

South Coast Neighbors United

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South Coast Neighbors United, Incorporated is a group of concerned residents from the South Coast of Massachusetts who have come together to stop the Access Northeast Project, a proposal to develop a major Liquefied Natural Gas (LNG) storage facility and pipeline expansion in the residential communities of Acushnet and East Freetown. Eversource Energy, National Grid and Spectra Energy are the lead developers, planning to significantly expand their existing Algonquin pipeline system through these towns to feed a massive LNG storage facility they intend to build on Peckham Rd in Acushnet. They claim that the expanded pipeline and storage facility are necessary to meet the energy needs of New England electricity consumers and that the new infrastructure will help to contain electricity rates in New England. South Coast Neighbors United, Inc. opposes this project for a multitude of reasons, including:

1. New England doesn't need additional LNG storage.

- A. According to Tom Kiley, president of the Northeast Gas Association, "We have the highest concentration of liquefied natural gas in the country right here (MA)." ¹
- B. New England has adequate existing LNG vaporization capacity to meet the region's winter peak deliverability needs. The Access Northeast Project would be built for the coldest 0-30 peak days of the year when more gas is needed due to simultaneous gas demand for home heating and electric generation needs. Some years the proposed added gas capacity would be completely unnecessary.
- C. Two existing LNG import terminals in Gloucester currently have the combined capacity to store 3.4 billion cubic feet (bcf) and sit largely idle. Industry experts say that these existing facilities are well-positioned to respond to market conditions if contract arrangements are in place. ³
- D. The two enormous storage tanks proposed for Acushnet will have a combined storage capacity of 6.8 bcf. Each tank will measure 170 feet tall (18 $\frac{1}{2}$ stories) by 270 feet wide. ⁴
- E. Most people know of the existing LNG storage tank on Interstate 93 in Boston with the Rainbow Swash design on it. For comparison, this tank is only 140 feet tall and even smaller in width. The combined storage capacity of the two proposed Acushnet tanks would be 6X that of the Boston tank, making them the largest LNG storage tanks in the Northeast United States, if not the US.
- F. The proposed Acushnet expansion is not intended to provide natural gas to heat our homes, but rather to power plants throughout the Northeast on the 0-30 coldest days of the year. The only time this would be necessary, however, is when the power plants have not proactively made arrangements to purchase the gas, reserving an amount sufficient to meet the anticipated need.
- G. We are being taken from a position where we MAY have a minor shortfall of gas in some winter months (due to poor planning by the power plants) to a situation where we will have a significant LNG storage overcapacity. ⁵ We already have the ability to meet winter electricity needs through plants that generate electricity using other fuels and/or via existing and underutilized LNG import facilities in Massachusetts. ³
- H. Industry experts have speculated that the true purpose of this pipeline and storage expansion is to give the gas company the ability to export LNG for profit. Local residents should not be forced

http://www.gdfsuezna.com/media/files/files/908b26be/ENERGYZT Report Winter Reliability Analysis FINAL 082015.pdf

¹ Northeast Gas Association http://www.northeastgas.org/about Ing.php

² Skipping Stone Report http://www.clf.org/wp-content/uploads/2015/09/Solving-New-Englands-Gas-Deliverability-Problem.pdf

³ WBUR News http://www.wbur.org/2015/03/11/natural-gas-lng-everett-terminal

⁴ Access Northeast Project Overview https://www.ecori.org/s/Access-Northeast-Factsheet-1pager.pdf

⁵ Energyzt Advisors, LLC

to bear the burden and risks of the processing and storing of this volatile liquid for corporate monetary gain. ⁶

2. New England doesn't need additional LNG pipelines.

- A. On 8/1/13, Senator Edward Markey commissioned an independent report on the gas leaks and its costs to consumers. This report concluded that the gas companies should not be able to pass the cost of lost gas on to consumers, and the gas companies need to fix the leaking gas pipes at the same time. The report also determined the following:
 - i. There are currently over 20,000 known gas leaks in MA.
 - ii. MA Ratepayers paid between \$640MM \$1.5B from 2000-2011 for gas they never received due to it leaking from the pipelines.
 - iii. Under current regulations, consumers pay for 100% of the gas lost through the companies' leaky pipes and the companies are not forced to repair the leaking pipes unless they are deemed explosive.
 - iv. MA gas companies currently replace less than 4% of their leaking gas pipes per year.
 - v. "At least" 99 billion cubic feet of natural gas was "lost and unaccounted for" from 2000-2011 in Massachusetts alone.
- B. The gas companies have no motivation to fix leaking gas pipes because current regulations permit companies to bill consumers for the gas lost.
- C. The gas lost from leaking gas pipes is bad for the environment (kills trees) and for people; it can cause property damage, health issues and costs consumers money.
- D. As a result of leaky pipes, fugitive methane is contributing to greenhouse gas emissions.⁸
- E. The proposed Freetown/Acushnet pipeline project will deliver up to 1 billion cubic feet per day of natural gas.³
- F. If the existing gas pipes were fixed to stop the constant leaking of gas, the existing pipeline and storage facilities should pipe in more than enough gas to heat homes and feed gas fired electric power plants all year long.

3. Condensing natural gas to LNG causes harmful chemical emissions into the air.

- A. The current LNG facility at the Peckham Road, Acushnet location does not compress natural gas into LNG. The facility trucks in LNG, stores it as LNG and then trucks it out as LNG during times of high demand to the power plants. If the proposed project is allowed, the liquefaction process used to compress natural gas into LNG will cause dangerous emissions to nearby residents.
- B. The proposed Acushnet expansion project will bring in natural gas in its vapor form through the expanded pipeline and then condense it on site into LNG, using a process that will take every 600 gallons of natural gas and turn it into 1 gallon of LNG. The process will lead to significant emissions of harmful chemicals, namely Methane, Nitrogen Oxide (NOx), Volatile Organic Compounds (VOCs) and Formaldehyde (H2CO), Particulate Matter (PM 10 and 2.5) and Sulfur Dioxide (SO2) and their impacts are not currently aggregated, but the exposure is cumulative.9

⁶ Marcellus Drilling News http://marcellusdrilling.com/2015/02/access-northeast-pipeline-pulling-ahead-of-kinders-ned-project/

⁷ A report prepared for Sen. Edward J. Markey http://www.markey.senate.gov/documents/markey lost gas report.pdf

⁸ Inside Climate News http://insideclimatenews.org/news/24082015/mapping-invisible-natural-gas-leak-methane-massachusetts-google-edf

⁹ Stop the Algonquin Pipeline Expansion https://sape2016.files.wordpress.com/2014/01/infrastructure-health-impacts-070814-ld-md-pm-pe.pdf

- C. Methane gas is a major contributor to global warming. In the first two decades after methane is released into the atmosphere, it is 79 to 105 times more destructive than Carbon Dioxide (CO2) at destabilizing the climate.
- D. Nitrogen Oxide is associated with respiratory disease.
- E. Volatile Organic Compounds are neurotoxins, hepatotoxins, reproductive toxins, fetotoxins, and dermatoxins.
- F. Formaldehyde is a known cancer causing substance.
- G. Particulate Matter contributes to human health risks. With a small increases in airborne particulate matter exposure humans risks increase for Cardiovascular disease, Respiratory disease, Fetal and neonatal illness, Childhood illnesses: Pediatric allergies, ear/nose/throat and respiratory infections early in life, impaired lung development in children that affects lung function in adulthood, asthma, bronchiolitis, exacerbation of existing asthma and exacerbation of cystic fibrosis, Geriatric illnesses: including exacerbation of chronic pulmonary disease, congestive heart failure, heart conduction disorders, myocardial infarction, and coronary artery disease, and diabetes in the elderly.
- H. Sulfur Oxide is associated with respiratory illness and it is toxic.
- I. Air sample testing near compressor stations¹⁰ and of gas transmission lines¹¹ resulted in over 60 known carcinogens, neurotoxins and endocrine disrupters, including: benzene, dimethyldisulfide, trimethyl benzene, diethyl benzene, tetramethyl benzene, carbon disulfide, nephthalenes, methyl pyridine, carbonyl sulfide and toluene, among others.
- J. Chronic exposure to low levels of benzene can lead to anemia, a decrease in blood platelets, and may increase one's risk of getting cancer (US EPA, 2012).¹² 13
- K. Chronic exposure to toluene over time can lead to problems in the nervous system, kidneys and liver (US EPA, 2012).
- L. Ethylbenzene has been found to cause liver and kidney damage as well as being ototoxic after chronic exposures (US EPA, 2012).
- M. Chronic exposure to Xylene can cause damage to the nervous system (Jacobsen, 2012).

4. Electric rate payers will pay for this proposed expansion via a tariff-induced fee on their monthly bill.

- A. The proposed pipeline and storage expansion will be paid for by a "cost recovery" tariff ¹⁴ on electric bills as proposed by the Baker administration and approved by the DPU on Docket 15-37. The cost of this project will be added to our electric bills in the section entitled Other Costs.
- B. Demand for electricity is only projected to grow at a rate of 1% annually due largely to efficiency.
- C. In a report dated November 2015 ¹⁵, the Massachusetts Attorney General's Office concluded that expanding our regions' gas pipeline and storage capacity is unnecessary and not in the best interest of the MA consumers.

¹⁰ Wolf Eagle Environmental report for Town of Dish, TX http://townofdish.com/objects/DISH - final report revised.pdf

¹¹ Environmental Health Perspectives Volume 122 Number 8 http://ehp.niehs.nih.gov/wp-content/uploads/122/8/ehp.1307866.pdf

¹² Report for Environmental Protection Agency

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¹³ Southwest Pennsylvania Environmental Health Project http://www.environmentalhealthproject.org/wp-content/uploads/2012/03/Compressor-station-emissions-and-health-impacts-02.24.2015.pdf

¹⁴ New England States Committee on Electricity letter http://nescoe.com/uploads/ISO assistance Trans Gas 1 21 14 final.pdf

¹⁵ Report prepared by Analysis Group for MA Attorney General http://www.mass.gov/ago/docs/energy-utilities/reros-study-final.pdf

- i. "This study demonstrates that we do not need increased gas capacity to meet electric reliability needs, and that electric ratepayers shouldn't foot the bill for additional pipelines"
- ii. "Rate-payers will be subsidizing pipelines that won't help them".
- D. Not only are electric rates unlikely to decrease, but the overall bill will surely go up for a lengthy period of time with the added cost of building the infrastructure, subsidized by the ratepayers.

5. The proposed project is not good for the local residents.

- A. This is the wrong location to build an industrial pipeline and massive LNG storage facility. This Acushnet <u>industrial project</u> would be constructed in a <u>residential community</u>. The project would be in an area surrounded by homes, schools, nursing homes and hospitals. The project would bury gas lines in people's yards and restrict their use of their own property over the easement created by the installation of industrial size gas pipes.¹⁶
- B. There is minimal, if any benefit to local homeowners. Residents get the unsightly gas tanks, harmful gas emissions and leaky gas lines and in return are promised the chance of a small decrease in property taxes. That "benefit" will certainly not compensate for the 5-40% loss in market value of our properties. Landowners will, however, continue to pay taxes and hold liability on the easement.¹⁷
- C. Property values around the pipeline, expanded storage facility, and gas conversion compressor will go down because no one wants to live near an industrial chemical storage and processing center that releases toxic chemicals into the air and presents other known and unknown risks.
- D. The location of the proposed expanded Acushnet LNG storage facility and gas conversion compressor is in a residential neighborhood, 1.3 miles from the Acushnet Elementary School and Middle School and 1.04 miles from New Bedford's Pulaski Elementary School.
- E. Compressor stations, like the one proposed for the Acushnet site are noisy, whirring around the clock. The sound of a regular compressor station operating has been compared to four diesel locomotive engines running 24/7. Residents as far away as a mile can hear the racket. ^{11 18}
- F. The Proposed Acushnet LNG storage facility will require deforestation of at least 150 acres from the current 250 acre parcel containing 35-40% wetlands (preliminary estimate). Eversource has publicly acknowledged that these wetlands will be impacted by the construction of these massive storage tanks and associated processing equipment.
- G. The proposed 3 mile pipeline through East Freetown and Acushnet will eliminate many more acres of forest through an approximate 75-150 foot corridor, or "ROW", during construction. The proposed pipeline is slated to go through wetlands and the 50 foot path of the pipeline will need to remain clear as long as the pipeline is in service. 19
- H. Displacement of wetlands on property will result in flooding of neighboring properties. The profusion of vegetation in Bordering Vegetated Wetlands acts to slow down and reduce the passage of flood waters during periods of peak flows by providing temporary flood water storage and by facilitating water removal through evaporation and transpiration.²⁰

¹⁶ The Salem News http://m.salemnews.com/news/local news/land-owners-deny-access-to-pipeline-company/article 0ba61faf-f104-517c-970f-8ac0cacf43b6.html?mode=jgm

¹⁷ Lebanon Daily News http://www.ldnews.com/story/news/local/2016/01/02/pipelines-could-affect-property-values/77984160/

¹⁸ No Pipelies <u>http://nopipelies.org/compressor-stations/</u>

¹⁹ Spectra Energy Partners http://accessnortheastenergy.com/wp-content/uploads/2015/11/20151103-509431004016.pdf

²⁰ MA Department of Environmental Protection http://www.mass.gov/eea/docs/dep/service/regulations/310cmr10a.pdf

6. Risks

- A. According to Ted Gleichman of the Sierra Club's national team on natural gas, "This tragic fire in Washington State demonstrates that these (LNG) facilities are inherently dangerous."²¹
- B. LNG is natural gas cooled to 260 degrees below zero; at this temperature it (LNG) becomes a liquid. If the tank leaks, it becomes gas again, which is flammable if the circumstances are right.
- C. Based on research conducted, these may very well be the largest LNG storage tanks in the country. For the purposes of comparison:
 - i. The Boston facility can hold 331,000 barrels (the proposed expansion would be 6 times larger)
 - ii. The Everett facility can hold 974,000 barrels (the proposed expansion would be 2 times larger)
 - iii. The existing Acushnet LNG tanks can hold 145,000 barrels
 - iv. The proposed expansion would hold 1,972,000 barrels and be 14 times larger than the existing structures. The existing 40+ year old tanks would remain in place and may be a public safety concern in their own right.
- D. The United States Department of Homeland Security has identified US LNG Facilities as high profile terrorist targets, further fueling our argument against erecting these "twin towers" here.²²
- E. For the proposed 24" diameter pipeline running at 650 psi (pounds per square inch) through East Freetown and Acushnet, the "Incineration Zone" will be 660 feet (Pipeline Safety Trust). To clarify, if there is a rupture in the pipeline, anything within 660 feet will be in danger of incineration.
- F. Spectra's Safety History is replete with industrial accidents, gas leaks and safety violations. ²⁴
- G. Due to the aging of the gas pipes and the lack of repair, the pipeline safety incident rate doubled during the past decade²⁵, and incidents at LNG facilities are on the rise as well.²⁶

In Summary:

When weighing the risks and benefits of Access Northeast pipeline and storage expansion in East Freetown and Acushnet, South Coast Neighbors United has come to the conclusion that the project is not good for local residents or Massachusetts consumers. Therefore, we strongly oppose this project.

Respectfully,

South Coast Neighbors United, Inc.



²¹ Reuters http://www.reuters.com/article/us-lng-blast-analysis-idUSBREA3506Y20140406

²² NBC News http://www.nbcnews.com/id/4276348/ns/us news-security/t/are-natural-gas-ships-boat-bombs-terror

²³ Pipeline Safety Trust http://pstrust.org/wp-content/uploads/2015/09/2015-PST-Briefing-Paper-06-Thinking-About-Risk.pdf

²⁴ Pipeline and Hazardous Materials Safety Administration http://search.usa.gov/search?utf8=%E2%9C%93&affiliate=dot-phmsa&query=Spectra+Energy+Violations&commit=+Search

²⁵ CBC News http://www.cbc.ca/news/pipeline-safety-incident-rate-doubled-in-past-decade-1.2251771

²⁶ Frack Check WV http://www.frackcheckwv.net/2014/03/15/recent-fires-and-explosions-with-natural-gas-in-the-united-states/

²⁷ Catskill Citizens