

NEC

Northeast Energy Center LLC

**Massachusetts Department of Environmental Protection
Public Hearing Thursday, July 29, 2021
Applicant Presentation**

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NEC – Project Team

Liberty Energy Trust is an infrastructure financing and development firm focused on LNG, RNG, energy infrastructure for peak shaving, energy storage and transportation

- Headquartered in Philadelphia, substantive presence in MA
- Management team with a history of successful M&A and energy infrastructure project development



Environmental Consultant



Owner's Engineer



Regulatory and Siting
Counsel

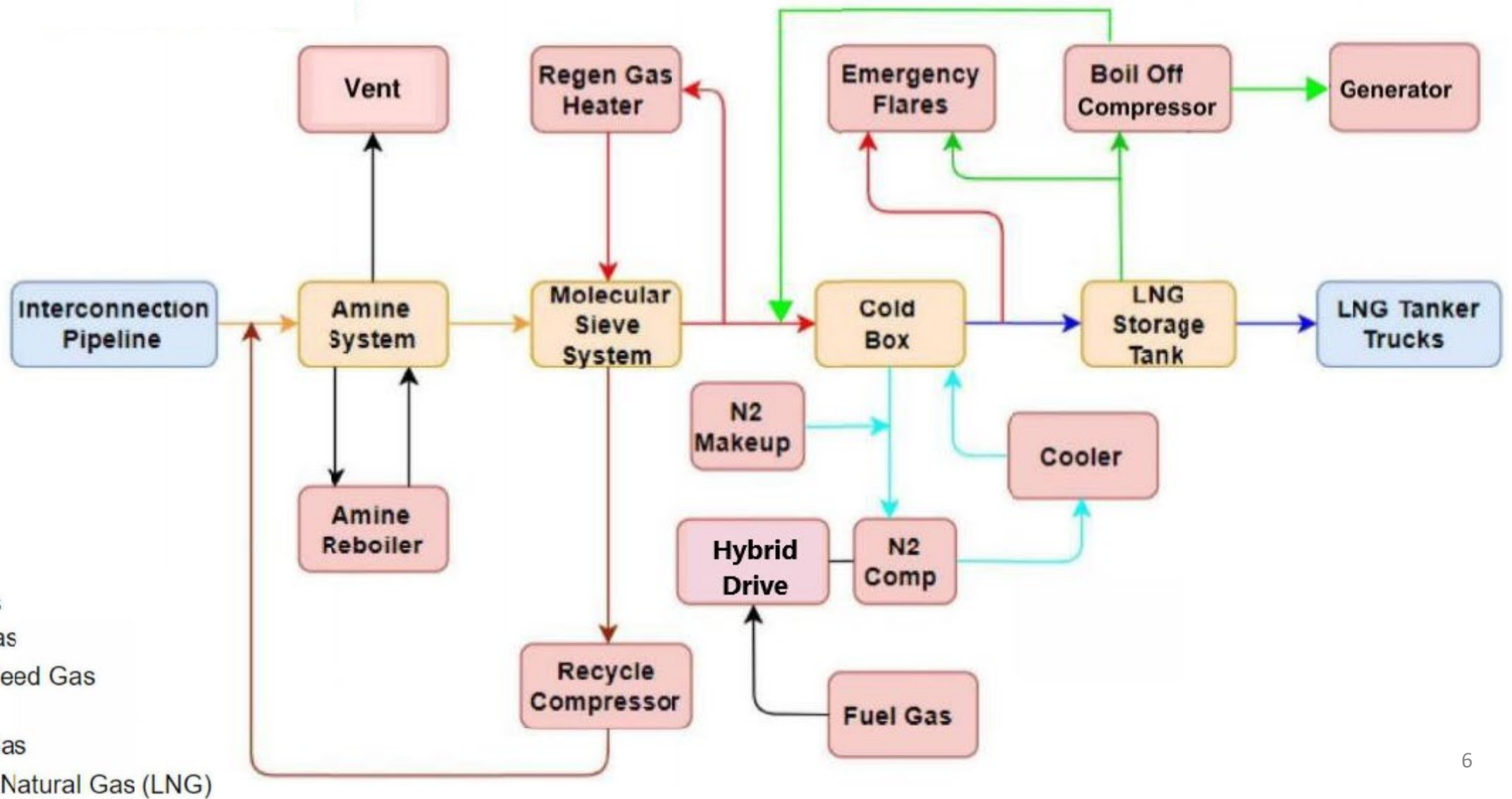
NEC – Project Overview

- Facility will provide pretreatment, liquefaction, storage, and truck-loading service to Commonwealth utilities
- Facility is located along Route 169 in Charlton, MA
- Project has gone through Massachusetts Environmental Policy Act (MEPA), Energy Facility Siting Board (EFSB), and Department of Environmental Protection (MassDEP) review
- Project construction start target 10/1/2021, completion Spring 2023
- Project Website:
<https://northeastenergycenter.com/>



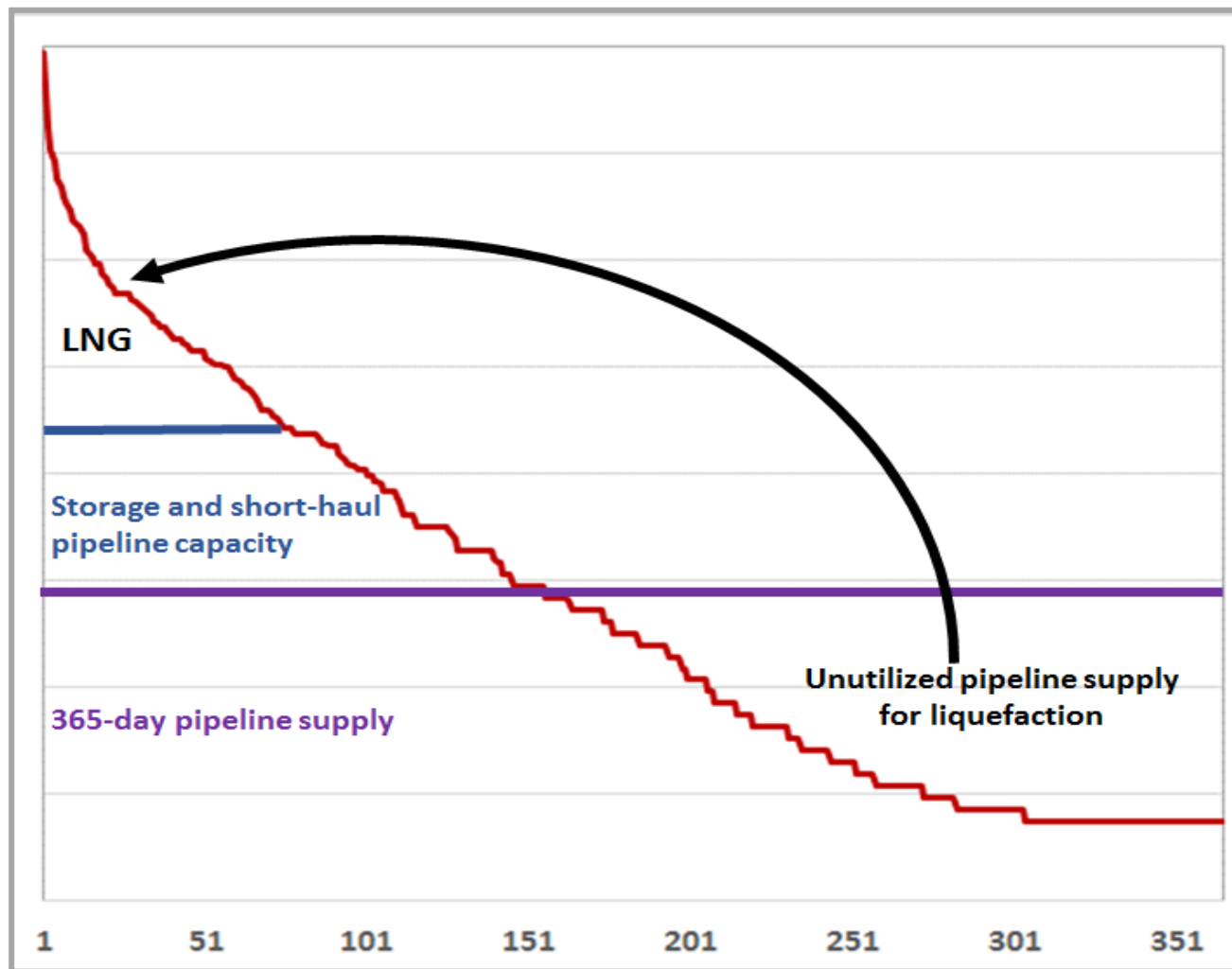
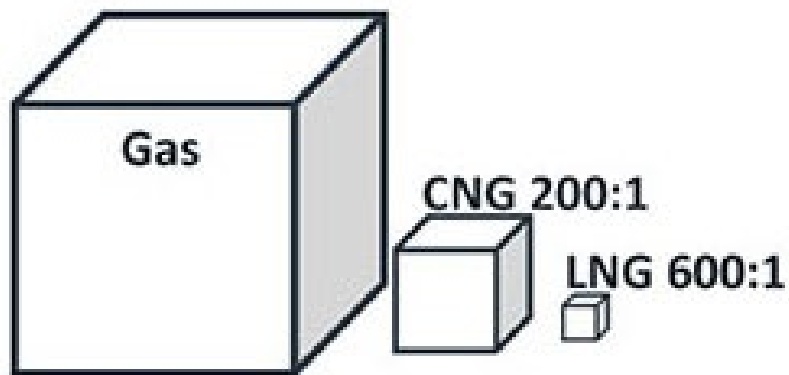
Facility Site Plan

Facility Process Flow Diagram



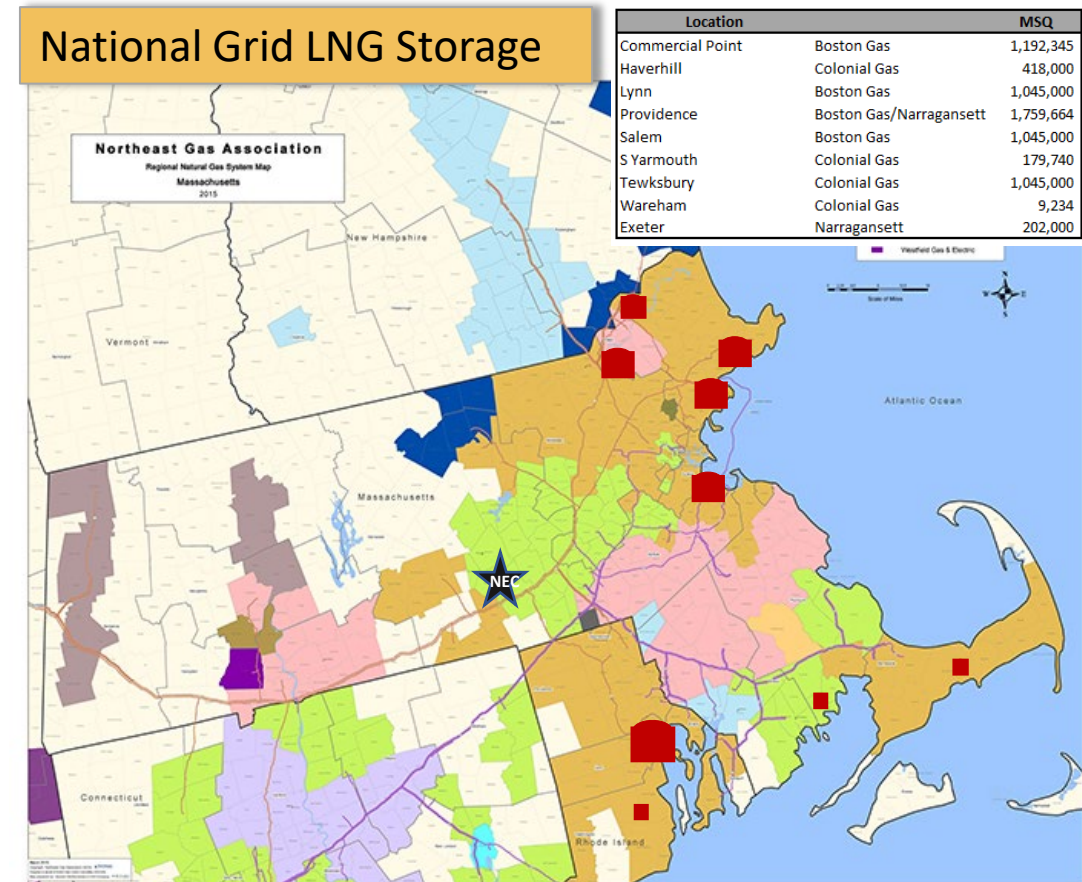
Project Context & Benefits

- Liquefy gas when pipeline capacity is underutilized
- Enable gas for customers' use during peak demand



National Grid Recognizes the Benefits of Domestically Produced LNG

- Boston Gas and Colonial Gas d/b/a National Grid have committed to NEC services for annual liquefaction capacity
- National Grid wants domestically-produced LNG and storage to:
 - Bring high deliverability natural gas on-line quickly
 - Meet hourly fluctuations in demand
 - Maintain deliveries to customers and balance pressures across the distribution system during high demand
 - Preserve delivery pressures in the event that an off-system resource becomes unavailable
 - Provide back up supply and resiliency to areas served by a single interconnection



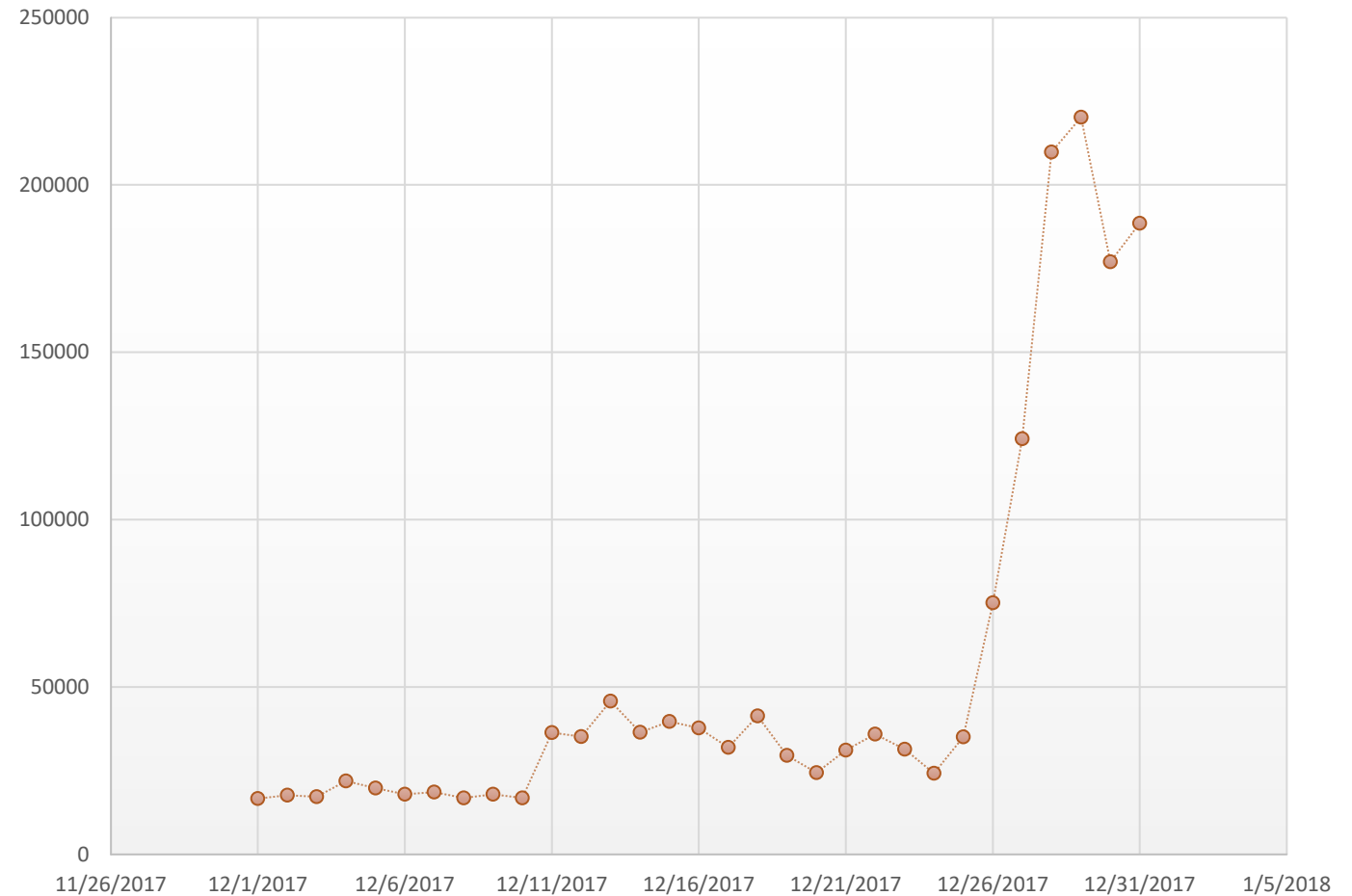
The Berkshire Eagle

Massive oil burn during cold snap a 'disaster,' says state energy and environment secretary



“...During the recent frigid cold, many power generators with dual fuel capabilities switched to burning oil as the price of natural gas spiked.”

ISO-NE NO_x Emissions (lb/day)

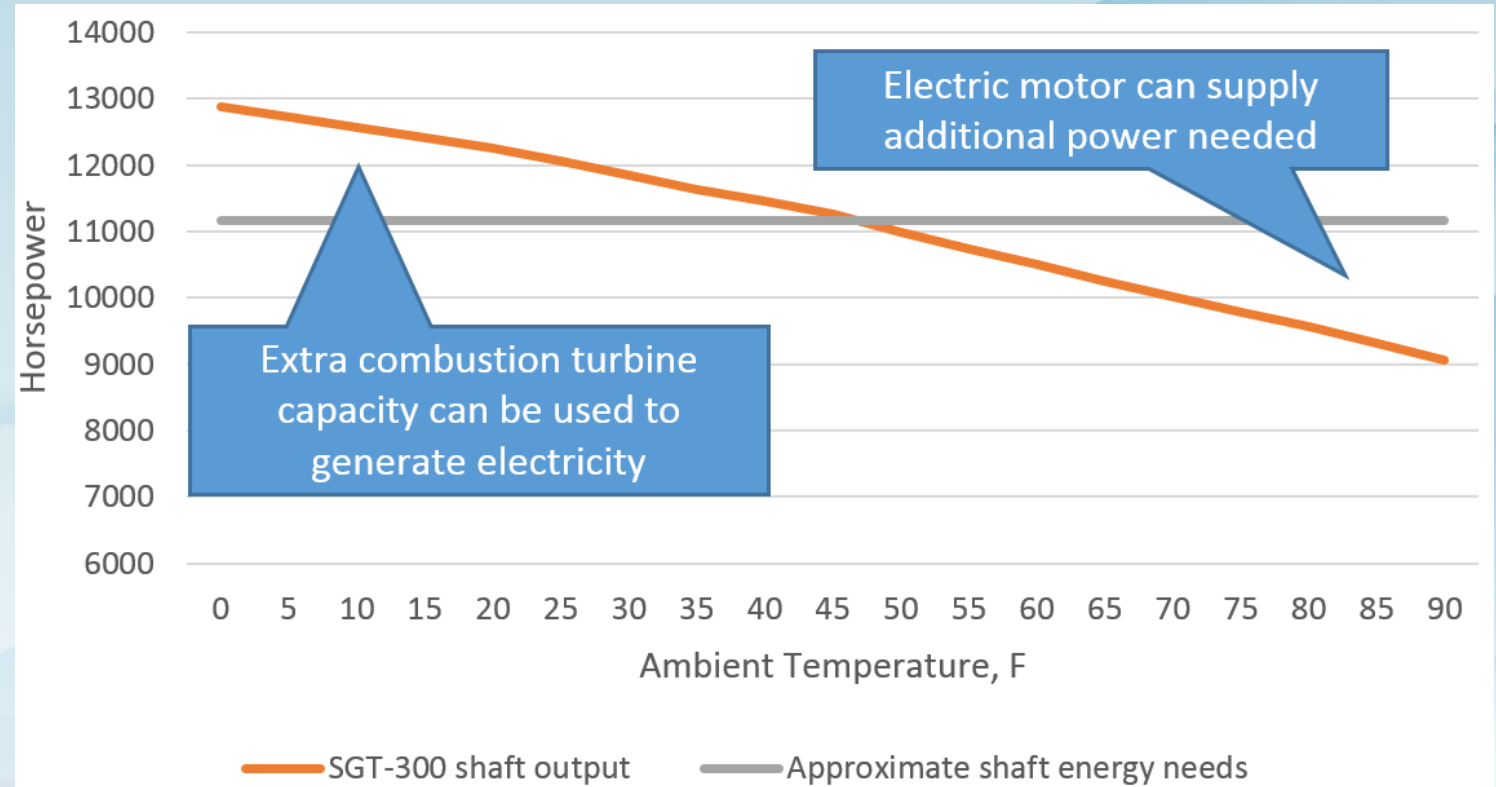


Air Plan Approval Requirements

- Facility is subject to plan approval requirements based on its Potential To Emit emissions from natural gas combustion
- The Plan Approval Application documents compliance with all applicable federal and Massachusetts air quality regulations
- MassDEP's review extended over a year, with several requests for supplemental information
- Key elements of the review focused on Best Available Control Technology, compliance with ambient air standards, and compliance with noise requirements
- The Proposed Approval contains monitoring, testing, record-keeping, and reporting requirements to document ongoing compliance

Best Available Control Technology (BACT)

- Emissions will be minimized through the facility and equipment design, use of clean fuels, good combustion practices, facility operating procedures, and best management practices
- Going further, Project proposes a Hybrid Drive Technology which is a smaller mechanical drive turbine supplemented by an electric motor/generator
- The smaller turbine has lower emissions and quieter operation



Compliance with Ambient Air Standards

- EPA develops and maintains National Ambient Air Quality Standards (NAAQS) for various durations of exposure
 - Primary Standards are intended to protect human health, including the health of “sensitive” populations such as asthmatics, children and the elderly
 - The secondary standards are intended to provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings
- MassDEP develops and maintains Threshold Effects Exposure Limits (“TELs”) and Allowable Ambient Limits (“AALs”) for toxic air pollutants
- NEC used computer air dispersion modeling to predict ambient air concentrations at thousands of locations near the facility, using five years of weather data and assuming worst case emission rates
- Results for all pollutants and averaging times are below the NAAQS, and well below the MassDEP guideline levels, indicating that operation of the proposed facility will not cause or significantly contribute to a condition of air pollution
- Modeling was performed following a MassDEP-approved protocol, and modeling results were reviewed and approved by MassDEP

Noise Compliance

- NEC has taken steps to reduce noise impacts such as:
 - Equipment positioning to minimize sound impacts at closest sensitive receptors
 - Custom mitigation silencers of the turbine combustion intake, combustion exhaust, vent intake, and vent exhaust
 - Use of sound attenuating enclosures for equipment
 - Sound barrier along the eastern side of the property
 - Use of low noise fans
 - Use of the smaller sized gas turbine as part of the proposed Hybrid Drive Technology
- Based on review of the facility design, predicted sound level impacts from the facility, and results of the ambient sound level monitoring, MassDEP's Proposed Plan Approval states the *"Facility incorporates sound suppression and sound transmission prevention elements that constitute necessary equipment, service and maintenance, and necessary precautions to prevent unnecessary sound emissions, as required by 310 CMR 7.10"*
- The Proposed Plan Approval requires retrofit of a sound barrier along the southern side of the property if needed to avoid sound impacts to the south.

Other Permitting/Licensing

- MEPA has issued the ENF Certificate for the Project
- The Charlton Conservation Commission has issued an Order of Conditions
- MassDOT has issued the Highway Access Permit
- Massachusetts Energy Facility Siting Board (EFSB) has concluded discovery and testimony and is completing the Order
- The project will have no significant process water use or wastewater generation (<4 gal/day), with no significant solid waste or hazardous waste
- There will be no work at 21E/brownfields sites, no underground storage tanks, and minimal onsite septic (3 employees/shift)
- Potable water will be from municipal supply

Outreach

- Public Outreach was performed as part of several different permitting/licensing processes including MEPA, EFSB and Town-hall Host Community meetings
- Public notice was published for the MEPA Environmental Notification Form (ENF) in: Charlton Villager; Worcester Telegram and Gazette; Southbridge Evening News; Sturbridge Villager; and Vocero Hispano August 7, 2020
- A virtual public consultation session was hosted by the MEPA Office on August 20, 2020
- The EFSB process involved public notice published in several local publications followed by two public hearings, one in November 2018 and the second in May of 2019 at the Charlton Middle School
- The EFSB Process also included six days of public evidentiary hearings in November and December of 2019
- Meetings held by NEC were at public locations outside of typical work hours to be more accessible to the community
- Public Notices were provided in English and Spanish

Outreach (continued)

- Outreach meetings with the local community included a public open house, meetings with multiple departments within the Town of Charlton, meetings with the adjacent towns Southbridge and Sturbridge, and meetings with the State Representatives and State Senator serving the region
- Specific dates of meetings and additional information regarding outreach may be found in the 'Community Outreach' section of the Northeast Energy Center Website (<https://northeastenergycenter.com/>)
- The Project website also contains information regarding the project and a means of contacting Project personnel

Contact

Opportunity for Public Comment is as-described by MassDEP

Proponent Contact Information for Any Questions

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<https://northeastenergycenter.com/contact/>