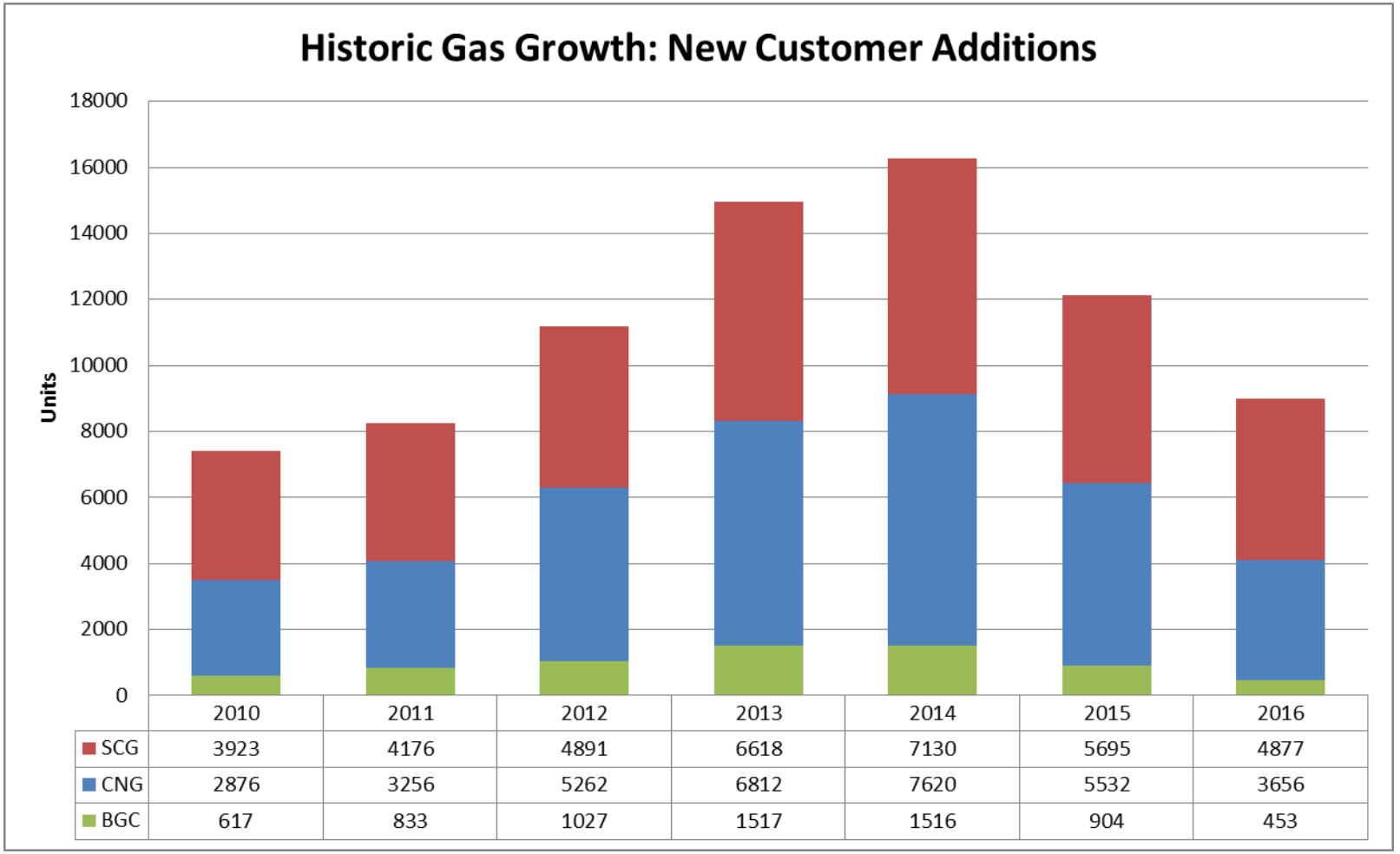



Source: Kinder Morgan

# Pipeline Expansions into New England



# CNG/SCG/BG Gas Growth




| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|---|---|
| SCG | 3923 | 4176 | 4891 | 6618 | 7130 | 5695 | 4877 |
| CNG | 2876 | 3256 | 5262 | 6812 | 7620 | 5532 | 3656 |
| BGC | 617 | 833 | 1027 | 1517 | 1516 | 904 | 453 |

# Addressing Challenges Related to Increasing the Role of Natural Gas

- Regulatory and state support for growth
- Gas capacity to ensure reliability- support for long term contracts
- A the local level, staffing and coordination across functions, process efficiencies and sound business development strategies, tools and flexibility
- There are high standards per the US Natural Gas Act to ensure protection of the environment and that the project is in the public interest
- Effective and open communication from many perspectives and to many stakeholders is essential
- A key regional transformational projects was cancelled in 2016 (Tennessee NED). Others are in litigation (Constitution) or delayed (Access Northeast)

✓ **The process of adding gas infrastructure capacity is highly structured, multi-faceted, complicated controversial….and difficult, but critical to address customer needs and the overall public interest.**