



**MASSACHUSETTS
OFFICE OF ENERGY
TRANSFORMATION**

Reducing Reliance on the Everett Marine Terminal Webinar

June 25, 2026

Office of Energy Transformation Mission and Structure

Energy Transformation Advisory Board (Advisory Board or ETAB)

Provides guidance and recommendations on strategic direction to the OET and focus area work groups (FAWGs) to execute the energy transition, including gas-to-electric transition, electric grid readiness, and a just and equitable transition for workers, business, and communities.

Transitioning Away from Everett Marine Terminal (EMT)

To develop a coordinated strategy to reduce or ultimately eliminate the local gas distribution companies' reliance on the EMT Liquefied Natural Gas (LNG) facility aligned with DPU Order 20-80 and the state's climate and clean energy mandates, including as established in the *Global Warming Solutions Act*.

Decarbonizing the Peak (DTP)

To demonstrate pathways to reduce reliance on and expeditiously eliminate fossil fuels from peaking power plants and combined heat and power (CHP) facilities and deploy alternative demand and supply side options to meet peak load needs in Massachusetts, aligned with the electric sector sublimit and clean energy goals in the *2050 Clean Energy and Climate Plan*.

Financing the Transition (FTT)

To identify alternative mechanisms for financing/funding electricity distribution system infrastructure upgrades needed to achieve Massachusetts's clean energy and climate mandates that minimize impacts on consumers' electricity bills, while providing an affordable, sustainable, and timely source of revenue for investments.

Enabling Sustainable Economic Development (ESED)

To advance clean energy-ready economic development zones that enable key business sectors to grow in Massachusetts, in alignment with the state's interconnection, land use planning, environmental justice and equity, housing, and economic development initiatives.



Everett Marine Terminal Issue Overview and Mission

- Massachusetts is constrained on its ability to bring natural gas into the state to meet peak demand.
- EMT is used as both a strategic supply resource and to maintain overall system integrity and reliability.
- Sixty individuals, represented by the UWUA, safely operate and maintain the facility.
- To maintain access to supplies from EMT, the state's LDCs signed six-year supply agreements, the costs of which are recovered through rates.
- When approving the agreements, the DPU also required the LDCs to develop and file transition plans and update the DPU on progress annually, beginning in April 2025.
- Because EMT is a resource relied upon collectively by the three LDCs that entered into agreements with Constellation LNG, a coordinated and shared solution is necessary.

Mission

To develop a coordinated strategy to reduce and ultimately eliminate the local gas distribution companies' reliance on the Everett Marine Terminal LNG facility aligned with DPU Order 20-80 and the state's climate and clean energy mandates, including those established in the Global Warming Solutions Act.



Everett Marine Terminal Working Group Members

A Better City	Environmental League of Massachusetts	MA Energy and Environmental Affairs	Repsol
Acadia Center	Eversource	MA Department of Energy Resources	Rewiring America
Advanced Energy United	Global Partners	MA Office of the Attorney General	RR Consulting
Associated Industries of Massachusetts	Green Energy Consumers Alliance	NAICOB	Salem State University
AlphaStruxure	GreenRoots	National Grid	Schneider Electric
Berkshire Gas	HFI AW LU#6	NEC LNG	Sense
City of Everett	Holtec	New England Power Generators Association	Sheet Metal Workers Local 17
Climate Jobs MA	International Brotherhood of Electrical Workers	North Shore Labor Council, AFL-CIO	United Steelworkers
Conservation Law Foundation	Ironworkers	Northeast Gas Association	Unitil
Constellation	IUPAT DC 35	Plumbers Local 12 Boston	Utility Workers Union of America
Energy and Environmental Economics	Joint Committee on Telecommunications, Utilities and Energy	PowerOptions	Vicinity Energy

*The findings and recommendations being presented were developed by this working group and reviewed and affirmed by the Energy Transformation Advisory Board.

Presentation Overview

- How Utilities Meet Peak Gas Demand
- EMT and its Evolving Role in the Regional Gas System
- Alternatives to Reduce Reliance on EMT
- Other Considerations: Cost Management, Emissions, Community
- Findings & Recommendations of the FAWG





How Utilities Meet Peak Gas Demand



How EMT Delivers Gas

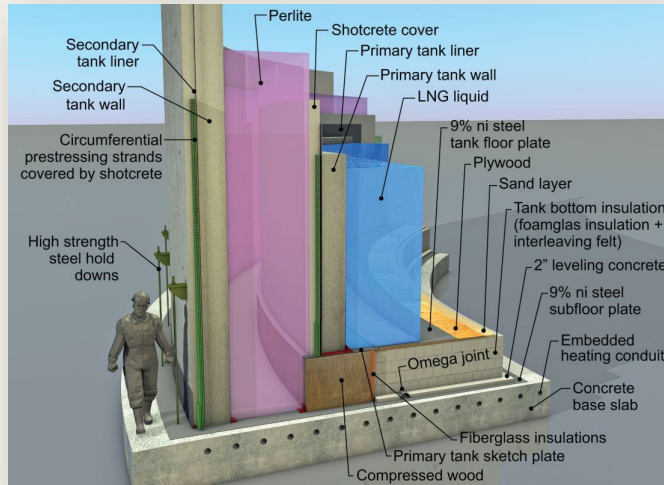
Supply: Tanker Delivery



LNG is produced in Trinidad and Tobago and shipped via tanker to EMT.

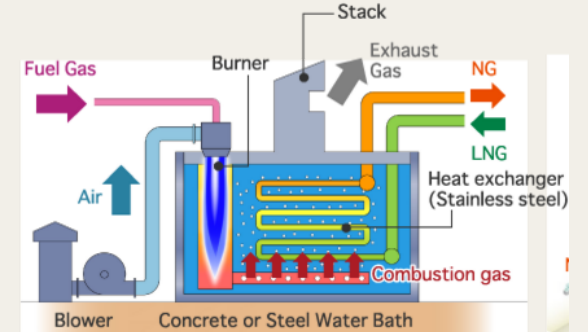
Delivery necessitates local security measures and cryogenic management at EMT.

Storage



EMT acts as a giant thermos that enables natural gas to be stored as a liquid (-160°C or -260°F)

Distribution: Pipeline Vapor



Distribution: Truck Delivery

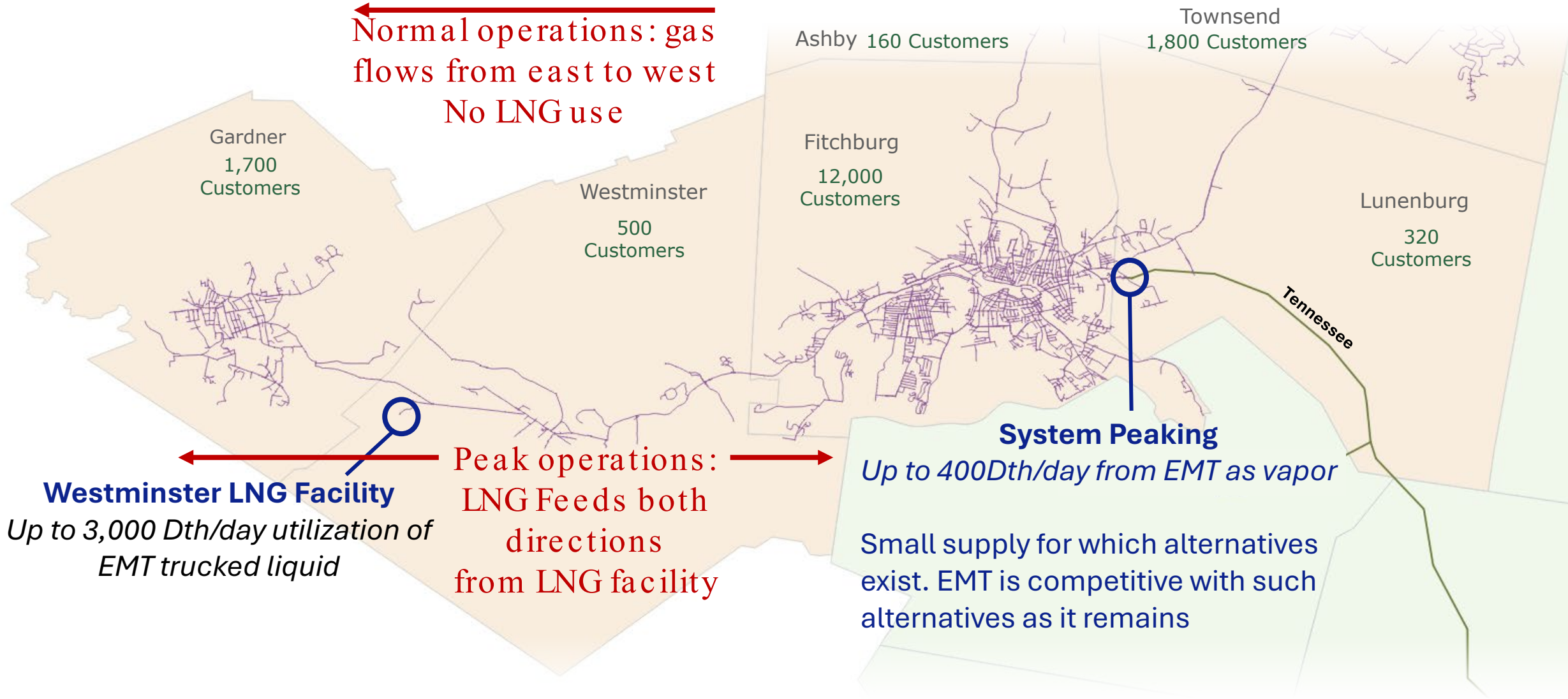


How Each LDC Uses EMT

LDC	Truck Liquid Supply <i>Liquid trucked to supply points where injected</i>	Vapor Supply <i>Gas injected at EMT in pipes</i>	Pressure Support <i>Keep enough gas in pipes for system operations</i>	System Redundancy <i>Back-up needs</i>
National Grid	Supply for storage and injection plants: <ul style="list-style-type: none"> • Salem • Lynn • Haverhill • Commercial Point • South Yarmouth • Tewksbury • Wareham • Portable injection 	Delivery at the National Grid-EMT connection.	Pressure support to the Boston Gas system at the direct connection to EMT, and at meters on the Algonquin J-System and the Tennessee Revere Lateral	Summer maintenance and unplanned outage redundancy at meters on the Algonquin J-System and the Tennessee Revere Lateral
Eversource	Supply for storage and injection plants: <ul style="list-style-type: none"> • Ludlow • Lawrence • Acushnet • Easton • Marshfield • Portable injection 	Delivery to the NSTAR Cambridge/Somerville meter on the AGT-J System and to the EGMA and NSTAR meters on the AGT G-System	Pressure support to the Algonquin J-System, upstream of the NSTAR Cambridge/Somerville meter.	Summer maintenance and unplanned outage redundancy on the AGT J-System for the NSTAR Cambridge/ Somerville systems
Unitil	Supply for storage at the Westminster LNG plant (~30 days/ year)	Delivery of vapor to the Company's meters on the Tennessee Gas Pipeline, Pittsfield, and North Hampton laterals	None	None
Berkshire	Supply for permanent storage at the Whatley LNG plant (~30 days per year)	Delivery of vapor to the Company's meters on the Tennessee Gas Pipeline Fitchburg Lateral	None	None

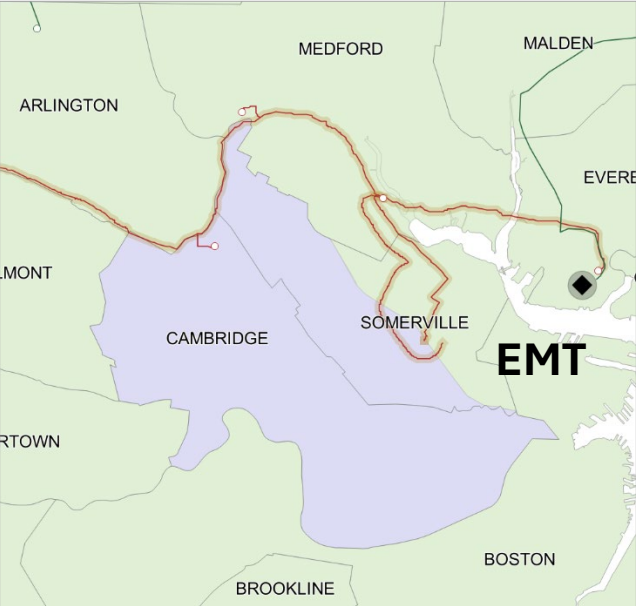


How Unitil Uses EMT

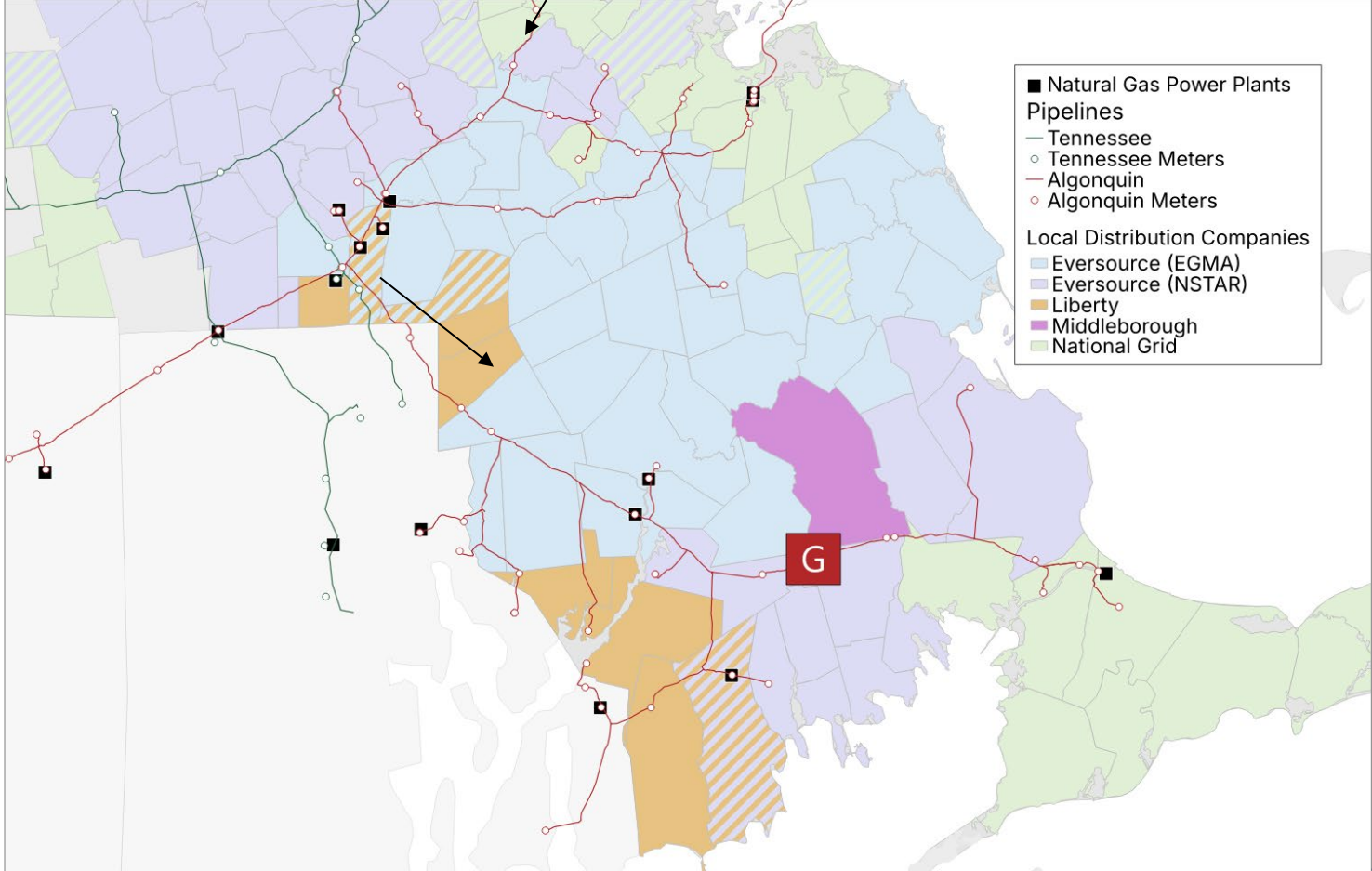


How Eversource Uses EMT

- Supply and redundancy to the Cambridge/Somerville System
- Supply to the Algonquin G-System

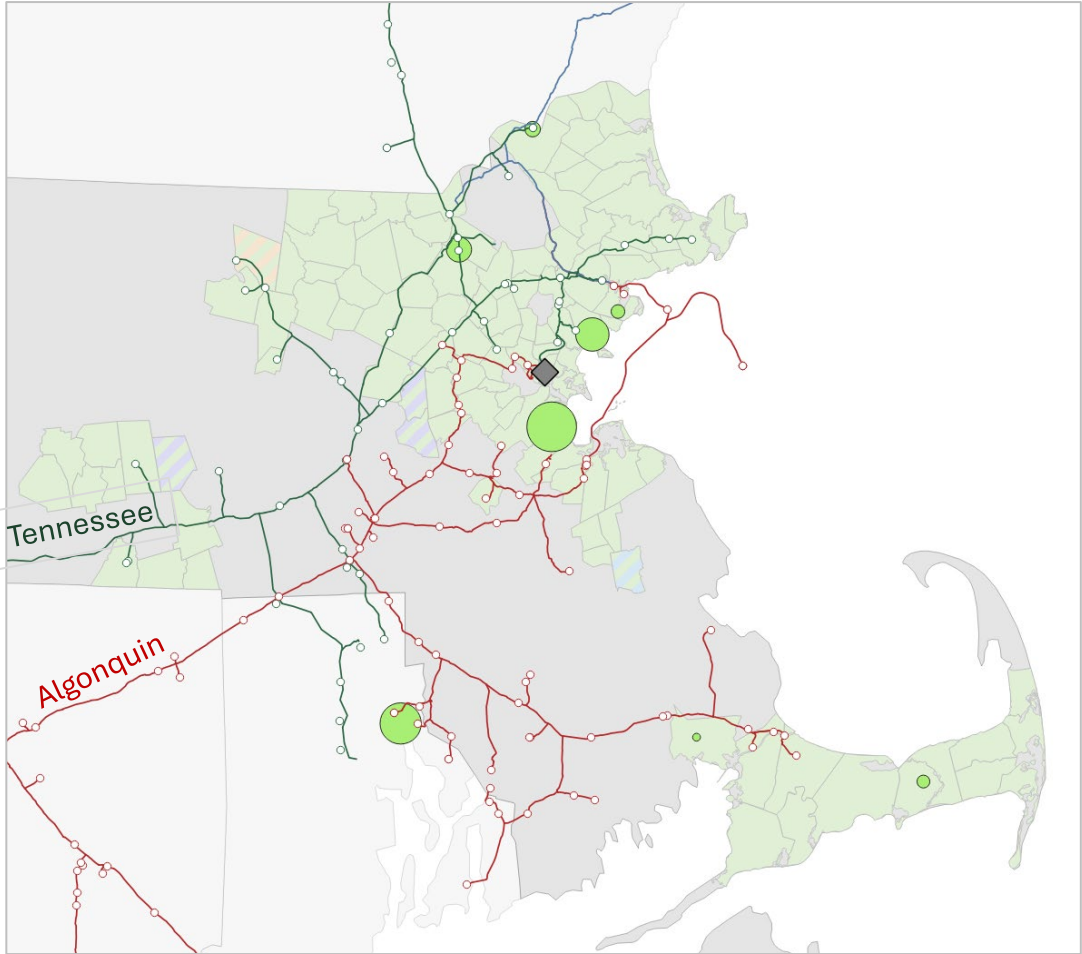
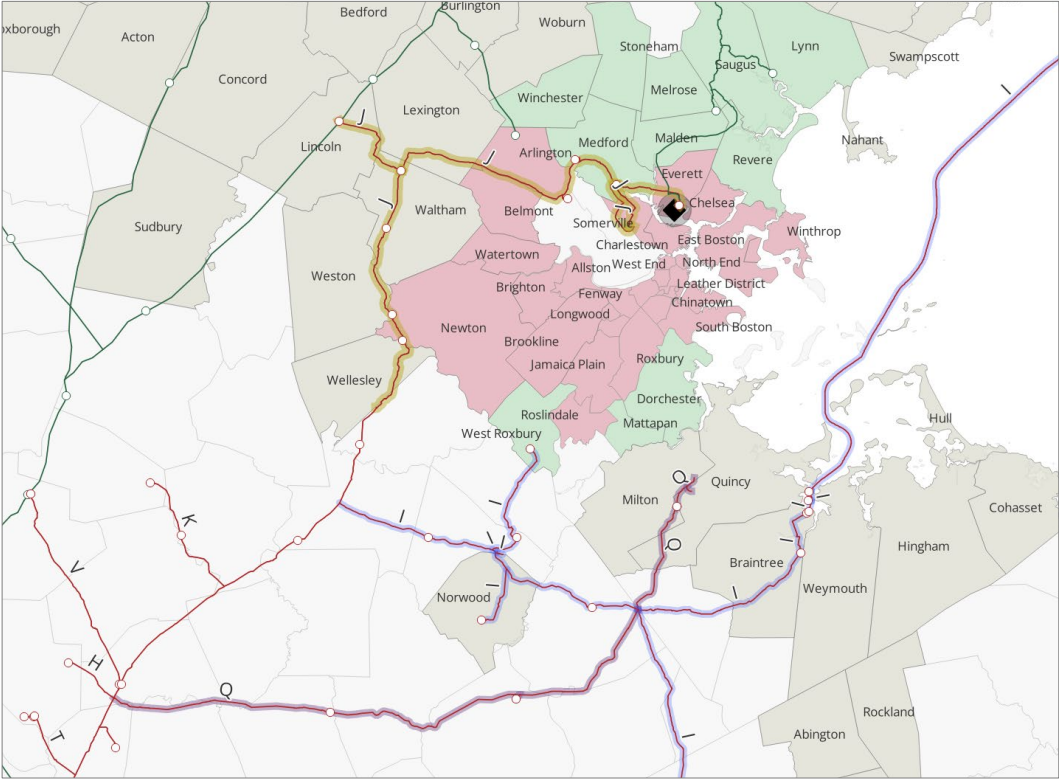


EMT Ensures Adequate Supply on Algonquin for G-System Operations

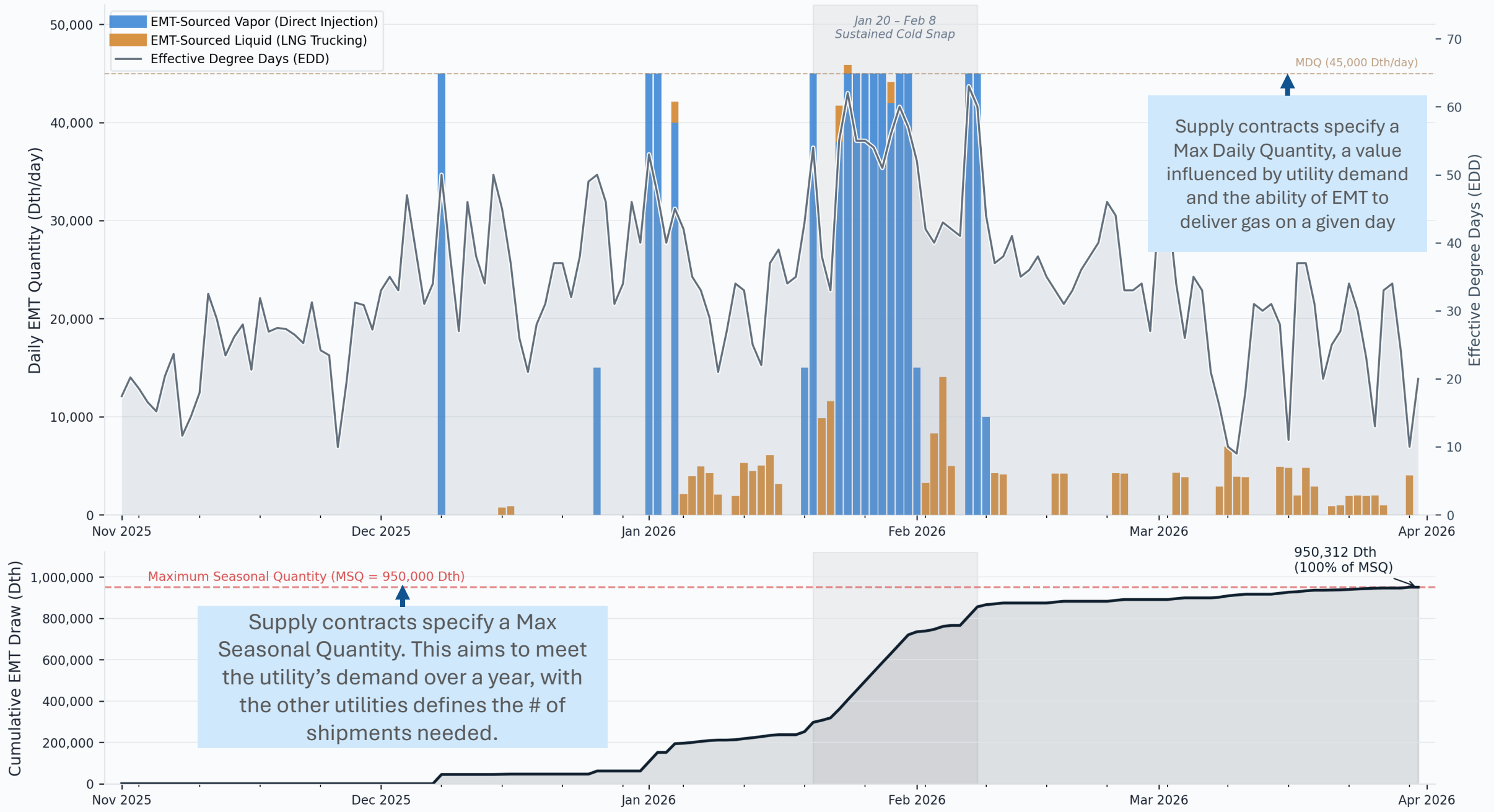


How National Grid Uses EMT

- It's Boston Gas direct connection
- At city-gate stations on each pipeline
- Via truck deliveries to storage tanks



National Grid (Boston Gas) EMT Utilization — 2025/26 Heating Season



Source: National Grid EMT reporting data, D.P.U. 24-25. November EDD from Boston weather observations. MDQ 45,000 Dth/day; MSQ 950,000 Dth.

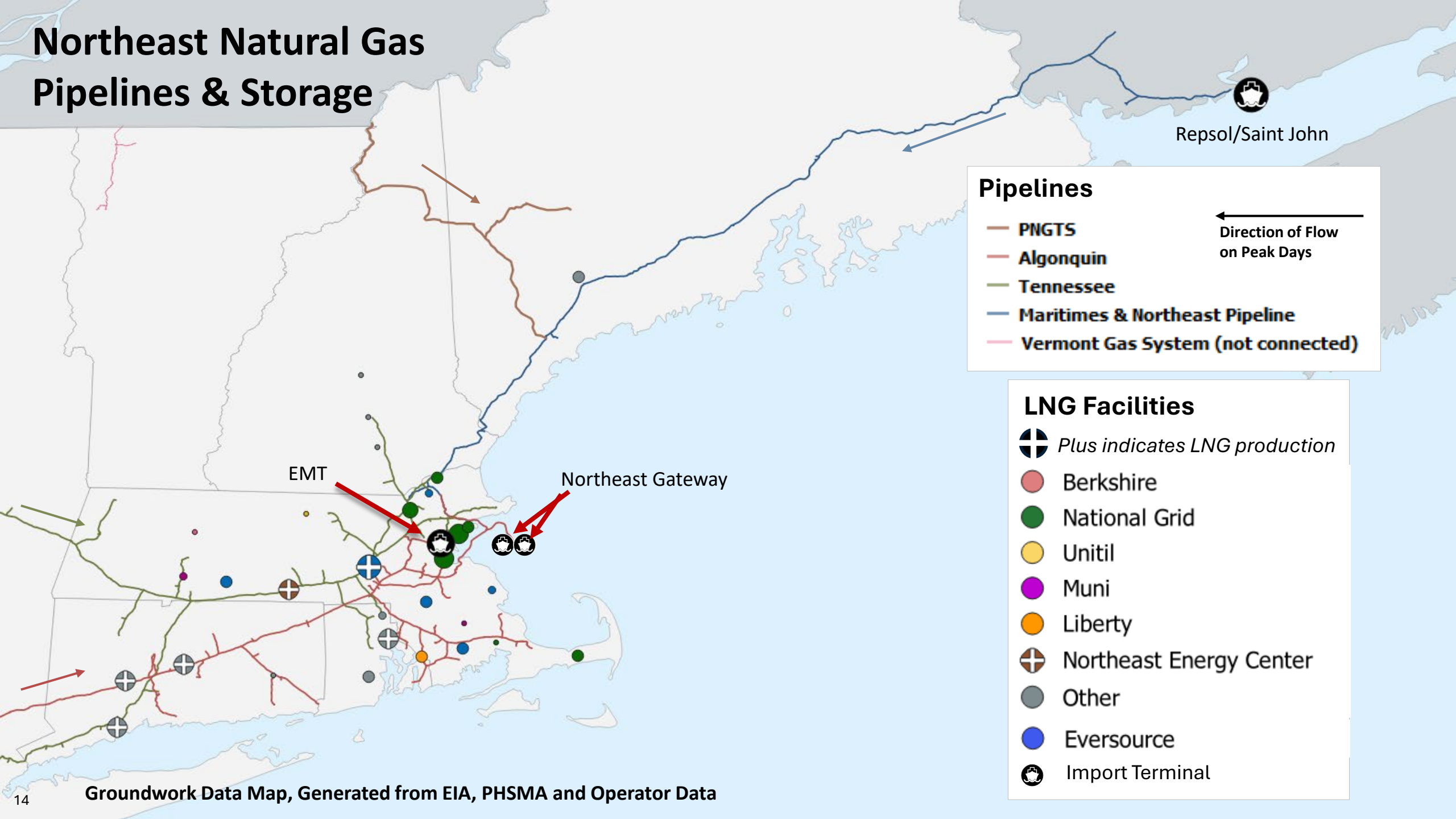


EMT and its Evolving Role in the Regional Gas System

EMT's situation is a result of historical factors, but its market role has become squeezed in recent years due to market dynamics.



Northeast Natural Gas Pipelines & Storage



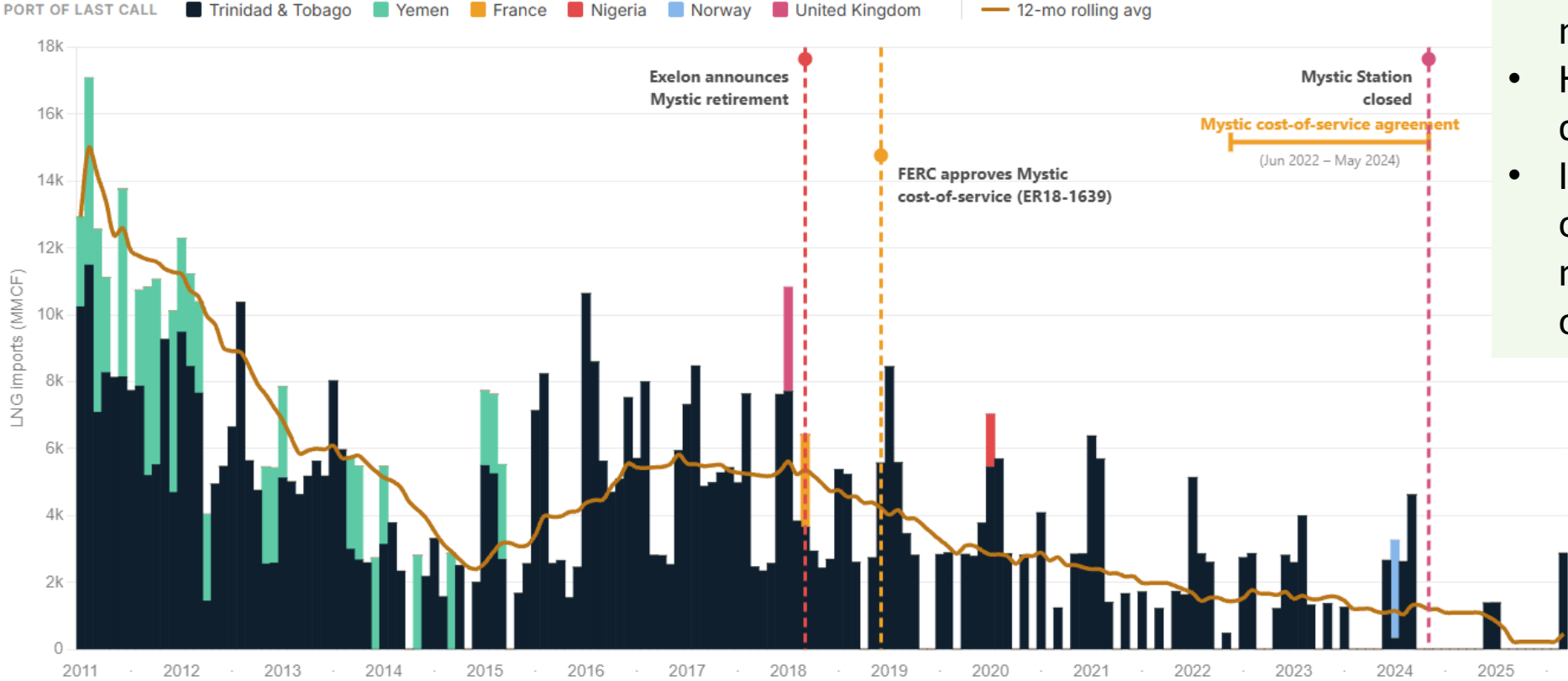
Pipelines

- PNGTS
 - Algonquin
 - Tennessee
 - Maritimes & Northeast Pipeline
 - Vermont Gas System (not connected)
- ← Direction of Flow on Peak Days

LNG Facilities

- ⊕ *Plus indicates LNG production*
- Berkshire
- National Grid
- Unitil
- Muni
- Liberty
- ⊕ Northeast Energy Center
- Other
- Eversource
- ⊕ Import Terminal

Changes in EMT Use



- Deliveries to EMT have declined with changing market conditions
- High fuel costs led to the decision to close Mystic
- In 2024, gas utilities and customers become responsible for the fixed costs of EMT.

Source: EIA Natural Gas Imports by Point of Entry (api.eia.gov/v2/natural-gas/move/poe1). Everett, MA facility (YEVTT). Months with no reported imports shown as zero.



Alternatives to Reduce Reliance on EMT



Alternative Categories & Assessment Criteria

The EMT FAWG established the following grouping and evaluation criteria to direct the utilities in their assessments

Alternative Categories

New Distributed LNG Capacity

Invest in other LNG facilities & sources

Pipeline System Changes

New or expanded pipeline infrastructure

Demand Reduction

Electrification, efficiency, demand response

Assessment Criteria

System Operations

- Hourly, Daily & Season Reliability
- Pressure Support
- System Resilience
- Redundancy

Infrastructure

- Costs
- Feasibility
- Timing (by 2030)
- Locational factors
- Electric impact

Policy & Broader Impacts

- Climate Policy
- Affordability
- Environmental Justice
- Other impact areas as relevant



National Grid Alternative Assessment Summary

Category	Alternative	Potential to Reduce or Eliminate Reliance by 2030/2031 Contract Renewal	Post-2030 Potential to Reduce or Eliminate Reliance	Notes
Pipeline System Changes	On and off-system pipe upgrades (multiple projects)	Infeasible due to high cost, land constraints, and development timeline.	Infeasible due to high cost and siting challenges.	Current LNG injection facilities serve “end of the pipeline” zones. Pipeline capacity upgrades to these areas are likely to be substantial and costly.
Alternative LNG	LNG Vaporization increase (+20% additional send-out upgrades to existing facilities)	Infeasible due to project development timeline.	Limited partial solution: Some upgrades are in the planning stages to address local system needs.	Vaporization increase will reduce some utilization of EMT but would not address all or certain redundancy requirements.
	Portable LNG Facilities (Four new facilities, including Everett)	Infeasible due to project development timeline.	Limited partial solution: Some additions are in the planning stages to address local system needs.	New portables will reduce some EMT utilization but would not address all or certain redundancy requirements.
	Trucked LNG	Possible solution if operational deliverability requirements are met.	Possible solution if operational deliverability requirements are met.	Long-distance transport faces increasing deliverability costs and challenges.
Demand Reduction	Electrification	Infeasible: customer transition constraints.	Possible solution: A substantial, unprecedented reduction in demand from peak-load drivers would eventually obviate the need for EMT.	Based on usage, reductions would need to involve large commercial customers.



National Grid Alternative Assessment: New Boston Gas Supply to Replace EMT

Relocate surplus gas in Milton to Everett

- 4 miles of new pipeline
- New regulators
- ~ Nine-figure cost

Assessment

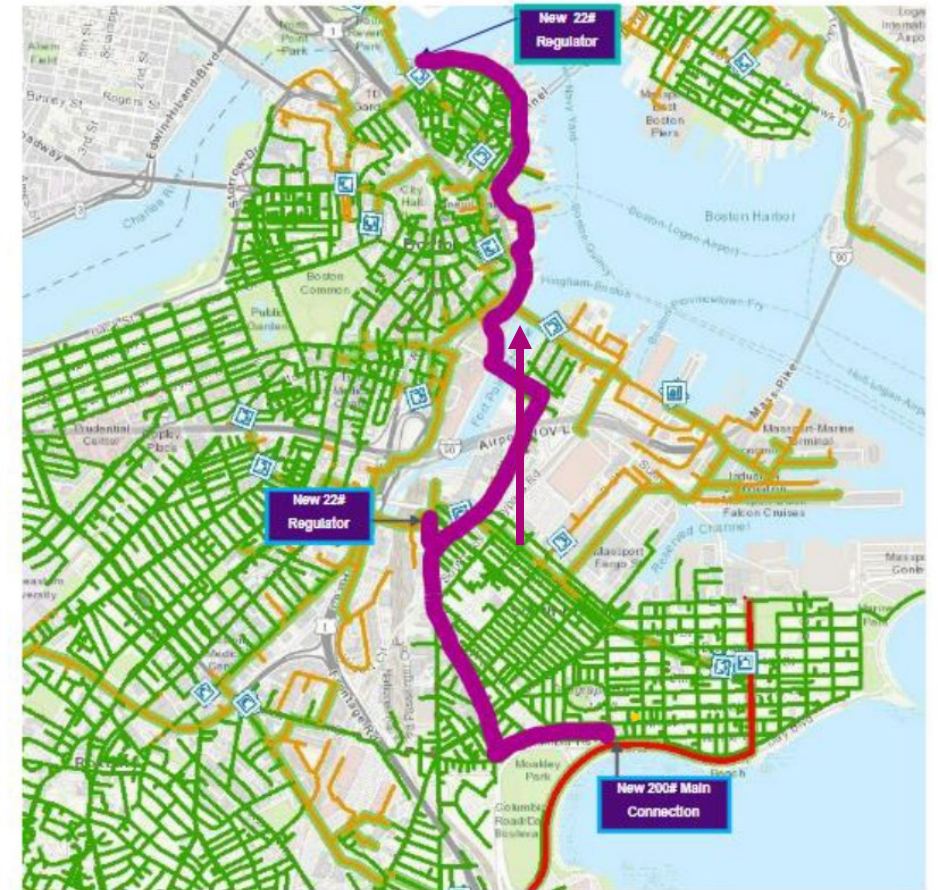
The scope is not feasible due to the location.

Project construction would be needed through Downtown Boston, (1) bridge crossing over railroad tracks and (1) bridge crossing over Fort Point Channel

Costs and location of project were found not viable

Would not fully replace volumes from EMT

EFSB Permitting required





Other Considerations



Other Considerations: Cost Management & Emissions

As a “peaking” resource, EMT’s concentrated costs of operations is of greater concern than GHG Emissions

Cost Management

Issues at Play:

- EMT is lightly regulated under §3 of the FERC Natural Gas Act, leaving little control and oversight over pricing
- Limited ability to spread costs around: Potential additional customers have options available at a lower cost (e.g., oil, Repsol St. John, various local and regional LNG producers, etc.).

Options exist, but are limited:

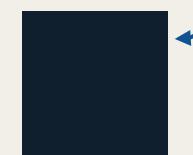
- ISO-NE’s Capacity Auction Reform is progressing but will not be implemented until 2028 at the earliest.
- Other options face either limited potential or significant barriers to implementation.

Emissions

Current
Statewide
Emissions

EMT LDC supply is approximately ~0.25% of the Commonwealth's GHG emissions

2050 Gross Emissions Limit 2024/2025: LDC EMT-Use: 0.161 MtCO₂e



Local vaporization represents only 4% of Everett’s total (residential + commercial emissions)

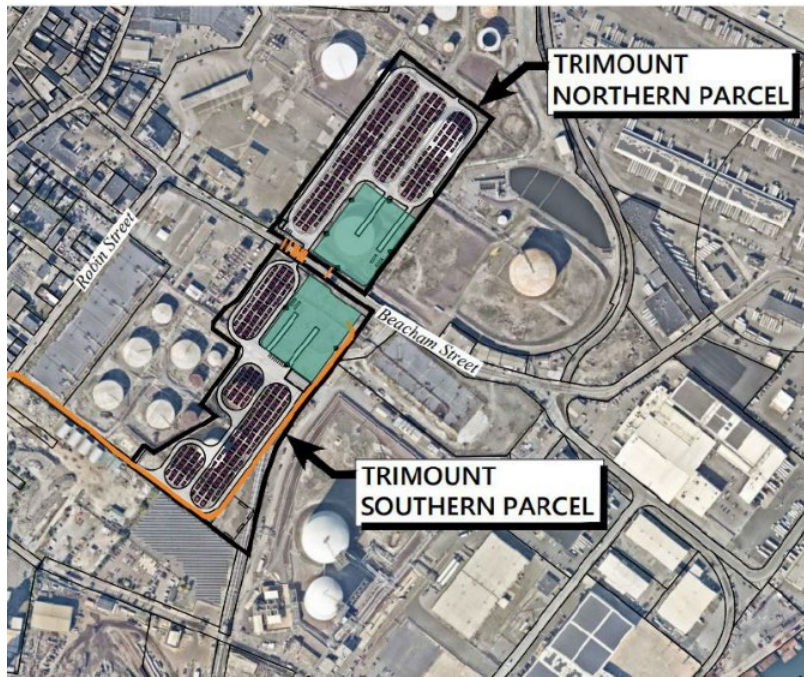


Upstream LNG liquefaction and shipping can increase the lifecycle carbon intensity by 10% relative to domestic pipes gas



Other Considerations: Development and & Community Considerations

Everett Waterfront is Experiencing Rapid Change Highlighting the need



 Aerial Locus
Trimount Energy Storage
Everett, MA

Figure 1
March 6, 2025

Priorities Identified through FAWG's Consultation with Community Representatives

- Public access and a waterfront park network.
- Transit investment as a precondition for functional redevelopment.
- Climate resilience — particularly the delayed Island End River flood-protection project.
- Economic benefits that reach existing residents.
- Meaningful community-driven engagement (mirroring the approach of Trimount BESS).



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Findings and Recommendations



Final Findings

EMT's Role and Contracts

1. **EMT's role:** supply, pressure support, redundancy, regional storage.
2. **LDC contracts:** run through 2030; large fixed costs; limited ability to regulate costs.
3. **Regional role in supporting the gas and electric systems:** Other regional parties (pipeline operators and customers) also benefit from hard-to-quantify reliability and supply option value but contribute little to fixed-cost recovery.

Emissions and Risks

5. **Emissions associated with EMT gas use and operations are a very small portion of overall Massachusetts emissions** including emissions from use of EMT supply, liquefaction, and fugitive emissions. Continued use of EMT as a peaking resource could be consistent with statutory emissions limits.
6. **Aggregate gas use that underpins LDC forecasts is inconsistent with the state's emissions limits (not EMT utilization, per se).**
7. **Emerging risks include:** changing demand patterns, concentration of costs, regulatory pressure, reliability, situational risks, and the global LNG market.

Costs

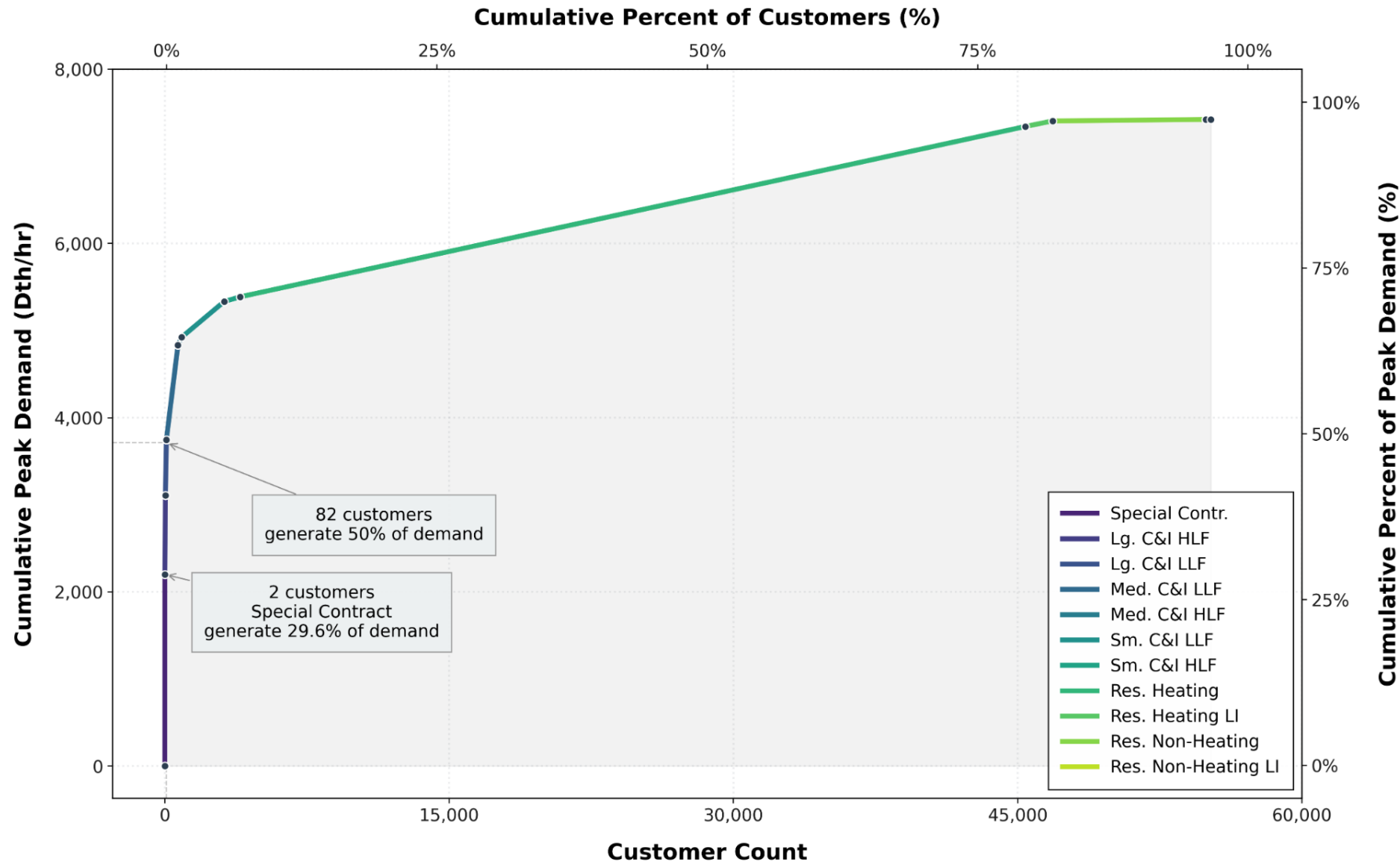
4. **Gas ratepayers now bear the fixed costs of EMT:** Prior to Mystic Generating Station's closure in 2024, EMT's fixed costs were absorbed by the regional electricity market. Following the closure, the costs have become concentrated on Massachusetts gas ratepayers.
11. **Several assessed cost mitigation strategies could partially offset costs to gas ratepayers:** (1) ISO-NE's Capacity Auction Reform (in development); (2) Expansion of EMT's commercial customer base; (3) FERC-approved pipeline peaking tariff; (4) state or public-entity ownership of the terminal.*

Pathways and Constraints

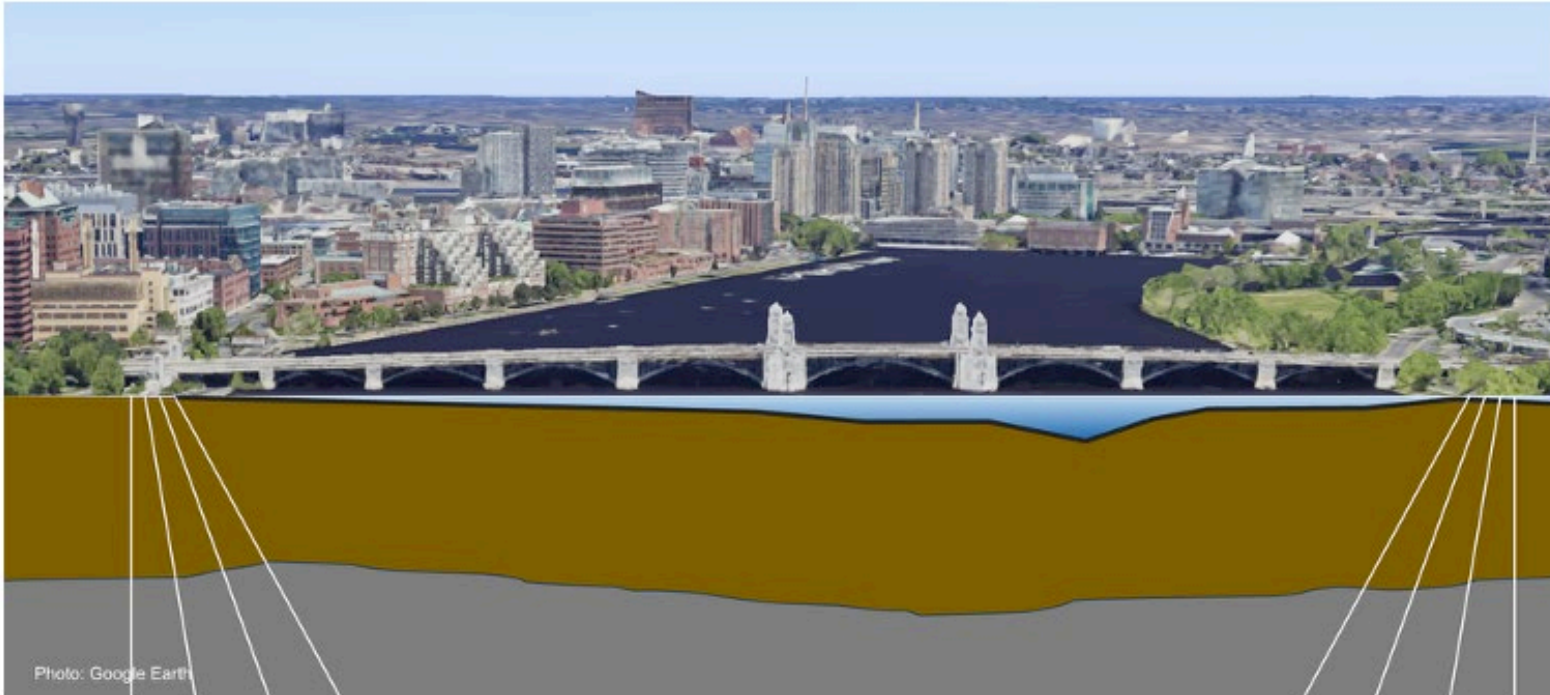
8. **Eliminating reliance requires both overall and peak gas demand reduction and targeted system investment**, prioritizing reduction on commercial and institutional peak gas demand.
9. **Complete elimination of LDC reliance by 2030 is infeasible, currently.**
10. **Reducing EMT dependency in dense load pockets requires coordinated demand-side planning at a scale that does not yet exist.**
12. **Future decisions about LDC contracts with EMT cannot be made in isolation from other active state workstreams that share the same load pockets, ratepayers, and 2028–2030 decision window.**



Targeting Large Customers:



Targeting Large Customers: BosTEN Feasibility Study



Potential Inclined Borehole Strategy



The study aims to generate insights on large customer usage and pathways to reduce that usage



Summary of FAWG Recommendations

1

Reduce EMT Dependency Through Demand Reduction

- Cultivate options to accelerate strategic gas demand reduction (alignment with EO 654)
- Focus on commercial and institutional demand
- Identify opportunities in Everett for targeted gas demand reduction

2

Mitigate & Fairly Allocate the Costs of EMT

- Pursue multiple cost-recovery strategies in parallel to broaden EMT's cost base
- Capacity auction reform, expanded use of EMT, pipeline peaking tariff, state purchase
- Even partial offsets deliver meaningful savings for Massachusetts ratepayers versus the status quo.

3

Investigate the Long-Term Role of Gas Supply & Storage

Commission an independent study—completed by 2028—of how regional pipeline capacity, LNG storage, and supply portfolios may evolve through the energy transition.



Next Steps, Outlook and Impact

Entity	Action
LDCs Annual EMT Reports	Annually report on utilization patterns and LNG-related changes.
OET	Convene key stakeholders to collect and disseminate information relevant to the future of peak gas demand.
OET/DOER/FREA	Oversee gas supply study and issue RFI for alternatives to meeting peak gas demand with a focus on demand reduction.
FREA	Engage in ISO-NE's Capacity Auction Reform activities.
EEA	Integrate EMT-related findings into the 2035 Clean Energy and Climate Plan.
MassCEC	Monitor and, where appropriate, support opportunities to work with Constellation on alternative commercial uses of EMT.
DPU	Provide an overview of its policies, procedures, and approach to confidential pricing information and related order directives in advance of future EMT supply contract proceedings.

On the Horizon

- May '26 ● *Project Beacon open season on Algonquin indicates a new regional capacity resource.*
- Summer '27 ● *BosTEN study identifies potential and timeline for large commercial loads to reduce gas demand.*
- '27-'28 ● *Gas Supply Study (Recommendation 3) LDCs commence contract negotiations.*
- '28-'29 ● *ISO-NE capacity auction reforms expected to start.*
- '29-'30 ● *End of current LDC contracts with EMT.*

High-Level FAWG Outcomes

- Convened 40+ organizations to understand and address issues, costs, and drivers to a deeper degree than possible in a DPU proceeding.
- Better informed stakeholders and intervenors in advance of future DPU proceedings and broader policymaking.
- Identified peak demand reduction as the priority pathway to reduce and ultimately eliminate reliance on EMT; engaged key C&I customers needed to achieve reduction.
- Identified options to mitigate cost impacts while reliance remains.
- Laid the groundwork for making more informed, transparent, and deliberate decisions around the future relationship of EMT with the LDCs and broader energy system.





Findings from the Decarbonizing the Peak FAWG



Decarbonizing the Peak FAWG: Key Themes from Findings (1-5 of 11)

The full text version of the findings can be found on the [OET website](#). The core point of each finding is stated here.

1. **Reliability risks shift from short summer peaks to sustained winter peaks by the 2040s**, requiring clean resources that can perform during long high-demand/low-renewable periods.
2. **Peaker plants will remain critical for grid reliability** until scalable, cost-effective alternatives can provide equivalent capacity.
3. **Demand response and load management** can reduce peak demand through 2050, mitigating costs and emissions, while meeting longer winter peaks will require additional demand-side innovations.
4. **The current regulatory framework relies heavily on ISO-NE capacity market payments** to keep peaker plants financially viable for reliability needs, while ongoing Capacity Auction Reforms (CAR) aim to better value all resources based on reliability contributions.
5. **In 2030, peaker replacement options include storage, renewables, demand-side solutions, grid-enhancing technologies, and potentially alternative fuels** if commercially available, cost competitive, safe, carbon neutral, and feasible at scale.



Decarbonizing the Peak FAWG: Key Themes from Findings (6-11 of 11)

6. **By 2040, expanded wind generation will need to be paired with more longer duration energy storage**, while emerging technologies like SMRs and fusion may play a future role if commercially viable.
7. **Full grid decarbonization by 2050 may be achievable with non-combustion resources**, storage, grid optimization, and firm clean power, though feasibility and costs of this pathway are debated among FAWG members.
8. **Decarbonizing institutional CHP systems will require phased strategies** combining fuel retrofits, efficient electrification, storage, active demand response, thermal energy solutions (e.g., campus-wide geothermal), and clean backup solutions.
9. **Equity and community engagement must guide the energy transition** to reduce cumulative harms, deliver local benefits, and support workforce transition.
10. **Interconnection delays to the regional grid are a major barrier to deploying new clean resources** and will require regional coordination to accelerate grid integration.
11. **Peaker plant decarbonization pathways will vary by site** based on community impacts, infrastructure, grid conditions, technology readiness, and financial factors.





Next Steps



Next Step in Reducing Reliance on the Everett Marine Terminal

- A common finding and recommendation from each OET working group is that reducing both peak electric and gas demand will drive affordability, enable emission reductions, avoid future infrastructure investment, and result in greater utilization of the existing energy system.
- OET is launching a new Focus Area Working Group (FAWG) on **peak energy demand reduction**, focused on coordinated strategies to reduce both electric and gas peak demand that:
 - Avoid future infrastructure and supply costs (gas and electric),
 - Reduce customer bills,
 - Enable emissions reductions aligned with the CECP, and
 - Support Executive Order 654's 3.5 GW of demand reduction by 2035 target and EMT directive.





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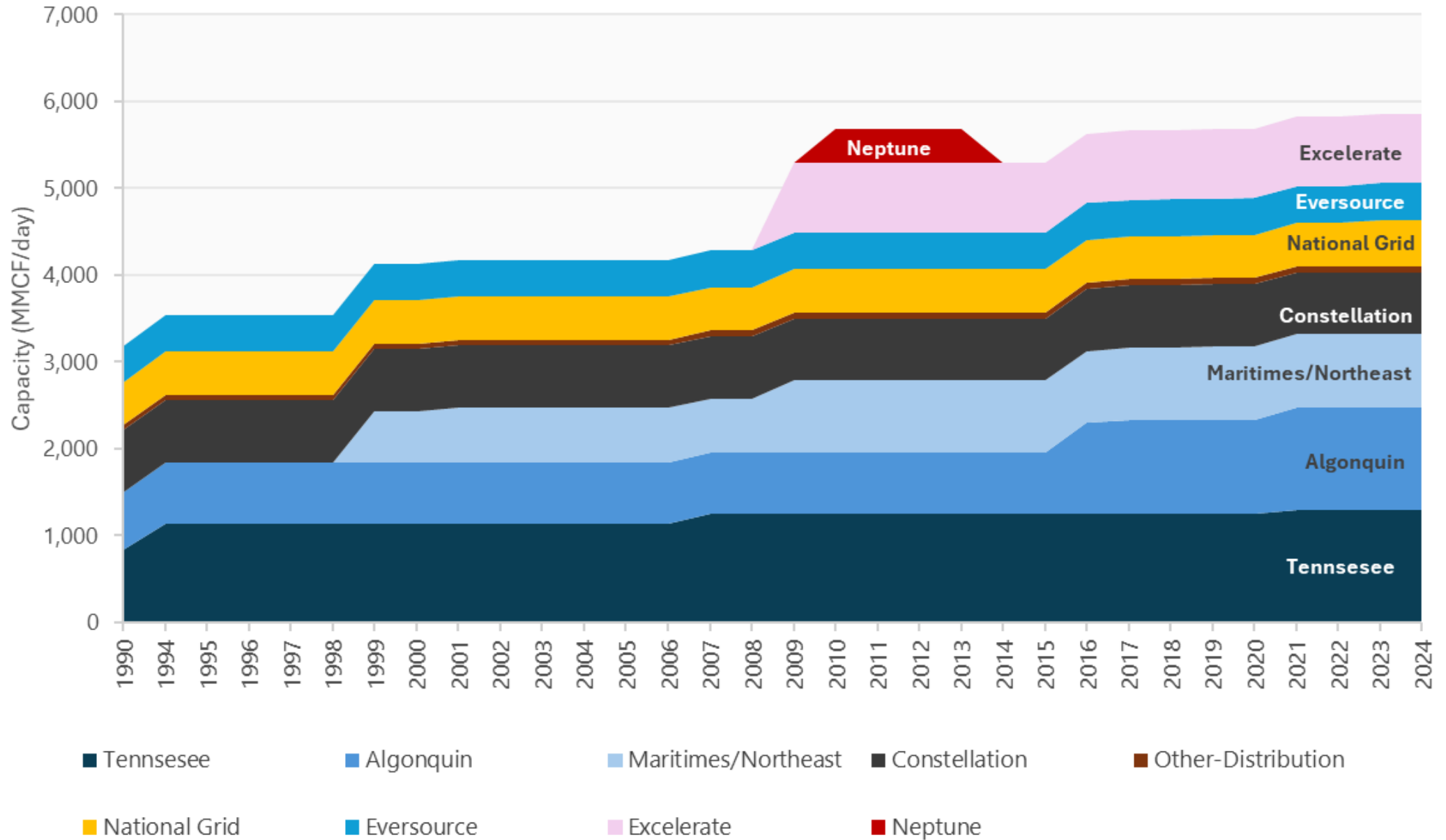
Questions?

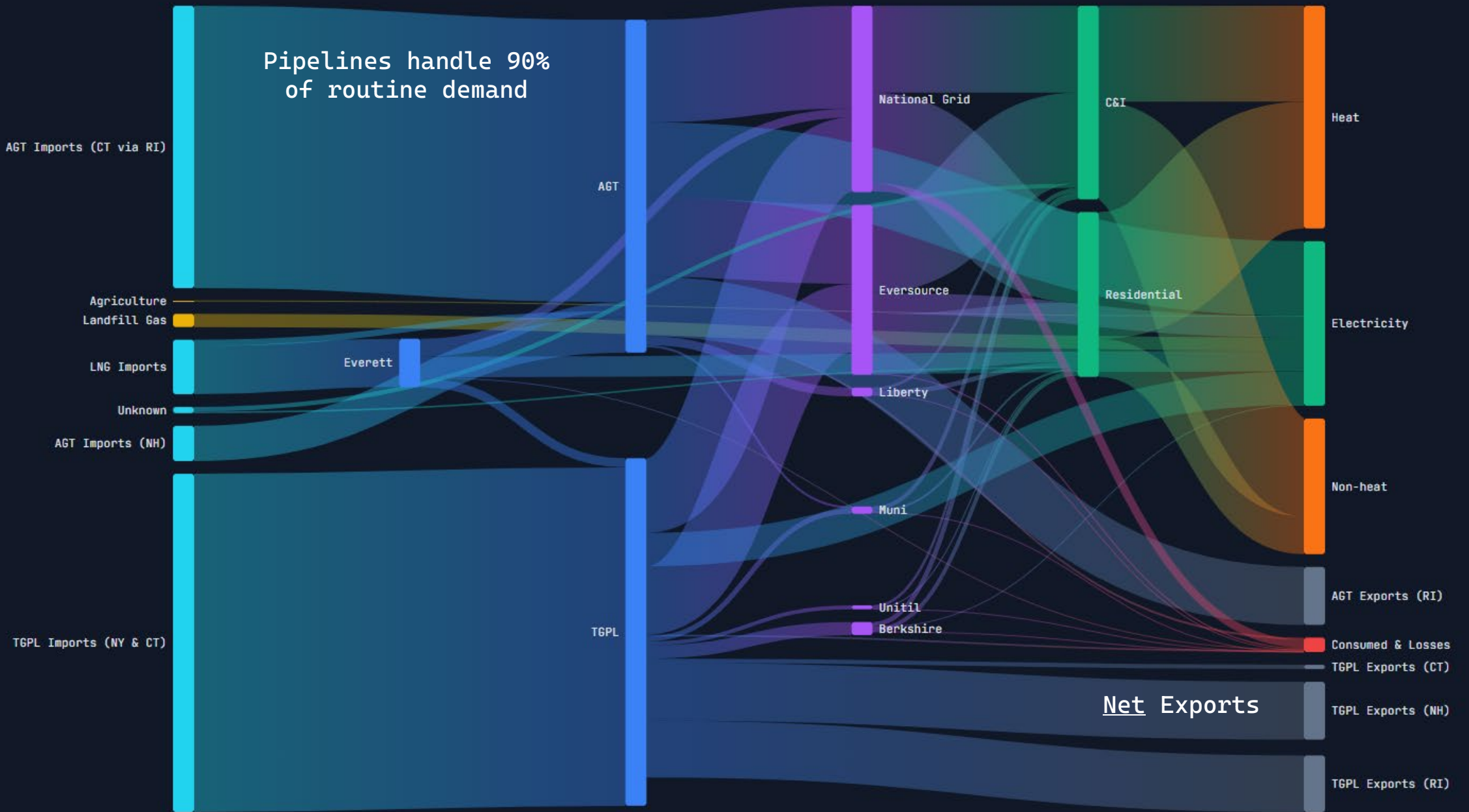


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Thank You!

Massachusetts Gas Capacity Resources



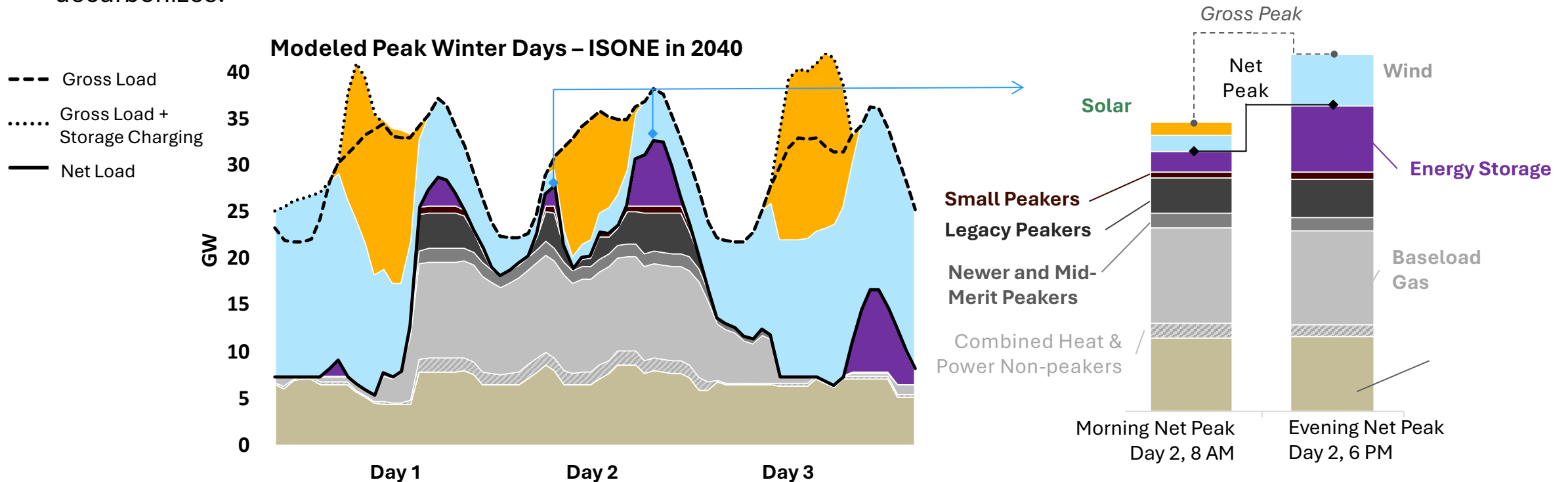


Natural Gas Volumetric Net Flow 2023 (Pre-Mystic Closure)

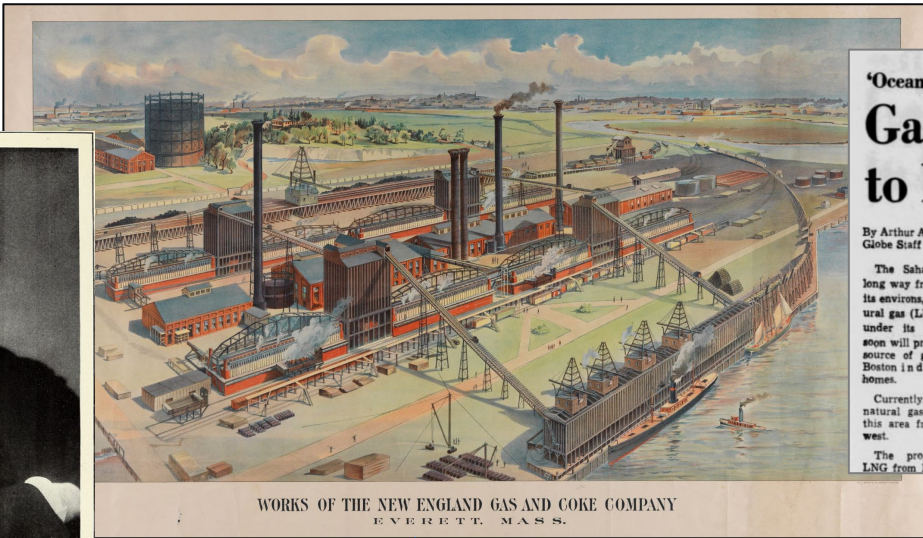
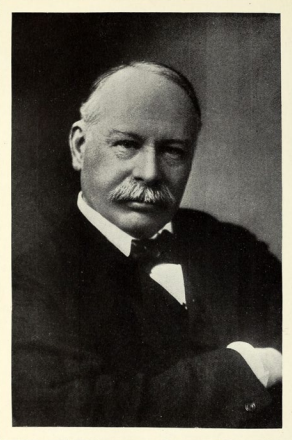
- Pipeline Imports
- Local Sources
- Transmission
- Distribution Utilities
- End Use Sectors
- Final Use
- Exports
- Consumed & Losses

Linkages with Decarbonizing the Peak

- A parallel stakeholder process explored ways to “decarbonize the peak”
- Grid modeling found that under future load demands, gas peakers will still continue to serve as a capacity resource during periods of high electricity demand, low solar, and low wind.
- Gas supply resources such as EMT could play a role in serving peak gas demand, even while the broader system decarbonizes.



EMT Site Chronicles 125 Years of Energy Transformations



'Ocean pipeline' in works
Gas from beneath Sahara to help heat Boston homes

By Arthur A. Riley
 Globe Staff

Experts point out that LNG has great potential value in water desalination through vacuum freezing and that it can eliminate mechanical refrigeration equipment in the food industry — with spent gas still available for fuel.

Key factor of LNG is that it is a natural gas that has been compressed through a cryogenic process to occupy one-sixth of its normal volume. Temperature of the liquid: Minus 260 degrees Fahrenheit.

The projected use of LNG from North Africa is

two trillion of this total being delivered to the East Coast via high pressure pipelines originating in Texas and Louisiana. More than one trillion cubic feet are used for residential heating resulting in a highly seasonal consumption pattern for the East Coast marketing area. The total gas supply for this market is entering a period of critical shortage.

It has been pointed out that natural gas transmission lines are not ideally suited to serve this varying seasonal demand pattern

ton, a subsidiary of the Cabot Corp., has moved into the field with plans to import LNG from Sonatrach, the Algerian national oil company.

As a transoceanic "pipeline", a contract for two methane carriers for transporting liquefied natural gas from Algeria to the United States has been awarded to a French shipyard.

The vessels will be the biggest methane carriers in the world, each with a capacity of 120,000 cubic meters. The craft will be operated by the



1880s-1890s: Henry Whitney purchases filled-in Island End River in Everett, builds industrial facility to import and process Canadian coal to serve street cars, town gas, chemicals, and steel.

1900s-1950s: Political actions result in emergence of New England Gas & Coke Co. at the site, and a new regulatory structure for gas sales that served as the basis for current state regulatory system.

1960s-1970s: At the end of the industrial era, the site — with its marine berth, industrial zoning, and connections to the gas system — transitioned into the U.S.'s first LNG import terminal to support growing gas demand across the region. At the time, LNG was cost-competitive with pipelines.

1980s-2020s: EMT's role in the energy system evolves with changing market conditions: price spikes causing a bankruptcy and temporary curtailment of sales; direct support to Mystic 8 & 9; domestic gas prices dropping due to fracking; Mystic 8 & 9 closure; and LDCs subsuming EMT's fixed costs.

EMT Contracts

- EMT contract specifications and allotments reflect each utility’s forecasted need for both pipeline-delivered supply and trucked LNG.

LDC	Specification	Maximum Daily Quantity (MDQ-dth)		Maximum Seasonal Quantity (MSQ-dth)	
National Grid (D.P.U. 24-25)	Vapor and Liquid Up to 20% as Liquid	24/25	27,000	24/25	500,000
		25/26	45,000	25/26	950,000
		26/27	59,000	26/27	1,450,000
		27/28	66,000	27/28	1,705,000
		28/29	73,000	28/29	1,925,000
		29/30	78,000	29/30	2,100,000
EGMA (D.P.U. 24-26)	Up to 50% as Liquid		19,600		882,000
NSTAR (D.P.U. 24-27)	Up to 50% as Liquid	AGT-G	5,000		450,000
		AGT-J or TGP	10,000		
Unitil (D.P.U. 24-28)	Liquid		3,000		83,000
	Vapor via TGP		400		
Berkshire (D.P.U. 17-145, 26-28)	Liquid or Vapor		5,400		162,000



