



The Commonwealth of Massachusetts
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September 10, 2020

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME : Northeast Energy Center
PROJECT MUNICIPALITY : Charlton
PROJECT WATERSHED : Quinebaug
EEA NUMBER : 16251
PROJECT PROPONENT : Northeast Energy Center, LLC
DATE NOTICED IN MONITOR : August 10, 2020

Pursuant to the Massachusetts Environmental Policy Act (MEPA; M.G. L. c. 30, ss. 61-62I) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **does not require** the preparation of an Environmental Impact Report (EIR).

Project Description

As described in the Environmental Notification Form (ENF), the project proposes to construct a Liquefied Natural Gas (LNG) Facility in Charlton. The LNG Facility will receive natural gas from a meter station on the Tennessee Natural Gas Pipeline Company (TGP) interstate pipeline. Natural gas will be delivered from the meter station to the LNG Facility using a new interconnection main (pipe), and the facility will then liquify and produce approximately 168,240 gallons per day (14,020 dekatherms) of LNG for delivery to National Grid's LNG storage facilities. Two potential interconnection options are included in the ENF, both of which would utilize the Route 169 right-of-way (ROW) which is a State Highway under the control of the Massachusetts Department of Transportation (MassDOT). Access to the project site is proposed via two driveways from Route 169, which is a State Highway. A petition to construct

the LNG Facility to serve National Grid's distribution system is currently pending before the Massachusetts Energy Facilities Siting Board (EFSB).¹

The LNG Facility will consist of a gas pretreatment system, a gas liquefaction system, a full containment LNG storage tank, an LNG truck loading system, a boil-off handling system, a distributed control and Supervisory Control And Data Acquisition (SCADA) system, a fire protection system, a hazard detection system, a security system and other ancillary systems. The LNG Facility will be surrounded by a perimeter fence that will allow controlled, secure access to the Facility.

During the liquefaction process, the natural gas will initially be sent through pretreatment vessels, (i.e., for water, carbon dioxide, and mercaptan removal). The liquefaction system uses a nitrogen recycle compressor and a combination compressor/expander. The LNG will be stored in a low-pressure, full containment, field-erected LNG storage tank with a net usable LNG capacity of 2.0 million gallons. There will be four loading bays with three scales for LNG trucks. Trucks will directly access Route 169 from the project site with no travel on local roads, and then will connect to Route 20 to the north to access either Interstate 84 which is four miles to the west or the Interstate 290/395 interchange which is eleven miles to the east. The LNG Facility will typically operate and provide deliveries during off-peak periods of the day and will liquefy and deliver gas from its LNG storage tank during the winter months, providing additional reliability benefits.

Electrical power for the Facility will be provided from the local electric distribution system and will be distributed to Facility equipment and structures through a pad-mounted transformer and motor control center (MCC) located within the site. In the event of a loss of utility power, the Facility will rely upon a dedicated standby emergency generator that will automatically start and provide power to all critical control and safety systems.

Project Site

The 11.6 acre project site is located at 314 Southbridge Road (Route 169) in the Town of Charlton. The site is predominantly undeveloped, with mixed deciduous and coniferous woodlands and wetland areas. The overall site elevation varies from 510 to 600 feet above sea level (asl) and is not located in 100-year flood plain area. The site is located within the Industrial-General Zoning District and is bordered by a solar panel installation to the west, Route 169 to the east, an Incom Inc. facility to the north which is a manufacturer of glass and polymer microstructures, and commercial businesses to the south; some residences exist at a distance to the south of the project site. Millennium Power, a 360 megawatt (MW) combined cycle generating facility is located further to the north of the site beyond the Incom facility. Other surrounding land uses include Casella Waste Systems and the Sturbridge Municipal Airport, located southwest of the Property.

¹ EFSB Docket #18-04 link: <https://www.mass.gov/service-details/efsb-and-dpu-siting-open-dockets>

The project site lies within an archaeologically sensitive area and there is an individually inventoried property listed in the Inventory of Historic and Archaeological Assets of the Commonwealth. The archaeological sensitivity of the project impact area is principally defined by its environmental setting and proximity to the recorded archaeological sites. The Philips Sash Mill historical archaeological site (MHC #CRT.HA.9) along Cady Brook is within and/or immediately adjacent to the proposed alternative pipeline alignment. The site also includes limited upland locations containing areas of well-drained soils located in proximity to the wetlands and water resources of Cady Brook, favorable for ancient and historical period land use and occupation.

According to the ENF, based on Massachusetts Natural Heritage and Endangered Species Program (NHESP) databases the site does not provide habitat for state-listed species.

The project involves some work within the 100-foot buffer zone of bordering vegetated wetlands (BVW) and an ephemeral/intermittent stream at the northern border of the property. There are two vernal pools located on the site adjacent to the nearby Millennium Power Company facility. The Proponent intends to minimize impacts to wetlands areas and avoid the vernal pools when planning and installing the interconnecting pipeline for the Project.

The site contains an Isolated Vegetated Wetland (IVW) which, according to the ENF, did not meet the Isolated Land Subject to Flooding definition in 310 CMR 10.57(2)(b). This determination was confirmed during the Abbreviated Notice of Resource Area Delineation (ANRAD) review process with the Charlton Conservation Commission on May 22, 2019. This IVW was also investigated as a potential vernal pool in April 2019 in accordance with NHESP's Guidelines for Certification of Vernal Pool Habitat. Based on observations described in the ENF, this wetland does not meet the NHESP criteria for a certifiable vernal pool (i.e., breeding habitat for certain amphibians) and this conclusion was confirmed during the ANRAD process.

Environmental Impacts and Mitigation

Potential environmental impacts associated with the project include creation of 1.9 acres of impervious area, removal of a maximum of 53 public shade trees, elimination of 175 linear feet of a stone wall, alteration of 2,310 square feet (sf) of Isolated Vegetated Wetlands (IVW), use of 250 gallons per day (gpd) of water, generation of 250 gpd of wastewater, the addition of 64 new vehicle trips per day on Route 169, and the creation of five parking spaces.

Measures to avoid, minimize or mitigate environmental impacts include stormwater management improvements, restoration of impacted wetland resources, use of erosion and sedimentation control measures during construction, and implementation of a traffic management plan. The project will also comply with MassDOT's policies to mitigate the removal of public shade trees.

Jurisdiction and Permitting

The project is undergoing MEPA review and requires an ENF pursuant to 301 CMR 11.03(6)(b)(2)(b) of the MEPA regulations because it requires State Agency Actions and will

result in the cutting of five or more living public shade trees of 14 or more inches in diameter at breast height (dbh). The project requires a Vehicular Access Permit from Massachusetts Department of Transportation (MassDOT) and a Non-Major Comprehensive Air Plan Approval (BWP AQ02) from the Massachusetts Department of Environmental Protection (MassDEP). The project has also filed with the Energy Facility Siting Board (EFSB) pursuant to G.L. c. 164, § 69J for approval to construct, operate and maintain a new natural gas liquefaction and storage facility (EFSB Docket #18-04).

The project will require an Order of Conditions from the Charlton Conservation Commission (or in the case of an appeal, a Superseding Order of Conditions from MassDEP). The project is also subject to review by the Massachusetts Historical Commission (MHC) acting as the State Historic Preservation Officer (SHPO) pursuant to Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (36 CFR 800). It requires a National Pollutant Discharge Elimination System (NPDES) General Permit for Construction from the U.S. Environmental Protection Agency (EPA).

Because the Proponent is not seeking State Financial Assistance, MEPA jurisdiction extends to those aspects of the project that are within the subject matter of required or potentially required Permits that are likely, directly or indirectly, to cause Damage to the Environment. The subject matter of the EFSB approval is sufficiently broad such that jurisdiction is functionally equivalent to full scope jurisdiction and extends to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment.

Review of the ENF

The ENF included existing and proposed conditions plans, described pipeline and facility site layouts, identified environmental impacts, and identified measures to avoid, minimize and mitigate impacts. It also identified several alternatives that were considered and subsequently dismissed in favor of the proposed project.

Comments from State Agencies provide feedback on required information for permitting of the project. Comments from the Pipe Line Awareness Network for the Northeast, Inc. (PLAN) and a joint letter from the No Fracked Gas in Mass & the Berkshire Environmental Action Team (BEAT) express concerns with the potential Greenhouse Gas (GHG) emissions associated with the project and assert that the project should demonstrate consistency with the Global Warming Solutions Act (GWSA). Comments from the No Fracked Gas in Mass & BEAT also express concerns about potential impacts to Environmental Justice (EJ) communities.

Alternatives Analysis

The ENF contained a discussion of alternatives in the context of the project purpose to provide additional LNG to help meet growing demand. Alternatives were evaluated on their ability to best meet the purpose and need of the project while limiting impacts to environmental resources. The Proponent initially considered several project locations for the project site, reviewing factors including whether interstate pipelines had secure long-term supply and underutilized off-peak capacity. Six regions were studied before focusing on south-central

Massachusetts along the Tennessee Natural Gas Pipeline corridor primarily between Westfield and Charlton. Final site selection focused on land availability with adequate space, highway access, and key stakeholder acceptance.

The ENF evaluated two alternative locations: the Route 169 Site (Preferred Site) and the Route 20 Site (Alternate Site). The Route 20 Site is approximately 220 acres, zoned for industrial use and is of sufficient size to comply with the requirements of all applicable LNG siting and operational standards. However, the site requires substantial grading and clearing and road construction, and lacks easy access to the TGP mainline and Route 20. The area around Route 20 is either underdeveloped or includes residential uses.

The Route 169 Site (preferred alternative) has direct access to Route 169 and the nearby interstate highway system (Interstates 84 and 90). The preferred approach for connecting to the interstate pipeline system is from a tap off the existing TGP pipeline lateral. The pipeline lateral connects to the nearby Millennium Power facility, which is a 360 MW combined cycle generating facility located to the north of the site. The Route 169 Site contains small wetland areas on the north and south ends of the property, but the Facility's equipment will be laid out so that it will not directly impact these areas. Site topography prevents the Facility from being broadly visible.

The ENF recognized that both the Route 169 and Route 20 site alternatives would provide reliability benefits in terms of the provision of service to the National Grid gas utility. According to the ENF, however, the Route 169 site has easier highway access and, therefore, has a reliability advantage. The Route 169 also has a shorter pipeline route to the TGP interconnection point and greater access to electric utility power service than the Route 20 site. As such, the Route 169 site was selected as the preferred site from an operational and customer service reliability perspective.

The ENF also presented two interconnection alternatives for only the Preferred Route 169 site, but did not choose a specific preferred alternative, instead deferring that decision to the EFSB proceeding; this point was discussed during the remote MEPA Site Visit held on August 20, 2020. The Proponent presented an interconnection route that is 0.54 miles in length and an alternative route that is 1.3 miles in length and utilizes the MassDOT right-of-way (ROW) along Route 169. The 0.54 mile route extends along the east side of the Millennium Power facility to a point near an existing cleared lot also owned by Millennium Power. From this point, the 0.54 mile route continues east/southeast to Route 169 and then runs parallel along Route 169 southerly to the site. While this route provides a shorter and more direct interconnection option, it could pose issues with site control as it would require access through the neighboring Millennium Power facility. Because these issues have yet to be fully resolved, the project has not yet selected the 0.54 mile route as the preferred alternative.

The 1.3 mile alternative route would begin at the TGP pipeline as close as practicable to the intersection with Route 169, starting from a TGP metering station adjacent to the pipeline and then traversing southerly within the MassDOT ROW along Route 169 to the LNG Facility. This route will require installation of the interconnection pipeline using horizontal directional drilling (HDD) to cross Cady Brook and Sherwood Lane to minimize construction and

environmental impacts. Both interconnection options avoid direct wetlands impacts and minimize construction impacts. As noted above, the 0.54 mile route is shorter but could raise site control challenges.

Land Alteration / Tree Removal

The ENF includes an inventory of trees along Route 169, where the two interconnection alternatives involve routes along the Route 169 ROW. As presented in the ENF, the project requires removal of a maximum of 53 living public shade trees in the Route 169 ROW, in the event the longer 1.3 mile interconnection route is chosen. Fewer trees would be removed with a shorter 0.54 mile interconnection route. The ENF states that the Proponent has taken efforts to minimize the number of public shade trees to be removed, will install privacy fencing and plant landscaping along Route 169, and, to the extent feasible, will maintain vegetation between the project driveways.

After consultation with MassDOT, the Proponent has committed to hire a certified arborist who will inventory the trees within the ROW. Once the preferred interconnection route is chosen in the EFSB proceeding, MassDOT will assess the quantity and value of the public shade trees to be removed and require compensation or replanting from the Proponent. The Proponent has confirmed that it will comply with MassDOT's requirements for mitigating the loss of public shade trees.

Transportation/Traffic

As discussed at the MEPA site visit, Route 169 is under MassDOT jurisdiction and a Vehicular Access Permit will be required. During the MEPA Site visit concerns were raised about the safety aspects of accessing the project site. The Proponent committed verbally to continue to work with MassDOT and the Town of Charlton in the development of a traffic management plan (TMP) for the purpose of maintaining safe and efficient mobility for all modes of travel throughout the construction process. The TMP should include, but not necessarily be limited to, the following elements which were discussed during the site visit:

- Identification of the types and average number of trucks that would be using area roadways on a daily and peak hour basis (for the project peak hour of generation as well as the AM and PM commuter peak hours);
- Identification of the expected hours of work and truck transport on a typical workday;
- Identification/illustration of truck traffic routing to/from construction areas;
- Identification/illustration of the location of construction zone advance warning signage;
- Identification/illustration of proposed accommodations and safety measures for bicycle and pedestrian access in construction zones (including signage, bypass, or refuge areas, etc.);
- Identification/illustration of the type and location of guide signs for vehicle access and safety within construction areas;
- Identification/illustration of the type and location of any barrier devices that would be used to separate vehicles, pedestrians, and bicyclists from construction work;

- Identification/illustration of the type and location of temporary pavement markings within construction areas;
- Identification/illustration of the type and location of any traffic control devices that would be used during construction (flashing beacons, temporary signals, etc.);
- Identification/illustration of any detour routes; and
- Identification of locations where police or flagger traffic control would be present.

Historic and Archaeological Resources

The MHC states that it will review the project under Section 106 of the NHPA of 1966, as amended (36 CFR 800) in consultation with the ACOE. The MHC, acting as State Historic Preservation Officer (SHPO) will coordinate state and federal historic review.

The ENF describes how the Public Archaeology Laboratory, Inc. (PAL) conducted the archaeological and above-ground identification work in Massachusetts. The archaeological overview survey involves archival research and visual field survey to locate and identify visible archaeological sites and sensitive areas where potentially significant below-ground resources may be present.

The Proponent should review the recommendations provided in the MHC comment letter and continue to work in cooperation with MHC to complete required surveys and documentation during the Section 106 review process.

Air Quality

The liquefaction process for the LNG Facility will utilize a hybrid drive system consisting of a gas turbine with an electric motor/generator and regeneration heaters. Air emissions will be generated from fuel combustion in the combustion turbine, as well as from heaters, control devices, and emergency engines. The criteria pollutants oxides of nitrogen (NOx) and carbon monoxide (CO) are expected to be 22 and 34 tons per year (tpy), respectively. Under MassDEP's air permitting regulations at 310 CMR 7.02, emissions from the project trigger the threshold for a Non-Major Comprehensive Air Plan Approval (NMCPA) permit. Plan approval requirements at 310 CMR 7.02(5) require Best Available Control Technology (BACT) for the criteria pollutants and noise.

In the ENF, the Proponent states that it reviewed the use of a lower-emission all-electric motor drive (EMD) to provide the mechanical power to drive the nitrogen compressor, but ruled it out in favor of a natural gas driven turbine with a hybrid drive system. I refer the Proponent to MassDEP's comments which request that the Proponent submit additional analysis, as detailed in MassDEP's comment letter, to support subsequent air permitting processes..

In addition to emissions limits for NOx and CO, the NMCPA will include emissions limits for hazardous air pollutants, estimated at 1.67 tpy. The NMCPA permit will limit hours of operations of the various emissions units and will limit the number of start-ups and shutdowns, which are expected to be infrequent. The NMCPA will also impose monitoring, testing, and reporting requirements to document compliance with the emissions limits.

The NMCPA will also require a BACT analysis for emissions of sound that create noise. MassDEP's guideline for interpreting and enforcing the air pollution control noise regulations at 310 CMR 7.10, as established in Policy #90-001 dated February 1, 1990 (the Noise Policy). Comments from MassDEP have provided guidance to the Proponent to take all available measures to comply with the air pollution control noise regulations. As part of the permitting process, the Proponent should evaluate and propose sound suppression measures that result in the lowest sound level increase above background that are technically and economically feasible.

As noted, several commenters have expressed concerns with the air emissions associated with the project. I note that the project does not trigger the air thresholds under the MEPA regulations at 301 CMR 11.03(8), nor does it trigger EEA's EJ Policy on this basis. While MEPA jurisdiction is broad, I am satisfied that MassDEP has sufficient authority to fully assess air quality impacts as part of subsequent permitting, and, accordingly, I find that additional review under MEPA in the form of a discretionary EIR is not warranted. The MEPA process is designed to ensure public participation in the state environmental permitting process, to ensure that state permitting agencies have adequate information on which to base their permit decisions, and to ensure that potential environmental impacts are described fully and avoided, minimized, and mitigated to the maximum feasible extent. I find that these objectives have been served through this ENF filing.

Wetlands/Stormwater

The project will impact 2,310 sf of IVW and associated work will cross under an unnamed intermittent stream. The Charlton Conservation Commission will review the project for its consistency with the Wetlands Protection Act (WPA), the Wetlands Regulations (310 CMR 10.00), and associated performance standards, including the Stormwater Management Standards (SMS).

The project is proposed under the limited project provisions in the wetlands regulations in 310 CMR 10.53(3)(d) which includes the construction, reconstruction, operation and maintenance of underground and overhead public utilities, including natural gas facilities. This provision allows the Conservation Commission discretion to condition an approval after considering the magnitude of the impact, reasonable alternatives, and the extent to which the impacts can be minimized and mitigated by best available construction measures and site restoration methods. According to the ENF, the interconnection pipeline route will be selected to avoid and minimize impacts to vernal pools and IVW and the design will provide required mitigation including constructing replacement vegetated wetland, if required. The current preferred interconnection pipeline design does not envision any permanent fill of IVW.

The ENF states that the Proponent proposes HDD to cross under Cady Brook and Sherwood Lane to minimize construction and environmental impacts for the potential 1.3 mile interconnection route. Comments from MassDEP indicate that the potential for "frac-out", or inadvertent returns of drilling lubricant, is a potential source of wetland impacts for projects that utilize HDD. The Proponent should incorporate these comments as it finalizes its choice of interconnection routes and should submit a Monitoring and Clean-up Plan to MassDEP and the Charlton Conservation Commission for the project if the 1.3 mile interconnection route is chosen.

In the event the 1.3 mile interconnection route is chosen, comments from MassDEP indicate there could potentially be greater than 5,000 sf of impacts to Bordering Vegetated Wetland (BVW) due to the installation of the pipeline and the use of HDD. If more than 5,000 sf of BVW impact is proposed for the installation of the pipeline, the Proponent will need to submit a 401 Water Quality Certification (WQC) application to MassDEP for review. Pursuant to the limited project provisions under 310 CMR 10.53(d) for this type of work, an alternatives analysis is needed to evaluate alternate routes. If material changes are made to the project beyond the components disclosed in the ENF such that a 401 WQC is required, the Proponent should consult with the MEPA Office to determine the need for additional review.

According to the ENF, the project is not located in the 100 year flood plain, and is therefore not subject to flooding risk. However, the project did not consider climate change projections and data. I encourage the Proponent to incorporate climate resiliency into final project design, including the following potential measures as applicable:

- Ecosystem-based adaptation measures to reduce heat island effect and mitigate stormwater runoff, such as integration of tree canopy cover, rain gardens, and low impact development (LID) stormwater management techniques;
- Stormwater management system design that will accommodate rainfall under projected climate conditions;
- Use of on-site renewable energy systems that may provide added resiliency during periods of power loss during storms;
- Protection of critical infrastructure and emergency generator fuel supplies from effects of extreme weather;
- Elevation of first floor uses and critical infrastructure above designated or projected base flood elevations or riverine peak flows, based on best available data and modeling; and
- Emergency generators to allow for select common areas and other emergency and life safety systems, including water and wastewater pumps, to remain operational in the event of an extended power outage

Construction Period

The project must comply with Solid Waste and Air Pollution Control regulations. All construction activities should be undertaken in compliance with the conditions of all State and local permits. The Proponent should require that contractors install emission control devices in all off-road vehicles. Contractors should also be instructed to limit engine idling and use ultra-low sulfur diesel fuel. Stormwater Best Management Practices (BMPs) must be implemented during the construction period to reduce potential erosion. If oil and/or hazardous materials are identified during construction, notification must be provided to MassDEP pursuant to the Massachusetts Contingency Plan (310 CMR 40.0000).

Conclusion

The ENF has adequately described and analyzed the project and its alternatives, and assessed its potential environmental impacts and mitigation measures. Based on a review of the ENF, comments received, and in consultation with State Agencies, I have determined that an

EIR is not required. The project may proceed to permitting, where any outstanding issues may be addressed.

September 10, 2020

Date

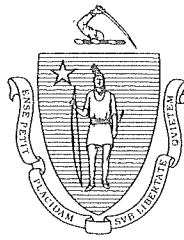


Kathleen A. Theoharides

Comments received:

08/27/2020 Massachusetts Historical Commission (MHC)
08/28/2020 No Fracked Gas in Mass & the Berkshire Environmental Action Team (BEAT)
08/31/2020 Pipe Line Awareness Network for the Northeast, Inc. (PLAN)
08/31/2020 Massachusetts Department of Transportation (MassDOT)
09/01/2020 Massachusetts Department of Environmental Protection- Southeast Regional Office

KAT/ACC/acc



August 27, 2020

The Commonwealth of Massachusetts
William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

Brian Lever
Senior Preservation Planner
Epsilon Associates, Inc.
3 Mill & Main Place
Maynard, MA 01754

RE: Northeast Energy Center LNG Facility, 294-314 Southbridge Road, Charlton, MA. MHC #RC.65057. EEA#16251.

Dear Mr. Lever:

Staff of the Massachusetts Historical Commission (MHC) have reviewed the Environmental Notification Form (ENF), and amended Project Notification Form (PNF), including an updated Cultural Resources Due Diligence review prepared by the PAL, Inc., received August 4 and 5, 2020, for the project referenced above. The MHC has previously reviewed and commented on the results of the intensive (locational) survey conducted for a formerly proposed project alternative in July 2019 that included the proposed liquefied natural gas (LNG) facility at 304 and 314 Southbridge Road (the Route 169 Site). A formerly proposed project alternative LNG facility off Sturbridge Road (Route 20) was also reviewed by the MHC in 2018.

The ENF and updated PNF include an additional pipeline interconnection alternative from 304 to 190 Southbridge Road in Charlton. As noted in the PAL's updated review for the Southbridge Road pipeline interconnection alternative, undisturbed portions of the project impact area along Southbridge Road are archaeologically sensitive. The archaeological sensitivity of the project impact area is principally defined by its environmental setting and proximity to recorded archaeological sites. The Philips Sash Mill historical archaeological site (MHC #CRT.HA.9) along Cady Brook is within and/or immediately adjacent to the proposed alternative pipeline alignment. The project environmental setting includes limited upland locations containing areas of well-drained soils located in proximity to the wetlands and water resources of Cady Brook, favorable for ancient and historical period land use and occupation.

If the alternative pipeline alignment along Southbridge Road is selected as the preferred pipeline route, then the MHC requests that an intensive (locational) archaeological survey (950 CMR 70) be conducted for the archaeologically sensitive portions of the project. The goal of the investigation is to locate and identify any significant archaeological resources that could be affected by the project, well in advance of any project construction. The results of the survey will be considered in consultation to avoid, minimize or mitigate adverse effects to any significant archaeological resources identified in the project impact area.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800), M.G.L Chapter 9, Sections 26-27C (950 CMR 70-71), and MEPA (301 CMR 11). If you have any questions or require additional information, please contact Jonathan K. Patton at this office.

Sincerely,

A handwritten signature in black ink that reads "Brona Simon".

Brona Simon
State Historic Preservation Officer
Executive Director
State Archaeologist
Massachusetts Historical Commission

xc: Barbara Newman, USACOE-NED
Bettina Washington, Wampanoag Tribe of Gay Head (Aquinnah)
David Weeden, Mashpee Wampanoag Tribe
Secretary Kathleen A. Theoharides, EEA, Attn: Anne Canaday, MEPA Unit
Cheryl Toney Holley, Nipmuc Tribal Nation
Deborah C. Cox, PAL, Attn: Jay Waller



Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Stephanie Pollack, MassDOT Secretary & CEO



August 31, 2020

Kathleen Theoharides, Secretary
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114-2150

RE: Charlton: Northeast Energy Center– ENF
(EEA # 16251)

ATTN: MEPA Unit
Anne Canaday

Dear Secretary Theoharides:

On behalf of the Massachusetts Department of Transportation, I am submitting comments regarding the Environmental Notification Form for the Northeast Energy Center project in Charlton, as prepared by the Office of Transportation Planning. If you have any questions regarding these comments, please contact J. Lionel Lucien, P.E., Manager of the Public/Private Development Unit, at (857) 368-8862.

Sincerely,

David J. Mohler
Executive Director
Office of Transportation Planning

DJM/jll

cc: Jonathan Gulliver, Administrator, Highway Division
Patricia Leavenworth, P.E., Chief Engineer, Highway Division
Barry Lorion, P.E., District 3 Highway Director
Neil Boudreau, Assistant Administrator of Traffic and Highway Safety
Planning Board, Town of Charlton
Central Massachusetts Regional Planning Commission



Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Stephanie Pollack, MassDOT Secretary & CEO



MEMORANDUM

TO: David Mohler, Executive Director
Office of Transportation Planning

FROM: J. Lionel Lucien, P.E, Manager
Public/Private Development Unit

DATE: August 31, 2020

RE: Northeast Energy Center– ENF
(EEA #16251)

The Public/Private Development Unit (PPDU) has reviewed the Environmental Notification Form (ENF) for the proposed Northeast Energy Center and interconnection main project. The project site consists of 11.6 acres of land located along the west side of Route 169 (Southbridge Road) between Sherwood Lane and Mass Avenue in Charlton. The site is currently predominantly undeveloped.

The project consists of a Liquefied Natural Gas (LNG) Facility and an interconnection main that would connect the site to the existing Tennessee Natural Gas Pipeline Company's interstate pipeline. Two interconnection options are included in the ENF, both of which overlap the Route 169 right-of-way (ROW) to varying degrees. Access is proposed via two driveways from Route 169. The project is expected to generate 64 vehicle trips per day and will include provisions for five automobile parking spaces. There are expected to be no more than five employees on site per day. The project trips do not exceed the Massachusetts Environmental Policy Act (MEPA) ENF transportation threshold, however, the project requires a Vehicular Access Permit from MassDOT because it abuts and would be accessed from Route 169, which is a State Highway. The Proponent may also require a grant of location for the interconnecting pipeline.

The ENF includes an inventory of trees along Route 169, where the interconnection alternatives overlap the Route 169 ROW, and along the LNG facility frontage. As presented in the ENF, the project requires removal of 53 living public shade trees in the Route 169 ROW, exceeding the MEPA threshold (301 CMR 11.03(6)(2)(b)) that requires an ENF if the project will remove five or more living public shade trees of 14 or more inches in diameter at breast height. The preferred interconnection alignment overlaps the Route 169 ROW to a lesser degree and therefore impacts fewer public shade trees.

The ENF states that the Proponent has minimized removal of public shade trees, will install screening landscaping along Route 169, and, to the extent feasible, will maintain vegetation between the project driveways. Furthermore, based on MassDOT comments, a

certified arborist will inventory the trees within the ROW that will remain. Once the interconnection alignment is finalized, MassDOT will assess the quantity and value of the public shade trees to be removed and require compensation or replanting from the Proponent.

MassDOT recommends that no further environmental review be required based on transportation-related issues. The details of the site driveway design as well as any mitigation required for the removal of the shade trees within the state highway layout can be addressed during the permitting process for the project.

The Proponent should continue consultation with the Town of Charlton and appropriate MassDOT units, including PPDU and the District 3 Office. If you have any questions regarding these comments, please contact me or Catrina Meyer at *Catrina.Meyer@dot.state.ma.us*.



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

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Secretary

Martin Suuberg
Commissioner

September 1, 2020

Secretary Kathleen A. Theoharides
Executive Office of Environmental Affairs
100 Cambridge Street, 9th Floor
Boston, MA 02114

Attention: MEPA Unit – Anne Canaday

Re: Environmental Notification Form (ENF)
Northeast Energy Center
Charlton
EEA #16251

Dear Secretary Theoharides,

The Massachusetts Department of Environmental Protection's ("MassDEP") Central Regional Office has reviewed the ENF for Northeast Energy Center, a Liquefied Natural Gas (LNG) facility in Charlton (the "Project"). The Project, proposed by Northeast Energy Center, LLC (the "Proponent") will comprise natural gas pretreatment and liquefaction, LNG storage, LNG truck loading bays, and associated systems on an 11.6-acre industrial site off Route 169/Southbridge Road. The Project will receive natural gas from a meter station on the Tennessee Natural Gas Pipeline Company, LLC (TGP) interstate pipeline via a new interconnection main. The natural gas will be liquefied, stored in the on-site tank, and eventually loaded onto LNG tanker trucks. The Project will produce approximately 168,240 gallons per day (GPD) of LNG, which will be provided to National Grid's existing LNG storage facilities. The Project will be surrounded by a perimeter fence that will allow controlled, secure access to the Site.

The Project site is undeveloped, with mixed deciduous and coniferous woodlands and wetland areas. The Project involves some work within the 100-foot buffer zone of bordering vegetated wetlands (BVW) and an ephemeral/intermittent stream at the northern border of the property. There are two vernal pools located on the site adjacent to the nearby Millennium Power Company facility. The Proponent intends to minimize impacts to wetlands areas and avoid the vernal pools when planning and installing the interconnecting pipeline for the Project.

The Project is under MEPA review because it meets or exceeds the following review threshold:

- 310 CMR 11.03(6)(b)(2)(b) - Construction, widening or maintenance of a roadway or its right-of-way that will: cut five or more living public shade trees of 14 or more inches in diameter at breast height.

The Project requires the following State Agency Permits:

- Massachusetts Department of Transportation Highway Access Permit;
- MassDEP – Non-Major Comprehensive Air Plan Approval (BWP AQ02);
- MassDEP - Superseding Order of Conditions (if local Order of Conditions is appealed);
- Massachusetts Department of Public Utilities Energy Facilities Siting Board (EFSB) approval for construction.

MassDEP offers the following comments:

Air Quality

Permitting

The Proponent will receive natural gas from a new interconnection main at a meter station on the Tennessee Natural Gas Pipeline Company, LLC interstate pipeline, and the Facility will produce approximately 168,240 gallons per day of LNG. The Project will include a natural gas liquefaction train, LNG storage, and truck loading facilities. The liquefaction process will utilize a hybrid drive system consisting of a gas turbine with an electric motor/generator and regeneration heaters. Air emissions will be generated from fuel combustion in the combustion turbine, as well as from heaters, control devices, and emergency engines. Emissions. The criteria pollutants oxides of nitrogen (NO_x) and carbon monoxide (CO) are expected to be 22 and 34 tpy, respectively. Under MassDEP's air permitting regulations at 310 CMR 7.02, emissions from the Project trigger the threshold for a Non-Major Comprehensive Air Plan Approval (NMCPA) permit. Plan approval requirements at 310 CMR 7.02(5) require Best Available Control Technology (BACT) for the criteria pollutants and noise. The Proponent has submitted an application for an NMCPA, and the application is currently under review by MassDEP pending completion of the MEPA process.

In the ENF, the Proponent states that it reviewed the use of a lower-emission all-electric motor drive (EMD) to provide the mechanical power to drive the nitrogen compressor. The ENF goes on to state that as a result of this review, the Proponent ruled out using an EMD in favor of a natural gas driven turbine with a hybrid drive system because of the lower operating costs and the higher reliability of service that would be realized with the use of the turbine. As part of the permitting process for the NMPCA permit, the Proponent should submit additional analysis to allow the Department to assess the Proponent's conclusion that the EMD option is not the top case control option. Specifically, the Proponent should submit a "top-down" Best Available Control Technology (BACT) analysis for the EMD option based on energy, environmental, and/or economic impacts in accordance with the five steps in MassDEP's guidance for a top-down BACT evaluation, which are:

- Step 1. Identify all possible control technologies
- Step 2. Eliminate technically infeasible options
- Step 3. Rank the technically feasible control technologies based upon emission reduction potential

Step 4. Evaluate ranked controls based on energy, environmental, and/or economic considerations
Step 5. Select BACT

In addition to emissions limits for NO_x and CO, the NMCPA will include emissions limits for hazardous air pollutants, estimated at 1.67 tpy. The NMCPA permit will limit hours of operations of the various emissions units and will limit the number of start-ups and shutdowns, which are expected to be infrequent. The NMCPA will also impose monitoring, testing, and reporting requirements to document compliance with the emissions limits. The Project will produce Greenhouse Gas Emissions including carbon dioxide and methane; potential emissions are below 60,000 CO₂e

The NMCPA will also require a BACT analysis for emissions of sound that create noise. MassDEP's guideline for interpreting and enforcing the air pollution control noise regulations at 310 CMR 7.10, as established in Policy #90-001 dated February 1, 1990 (the Noise Policy), specifies that the ambient sound level, *measured both at the property line and at the nearest inhabited residence*, shall not be increased by more than 10 decibels weighted for the "A" scale [dB(A)] due to the noise from the facility during its operating hours. Additionally, the Noise Policy states that any source of sound will be considered to be violating regulations if the source produces a "pure tone" condition – when any octave band center frequency sound pressure level exceeds the two adjacent center frequency sound pressure levels by 3 decibels or more.

The ENF states, "The Facility will use buildings, enclosures, and silencers as appropriate to minimize noise. With mitigation measures, the Project will comply with the 10 dBA increase permitted by the MassDEP Noise Policy at all residential property lines and homes," and that "through the MassDEP air plan approval application, the Project team will document compliance with MassDEP's Noise Policy and Guidance." However, the ENF also includes calculations showing projected sound increases of greater than 10 dBA (decibel, A –Weighted) at property lines. To remedy this, the Proponent intends to seek a written sound increase waiver from the property owners at locations where sound levels are predicted to exceed MassDEP limits. Sound waivers from affected property owners will not constitute compliance with the limitations of 310 CMR 7.10 or the Noise Policy. MassDEP expects the Project to take all available measures to comply with the air pollution control noise regulations regardless of any agreements obtained with adjacent property owners.

MassDEP requires that when an air permit applicant is proposing sound suppression/mitigation measures for a new facility, similar to the traditional "top-down" BACT process, the "top case" sound suppression/mitigation measures that deliver the lowest sound level increase above background are required to be implemented, unless these measures can be eliminated based upon technological or economic feasibility. An applicant cannot "model out" of the use of the "top case" sound suppression/mitigation measures by simply demonstrating that predicted sound levels at the property line or other sensitive receptors when employing a less stringent sound suppression/mitigation strategy will result in a sound level increase of less than or equal to the 10 dBA above background. As part of the permitting process, the Proponent should evaluate and propose sound suppression measures that result in the lowest sound level increase above background that are technically and economically feasible.

Dust, Odor and Noise During Construction

Clearing/grading operations, and construction of buildings, parking areas and roadways/access ways have the potential to generate dust, odor and/or noise. The Proponent should ensure that these construction-phase activities conform to MassDEP's regulations governing nuisance conditions at 310 CMR 7.01, 7.09 and 7.10 and not cause or contribute to a condition of air pollution due to dust, odor or

noise. As such, the Proponent should propose measures to prevent and minimize dust, noise, and odor nuisance conditions that may occur during construction.

The Department notes that the Proponent proposed the following air emission mitigation measures, and MassDEP encourages that the Proponent implement these and any other measures that may be necessary be implemented during construction:

- All contractors shall use Ultra-Low Sulfur Diesel oil in diesel-powered non-road vehicles.
- All non-road engines used on the construction site shall meet the applicable non-road engine standard limitations per 40 CFR 89.112.
- All contractors shall utilize the best available technology for reducing the emission of PM and NOx for diesel-powered non-road vehicles. To minimize air emissions from equipment operation, the Applicant will direct its contractors to retrofit any diesel-powered, non-road construction equipment rated 50horsepower or above, whose engine is not certified to United States Environmental Protection Agency (USEPA) Tier 4 standards and that will be used for 30 days or more over the course of the Project, with USEPA-verified (or equivalent) emission control devices (e.g., oxidation catalysts or other comparable technologies). The Applicant exclusively uses ULSD fuel in its own diesel-powered construction equipment and will require its contractors to do the same for the Project.
- All contractors shall turn off diesel combustion engines on construction equipment not in active use and on dump trucks that are idling while waiting to load or unload material for five minutes or more.
- All contractors shall establish a staging zone for trucks that are waiting to load or unload material at the work zone in a location where any impacts of diesel emissions from the trucks will be minimized.
- All contractors shall locate construction equipment away from sensitive receptors such as residents and passersby, fresh air intakes to buildings, air conditioners, and windows.

Wetlands

The Proponent obtained an Order of Resource Area Delineation (“ORAD”) (MassDEP File #128-1726) from the Charlton Conservation Commission on October 9, 2019 for the Project site to establish the wetlands resource area boundaries subject to jurisdiction under the Massachusetts Wetlands Protection Act, M.G.L c. 131, § 40. The ORAD does not include wetlands resource areas for the proposed interconnection pipeline route.

The Proponent will be required to file a Notice of Intent (“NOI”) for the Project with the Charlton Conservation Commission (“the Commission”) and MassDEP. Upon receipt of the NOI, MassDEP may provide comments to the Proponent and the Commission in the File Number Notification Letter issued following MassDEP’s technical review of the NOI.

The ENF does not discuss whether there is Riverfront Area associated with Cady Brook located on the site. Cady Brook is located on the opposite side of Route 169 from the Project and is depicted as a perennial stream on the USGS topographic map. The ENF does not provide any details on the proposed activities with Bordering Land Subject to Flooding, other than “no significant Facility elements will be in the 100-year flood plain.” These resource areas, as well as the proposed activities within the resource areas, should be identified on the plans submitted with the NOI. The Proponent should include an explanation of how the applicable performance standards will be met.

The ENF does not identify the area of Bordering Vegetated Wetland (BVW), Land Under Water, or any other wetlands resource area impacts associated with the interconnection pipeline route, but only states that the route will be selected to minimize wetland impacts, and to avoid the two vernal pools near the site. If more than 5,000 square feet of BVW is proposed to be altered by any filling of the certified vernal pools (which are considered Outstanding Resource Waters) for the installation of the pipeline the Proponent will need to submit a 401 Water Quality Certification (WQC) application to MassDEP for review. This requirement is in addition to the NOI under the Wetland Protection Act. Pursuant to the limited project provisions under 310 CMR 10.53(d) for this type of work, an alternatives analysis is needed to evaluate alternate routes. The 401 WQC review would also require an alternatives analysis.

For the various alternative interconnection pipeline routes, the Proponent should identify the wetlands resource area boundaries on a plan for the associated parcels, describe the alterations to those wetlands resource areas, explain how the work meets the relevant wetland resource areas performance standards or qualifies as a limited project, and describe any planned mitigation in accordance with 310 CMR 10.00. This information should be provided with the NOI filed for the Facility as a single and complete filing. It was also not clear from ENF if the route needs Energy Facilities Siting Board approval.

The Proponent proposes horizontal directional drilling (HDD) to cross Cady Brook and Sherwood Lane to minimize construction and environmental impacts for an identified alternate route of the interconnection pipeline. Frac-out, or inadvertent returns of drilling lubricant, is a potential source of wetland impacts for projects that utilize HDD. The Proponent must submit a Monitoring and Clean-up Plan to MassDEP and the Charlton Conservation Commission as part of the NOI for the Project if this route is chosen. This document must provide a comprehensive procedure for preventing and remediating inadvertent returns.

Stormwater

The Project will create 1.9 acres of new impervious surfaces and is subject to the Massachusetts Stormwater Standards. The Proponent must demonstrate compliance with the DEP Stormwater Management Regulations at 310 CMR 10.05(6)(b) and 310 CMR(6)(k-q). A definitive stormwater management design was not included in the ENF.

The NOI should demonstrate that source controls, pollution prevention measures, erosion and sediment controls, and the post-development drainage system will be designed in compliance with the stormwater elements of the Massachusetts Wetlands Protection Act regulations (310 CMR 10.00), applicable standards, and the *Massachusetts Stormwater Handbook*. A stormwater management report should be prepared that includes, at a minimum, 1) calculations of water quality volume, infiltration volume, total suspended solids removal, and peak rates of runoff for predevelopment and post-development site, 2) a description of stormwater Best Management Practices (BMPs) and structural features, and 3) stormwater system design plans presented at a readable scale. Documentation to support statements that the stormwater system design provides adequate protection for wetland resources also should be included in the NOI to show compliance with the stormwater standards and *Stormwater Management Handbooks*. The Proponent should use precipitation data provided in the TR-55 or that required by the local municipality, whichever is more conservative, for the purposes of preparing the stormwater analysis. The potential impact of increased precipitation frequency and volume due to climate change should be considered during the design of the stormwater management system.

Pollution prevention and source control measures are required for compliance with Standard 4 in the Stormwater Management regulations. Deicing and contaminated snow stockpiling and disposal should

be controlled in accordance with a source control and pollution prevention plan for the Project. Snow should not be stored or disposed in wetland resources or within stormwater BMPs, and snow management should be done in accordance with the MassDEP Snow Disposal Guidance. This guidance document is available at the following MassDEP website: <https://www.mass.gov/guides/snow-disposal-guidance>. MassDEP recommends that the Proponent commit to using the minimum amount of deicing and abrasive agents. In addition, a schedule for parking lot sweeping should be timed to occur a minimum of twice per year (preferably once in spring and once in fall) for removal of leaves and sediment.

The Project includes a land use with higher potential pollutant load (“LUHPLL”). As a site with a LUPPHL, the stormwater management system must be designed, constructed, and operated in compliance with Standard 5 of the Stormwater Management Standards. Specifically, the stormwater management system must include a treatment train that provides for at least 44% Total Suspended Solids (TSS) removal prior to discharge to the infiltration BMP and be designed to treat 1.0 inch of runoff times the total impervious area at the post-development site. Stormwater discharges from LUHPPLs must also comply with the requirements of the Massachusetts Clean Waters Act, M.G.L.c. 21, §§ 26-53 and the regulations promulgated thereunder at 314 CMR 3.00, 314 CMR 4.00 and 314 CMR 5.00.

The Project construction activities will disturb one or more acres of land and therefore will require a NPDES Stormwater Permit for Construction Activities. The Proponent can access information regarding the NPDES Stormwater requirements and an application for the Construction General Permit at the EPA website: <https://www.epa.gov/npdes/2017-construction-general-permit-cgp>.

The Proponent should also determine if a U.S. EPA NPDES Dewatering General Permit is required prior to commencing Project construction (<https://www.epa.gov/npdes-permits/dewatering-general-permit-dgp-massachusetts-new-hampshire>).

MassDEP appreciates the opportunity to comment on the Project. If you have any questions regarding these comments, please do not hesitate to contact JoAnne Kasper-Dunne, Central Regional Office MEPA Coordinator, at (508) 767-2716.

Very truly yours,



Mary Jude Pigsley
Regional Director

cc: Commissioner’s Office, MassDEP



Working with you to protect
the environment for wildlife

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August 28, 2020

Comments to MEPA Northeast Energy Center, LLC LNG Facility EFSB 18-04 / D.P.U. 18-96

Please accept the following comment to MEPA from No Fracked Gas in Mass & the Berkshire Environmental Action Team (BEAT). BEAT works to protect the environment for wildlife in support of the natural world that sustains us all. No Fracked Gas in Mass works to stop the expansion of fossil fuel infrastructure in the Northeast states and to promote energy efficiency and sustainable, renewable sources of energy and local, permanent jobs in a clean energy economy.

The Revised Project Description for the Northeast Energy Center includes some details of concern regarding the mandated Massachusetts state laws of the Global Warming Solutions Act and the 2050 Decarbonization Roadmap, as well as concerns for environmental impacts on the already environmentally overburdened host community of Charlton.

INCOMPATIBILITY WITH STATE ENVIRONMENTAL LAW

Chief among our concerns are a new meter and regulation station and undetailed “options to support & facilitate the development of natural gas service to Charlton and neighboring communities”.

“Utilizing National Grid’s existing capacity on the Tennessee Natural Gas Pipeline Company’s (TGP) interstate pipeline, gas will be accessed from a new meter and regulation station tap and delivered to the facility station by a short interconnection main.¹”

“The Project ... is exploring options to support & facilitate the development of natural gas service to Charlton and neighboring communities as a benefit of the TGP Meter & Regulation (“M&R”) facility currently planned to provide the project with natural gas supply. Access to gas would allow the residents to have access to clean & cost effective gas while also facilitating industrial

¹ [“NEC Supplemental Response to EFSB-G-7”](#), Cover letter to Secretary Theoharidies, page 1. (PDF document page 3). <https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/12515530>. Also Attachment E, Project Notification Form sent to MHC, page 97 (PDF document page 99).

development for projects in need of gas supply in this region.²

Neither construction of a new metering station on the Tennessee Gas line, nor creation of new local distribution systems are consistent with State Law in Massachusetts. Increase of fossil fuel emissions is not allowed under the Global Warming Solutions Act, and seem to run counter to the 2050 Decarbonization Road Map. These two features, plus the emissions expected from other operating procedures such as gas pre-treatment, boiloff handling and liquefaction constitute a net increase in greenhouse gas emissions both upstream, on location and downstream from the proposed facility. If this administration is to remain consistent in enforcement of environmental regulations, this proceeding should include provisions for development of a “Clean Energy Business Case Analysis”, as was demanded in the Eversource purchase agreement with Columbia Gas³.

Construction of long-term infrastructure such as this, in support of the current fossil fuel based energy system, commits the region to fossil fuel use for the decades-long life of that infrastructure and disincentivizes moving toward cleaner energy solutions. Instead of making incremental and very occasional moves toward gas replacing oil or imports of foreign LNG during extreme peak demand, the Commonwealth needs to be making bold moves AWAY from fuel-based solutions altogether. To meet our Global Warming Solutions Act mandate and the timeline for decarbonization suggested by the IPCC⁴ in a timely manner, we need to be incentivizing a move to high efficiency and net-zero building retrofits and high efficiency heat pumps for heating demands, and solar and wind with grid scale storage for electric generation and meeting peak demand.

This planned infrastructure also calls for an interconnection pipeline to be laid within the DOT Right of Way along Rte. 169, a heavily used highway, either for a short course for the preferred pipeline route passing through Millennium Power’s property, or for more than twice the length along Rte. 169 to the intersection of the highway’s crossing of the Tennessee Gas Pipeline easement. Construction of “various pipeline lateral alternatives” are mentioned in passing in Attachment E - Project Notification Form and MHC Correspondence⁵ and in a brief section only specifying use of HDD for stream and road

² “[NEC Supplemental Response to EFSB-G-7](#)”, Land Section, III Consistency, 2) Adequacy of Infrastructure, Northeast Energy Center LLC EFSB 18-04/D.P.U. 18-96 Attachment EFSB-G-7(1)(S1), page 21. (PDF document page 23).

<https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/12515530>

³ D.P.U. 20-59, Joint Petition of Eversource Energy, NiSource Inc., Eversource Gas Company of Massachusetts, and Bay State Gas Company d/b/a Columbia Gas of Massachusetts for approval by the Department of Public Utilities of Purchase and Sale of Assets.

⁴ “*Staying at or below 1.5°C of global temperature rise requires slashing global greenhouse gas emissions 45 percent below 2010 levels by 2030 and reaching net zero by 2050.*” *IPCC Special Report: Global Warming of 1.5°C*, The Intergovernmental Panel on Climate Change, October 2018.

<https://www.ipcc.ch/sr15/>

⁵ “The Project will also involve construction of a pipeline lateral to the Tennessee Gas Pipeline Company, L.L.C. pipeline meter station at the power plant; various pipeline lateral alternatives are currently under consideration.” “[NEC Supplemental Response to EFSB-G-7](#)”, Attachment E - Project Notification Form and MHC Correspondence.

<https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/12515530>

crossings in the Interconnection Alternatives section⁶, with no details of construction practices and measures to protect this natural gas pipeline from compression and vibration along this busy highway road that will now have LNG tanker traffic added to its regular load.

As stated in our earlier filings with the EFSB on this project⁷, although this project is planned to be in an industrial zone, it would be adding environmental impacts to an already overburdened community,

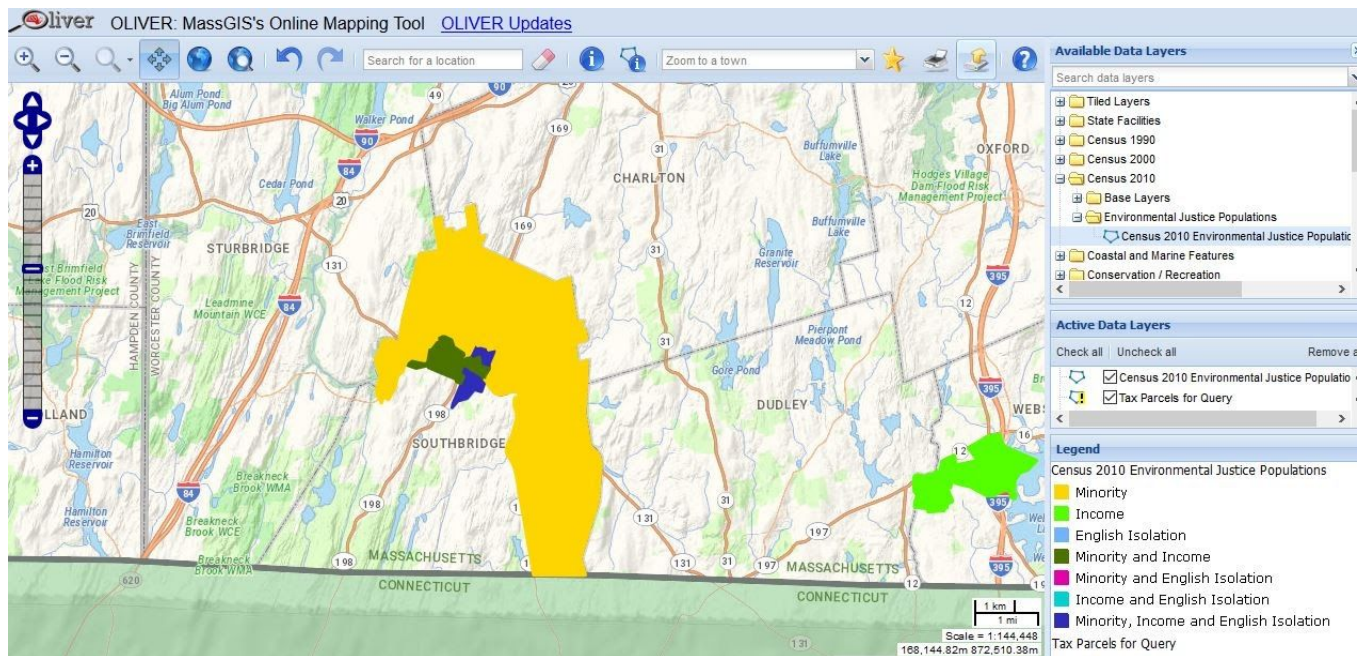
PRE-EXISTING ENVIRONMENTAL HARM

The proposed location for the Northeast Energy Center, LLC (NEC) facility is in the heart of a designated Environmental Justice Community as determined by the 2010 census, shown here on the MassGIS OLIVER Online Mapping Tool. Though the proposed site is technically zoned industrial, there are clusters of housing nearby that are already deeply affected by existing industrial infrastructure. The health of nearby residents should be carefully considered, as prescribed by Massachusetts state Environmental Justice Policy⁸.

⁶ “The installation of the interconnection pipeline using horizontal directional drilling (HDD) is proposed to cross Cady Brook and Sherwood Lane to minimize construction and environmental impacts.” “[NEC Supplemental Response to EFSB-G-7](https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/12515530)”, Interconnection Alternatives, page 69. (PDF document page 71).
<https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/12515530>

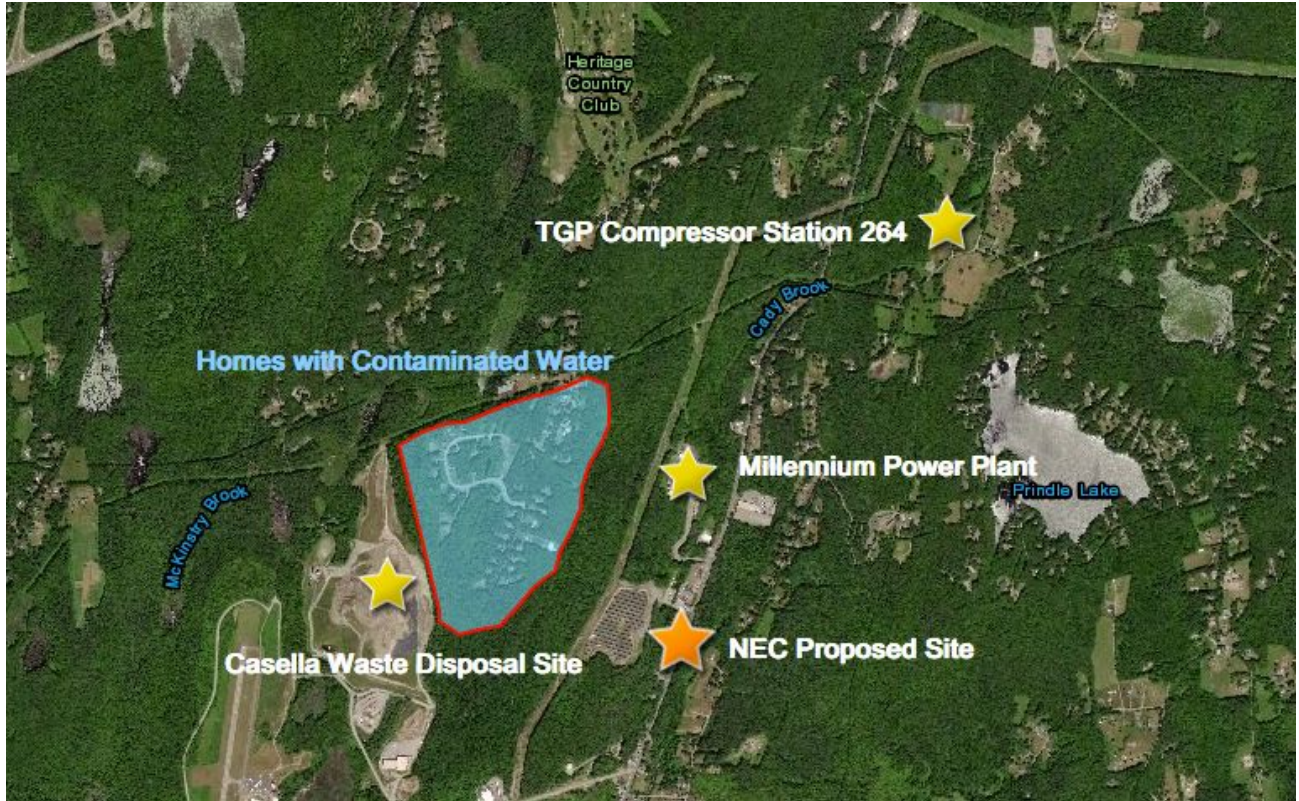
⁷ Comments to the EFSB on Northeast Energy Center, LLC LNG Facility, EFSB 18-04 / D.P.U. 18-96, Filed June 12, 2019 by Berkshire Environmental Action Team and No Fracked Gas in Mass.

⁸ Environmental Justice Policy of the Executive Office of Energy and Environmental Affairs. January 2017.
https://www.mass.gov/files/documents/2017/11/29/2017-environmental-justice-policy_0.pdf



It is less than a half mile from the Millennium Power Plant, and three quarters of a mile from the Casella Waste Disposal site. Within the center of this triangle is a group of homes with wells already contaminated by the Casella site.⁹

⁹ Source: Berkshire Environmental Action Team / No Fracked Gas in Mass mapping of existing and proposed infrastructure, based on Google Map search and NEC's filing. <https://arcg.is/10y4qy>



WATER CONTAMINATION

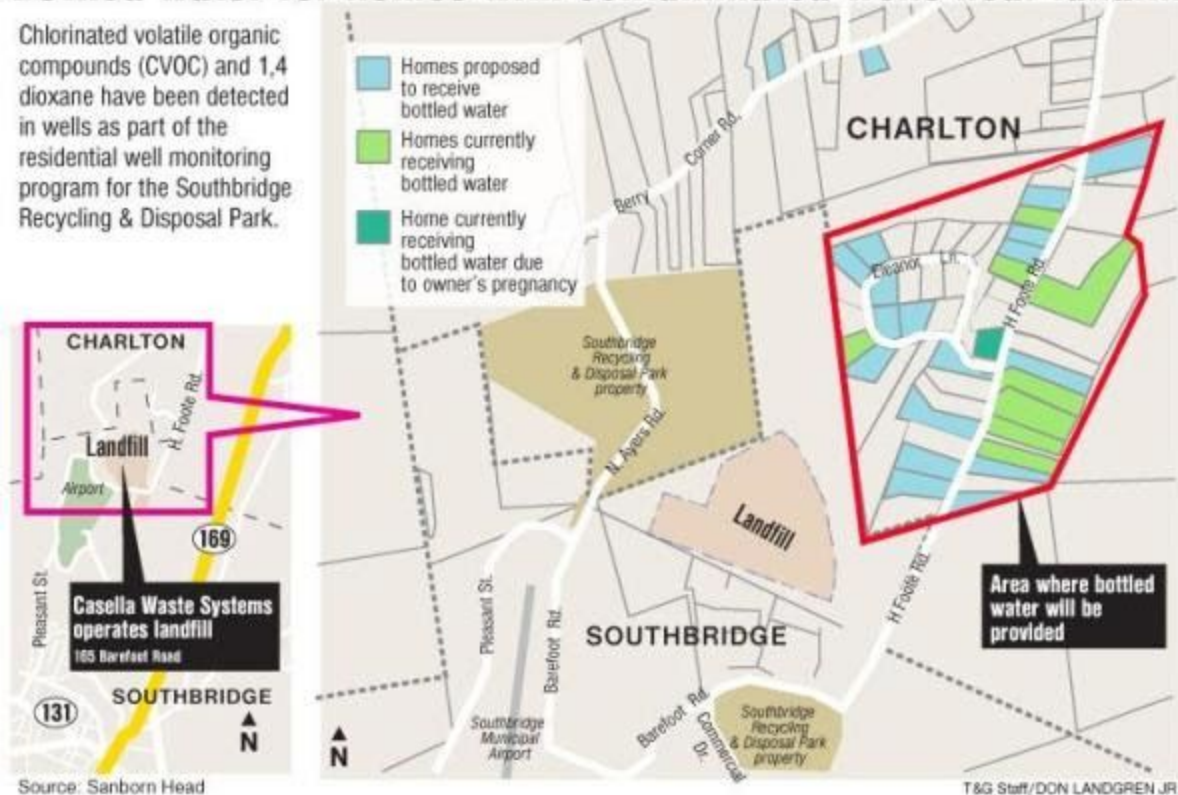
The town has two main sources of water contamination - the Casella site and Methyl Tertiary-Butyl Ether (MTBE) contamination by former ExxonMobil gas tanks at the LaMountain Service Station¹⁰. The result is approximately 200 homes requiring clean water to be transported in (currently bottled water). Casella and Exxon have settled with the town to create a water pipeline loop, but this project remains unfinished after multiple delays¹¹.

¹⁰ "Charlton water line delayed another year" by Debbie LaPlaca, Worcester Telegram, Oct 4, 2017 <https://www.telegram.com/news/20171004/charlton-water-line-delayed-another-year>

¹¹ "Some residents who were previously told they could expect clean municipal water from their taps by year's end will likely have to wait until 2021, according to a posting on an ExxonMobil website, www.ourcharltoncommitment.com." Construction of Charlton water line delayed, ExxonMobil says, Debbie LaPlaca, Worcester Telegram, June 7, 2018 <https://www.telegram.com/news/20180607/construction-of-charlton-water-line-delayed-exxonmobil-says>

Bottled water for homes with contaminated wells near landfill

Chlorinated volatile organic compounds (CVOC) and 1,4 dioxane have been detected in wells as part of the residential well monitoring program for the Southbridge Recycling & Disposal Park.



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The NEC site is also just 1.3 miles from Tennessee Gas Compressor Station 264 to the north-northeast, and 2.25 to the center of Southbridge to the south-southeast, and approximately 6.5 miles from the LaMountain Service Station site¹³.

Well contamination from the Casella landfill is substantial:

“... at present 88 wells have been contaminated with one or more pollutants – 45 in Charlton and 43 in Sturbridge, demonstrating the risk to the greater aquifer. Pollutants found in wells include lead, 1,4-dioxane, trichloroethylene and other chlorinated volatile organic compounds, and arsenic. Thirty-six wells have had concentrations of

¹² *Southbridge Voices for Bethlehem*, Build a Better Bethlehem website for Bethlehem, NH citizens opposing expansion of a local Casella Waste Disposal Site. <http://buildabetterbethlehem.org/voices> - Graphic from Sanborn Head & Associates. <https://www.sanbornhead.com/>

¹³ ExxonMobil’s “Our Charlton Commitment” website, LaMountain page of History section. <https://www.ourcharltoncommitment.com/exxonmobil-lamontain/>

*lead, 1,4-dioxane, or other pollutants that exceed safe drinking thresholds — 9
Charlton and 27 in Sturbridge”¹⁴.*

AIR QUALITY CONCERNS

Environment New Jersey rated Millennium Power Plant the 5th most polluting in Massachusetts in its report on America’s most polluting power plants¹⁵. This facility and the nearby Tennessee Gas 264 Compressor Station run on fracked gas, which carry significant emissions through normal operations. *(See Appendix A on page 10 of this filing.)*

This proposal will yield even more emissions from fracked-gas-powered equipment to this same industrial corridor and the homes it contains. As shown in Table 5.3.1.4, expected emissions from this facility include 48 tons per year (tpy) of carbon monoxide, 27 tpy of nitrous oxides and a mix of VOCs, sulfur dioxide and particulate emissions.¹⁶

This chemical profile of emissions is very similar to those of compressor stations and gas-fired electric generation plants¹⁷, both of which are within 1.3 miles or less of the proposed LNG facility, and located within the same valley. Effects of these chemicals are a rise in malignant neoplasms, blood, immune, and endocrine system disruption, chromosomal abnormalities, mental, behavioral and nervous system disruption and more. For an in-depth study of health effects of compressor stations in upstate NY, see Chapter 3

¹⁴ *Environmental Groups Sue Casella Systems Over Contaminated Drinking Wells and Toxics Pollution from a Leaking Landfill*. Toxics Action Center, September 30, 2018
<https://toxicsaction.org/environmental-groups-sue-casella-systems-over-contaminated-drinking-wells-and-toxics-pollution-from-a-leaking-landfill/>

¹⁵ *America’s Dirtiest Power Plants: Polluters on a Global Scale*. Jordan Schneider and Julian Boggs, Environment New Jersey, September 2014, pg. 31
https://environmentnewjerseycenter.org/sites/environment/files/reports/NJ_Dirtiest_power_plants_scrn_2.pdf

¹⁶ *Amended and Restated Petitions before the Massachusetts Energy Facilities Siting Board for Approval to Construct a Natural Gas Liquefaction, Storage, and Truck-loading Facility in Charlton, Massachusetts*, Submitted to Docket #EFSB18-04 by NEC, page 5-27 (PDF page 124).
<https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/10471678>

¹⁷ *Health Effects Associated with Stack Chemical Emissions from NYS Natural Gas Compressor Stations: 2008-2014: A Technical Report Prepared for the Southwest Pennsylvania Environmental Health Project underwritten by the Park Foundation*, October 2017, Russo & Carpenter, Institute for Health & the Environment, Rensselaer, NY, pgs. 123 & 124.
https://gallery.mailchimp.com/288ec92ff904f6e9cb80bdb20/files/cd1e56fb-508a-4edd-9e8f-36ee43142c14/Health_Effects_Associated_with_Stack_Chemical_Emissions_from_NYS_Natural_Gas_Compressor_Stations_2008_2014.pdf

of Health Effects Associated with Stack Chemical Emissions from NYS Natural Gas Compressor Stations, starting on page 121.¹⁸

Table 5.3.1.4 Emissions Summary

Pollutant	Facility Annual Emissions (tpy)	PSD Major Source Threshold (tpy)*	NSR Major Source Threshold (tpy)
VOC	3.9	250	50
CO	48	250	not applicable
PM	3.7	250	not applicable
NO _x	27	250	50
SO ₂	1.0	250	not applicable

* The federal PSD program also regulates greenhouse gas (GHG) emissions, but only for facilities already subject to the program for another pollutant.

It is unclear whether these estimated emissions include the flaring that will take place on startup and shutdown of the liquefaction process, or from the continuous pilots for both the warm and cold flares.¹⁹

Situated in a valley, these emissions have the ability to pool in low pressure / low wind weather conditions²⁰ and compound those already impacting the neighborhoods along Route 169.

The people of Charlton and Southbridge should not be made to bear the brunt of yet another industrial site in such an already concentrated area, especially with so many homes within the same region of town. As this area of town is already designated as an Environmental Justice Community, it should be in the interest of MEPA, DEP and

¹⁸ *Health Effects Associated with Stack Chemical Emissions from NYS Natural Gas Compressor Stations: 2008-2014: A Technical Report Prepared for the Southwest Pennsylvania Environmental Health Project underwritten by the Park Foundation, October 2017, Russo & Carpenter, Institute for Health & the Environment, Rensselaer, NY, pgs. 123 & 124.*
https://gallery.mailchimp.com/288ec92ff904f6e9cb80bdb20/files/cd1e56fb-508a-4edd-9e8f-36ee43142c14/Health_Effects_Associated_with_Stack_Chemical_Emissions_from_NYS_Natural_Gas_Compressor_Stations_2008_2014.pdf

¹⁹ *Amended and Restated Petitions before the Massachusetts Energy Facilities Siting Board for Approval to Construct a Natural Gas Liquefaction, Storage, and Truck-loading Facility in Charlton, Massachusetts, Submitted to Docket #EFSB18-04 by NEC. Page A-7 (PDF page 184)*
<https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/10471678>

²⁰ *How's the Weather? Environmental Health Project on Air Exposure from Fracking from Southwest Pennsylvania EHP, instructional video on Vimeo.* <https://vimeo.com/75028523>

the other agencies within the Environmental Justice Working Group to protect the residents from further harm.

Thank you for considering our comments.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jane Winn".

Jane Winn, *Executive Director*
Berkshire Environmental Action Team

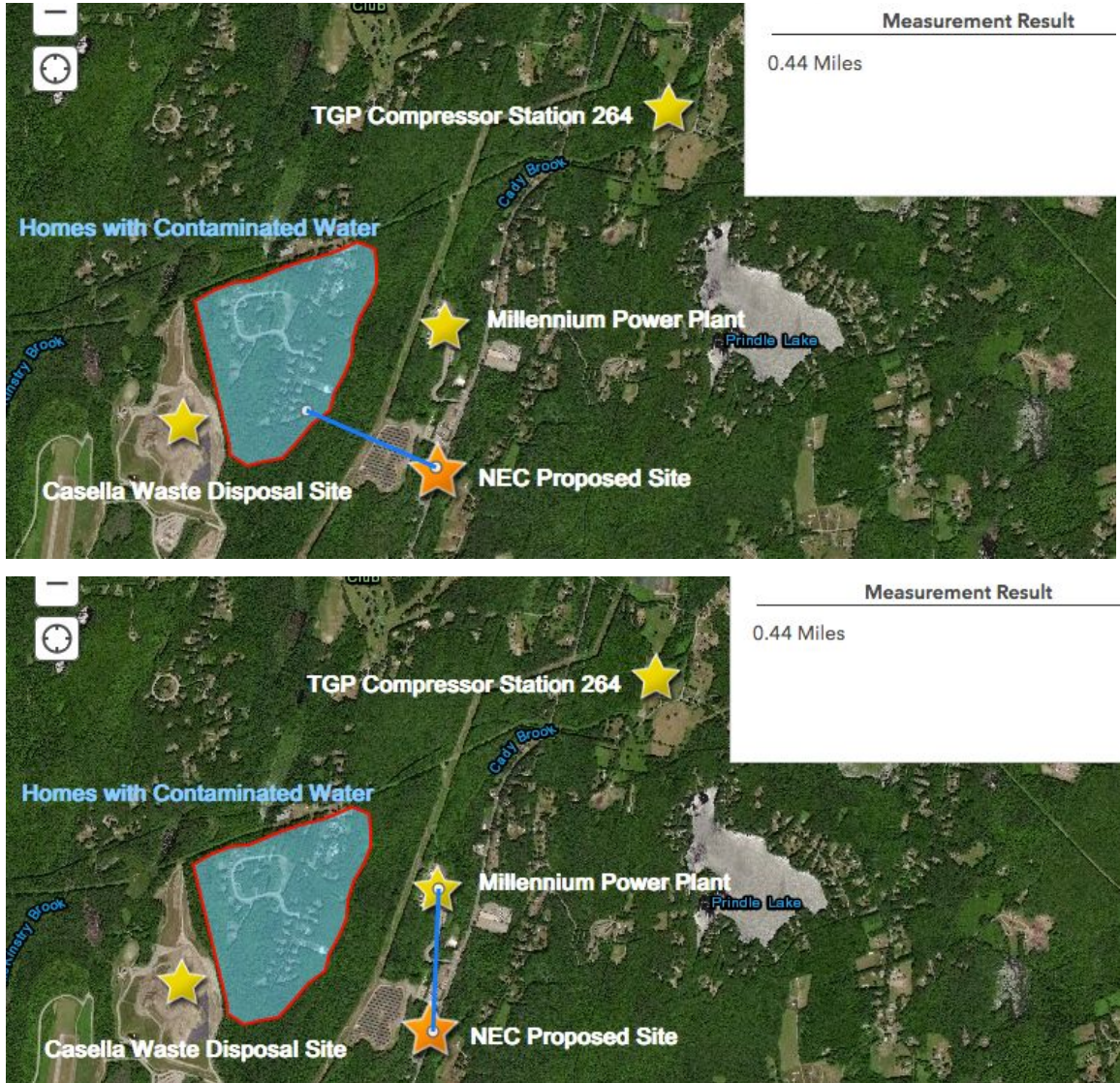
A handwritten signature in black ink, appearing to read "Rosemary Wessel".

Rosemary Wessel, *Program Director*
No Fracked Gas in Mass, A Program of Berkshire Environmental Action Team

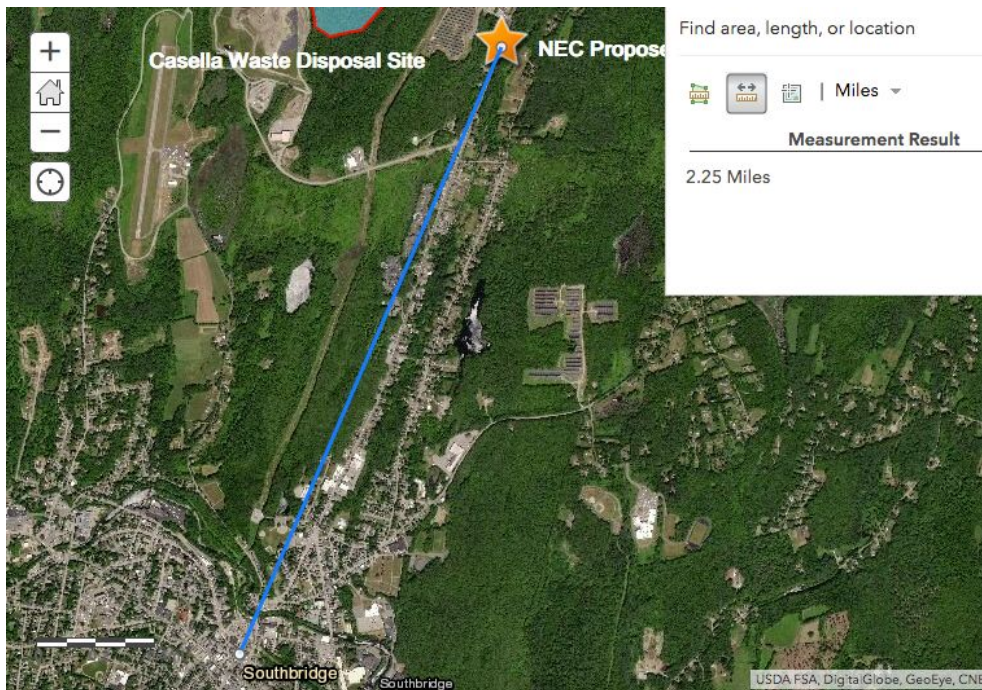
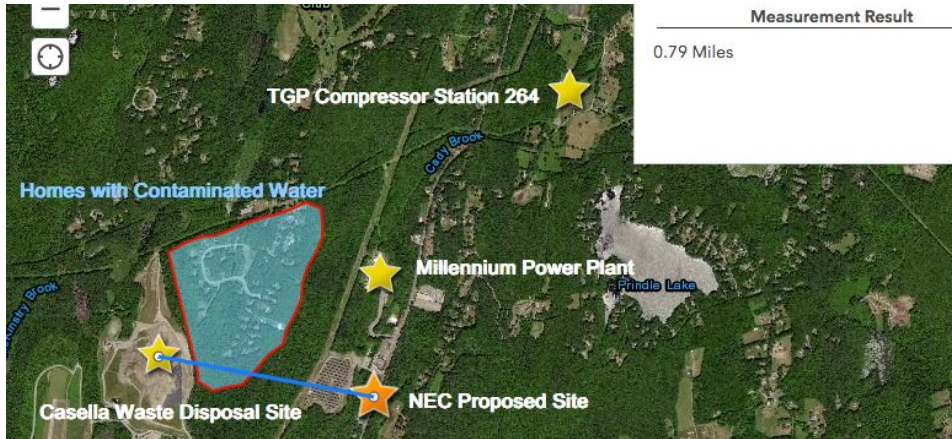
cc:

Attorney General Maura Healey
Kathleen Theoharides, Secretary of Energy and Environmental Affairs
Charles Baker, Governor of the Commonwealth of Massachusetts

**APPENDIX A:
PROXIMITY OF THE PROPOSED NEC SITE TO OTHER INFRASTRUCTURE, HOMES WITH
ALREADY CONTAMINATED WELLS AND THE CENTER OF SOUTHBRIDGE²¹**



²¹ GIS map analysis of relative proximity of industrial sites and homes with already impacted water wells by No Fracked Gas in Mass / Berkshire Environmental Action Team.



This facility is only 2.25 miles from the densely populated center of the town of Southbridge.

P♦L♦A♦N
PIPE LINE AWARENESS NETWORK
FOR THE **NORTH EAST, INC.**
www.plan-ne.org

August 31, 2020

VIA EMAIL

Secretary Kathleen Theoharides
Executive Office of Energy and Environmental Affairs
Attn: MEPA Office, EEA No. 16251
Anne Canaday, MEPA Analyst
100 Cambridge Street, Suite 900
Boston MA 02114

Re: EEA #16251, Northeast Energy Center, Liquefied Natural Gas Facility in Charlton, MA

Dear Secretary Theoharides:

The Pipe Line Awareness Network for the Northeast, Inc. (“PLAN”) submits the following comments in response to the Environmental Notification Form (“ENF”) submitted by Northeast Energy Center (“NEC” or the “Company”) for its proposed Liquefied Natural Gas (“LNG”) Facility in Charlton, MA (the “Project” or “Facility”).

As described in the ENF, NEC proposes to construct an LNG facility consisting of natural gas liquefaction, LNG storage, and truck loading bays. The liquefaction system would be capable of producing approximately 250,000 gallons of LNG per day. The LNG storage would be a single, field-erected LNG storage tank with a capacity of two million gallons. LNG from the Facility would subsequently be transported by truck across the Commonwealth to gas company customers such as National Grid. Additionally, the Company proposes, for the longer term, to find a market for the Facility’s LNG in the school bus, rail, heavy trucks, and marine transportation sectors and the power generation sector.

The Company’s proposed removal of 53 public shade trees, significantly more than the MEPA threshold of five, is the trigger that brought this Project before MEPA Review so late in the process. The Project is currently at the Energy Facilities Siting Board (“EFSB”) docketed as

EFSB 18-04, where evidentiary hearings have been held and briefs already filed. PLAN was granted¹ Limited Participant status in that proceeding. The proposed Project change from the Preferred to the Alternate Interconnection Route now requires a one-mile pipeline running alongside Route 169, the use of the Commonwealth's Right Of Way ("ROW") along that road, and the need for a new meter and regulating station to be built by Tennessee Gas Pipeline Company, L.L.C. ("TGP"). This new meter station will be in addition to the meter station planned by TGP in Longmeadow just six towns down the 200Line.

In addition to the public shade tree impact that triggered review, the Project presents multiple environmental impacts that must be reviewed in light of the Commonwealth's commitment to net zero by 2050. A project that may have seemed a good idea back in 2015 is no longer such a good fit. The Attorney General has recently petitioned for an investigation into the future of local gas distribution companies ("LDCs") in the Commonwealth,² the very customers this project seeks to attract. Therefore the Project requires an environmental impact report reflective of the present situation on the ground.

Alternate Interconnection Route now Preferred Route

The Company now proposes to change from the Preferred to the Alternate Interconnection Route for its Project. This will necessitate the removal of 53 public shade trees³ to accommodate their interconnect pipeline run down the Commonwealth's right-of-way ("ROW") of Route 169, ENF at B-16. The Company's declaration in the cover letter to the ENF that "the project team determined that the construction of the facility driveway will require the removal of more than five 'public shade trees' in the DOT right-of-way (ROW)" seems disingenuous when the reality is that the removal of 53 public shade trees is required for not only the driveway but also the one-mile interconnect pipeline leading to the driveway, a one-mile long cleared swath of undefined width.

It appears that the Commonwealth is being asked to allow a pipeline to be placed within the ROW of Route 169 (on property owned by the Commonwealth), with an unidentified amount of temporary workspace and temporary easements that may be required on private land, in addition to the granting of an easement by the Commonwealth. If the permanent or "temporary" construction easements for the interconnect fall outside of the Commonwealth's 30' ROW, will the impacted homeowners & landowners require eminent domain takings? A cursory

¹ See *RULING ON PETITIONS TO INTERVENE AND PETITIONS TO PARTICIPATE AS A LIMITED PARTICIPANT of the Energy Facilities Siting Board Hearing Officer in EFSB18-04* (available at <https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/10921402>).

² See *Petition of the Attorney General, D.P.U. 20-80* (available at <https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/12255773>).

³ "Of these 93 trees, it is anticipated that 53 public shade trees will have to be removed. This is above the MEPA threshold of 5 shade trees."

investigation at the Worcester Registry of Deeds shows none have been granted to date. Will a value be assigned to those public shade trees as is common practice and some compensation be awarded the Town of Charlton or the private homeowners? There is no mitigation, payment in lieu of or otherwise, provided in the ENF for the loss of public shade trees.

The Commonwealth would not have adopted M.G.L. Chapter 58 to protect and govern our public shade trees if we did not place significant value on them whether within a state highway, designated scenic road or not. ***If the Project is allowed to proceed as planned, please require adequate mitigation or compensation for the removal of these public shade trees.***

Alternatives Analysis

The alternatives provided in the ENF are deficient because they are only natural gas alternatives options, not true alternatives (ENF at B-5).

The Baker administration has established that our climate realities necessitate “a focus on energy efficiency improvements and the utilization of electricity to heat our homes and power our transportation sector.”⁴ In addition, Governor Baker has now committed the Commonwealth to net zero by 2050.⁵

Yet instead of shifting away from fossil fuel consumption, the ENF at 12 also suggests “future infrastructure expansion such as natural gas distribution service” for Charlton. Embarking on new gas distribution systems and conversion of heating, cooking and hot water appliances some time in the late 2020s or 2030s is completely incompatible with climate change adaptation and mitigation requirements. The ENF at 13 and B-6 describes “providing natural gas for vehicle fueling” “over the longer term.” NEC has described future plans⁶ to target the school bus,⁷ rail,

⁴ “Baker-Polito Administration Releases First Comprehensive Energy Plan,” Dec. 12, 2019 (available at www.mass.gov/news/baker-polito-administration-releases-first-comprehensive-energy-plan). See also *Governor Baker’s Executive Order 569: Establishing an Integrated Climate Change Strategy for the Commonwealth*, issued on September 16, 2016.

⁵ “Baker-Polito Administration Releases Draft Letter Establishing Net Zero Emissions Target,” February 26, 2020 (available at <https://www.mass.gov/news/baker-polito-administration-releases-draft-letter-establishing-net-zero-emissions-target>).

⁶ Initial filing with the Energy Facilities Siting Board Docket EFSB18-04 (available at <https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/9790072>), page 3-7.

⁷ <https://www.youtube.com/watch?v=DuQ6AvSSkPY>, at 28:58

heavy trucks, and marine transportation sectors⁸ and the power generation sector. See also Attachment A.

The Company's "justification" for this Project is outdated. This Project was proposed five years ago as part of a precedent agreement in D.P.U. 15-129. The precedent agreement provides for 15 years of LNG, with the original in-service date to be spring 2020.⁹ It makes no sense to proceed with a facility that will take at least two to three years to come on line (ENF at 25) to bring an energy source that we need to be moving away from much more rapidly. We do not have time to merely switch from one fossil fuel to another when superior clean renewable and demand-side options are available. Peak shaving could be accomplished by moving gas customers to electrification on the (ever-greening) grid, and also by increasing energy efficiency and demand response measures and programs.

Increased consumption of any fossil fuel, with the resulting carbon and methane emissions, is antithetical to complying with our GWSA mandates and the Commonwealth's commitments.

Conclusion

The ENF has not adequately analyzed the project, its continued necessity or any potential non-gas alternatives, nor provided sufficient mitigation measures for all environmental impacts. The Company should be required to submit an environmental impact report (EIR).

Respectfully submitted this 31st day of August, 2020.



Kathryn R. Eiseman, President & CEO
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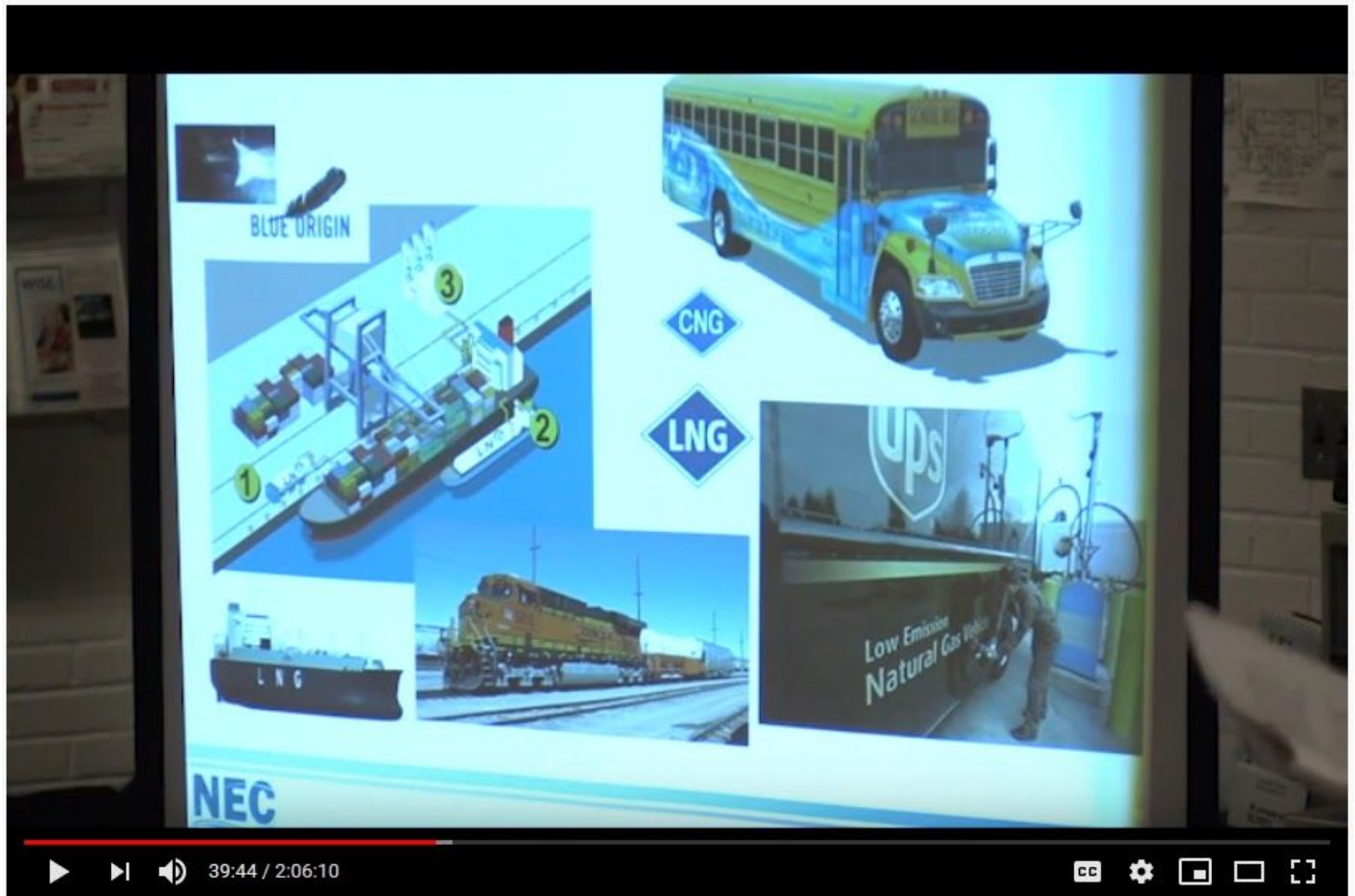
Cathy Kristofferson, Secretary
Pipe Line Awareness Network for the
Northeast, Inc.
244 Allen Road
Ashby, MA 01431
kristofferson@plan-ne.org
(978) 204-3940

CC: EFSB18-04 docket

⁸ Id, at 39:44 "while many hope to see great expansion in electric vehicles, LNG is increasingly becoming the fuel of choice across the world."

⁹ *Boston Gas Company*, D.P.U. 15-129, May 13, 2016 order at 6 (available at <https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/9204666>).

Attachment A - Presentation of NEC to the Nov. 14, 2018 Public Hearing of the Energy Facilities Siting Board



Public Hearing for LNG Northeast Energy

118 views • Nov 14, 2018

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