COMMONWEALTH OF MASSACHUSETTS

TOWN OF ACUSHNET

122 MAIN STREET, ACUSHNET, MA 02743
LNG ADVISORY COMMITTEE



TEL.: (508) 998-0250 FAX: (508) 998-0203

Mr. Garry Rawcliffe, Chair

Mr. Kevin Gaspar Mr. Michael Cioper

Office of the Board of Selectmen

122 Main Street Acushnet, MA 02743

June 29, 2016

Dear Members of the Board of Selectmen:

Please accept the following "Report by the Acushnet Citizens Advisory Committee on LNG to the Acushnet Board of Selectmen."

This report represents our collective efforts to review and consider issues of local importance relative to the Access Northeast project. We have taken the liberty to offer numerous recommendations for your review and consideration.

Sincerely,

evin A Callagher, Chair

Dennis Maltais

John Roy

Paul Pelletier

TABLE OF CONTENTS

Acknowledgements Pa	ige 1
Introduction	ige 2 - 3
Committee Meeting Guests Pa	ige 4
Documents Posted on WebsitePa	ige 5
PUBLIC SAFETY / SECURITY Pa	ige 6 - 16
ENVIRONMENTAL / ALTERNATIVES Pa	ige 17 - 22
PROPERTY VALUES	age 23 - 25
GENERALPa	ige 26 - 30
APPENDIX	
List of Recommendations D	ocument #1
Draft By-Law	ocument #2
Meeting Agendas with Meeting Minutes De	ocument #3
EPA Letter to FERC	ocument #4
MA DED Letter to FERC	ocument #5

ACKNOWLEDGEMENTS

The committee would like to express its thanks and gratitude to the following:

- The Acushnet Board of Selectmen for having confidence in our abilities to work our way through a very controversial issue in order to make this report a credible document.
- Town Clerk Pamela LaBonte for her guidance on issues relative to public records and the Massachusetts Open Meeting Law.
- Ms. Cathy Murray for serving as the committee clerk and for documenting the activities of our meetings.
- Board of Selectmen Administrative Assistant Lisa Leonard for her assistance in keeping the town website updated on the committee's efforts.
- The Acushnet Cable Television Committee for televising each of our meetings live and for replaying them on Channel 18.
- The members of South Coast Neighbors United for their attendance at each of our meetings and their willingness to participate throughout this entire process.
- The representatives of Eversource, Spectra Energy and Algonquin Gas for responding to committee requests for information in a timely manner.

The committee, from its inception, has endeavored to conduct itself in a professional and transparent manner. All meetings have followed the Massachusetts Open Meeting Law, all meetings have been televised, and all meeting agendas and minutes have been posted on the town's website (www.acushnet.ma.us).

Finally, to all the residents who have reached out to the committee as a whole or individually, we thank you for caring about your community.

INTRODUCTION

The Acushnet Citizens Advisory Committee on LNG ("the committee") was appointed by the Board of Selectmen in March 14, 2016. We were tasked with the assignment of wading through the many local concerns that appeared as a direct result of the Access Northeast project selecting this community as the site of a LNG storage facility.

The residents of this community are not new to issues of great controversy. However, since this project landed on our door step in July 2015, it has been a constant source of speculation, rumor, concern and fear. It was the job of the committee to make sense of the facts and to review them through the eyes of the people that will continue to live here long after the project is completed.

No single issue, over the past thirty years, is as important to the town of Acushnet as is this one.

Over the course of the last three months, the committee has conducted informational sessions with over fifteen federal, state and local officials; as well as subject matter experts. We have officially spent 23 hours in formal meetings and countless more hours on the phone, conducting research or in discussions with neighbors and coworkers. We have taken action when necessary and, as the enclosed report will demonstrate, have made over twenty-five recommendations to the Board of Selectmen to consider.

The committee has strived to maintain a balanced approach to investigating the issues surrounding this project. We are mindful of the emotions that this expansion has elicited, while at the same time remaining faithful to uncovering the facts to shape our considerations.

As the debate on this project has unfolded we have examined statements by project opponents that have proven to be fact challenged. One such claim surrounded the potential for a "thirty mile vapor cloud" if a large release of LNG were to occur. Furthermore, statements persist that language calling for the distribution of LNG to facilities in the Northeast actually meant distribution only within Acushnet itself. These are examples of false claims that only muddle the debate over the merits of expansion.

In the end, this project will be decided by federal officials. In a letter dated June 8, 2016 from Federal Energy Regulatory Commission Chairman Norman Bay to Congressman William Keating, the following was expressed, "The Commission's decision will be based on a careful review of the consolidated record, including public comments, and will be rooted in the law, facts and science."

We trust that the same importance residents of Acushnet place in "the law, facts and science" are shared by regulators in Washington.

Our community deserves nothing less.

COMMITTEE MEETING GUESTS

Mr. Mario Tavolieri, Site Manager - LNG Facility, Peckham Road

Mr. Norman Seymour, Massachusetts Firefighting Academy

Mr. Guy Colona, National Fire Protection Association (NFPA)

Mr. Jeffrey Martin, Project Planning and Siting for Eversource Energy (and others)

Major Christopher Mason, Commonwealth of Massachusetts Fusion Center

Chief Michael Alves, Acushnet Police Department

Atty. Sarah Bresolin, Office the Massachusetts Attorney General

Mr. John Peconom, Environmental Project Manager – Federal Energy Regulatory Commission (and others)

Mr. Henry Young, Acushnet Town Planner

Ms. Merilee Kelly, Agent for the Acushnet Conservation Commission

Ms. Kelly Koska, Principal Assessor for the Town of Acushnet

Mr. Paul Chasse, CEO of the Southeastern Massachusetts Association of Realtors

Mr. Eric Johnson, ISO New England

Ms. Karen Gentile, Pipeline and Hazardous Material Safety Administration

Mr. Brian Kuta, Spectra Energy (and others)

DOCUMENTS ON TOWN WEBSITE (WWW.ACUSHNET.MA.US)

Access Northeast Presentation

South Coast Neighbors United Presentation

NFPA Presentation

Massachusetts Firefighting Academy Presentation

ISO Presentation

Spectra Energy Presentation

Draft Resource Report #11

Draft Resource Report #13

FERC Notice of Intent

FERC Notice of Scoping Meetings

EPA Letter to FERC

Massachusetts Energy Facilities Siting Board Letter to FERC

Massachusetts Department of Environmental Protection Letter to FERC

Committee Letter to FERC on Extension of Public Comment Period

Committee Letter to FERC on Risk Assessment

Committee Letter to FERC on Terrorism

Committee Letter to FERC on Property Values

Committee Letter to Eversource on Liquefaction with Response

Acushnet Fire Chief & Police Chief Letter to FERC on Distribution

PUBLIC SAFETY / SECURITY

No series of issues are the focus of heightened concern for residents of Acushnet as are those involving the safety of the public relative to the proposed LNG storage facility. We have learned, from experience and research, that natural gas – in either its gaseous state (methane) or liquid state (LNG) is highly regulated because of its inherent dangers. Given the exceptionally large amount of LNG to be stored on site, we find concerns relative to safety and security to be very real and worthy of careful, deliberate consideration.

Many residents have asked questions regarding the town's ability to fight fires, respond to explosions, control leaks and prevent potential terrorist act at the new facility if it is built. This section of the report will address many of those concerns and propose recommendations for the Board of Selectmen's consideration.

What we know:

Liquefied Natural Gas (LNG) is natural gas that has been converted to liquid form for ease or transportation or storage. When cooled to -260F, it has 1/600th the volume of gas in a liquid form (compare one beach ball to one ping pong ball). First attempts to liquefy gas occurred in 1917 and large scale commercial use began in the 1960's.

LNG, like any other hazardous material, is safe if it is kept in its container. If this liquid, is released from a container (truck tank, pipe, storage tank) it "boils" and releases vapors. It was explained to the committee by representatives of the Massachusetts Firefighting Academy that the vapor is subject to ignition at a relatively narrow range (5-15% concentration of gas and air). If vapor is ignited it will burn back to its source. A vapor cloud will not explode. However, the build-up of methane vapors inside a structure, when ignited, ignited will release energy sufficient to destroy the structure.

LNG storage facilities are designed, built, operated and maintained to keep this from happening. Federal and state regulators, insurance company representatives and the plant operators themselves are vigorous in ensuring that leaks don't occur. If they do, systems are in place at locations where leaks may occur to isolate the leak by the closing of valves, capture the released LNG and allow it to flow to an impoundment area located certain distances from ignition sources. Fire officers, after considering all factors, may allow the vapor to "boil" away, cover it with vapor suppressing foam or ignite it and let it burn. The choice of action would be based on the situation at hand.

We cite, as an example, the forty-five year history Acushnet has had with the existing LNG peak shaving facility. That plant went operational in 1971 and since that time there have been no fire incidents or leaks of LNG. Public safety officials work closely with facility management to revise emergency plans, documents that we thankfully have never needed to utilize. The committee requested, and received, from the Massachusetts Department of Public Utilities, the most recent inspection reports of the existing plant. The report confirmed what we already knew, the facility passed with flying colors.

With all that said, the spotless record of any high hazard facility changes when the first incident occurs. We do not endorse the concept that because the present facility has had a spotless safety record that any new facility would have the same. Many people have expressed concerns that the size and scope of the proposed project offers greater potential for accidents to occur. In addition, we are aware that there are components of the proposed project that we in Acushnet have no experience with. A 24 inch pipeline will carry natural gas to the facility (we presently do not have transmission pipelines in town), a process will be used to turn the gas into a liquid (the existing facility does not have this ability), 6.8 billion cubic feet of stored LNG is a great deal more than 0.5 billion cubic feet (the quantity presently stored in town) and the loading of trucks for the distribution of LNG is not something that has ever occurred from the existing Packham Road site.

On May 31, 2016 the proponents filed with FERC two draft resource reports relative to the proposed LNG facility (#11 LNG Reliability and Safety, #13 LNG Engineering and Design Material) along with several technical appendices. While these reports were submitted to FERC for their review. the committee, believes that there is value to this community to have them reviewed by independent, technical experts for comment. No one on the LNG Advisory Committee claims to be knowledgeable on LNG related engineering. We do not think it wise for the community to rely solely on the statements of the proponents or the review of one federal agency.

Public Safety & Security Recommendation #1: The Board should secure the services of a third party consultant to review the two draft resource reports issued by the proponents on May 31, 2016, as well as the remaining resource reports – as they relate to the Acushnet components of the project – scheduled to be submitted to FERC on July 22, 2016.

Public Safety Capabilities:

Questions have been asked regarding the present capabilities of Acushnet's public safety departments to respond to an incident at a LNG facility such as the one proposed by Access Northeast. For the purpose of this report, we define public safety agencies as Fire & EMS, Police and Emergency Management Agency (EMA). Prior to addressing this concern please consider the following:

- Fire & EMS: Acushnet's fire service consists of one full-time Fire Chief, three fulltime Firefighter / Paramedics, 25 call firefighters (all of which operate three fire engines and one water tanker). By comparison, in 1971 when the existing LNG facility went into operation, the department consisted of one full-time Fire Chief, three fulltime Firefighters and four fire engines. Several years ago when the Fire and EMS Departments were merged three fulltime Paramedics were trained as firefighters and 15 part-time EMT's, many of which are firefighters in other communities, round out our force.
- Police: The Acushnet Police Department consists of one Police Chief, 5 sergeants, 14 fulltime Police officers, 8 part-time Police officers, 3 dispatchers and 10 vehicles.
- EMA: An all-volunteer service, the Acushnet EMA consists of one Director, 12 volunteers and 2 support vehicles.

The committee has struggled with the question of preparedness. Given the fact that the Fire Department has changed very little in the 45 years the existing LNG facility has been in operation, a facility that has never experienced a fire based emergency, the argument could be made that the town has been adequately prepared. However, given the fact that the Access Northeast project would bring a considerably greater amount of LNG to town along with a pipeline, new processes and the potential of LNG transport vehicles rolling down Peckham Road in greater numbers, the argument could be made that we are ill prepared. The same holds true for the Police and EMA departments who would respond to potential emergencies.

In addition, the committee understands that surrounding local fire departments may be called to play a role at an LNG related incident. Future planning must also take into consideration the level of involvement and the capabilities of our mutual aid partners.

The committee admits that we lack the ability to answer this question directly. Again, we believe that the town would be well served by securing consultant services to aid in making this determination.

Public Safety & Security Recommendation #2: The Board should secure the services of qualified consultants to conduct the following studies:

- WORSE CASE SCENARIO: The process of planning is best served when it is determined what the worst case scenario would be, that event or series of events that stress local emergency response services. By establishing the high water mark for emergency response, planning achieves the stated goal of protecting lives and preserving property.
- PRESENT CAPABILITY ASSESSMENT: A top to bottom review of our present public safety services and their capabilities should be initiated. This report should be structured to present the Board with our public safety department's strengths, as well as weaknesses.
- OVERLAY: a report should be prepared which draws from the worst case scenario findings and overlays the results of our present capabilities. Where shortcomings are found a course of corrective action should be detailed. This report should also include the costs associated with bringing the local departments to a full state of preparedness and a schedule of implementation to achieve those levels.

Public Safety & Security Recommendation #3: The committee recommends to the Board the attached draft by-law language which would establish a "permit to Operate a LNG Facility in the Town of Acushnet". The permit would only be required if any LNG storage facility, greater than 0.6 billion cubic feet of storage, after receiving approval by state or federal licensing authorities. It would require a study of local, and regional, fire service capabilities and would require the project owners to fund any shortfalls. The permit would be added to the list required for the issuance of a Certificate of Occupancy by town officials. We further request that this draft document be forward to Town Counsel for review and, if found to be legally sound, be placed on the next available Town Meeting Warrant.

Risk Assessment:

The confusing, often frustrating worlds of federal beaucracies have impacted our review of this project. The federal Department of Transportation develops regulations relative to the siting of LNG tanks on land proposed to house a LNG storage facility. These rules often incorporate standards developed by non-government agencies. In the case of where

to physically place the tanks on the Peckham Road parcel, federal regulators require compliance with the National Fire Protection Associations (NFPA) Standard 59A which relates to LNG facilities.

The committee hosted a meeting in which an official from the NFPA, knowledgeable in NFPA 59A, reviewed the standard and spoke of the specific siting requirements. We were surprised to learn that the federal government is still using the 59A edition which was developed in 2001, despite several updates and revisions of that standard, the most recent of which occurred in 2015.

Why is this important? The 2001 requirement requires the project proponents to locate the LNG tanks based on the result of two tests, one involving heat released in a fire contained to the tanks and one involving the flammability potential of released vapors. The goal is to place the tanks in such a location so that both heat from the fire and the released vapors are at safe levels when they reach the facility's property line. This method of risk assessment is referred to as "prescriptive based" as the measurements that equal success are prescribed in the standard.

The most recently updated edition of 59A adds language that allows an alternative method to be used in determining where the tanks would be located. This "performance based" method of risk assessment considers factors beyond the boundaries of the proposed facility. Natural threats (weather related) and man-made threats (terrorism) along with threats to people and property are factored into the final decision. This method is referred to as "Quantitative Risk Assessment" or QRA.

We argue that the higher level of risk assessment, that being a QRA, should be required in this project for many reasons, the most important being that the location is in a residential neighborhood. We were informed that a facility of this size and scope is common in industrial settings found on the waterfront (to accommodate import / export of LNG by tanker). This proposed facility is squarely in a residential area. Every measure of risk assessment should be used to make sure the first, and potentially most important decision, that being where on the 210 acres should the tanks be placed, is made using every tool in the toolbox.

We acknowledge that there is no requirement for FERC to mandate the use of the QRA in this project as they are required to follow existing federal code. Unfortunately, the federal code is behind the times by 15 years. The committee, on April 14, 2016, asked officials from Access Northeast to voluntarily conduct a QRA review. As of this date we have not received a reply to our request.

The committee strongly endorses risk assessment models that go "above and beyond" when assessing potential threats to this community.

Public Safety & Security Recommendation #4: The committee firmly believes, and emphatically recommends without hesitation, that a Quantitative Risk Assessment as found in Chapter 15 of NFPA 59A is necessary to fully analyze the risks associated with this project, relative to the siting of the tanks. We have stressed the importance of this assessment to the proponents multiple times. The failure by the proponents to voluntarily comply with this request would, we believe, send a strong signal as to their willingness to be "good neighbors". We recommend that the Board continue to monitor this issue and, in the event that the proponents decide to not comply with this local request, factor that decision into the relationship between the town and Access Northeast as the project moves forward.

Distribution of LNG from Acushnet:

Because the existing LNG storage facility does not have the equipment necessary to make liquefied natural gas from methane, all LNG stored presently in Acushnet arrives via over the road transport vehicles. These trucks begin arriving during the summer months carrying approximately 10,000 gallons of LNG on each trip. Typically, the loading process is complete by November 1st after approximately 300 trucks have travelled through our community.

These trucks come from outside the area and follow the typical route of: Route 140 South to Braley Road and Acushnet Avenue in New Bedford before turning onto Peckham Road in Acushnet. To date, with approximately 31,500 trips over 45 years, we have not experienced a single incident involving a LNG transport vehicle. That includes motor vehicle crashes or incidents while offloading at the facility. However, we are fully aware of the increase to overall public safety by greatly reducing or possibly eliminating an over the road transport of LNG. We live in a time where distracted drivers are far to commonplace.

With that said, one of the original goals stated to us by the project proponents was the plan to shuttle LNG from the new facility where it would be made to the existing facility. The very first artist rendition of the proposed facility included a roadway linking the two plants for the purpose of transporting LNG. Under this plan, all trucking operations would take place within the boundaries of the facility property.

Much to our – and the community's – surprise, a close review of the May 31, 2016 released draft Resource Report #13 found language that indicates the inclusion into the project – and clearly stated to FERC – of distributing LNG from Acushnet to the Northeast. We understand, and agree, that the emergency transport of LNG from Acushnet is an important component of the LNG system's operational needs. Such ability to load trucks at the existing facility for transport to a LNG facility in emergency need exists at the present facility on Peckham Road. However, the language used indicates that approval from FERC for "distribution" beyond exclusively filling an emergency need has been requested.

This disturbing development was never mentioned in countless discussions between town officials and committee members with representatives of Access Northeast. We were never given advanced notice, never provided an explanation and only found out about it after the formal closing of the public comment period. We are disappointed by this development and distressed by this tactic.

We stand committed to the goal of reducing, not adding to, the transport of LNG through the streets of Acushnet and neighboring communities. The Fire Chief and Police Chief have written to Access Northeast officials calling them out for this development and issuing a clear statement of opposition to any distribution of LNG out of Acushnet.

In addition, a committee member has suggested, in order to completely remove the possible human error associated with the loading and offloading of LNG when being moved from the new tanks to the existing, that a pipeline be built to connect the two storage facilities. This concept of piping LNG a significant distance was made known to us by officials in Hopkinton, Massachusetts, where Eversource operates a LNG peak shaving facility. At that location, LNG is piped underground, and under a public way, from the storage location to the processing location. Eversource, it would appear, has the know how to make such a system work. We encourage them to do so.

Public Safety & Security Recommendation #5: As with the issue of Risk Assessments, we recommend that the Board continue to monitor this issue and, in the event that the proponents decide to maintain the language submitted to the federal government which opens the door to Acushnet being a distribution center for LNG, factor that decision into the relationship between the town and Access Northeast as the project moves forward.

Public Safety & Security Recommendation #6: The Board should strongly encourage Access Northeast officials to consider piping LNG from the new storage facility to the existing in order to achieve Acushnet's goal of seeing all LNG transport vehicles eliminated from area streets.

Pipeline:

As previously mentioned, the Access Northeast project would bring to Acushnet, for the very first time, a natural gas transmission pipeline. This 24 inch diameter pipeline would begin in Freetown and traverse 2.8 miles through Acushnet before connecting to the Metering and Reduction Station built at the proposed facility. Being new to this community, this topic was the focus of a recent committee meeting with representative of Spectra Energy, the company that would own the pipeline, in attendance.

At that meeting we also heard from representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA), the federal agency that oversees pipeline projects. We were assured that a regulatory system exists for the construction, maintenance and operation of transmission natural gas lines.

Also at that meeting, Spectra officials indicated that they have nearly finalized the proposed route of the pipeline. The line would enter Acushnet at Nestles Lane from Keene Road in Freetown. The pipeline would be laid under Nestles Lane up to the location where it would go off road and through the properties of two separate residences before entering the property owned by Eversource. The underground pipeline would terminate at the Metering and Regulation building.

Residents along Nestles Lane are expectedly concerned about this development. A few residents have attended each of the committee's meetings and made their opinions clear during the two scoping sessions held in town. Fears of leaks, explosions and fires are held by many in this neighborhood. Spectra officials walked the committee through their construction, maintenance, and surveillance plans which includes weekly fly over by plane and the ability to periodically place probes into the pipeline to check conditions. In addition, sensors monitor in such a way that variances in pressure would trigger monitored alarms which would trigger investigation.

Given the April 29, 2016 incident in Salem Township, Westmoreland County, Pennsylvania, where a Spectra owned pipeline suffered a breach resulting in extensive damage to the area, emotions and concerns run high, and rightfully so. Spectra argues that the number of transmission line incidents are small and that their maintenance program keeps adverse incidents from occurring. Residents point to Pennsylvania and worry.

It is worth noting that there is a degree of risk in delivering natural gas and electricity that is passively accepted. The electricity needed to operate your television travels over primary transmission lines that run down every street and, if they come into contact with a person, would kill them instantly. The gas used to boil water on a stove travels through local distribution lines laid in place many, many years ago. Beginning at the intersection of Main and South Main Streets in Acushnet, a 4 inch cast iron gas line, placed in the 1920's, services numerous homes and businesses. Along South Main Street from Hope Street to Alden Road, a 12 inch coated steel supply line carries natural gas to Fairhaven and other communities. That pipe line was placed in the 1960's.

Spectra informed us that the type of pipe to be used in this project is predicated on the class designation based on population density. For the Nestles Lane area the Class designation is a 2. Spectra indicated that they are moving the designation up to a Class 3, which will require a higher level of protective elements. Spectra were asked if this classification was similar to a transmission line laid under Commonwealth Avenue in Boston. They indicated that it was.

Again, we must assume that these designations are correct and that the actual actions taken follow these plans. We would assume that some form of checks and balance will be initiated to ensure that we receive this higher level of protection.

Public Safety & Security Recommendation #7: We recommend that the Board obtain, in writing, assurances that Spectra will install Class 3 level pipe with associated protective elements in the area that calls for a Class 2 system. We further recommend that the board monitor this portion of the construction project closely to ensure compliance.

Public Safety & Security Recommendation #8: We recommend that the Board provide the necessary training and tools to the local Acushnet Gas Inspector so that he will be prepared for local level inspections of this pipeline if it comes to fruition.

Public Safety & Security Recommendation #9: We recommend that the Board make the resources necessary to the Fire Department to ensure that all Acushnet firefighters are trained and remain competent in emergency responses to natural gas transmission line incidents.

Facility Security:

In 1971, when the existing LNG tanks on Peckham Road were made operational, Acushnet and the world were very different than they are today. We live in an age of constant anticipation, anticipation of the next foreign or domestic terror attack. Every day we are greeted with news of our vulnerabilities and the threats against our safety. Many, many residents have expressed concern over their security relative to the proposed LNG storage. Given the times we live in, and the attention this project has received, and the sheer size of the proposed facility, people believe that Acushnet will become a target.

To address these concerns, the committee heard from the staff of the Massachusetts Fusion Center, a law enforcement entity that links Massachusetts law enforcement officials with those from other states and those at the federal level. By sharing information, by developing leads, by making decisions if actions are required, this center continuously monitors and apprises on potential threats to our communities. The Acushnet Police Chief stated that his department has received, and provided information to, the Fusion Center numerous times. The sharing of information from international and national sources to the local level has paid benefits we will never see or be made aware of. That is the simple truth of the intelligence services.

We were given the following example; if local police in Texas noted suspicious activity at the main entrance to a LNG facility, and several days later the same activity was noted at a LNG facility in Louisiana, and later in Maryland that information would be collected, analyzed and shared with local law enforcement officials. Extra patrols or possible surveillance may be conducted. The take away from this is information among law enforcement is coordinated and shared in a way that it wasn't back in the late summer of 2001. The Acushnet Police Department, through the Massachusetts Fusion Center, is linked to the CIA and FBI among others.

The committee learned that the United States Department of Homeland Security created "Chemical Facility Anti-Terrorism Standards" in 2007. This action developed a list of chemicals which, if stored in quantities above a certain trigger, are required to be subjected for possible further review. The committee is confident that 6.8 billion cubic feet of methane satisfies the trigger requirements.

The process, referred to as a Part 27 review, would identify risk factors associated with LNG facilities. The potential for terrorism related activities would be further reviewed leading to the issuance of a "Security Vulnerability Assessment". Depending on the final outcome of the assessment, DHS would play a role in developing, reviewing and approving plans that would include measures to mitigate the risk of terror related activities.

This process typically begins once the LNG is delivered to the storage facility. The committee believes that this process would best serve the interest of Acushnet if it were initiated much earlier in the planning and approval stages. We have written to FERC requesting that they work with DHS in beginning the Part 27 review sooner than later. Given the quantity of LNG which may be stored in a residential neighborhood, we believe such an action is in this and surrounding communities best interest.

Finally, the Acushnet Fire Chief has engaged in conversations with DHS officials who would be willing to visit Acushnet in the coming months to discuss this process and associated issues with local law enforcement and Access Northeast officials.

Public Safety & Security Recommendation #10: We recommend that the Board engage surrounding Boards of Selectmen, the Mayor of New Bedford and our Congressional delegation to urge FERC to act on the committee's request for an earlier than typical Part 27 review process.

Public Safety & Security Recommendation #11: We request that the board consider hosting a "Security Summit" of local, state and federal law enforcement officials, including representatives from the Department of Homeland Security, during the upcoming summer months in order to begin the process of security planning and review.

Public Safety & Security Recommendation #12: The committee recommends that the town, through the appropriate department heads, conduct planning sessions with appropriate officials from the federal and state government, in addition to neighboring communities, for the purpose of developing evacuation plans.

ENVIRONMENTAL / ALTERNATIVE LOCATIONS

The decision was made to join these two local concerns due to the fact that environmental impacts of the proposed LNG storage facility site drive the discussion on alternative locations.

Residents in the Nestles Lane, Peckham Road and Keene Road area are universal in their opinion that their neighborhood includes beautiful stretches of woodlands, wetlands and associated flora and fauna. The committee has heard – loudly and clearly – from concerned neighbors about the impacts to their local environment. In a community like Acushnet, one that places a high value on rural characteristics and natural resources, these concerns rank high on the list of potential negative impacts that must be fully considered.

The proposed LNG storage facility would be located on 210 acres and would consist of two large storage tanks, a pipeline, equipment and associated structures and buildings. Having visited the Eversource LNG facility in Waterbury, Connecticut, members of the committee can personally attest to the impressive size of one tank that is considerably smaller than the two tanks proposed for our community. To put it simply, this project is enormous. No one at the local level has seen a comparable LNG operation; therefore, we must simply base our opinions on observational comparisons and personal experiences. Any two structures 160 feet in height (13 1/3 stories) and 269 feet in diameter (844 foot circumference) sitting side by side is not something this town, region or state has ever encountered.

Access Northeast is proposing that approximately 65 acres of wetlands will be "permanently impacted" or destroyed. The importance of wetlands was explained in the May 31, 2016 letter from the Massachusetts Department of Environmental Protection (MA DEP) to FERC. "The wetlands proposed to be impacted by this project are presumed to serve important statutory public interests including storm damage prevention, flood control, prevention of pollution, and protection of public and private water supplies, protection of ground water supply and protection of fisheries (page 3)."

It is important to note that, in the words of the MA DEP, "As proposed, this project element (LNG storage) would qualify as one of the largest proposed wetland alterations in the history of the Commonwealth of Massachusetts (page 5)." Similarly, the United States Environmental Protection Agency (EPA), in their June 13, 2016 letter to FERC, states, "However, it should be noted that the estimated direct impact to 65 acres or more of wetlands for the proposed Acushnet LNG facility (not including the additional project

impacts associated with the pipeline work) if permitted, would represent one of the largest direct impacts allowed in New England to date (page 11)".

Not only is a project of this size new to the south coast region, the potential loss of 65 acres of Acushnet wetlands would be historic on both a state and regional basis.

The committee found a United States Geological survey factsheet on wetlands and mitigation effort of value and recommends it to the readers of this report. The factsheet, "Do Created Wetlands Replace the Wetlands that are Destroyed? by Randall J. Hunt", can be found at: http://wi.water.usgs.gov/pubs/FS-246-96/

State and federal regulators play a leading role in the Access Northeast project, through numerous laws and regulations, due to several areas of potential environmental impact. Both letters to FERC (MA DEP & EPA) are included in this report for your review. The letters detail the specific standards and conditions that must be met during construction and operation of the proposed facility. Issues such as air and water quality, environmental justice, impacts to health and children's health issues are discussed and the appropriate regulatory standards referenced. Many residents expressed concerns relative to these topics, and while the committee is not qualified to answer these concerns directly, we take comfort in knowing that both state and federal environmental regulators are reminding FERC, at this very early stage of project development, of their responsibilities and those of the proponents toward ensuring compliance.

The committee strongly believes that the quality of the air needs to be assured through law, regulation and science, well before the proposed facility would begin operations. The reconfiguration of the site map, found in Appendices 13A and 13B of the recently submitted Draft Resource Reports, indicates that the industrial processes associated with the plant have moved closer to the Nestles Lane neighborhood than in previous drawings. It is imperative that air quality issues be determined and addressed prior to monitoring reports coming to light several months into plant operation, and several months after potential exposure.

Similarly, the community needs to be certain of the impact on private drinking wells caused by the loss of a large area of wetlands as well as the potential run off from facility operations. The quality of the local drinking water supply should not be jeopardized in any manner whatsoever.

The importance of the letter from the EPA to FERC cannot be understated. As the lead federal agency responsible for implementing the National Environmental Policy Act

(NEPA), the EPA carries significant clout among other federal agencies. Given their importance, the following statements carry significant influence:

- "Our comments in the wetlands and aquatic resources section below explain why potentially significant impacts to those resources signals the need for a comprehensive look at alternative sites for the LNG storage facility (page 3)."
- "Moreover, we recommend that FERC's analysis consider whether the project purpose and need could largely be met without the LNG storage facility. This question is warranted due to the limited range of time the facility is projected to operate in any given year and the projection that almost half of the project gas will be provided through proposed pipeline expansion (page 3)."

We identified these two passages in order to focus on the need of the project proponents to seriously consider alternative locations. If the guiding business approach was to select the Acushnet site first, then work backwards in justifying the decision, multiple reasons can be found for ruling out other potential locations. We are mindful of the fact that the selected Acushnet site is owned by one of the project partners and is within a relatively short distance to the other partner's transmission line. Presumably, these factors would keep expenses down as opposed to the need to acquire land and make connections further away. But the EPA argues that the "optimal" location might not necessarily be the most "practical and less environmentally damaging (page 11)." With historical amounts of wetlands subject to destruction, the argument that the Acushnet site is the least environmentally damaging is suspect. Additionally, proponents have, at the request of FERC, expanded their review of alternative locations beyond their original radius of 5 miles distance from their transmission line to a 10 mile radius. This doubling of what was once considered (based on their initial planning) both optimal and practical is also troubling.

Both the MA DEP and the EPA have requested that FERC require the proponents to conduct more robust screening of alternate site locations for the LNG storage facility. We agree. The EPA stated it this way, "However, other LNG storage site locations, while perhaps not optimal, might nonetheless be practicable and less environmentally damaging alternatives that meet the project purpose and therefore warrant full consideration (page 11)."

To complement their request for greater review of alternative locations, the EPA picked up on comments made by both residents and committee members alike; "Why must the tanks be so large?" Is it more "practicable" to build several smaller LNG storage facilities at selected distances from the transmission lines? Again, we are impressed with

the EPA's comments to FERC, "By reducing the required area for each LNG facility site, the number of potential practicable locations would likely increase, thus the likelihood of finding sites that would result in less environmental harm (page 12)."

Finally, on the issue of alternative locations, the EPA states, "Again, in assessing alternative sites, the key criterion for facility location and design (size and number of LNG facilities, engineered features to reduce required site area, etc.) is practicability. While cost, desirability of locations, etc., is taken into consideration, the fact that an alternative may have reasonably greater costs, or be sited in a less than optimal location, does not necessarily render that alternative impracticable (page 12)."

To the list above, we would add the focusing of public opposition to one single geographic location. Multiple smaller tanks spread out over a wider area would result in multiple impacted communities which would trigger multiple centers of local opposition. In addition, multiple locations would necessitate multiple financial mitigation plans with multiple local governments. We argue that the possible interest in limiting opposition and financial mitigation to one area does not necessarily render alternatives impracticable.

The committee is skeptical of public statements from the proponents relative to the issue of wetland destruction. Given the statements by both the EPA (on June 8, 2016) and the MA DEP (on May 31, 2016) that the loss of 65 acres of wetlands would be significant and historic for our state, the proponents, in a document posted to the FERC website on June 14, 2016 (Response to Comment – FERC Scoping Period) answer the question of why Acushnet was chosen as a location for the LNG facility as follows: "As reflected in Section 10.10.2 of draft Resource Report 10 filed with the Commission in Docket No. PF16-1-000, the site of the proposed LNG Facility was dictated by engineering and environmental considerations. The proposed site is consistent with and adjacent to an existing LNG facility, will cause significantly less overall impact than would result from construction of an alternative site, and will cause less off-site impact to local communities because site access for delivery of construction equipment and materials will be more direct. Algonquin continues to evaluate alternative LNG sites as outlined in Resource Report 10".

For the proponents to assert, in the middle of June, that the selection of the Acushnet site was based on "environmental considerations" is disingenuous. The EPA made it clear in their June 8, 2016 letter that they had discussed their concerns relative to wetland destruction with the proponents. The response to the question asked during the scoping period, released after those meeting and the EPA and MA DEP written comments, appears to be a cut-and-paste of reports written in December, 2015. We are discouraged

by the lack of effort that went into Access Northeast's response and are concerned that the very real local concerns regarding the destruction of 65 acres of Acushnet wetlands is being minimized.

In addition, the committee is concerned by the possible impact to private wells and the existing aquifer in the neighborhoods surrounding the proposed facility. While the EPA has developed regulatory requirements, what happens in the event that impacts occur and the destruction of the wetlands is noted as a cause?

The committee learned, from a representative of the United States Army Corps of Engineers, that federal code requires the mitigation to compensate for the loss of wetlands. We were surprised to learn that one of the possible components of a mitigation plan could be the financial payment by the proponent into a fund used for environmental enhancement projects. While this is a commendable approach toward offsetting an environmental loss with an environmental gain, we were troubled to learn that the mitigation project could possibly be assigned to a community other than Acushnet. To put it simply, if Acushnet residents experience the single largest loss of wetlands in the history of Massachusetts, the mitigation effort must take place in Acushnet. Anything else would be an insult to this community at present and for generations to come.

We would be remiss if we did not discuss the important issue of potential negative impacts to the habitats of rare species caused by this project. Numerous residents have expressed concern for different species of wildlife including deer, fox, salamander and turtles. The MA DEP referenced the box turtle as a special concern. Residents have sent to the committee photographs of box turtles found in the area of Peckham Road. Again, the issue of potential environmental damage must be fully vetted.

The committee recommends that the Board of Selectmen consider the following actions:

Environmental Recommendation #1: Forward to the local Congressional delegation the June 13, 2016 letter from the EPA to FERC with the request that they monitor for the inclusion of the EPA's recommendations into the Environmental Impact Statement to be issued by FERC on this project.

Environmental Recommendation #2: Initiate immediate contact with the project proponents to discuss alternative LNG storage facility site locations and to urge the consideration of multiple, smaller storage facilities throughout a wider geographic area.

Environmental Recommendation #3: Initiate immediate contact with the project proponents to discuss the status of their wetland delineation efforts and to insist that the

Acushnet Conservation Commission, through its agent, be apprised of all wetland based efforts and findings.

Environmental Recommendation #4: Initiate immediate contact with the project proponents to discuss their strategies for determining adequate mitigation to compensate for all unavoidable direct, indirect and cumulative impacts to wetlands and aquatic resources.

Environmental Recommendation #5: Require the proponents to issue assurances / bonds with the town in order to compensate landowners who may have wells impacted by this project due to wetland destruction or contamination due to the storage facility or pipeline.

Environmental Recommendation #6: Initiate immediate discussions with state and federal regulators, and legislators, to identify mechanisms that would keep mitigation compensation efforts based on the loss of wetland in Acushnet.

Environmental Recommendation #7: Initiate immediate contact with our state legislative delegation requesting their assistance in having representatives from the Massachusetts Natural Heritage and Endangered Species Program visit Acushnet and meet with local residents for the purpose of first hand documentation of habitats and wildlife documentation.

Environmental Recommendation #8: Establish town based continuous, independent monitoring of air quality around the perimeter of the proposed facility. Monitors should be placed outside the boundaries of the facility. All data collected to be transmitted to the appropriate town departments.

Environmental Recommendation #9: Establish regular, independent monitoring of drinking water in areas adjacent of the proposed facility. All data collected to be transmitted to the appropriate town departments.

PROPERTY VALUES

Residents in the vicinity of the proposed expanded LNG plant are concerned with the potential negative impact on their property values. Would the presence of the largest LNG storage facility on the east coast result in a significant loss in property value at the time they sell their property? Would banks be agreeable to refinancing agreements and would home insurance companies modify their coverage in any way? The committee found these issues to be genuine in nature and very high on the list of local issues that need to be addressed.

During the meeting held on May 24, 2016, the committee met with Ms. Kelly Koska, Principal Assessor for the Town of Acushnet. We were advised that very little data exists on the potential impacts on the value of properties close to a large industrial complex. In addition, local history provides little clarification. The question was asked what impact, if any, the closing of the Titleist golf ball plant had on the residential property values of the Slocum, Hope and Rock Street neighborhoods. Conversely, what impact did an operational golf ball plant have on those properties compared to properties further distanced from the golf ball manufacturing plant? The same question could be asked about residences near the operating quarry on South Main Street. The information was inconclusive.

It has been explained that the value of a person's home is based on three concepts:

- 1) What is the value of my home according to the local government?
- 2) What is the value of my home according to the marketplace?
- 3) What do I, as the owner, consider to be the value of my home?

The answer to the first question is determined by the local Board of Assessors. Multiple factors are used to determine the value of a home for local tax purposes (style, size condition and grade, a concept called MASS appraisal). Ms. Koska stated that Acushnet uses neighborhood zones as one of the contributing factors to determine the value of land for tax purposes. It is her opinion that the formulas used to determine value for taxation purposes would not change.

To determine the answer to the second question, a house would have to be placed on the market. Realtors inform us that multiple factors work into the determination as to what the market would bear. Structural and cosmetic factors, number of bedrooms and the sale of "comparable" properties in the area contribute to the determination of an asking price and ultimately, the sale price.

The answer to the third question is independent of analysis. A home is much more than an investment. The chance to own a home brings with it immeasurable pride, a benchmark for attaining the "American Dream". A home is a place to raise a family, entertain friends and experience all the joys and sorrows of life. Unfortunately, we were not able to secure – because it may not be possible – a formula that scales the impact on property values based on the proximity to a LNG storage facility. The intrinsic value of a home, for many residents their home for decades, is impossible to gauge and irrelevant of money.

At the same meeting, the committee heard from Mr. Paul Chasse, CEO of the Southeastern Massachusetts Association of Realtors. Mr. Chasse stated that his organization is focusing attention on the Access Northeast project with an eye to implications to the local real estate market. Mr. Chasse informed the committee that his group will be requesting assistance from their state and national affiliations to study this issue in detail. A copy of that report will be provided to the town.

The committee did discover inconsistencies in previous FERC approval decisions relative to their review of property value concerns. In one instance, a detailed, comprehensive review was conducted which cited numerous studies. In a different decision, FERC limited their comments to two paragraphs.

It was noted that the studies referenced and financed by FERC were several years passed their date of publication. The committee believes that any review of possible impacts on property values on Acushnet, Freetown and New Bedford real estate must be based on current market data. Accordingly, the committee wrote to FERC on May 25, 2016 (copy immediately follows), requesting that they commission new studies on the issue of "possible impacts to property values, property insurance coverage, title insurance and impacts on mortgages and mortgage rates resulting from the Access Northeast project".

As an ancillary observation, many members of the committee noted the presence of "For Sale" signs in the neighborhoods close to the proposed project location. Whether the decision to sell is driven by Access Northeast, a robust market favorable to sellers, or the traditional uptick associated with the spring season is beyond our ability to determine. Anecdotal information is that recent sales have been logged close to or slightly above asking market price. We look forward to reviewing these trends and area specific data when that information is made available.

Finally, several residents have noted that a large number of the properties in the area of the proposed new LNG storage facility were built after 1971, the year the existing plant went operational. In fact, a few subdivisions were created after the existing LNG facility

went operational. Some draw the conclusion that the purchase of properties since 1971 tested the market value of residences located near LNG storage. While it may be easy to use this reference as the answer to the questions surrounding the possible impacts caused by the proposed plant, the committee is mindful that the world, financial institutions and the real estate market is very different than it was forty-five years ago. The concerns relative to individual real estate values are very real to the individual homeowner and every effort must be made to study possible implications.

Property Values Recommendation #1: The request for FERC to commission updated property value impact studies has been initiated by the committee. We recommend that this request be forwarded by the Board of Selectmen to the local Congressional delegation for their assistance in expediting a response.

GENERAL

Several items for consideration do not fit neatly into the categories we established for this report. This section is designed to inform the Board of Selectmen of relevant issues and offer recommendations in certain areas.

Tanks & Containment:

Federal code, through references to standards line NFPA 59A, requires all LNG storage tanks to have two means of containing the liquid product (primary and secondary containment systems). At the present Peckham Road facility, inside the blue tanks are containers that act as a thermos. The metal container that physically holds the LNG is considered the primary containment system. The blue metal shell of the tanks is not considered part of the containment system. Surrounding both tanks is a large berm or dike designed to hold 110% of the contents of the tank. In the event of a rupture, of the inner vessel and exterior metal structure, the diked area would contain the tank contents. The dike is considered the secondary containment system.

We were informed by Access Northeast officials that the type of construction of the proposed new Acushnet tanks would be similar to that used in Waterbury, Connecticut. At that location, the LNG is primarily contained by the inner vessel. The entire structure is wrapped in 2 ½ feet of concrete reinforced with steel rods. This concrete outer shell performs the role of secondary containment system. There is no berm or dike surrounding the tank.

The resource reports filed with FERC by the proponents indicate that the method of construction for the proposed Acushnet tanks will be similar to that used in Waterbury, with primary containment being the inner vessel and secondary containment being the concrete shell. In addition, plans call for a berm / dike structure capable of containing 110% of the contents of one tank. This addition results in the presence of a third level of containment, more than is required in present codes and standards.

It is important to note that the present tanks followed the standards in place at the time of their construction. Those rules allowed all piping to occur at the bottom of each tank. New standards require all piping to enter at the top of each tank. While this design enhances safety (out of access to people and machines working at ground level, free from falling ice dangers) it does present challenges in the event that first responders are called to assist with medical or other emergencies at the top of the tank. Access stairs and

ladders will be present, however, challenges would be anticipated and proper training will need to be accomplished.

Finally, the size and scope of the overall construction project will be something the likes of which this town, and this region, has never seen before. We anticipate workers working below grade, in trenches, at heights off of cranes and scaffolding and in environments that are uncommon in traditional construction projects. It is estimated that over 200 workers will be on site at any given time and that the project will be held to a very efficient (aggressive) schedule.

We must prepare for the possibility of construction related emergencies involving people and equipment. While the Acushnet Fire & EMS Department is currently capable of providing rescue operations at construction projects typical in a bedroom community, we would simply be out of our league for operating at rescue scenarios of the type associated with a project of this size.

The Commonwealth of Massachusetts, through the Department of Fire Services, trains, equips and keeps ever ready "Technical Rescue Teams" at the county level. The Bristol County Technical Rescue Team (BCTRT) consists of highly trained firefighters from across our area. Each team has a trailer of equipment (ropes, saws, tools, etc.) that is brought to the scene of an incident. The team is highly effective and has proven to be a great asset to local departments who know that in certain scenarios the BCTRT is available.

General Recommendation #1: The Board should initiate discussions with Access Northeast officials for the on-site placement of a trailer, which mirrors the trailers used by the county based technical rescue teams, for ready access in the event of a rescue based emergency during all phases of facility construction.

Cost to Ratepayers:

A component of the overall Access Northeast project is the fact that costs associated with the Massachusetts component would be passed along to electricity ratepayers. It is our understanding that the permission for this payment plan has been approved by the state Department of Public Utilities (DPU). However, we further understand that a lawsuit seeking to have this plan overturned is currently under consideration by the Massachusetts Supreme Judicial Court. We are told by interested parties that if the court overturns the DPU decision the overall Access Northeast project would be in jeopardy.

Many residents find this financing scheme offensive and have made their opinions known to the committee and to federal and state regulators at the scoping sessions. Representatives from Access Northeast argue that the high spikes in paying for natural gas during the days the peak shaver would be in operation would negate the charges assessed for the project.

The committee leaves it to the members of the Board of Selectmen to review this topic and form their own opinion.

Necessity:

The issue of overall project necessity was discussed at two committee meetings. The question is, simply put; does this project address a need? We were told by many that the need simply doesn't exist. The Massachusetts Attorney General commissioned a report which concluded that the Access Northeast project is not needed and that renewable energy sources are present and will continue to expand. Opponents to the project cite the Attorney General's report as evidence that the motives of the proponents are suspect. In turn, the proponents claim that there exists a need for greater pipeline capacity, that this project is the least intrusive due to running new pipelines along the route of existing pipelines and that the goal of the LNG storage facility is to provide cost effective natural gas during a very narrow window of need in the winter.

Added to this heated debate are other related issues such as the creation of greenhouse gasses, the reliance on fossil fuels, the methods used to extract methane from its source (fracking) just to name a few.

The committee reminds the Board that our task was to review local issues of concern. We view these issues to be of importance but not within our scope of expertise. Again, the committee leaves it to the members of the Board of Selectmen to review this topic and form their own opinion.

Property Taxes to Acushnet:

Project proponents have long held, and long advanced, the benefit to the town of Acushnet derived from the payment of taxes this project would generate. The figure of \$12.5 million in annual tax revenue was mentioned over one year ago by project proponents and continues to be used as recently as one month ago.

The committee appreciates that multiple factors go into the development of a determination of value to which a tax rate is applied. We would caution that any figure

added to the conversation on this project should be subjected to the review of professionals trained and experienced in this unique tax matter. During a committee meeting on this topic, the Principle Assessor for the Town of Acushnet stated that a project of this size and scope is unlike any other for which she has experience. We believe that it is in the best interest of the town, and of the conversation on this project moving forward, that annual tax payments derived from the proposed facility be subjected to an outside, independent review.

General Recommendation #2: We recommend that the Board initiate, in conjunction with the Board of Assessors, a study of projected tax revenue as provided by Access Northeast.

Payment for Studies:

In this report, the committee has made several recommendations for studies to be commissioned that would provide information, independent of the proponents, on several matters of concern. Understanding that such studies, conducted by qualified and competent consultants, will be expensive, we are reminded that the town of Acushnet – as a community – did not ask to be included in the Access Northeast project. Proponents came to our zip code. We believe that the costs incurred by the town, in all aspects of this project, should be carried by the proponents.

General Recommendation #3: The Board should determine the best means possible to secure funding from the proponents for unrestricted use by the town for the purpose of securing third party consultants for local project review.

Ombudsman:

The work of the committee over the past three months has made it clear that residents of the town of Acushnet have now, and will continue to have if the project continues to advance, many issues of real concern. Those issues deserve to be addressed and each question deserves an answer.

It is the opinion of the committee that coordination needs to be achieved. For instance, a resident may have a question relative to a health issue that is brought to the local health board and a question relative to taxes goes to the local board of assessors, etc. A situation could easily arise where multiple boards are seeking information from multiple

Access Northeast officials resulting in confusion and delay. In addition, if the project is approved by federal officials issues associated with construction (traffic, dust, etc.) and operation (noise, light infiltration, etc.) should be anticipated.

A more streamlined and coordinated approach would prove more effective and efficient.

General Recommendation #4: The committee recommends that the Board appoint an "LNG Ombudsman" for the purpose of being the principle point of contact for the town, and that the Board recommend to Access Northeast that they designate an "Acushnet Ombudsman" for the purpose of being the principle point of contact for the project.

Appendices

1) List of Recommendations

LIST OF RECOMMENDATIONS

Public Safety & Security Recommendation #1: The Board should secure the services of a third party consultant to review the two draft resource reports issued by the proponents on May 31, 2016, as well as the remaining resource reports – as they relate to the Acushnet components of the project – scheduled to be submitted to FERC on July 22, 2016.

Public Safety & Security Recommendation #2: The Board should secure the services of qualified consultants to conduct the following studies:

- WORSE CASE SCENARIO: The process of planning is best served when it is determined what the worst case scenario would be, that event or series of events that stress local emergency response services. By establishing the high water mark for emergency response, planning achieves the stated goal of protecting lives and preserving property.
- PRESENT CAPABILITY ASSESSMENT: A top to bottom review of our present public safety services and their capabilities should be initiated. This report should be structured to present the Board with our public safety department's strengths, as well as weaknesses.
- OVERLAY: a report should be prepared which draws from the worst case scenario findings and overlays the results of our present capabilities. Where shortcomings are found a course of corrective action should be detailed. This report should also include the costs associated with bringing the local departments to a full state of preparedness and a schedule of implementation to achieve those levels.

Public Safety & Security Recommendation #3: The committee recommends to the Board the attached draft by-law language which would establish a "permit to Operate a LNG Facility in the Town of Acushnet". The permit would only be required if any LNG storage facility, greater than 0.6 billion cubic feet of storage, after receiving approval by state or federal licensing authorities. It would require a study of local, and regional, fire service capabilities and would require the project owners to fund any shortfalls. The permit would be added to the list required for the issuance of a Certificate of Occupancy by town officials. We further request that this draft document be forward to Town Counsel for review and, if found to be legally sound, be placed on the next available Town Meeting Warrant.

Public Safety & Security Recommendation #4: The committee firmly believes, and emphatically recommends without hesitation, that a Quantitative Risk Assessment as found in Chapter 15 of NFPA 59A is necessary to fully analyze the risks associated with this project, relative to the siting of the tanks. We have stressed the importance of this assessment to the proponents multiple times. The failure by the proponents to voluntarily comply with this request would, we believe, send a strong signal as to their willingness to be "good neighbors". We recommend that the Board continue to monitor this issue and, in the event that the proponents decide to not comply with this local request, factor that decision into the relationship between the town and Access Northeast as the project moves forward.

Public Safety & Security Recommendation #5: As with the issue of Risk Assessments, we recommend that the Board continue to monitor this issue and, in the event that the proponents decide to maintain the language submitted to the federal government which opens the door to Acushnet being a distribution center for LNG, factor that decision into the relationship between the town and Access Northeast as the project moves forward.

Public Safety & Security Recommendation #6: The Board should strongly encourage Access Northeast officials to consider piping LNG from the new storage facility to the existing in order to achieve Acushnet's goal of seeing all LNG transport vehicles eliminated from area streets.

Public Safety & Security Recommendation #7: We recommend that the Board obtain, in writing, assurances that Spectra will install Class 3 level pipe with associated protective elements in the area that calls for a Class 2 system. We further recommend that the board monitor this portion of the construction project closely to ensure compliance.

Public Safety & Security Recommendation #8: We recommend that the Board provide the necessary training and tools to the local Acushnet Gas Inspector so that he will be prepared for local level inspections of this pipeline if it comes to fruition.

Public Safety & Security Recommendation #9: We recommend that the Board make the resources necessary to the Fire Department to ensure that all Acushnet firefighters are trained and remain competent in emergency responses to natural gas transmission line incidents.

Public Safety & Security Recommendation #10: We recommend that the Board engage surrounding Boards of Selectmen, the Mayor of New Bedford and our

Congressional delegation to urge FERC to act on the committee's request for an earlier than typical Part 27 review process.

Public Safety & Security Recommendation #11: We request that the board consider hosting a "Security Summit" of local, state and federal law enforcement officials, including representatives from the Department of Homeland Security, during the upcoming summer months in order to begin the process of security planning and review.

Public Safety & Security Recommendation #12: The committee recommends that the town, through the appropriate department heads, conduct planning sessions with appropriate officials from the federal and state government, in addition to neighboring communities, for the purpose of developing evacuation plans.

Environmental Recommendation #1: Forward to the local Congressional delegation the June 13, 2016 letter from the EPA to FERC with the request that they monitor for the inclusion of the EPA's recommendations into the Environmental Impact Statement to be issued by FERC on this project.

Environmental Recommendation #2: Initiate immediate contact with the project proponents to discuss alternative LNG storage facility site locations and to urge the consideration of multiple, smaller storage facilities throughout a wider geographic area.

Environmental Recommendation #3: Initiate immediate contact with the project proponents to discuss the status of their wetland delineation efforts and to insist that the Acushnet Conservation Commission, through its agent, be apprised of all wetland based efforts and findings.

Environmental Recommendation #4: Initiate immediate contact with the project proponents to discuss their strategies for determining adequate mitigation to compensate for all unavoidable direct, indirect and cumulative impacts to wetlands and aquatic resources.

Environmental Recommendation #5: Require the proponents to issue assurances / bonds with the town in order to compensate landowners who may have wells impacted by this project due to wetland destruction or contamination due to the storage facility or pipeline.

Environmental Recommendation #6: Initiate immediate discussions with state and federal regulators, and legislators, to identify mechanisms that would keep mitigation compensation efforts based on the loss of wetland in Acushnet.

Environmental Recommendation #7: Initiate immediate contact with our state legislative delegation requesting their assistance in having representatives from the Massachusetts Natural Heritage and Endangered Species Program visit Acushnet and meet with local residents for the purpose of first hand documentation of habitats and wildlife documentation.

Environmental Recommendation #8: Establish town based continuous, independent monitoring of air quality around the perimeter of the proposed facility. Monitors should be placed outside the boundaries of the facility. All data collected to be transmitted to the appropriate town departments.

Environmental Recommendation #9: Establish regular, independent monitoring of drinking water in areas adjacent of the proposed facility. All data collected to be transmitted to the appropriate town departments.

Property Values Recommendation #1: The request for FERC to commission updated property value impact studies has been initiated by the committee. We recommend that this request be forwarded by the Board of Selectmen to the local Congressional delegation for their assistance in expediting a response.

General Recommendation #1: The Board should initiate discussions with Access Northeast officials for the on-site placement of a trailer, which mirrors the trailers used by the county based technical rescue teams, for ready access in the event of a rescue based emergency during all phases of facility construction.

General Recommendation #2: We recommend that the Board initiate, in conjunction with the Board of Assessors, a study of projected tax revenue as provided by Access Northeast.

General Recommendation #3: The Board should determine the best means possible to secure funding from the proponents for unrestricted use by the town for the purpose of securing third party consultants for local project review.

General Recommendation #4: The committee recommends that the Board appoint an "LNG Ombudsman" for the purpose of being the principle point of contact for the town, and that the Board recommend to Access Northeast that they designate an "Acushnet Ombudsman" for the purpose of being the principle point of contact for the project.

Appendices

2) Proposed By-Law

DRAFT BY-LAW

LIQUEFIED NATURAL GAS (LNG) FACILITY OPERATIONS PERMIT AND FIRE DEPARTMENT CAPABILITIES AND PREPAREDNESS EVALUATION

Section 1. Purpose: This by-law establishes a permit for the operation of Liquefied Natural Gas facilities in the Town of Acushnet. Further, it establishes as a condition of permit approval the completion of an Evaluation of Local Emergency Response Capabilities.

Section 2.0 Definitions:

Authority Having Jurisdiction (AHJ): The Chief of the Acushnet Fire & EMS Department LNG Storage Facilities: structures built for the liquefaction of methane gas, storage of LNG and vaporization of LNG into methane gas.

Municipal Fire Departments: for the purpose of this by-law shall include the Fairhaven Fire & EMS Department, the Freetown Fire Department, the New Bedford fire Department, the Rochester Fire Department and any other local fire department as determined by the AHJ.

Section 3.0 Authority

3.1 This bylaw is adopted under the authority given to cities and towns by Massachusetts General Law Chapter 148, Section 9

Section 4.0 Permit to Operate LNG Facility in the Town of Acushnet, Massachusetts

4.1 All LNG storage facilities with a total storage capacity of 0.6 billion cubic feet and approved for construction and operation by the appropriate licensing authority under the federal and/or

state government shall apply for a permit to operate with the Acushnet Fire & EMS Department within sixty (60) calendar days of receiving said approval.

Section 5.0 Conditions of Permit Approval

- 5.1 Approval of the LNG operations permit shall be granted after the applicant:
- 5.1 (a) Provides to the Acushnet Fire Chief a report, prepared by an independent qualified person who shall be a properly licensed Fire Protection Engineer, that evaluates the capability and preparedness, or lack thereof, of the Acushnet Fire & EMS Department as well as municipal fire departments in the vicinity of the approved facility who would respond to a release of LNG or fire involving LNG. If this report concludes that any additional training, personnel, or equipment would be needed for local fire departments to effectively respond to a release or fire involving LNG, the report shall detail the deficiencies and provide a detailed cost estimate and schedule for remedying and deficiencies at applicant's cost.
- 5.1 (b) Each applicant for a permit shall offer an emergency response training program, necessary personnel and/or equipment for local enforcement, fire, and hazardous material response personnel of the Acushnet Fire & EMS Department, and other local municipal fire departments entering into mutual aid agreements with the Town of Acushnet. The applicant shall offer, at applicant's cost, relevant training, necessary personnel and/or equipment prior to commencing operation of the LNG facility and annually thereafter using an appropriate training program approved by the Massachusetts Firefighting Academy.

Section 6.0 FIRE DEPARTMENT CAPABILITIES AND PREPAREDNESS EVALUATION CRITERIA:

6.1 The evaluation of the Acushnet Fire & EMS Department, and other local municipal fire departments entering into mutual aid agreements with the Town of Acushnet, capabilities and preparedness must include, but is not limited to, staffing/training, equipment and standard operating procedures. It must also take into consideration the size and complexity of the LNG facility. Each area is further defined below and shall be addressed in the fire department evaluation report.

6.2 Staffing/Training:

The responsibility to provide the properly trained personnel for a response to any incident belongs to the Authority Having Jurisdiction.

6.3 29 CFR 1910.120(q) identifies the emergency response program to a hazardous substance release. This regulation identifies critical staffing positions and provides training requirements, levels of responders and specific t roles/tasks that may be required during a LNG emergency response including but not limited to:

■ Incident Command

Air Monitoring

■ Safety Officer

Containment

Evacuation

Remediation

■ Emergency Medical Care

6.4 29 CFR 1910.120(q) states operations in hazardous areas shall be performed using the buddy system in groups of two or more with back-up personnel standing by with equipment ready to provide assistance.

6.5 29 CFR 1910.134(g) (4) had been adapted by the fire service for most, if not all, of their operations as the "two in/two out rule," requiring at least two personnel to affect a task and at least two equally trained personnel to back up the first team.

6.6 As outlined in NFPA 1500 (2013), members of the fire department should receive documented education and training. The members should remain proficient as verified by an annual skills check. The report must provide information on the training received and verify that an annual skills check is included in their training plans. By means of normal response or by automatic/mutual aid, the fire department shall be evaluated for their training specific to complete the following tasks:

- * LNG Fire Suppression Techniques
- LNG Extinguishing Agents

* Air Monitoring

* Emergency Medical Care

* LNG spill response

* Hazardous Materials Response

6.7 An evaluation of the proposed facility (see paragraph 12.2.1 NFPA 52 and paragraph 12.2 of NFPA 59A as applicable) may identify potential safety hazards that require additional

capabilities including, among others, the ability to perform technical rescues. Utilizing NFPA 1670 (2014) as a guidance document relating to technical rescue needs, the report should identify the capability of the fire department/mutual aid to affect any potential technical rescues identified. The report should detail deficiencies and provide a detailed cost estimate and schedule for remedying any deficiencies.

- 6.8 As outlined in NFPA 472 and 29 CFR 1910.120(q), specific competencies and requirements have been described for Hazardous Material Responders. The report shall establish that the fire department will respond to LNG incidents at the First Responder Operations Level at a minimum, and at a higher level if identified as necessary to accomplish the tasks identified above any tasks specific to the to the proposed facility.
- 6.9 The report must account for the availability of staffing trained to fulfil the roles/tasks, with the required back-up, on 24/7/365 basis. The report must account for the staffing levels that may vary throughout the day/week in a career, combination, or volunteer fire department Automatic/mutual aid staffing resources may be accounted for within the evaluation and a separate evaluation may be necessary of those agencies.

7.0 Equipment:

- 7.1 Equipment appropriate for LNG incidents includes, but is not limited to: dry chemical extinguishers or equipment, high expansion foam and air monitoring equipment (meters). As outlined in NFPA 1901 (2009), only one approved dry chemical portable fire extinguisher with a minimum 80-BC rating per apparatus is required, therefore additional dry chemical extinguishers or equipment may be necessary for a response to a LNG incident. Apparatus mounted foam application systems may be present, but are not required.
- 7.2 The report should identify current levels of apparatus, dry chemical fire extinguishers, metering equipment, medical equipment, foam capabilities, or other technical equipment required to respond to any incident at the permitted facility. The report should identify specific equipment needs required to identify, contain, and/or remediate a LNG incident. Automatic/mutual aid may be accounted for within the evaluation and a separate evaluation may be necessary of those agencies.

- 7.3 29 CFR 1910.120(h) describes monitoring but does not establish a minimum number of meters required. The report must document whether a fire department has an adequate number of meters and appropriate training in the operation of meters capable of detecting methane and oxygen levels. The report must document that the fire department has adequate procedures for meter calibration and maintenance.
- 7.4 The agency or automatic/mutual aid should have equipment required to complete the tasks outlined in the training/capabilities section. The report should specify which equipment is available through the local fire department or through automatic mutual/aid. The report should identify any specialty assets held by the fire department pertinent to the proposed facility.
- 7.5 If the report concludes that any additional equipment would be needed for a local fire departments to effectively respond to a release or fire involving LNG, the report shall detail the deficiencies and provide a detailed cost estimate and schedule for a remedying any deficiencies.

8.0 Standard Operating Procedures:

- 8.1 The evaluation report should include a copy of the current standard operating procedures (SOPs) for the fire department response to a LNG incident. A review the SOP's should be included in the report.
- 8.2 If the report concludes that the SOPs are not present, not sufficient, out of date, or not in accordance with all cited laws and standards, the report shall detail the deficiencies and provide detailed changes and schedule for remedying any deficiencies.

9.0 EMERGENCY RESPONSE TRAINING PROGRAM

9.1 **The** Massachusetts Department of Fire Services recommends the following approach to ensuring appropriate training for agencies and/or mutual aid agencies that will cover a LNG facility. The report should identify which of these training steps have been completed and specify any training plans to accomplish the other training steps.

9.2 Awareness Level Training

9.3 Training courses may be presented to the Massachusetts Department of Fire Services for review and shall contain, at a minimum, these topics:

*	LNG Properties		*	Dry Chemical Extinguishers
*	Storage		*	Storm& Sewer System Protection
*	Transportation		*	Industrial Facilities Hazards
*	Liquefaction	*	Rapid 1	Phase Transition
*	Regasification	*	Extinguishment	
*	Bunkering	*	Medical Considerations	
*	High Expansion Foam	*	LNG 1	fueled vehicle technology

9.4 Once a permit application has been received by the authority having jurisdiction, the members of a fire department should begin to train on LNG and the specific hazards it presents. A Massachusetts Department of Fire Services program will be created and will be an option available to the Applicant.

10.0 Practical Skills Training

10.1 The Applicant shall provide hands-on practical skills LNG training to a proportional representation of the command and operational staff of the local fire department and mutual aid agencies if those agencies will be providing staffing, capabilities or equipment accounted for in the evaluation. The final number of personnel required to be trained may vary depending upon several factors including, but not limited to:

- the Authority Having Jurisdiction
 size of the proposed facility
 number of staff in the local agency
 facility fire suppression equipment
- 10.2 Current industry recognized training is available through:

* TEEX

http://www.teex.com/teex.cfm?pageid=ESTIprog&area=ESTI&templateid=1536

- * Massachusetts Fire Training Academy in conjunction with Northeast Gas Association http://www.northeastgas.org/tql-lng-safety.php
- 10.3 The Applicant shall provide training on an annual basis and shall encompass either new personnel or a refresher to previously trained personnel It is recommended that trained personnel should attend a refresher course every five years.
- 10.4 This list will be updated as additional training is recognized. Other sources of training may be presented to the Massachusetts Department of Fire Services for review. Comprehensive course materials and hands-on extinguishment components are required in order for training to be considered.

11.0 Emergency Response Plan Integration

11.1 In accordance with Chapter 12 of both NFPA 52 and 59A, the Applicant shall plan for emergency responses measures coordinated with the appropriate local emergency agencies. The applicant should also take the steps necessary to ensure all related response plans are coordinated with any existing local or country plans.

12.0 Site-Specific Training

- **12.1 On** an annual basis, the Permittee and the Acushnet Fire & EMS Department shall review or provide for, at a minimum:
- * Site and Facility familiarization
- * Emergency procedures familiarization
- * Emergency shutdown procedures
- * Changes to facility operations

- *Integrated response drills
 - * After hour contacts and procedures
- Facility fire suppression equipment
- * Changes to facility staffing levels

This guidance is designed to encompass all facility types. This guidance will be subject to change and update as standards and regulations are changes/updated.

13.0 Fee

13.1 The for this permit will be \$50.00

14.0 Enforcement

- 14.1 The Chief of the Acushnet Fire & EMS Department shall be responsible for enforcing this by-law.
- 14.2 Failure of a facility operator to comply with the requirements of this by-law shall result in the with-holding of the approval of the Acushnet Building commissioner and the Chief of the Acushnet Fire & EMS Department, or his/her designee, on an occupancy permit for the facility, its structures and buildings.
- 14.3 Failure of a facility operator to comply with the requirements of this by-law shall result in a penalty assessed beginning the sixty-first (61) calendar day following the approval of the LNG facility by federal and/or state appropriate licensing authority.
- 14.4 The penalty referenced in section 14.3 shall be \$1,000 per calendar day of violation as determined by the authority having jurisdiction.

Appendices

3) Meeting Agendas & Meeting Minutes

Note: The minutes from the following meetings are not presently available and will be added as a supplemental document to this report:

May 24, 2016

June 7, 2016

June 14, 2016

June 17, 2014

June 21, 2016

COMMONWEALTH OF MASSACHUSETTS

TOWN OF ACUSHNET

122 MAIN STREET, ACUSHNET, MA 02743
LNG ADVISORY COMMITTEE



TEL.: (508) 998-0250 FAX: (508) 998-0203

Monday, March 28th 2016 Town Hall Meeting Room

- I. Called to Order at 6:30 p.m.
- II. Pledge of Allegiance:
- III. Introduction of Committee Members:
 - 1. Discussion on structure and scope of committee meetings
- IV. Appointments:
 - 1. Swearing in of Committee Members by Acushnet Town Clerk
 - 2. Briefing on Massachusetts Open Meeting Law by Acushnet Town Clerk
 - 3. Q&A with Mr. Mario Tavolieri, Site Manager of existing LNG Facility on Peckham Road
- V. Meeting Mail:
 - 1. Items sent by Chair to Committee Members
- VI. <u>Discussion of Future Meeting Dates and Topics</u>
- VII. Adjournment

2016 MAR 24 AM ID: 5

LNG Advisory Committee Acushnet, Massachusetts Minutes of Meeting March 28, 2016 6:30 APPROVED APRIL 12, 2016

ATTENDANCE: Chair Chief Kevin Gallagher, William Lima, Jr., Dennis Maltais, and John Roy

ABSENT: Paul Pelletier

Chief Gallagher opened the meeting at 6:32.

After the Pledge of Allegiance, members introduced themselves. The Committee has the following five members:

William Lima, Jr., resident and member of South Coast Neighbors United (SCNU). Dennis Maltais, resident and 38 years in the construction business working with gas John Roy, teacher at Ford Middle School and member of the Energy Committee since 2008.

Chief Kevin Gallagher, Fire Chief for 13 years and member of the Fire Department for 30 years.

Paul Pelletier, resident and abutter of the proposed project.

Chief Gallagher stated that they did have some formalities that they needed to proceed with first. Ms. Pamela Labonte, Town Clerk, was present. She thanked the members for volunteering for this Committee as this was one of the largest projects the Town had ever faced. She was glad that the pros and cons of the project would be discussed in an objective manner. She then individually swore in the members that were present. She advised that it was her understanding that this Committee is formed and will continue. There will be no annual reappointments.

Chief Gallagher advised that their first official item was to be briefed on the Open Meeting Law. He noted that it was very important for this Committee to maintain a very high level of transparency and public confidence. They will be complying with the dictates of the Open Meeting Law and in some areas exceeding them. They have made arrangements for the Town website to carry their agenda and minutes. They have also established an email address which is lng@acushnet.ma.us. This will allow residents to send in their comments, questions, or concerns to the Committee.

Ms. Labonte then began to present an overview of the Open Meeting Law which had been requested by Chief Gallagher. She advised that the Open Meeting Law ensures transparency in the deliberations on which public policy is based. It covers State, County Municipal, District and Regional public bodies. A public body is any multi-member board, commission, committee or sub-committee of any region or town, if established to serve a public purpose. It also includes any multi-member body created to advise or make recommendations to a public body.

Ms. Laborte then explained what constituted a meeting. A meeting is defined as a deliberation by a public body with respect to any matter within the body's jurisdiction. All meetings must be open to the public. There are some exceptions to a meeting, one of which is the on-site inspection, provided no deliberation occurs. Other exceptions include attendance at training and events, attendance at another public body's meeting, and Town Meeting but there must also be no deliberation.

Ms. Labonte advised that deliberation has been defined as an oral or written communication through any medium, including electronic mail, between or among a quorum, which in the case of this Committee is three members. Distribution of materials is okay but no opinions are to be expressed. It was noted that multiple communications among members constituting a quorum is considered deliberation and a violation of the Open Meeting Law.

The Posting of the Meeting Notice and Agenda was also discussed. The posting requirement is 48 hours ahead. This does not include Saturday, Sunday, and legal holidays. Chief Gallagher noted that topics that members might want to recommend for the agenda can be sent to him via email. The Meeting Notice and Agenda must include the time, date, title, location of the meeting, and topics that the Chair reasonably anticipates will be discussed. There should be enough detail so that the public can make a decision on participation. If votes are to be taken the Meeting Notice should indicate that. Ms. Labonte also touched on the topics of Executive Session, Minutes, Remote Participation, and Open Meeting Law Complaints. Ms. Labonte asked if there were any questions. There were none. Chief Gallagher noted that the Clerk and her staff were very diligent in making sure that all procedures are followed correctly as well as to respond to any questions that they may have. He then thanked her for the presentation.

Chief Gallagher advised that the next thing he would like to discuss was the structure and scope of the Committee and how they are going to conduct business. He also wanted to explain the history of what had brought them here. Last summer, Eversource informed the Town of their intention to move forward with the permitting process to site a new LNG storage facility on property they own in Acushnet. Since then, there was an event at the Ford Middle School on September 23, 2015, sponsored by the proponents, Access Northeast, which allowed for questions to be asked. On January 26, 2016, a similar event was held at the Century House. This was a requirement of the Federal Energy Regulatory Commission (FERC) process. Chief Gallagher continued on February 1, 2016, SCNU, the organization that is opposed to the facility, made a presentation to the Board of Selectmen. On March 14, 2016, Access Northeast attended a Board of Selectmen's meeting and made a further presentation and answered some issues that had come up.

Chief Gallagher stated that in early November FERC will close the door for the pre-filing process. By then, it is the Town's intention through the Board of Selectmen to have a formal response to the project. This is the Committee that will weed through all the information that is available. They have been asked to have a report ready for the Selectmen by early July which is a very aggressive time frame. His hope is that, not only will they become cognizant of all the issues involved but through this Committee, the community at large will also become more educated on this project.

Chief Gallagher advised he wanted to know if members felt the structure of the agenda was okay and also was there anything that anyone would want to add or was it too early in the process. He did want to comment on one item. This was a citizens' advisory committee, therefore, they should hear from the citizens. The email address has been established, but he would recommend that residents that have questions or concerns come to these meetings and raise them at that time. His concern would be how they put that on the agenda. Should an email be submitted requesting to be put on the agenda or should they have an open mic night where there is an opportunity for people to come forward without much structure? Additionally, should residents from the surrounding towns have the same opportunity to speak?

Mr. Lima felt there should be complete accessibility by residents of the surrounding communities. They will also be greatly impacted by this project and they should be able to provide their concerns as well. Chief Gallagher asked how they could respond to a Freetown resident who comes in with concerns regarding the impact to their property in another town. He had not heard of other communities setting up some type of advisory committee meaning theirs might be the only venue for public input. Their responsibility to the Board of Selectmen is to deliver recommendations specific to the Town of Acushnet for them to formally respond to FERC. Should they set time aside at the end of the meeting for public input and see how it develops? Mr. Roy said that he would like to see priority given to Acushnet residents to speak first, but he did feel it was important to get feedback from others who will also be impacted by this project. Members agreed that was a fair response.

Chief Gallagher advised he would now like to talk about upcoming meetings. As he had mentioned, they have a lot to work through in order to meet that July deadline for the Selectmen. He works closely with the staff at the existing LNG plant and he thought before they look at what was proposed it would be time well served if they looked at and learned what was going on right now at the site. Once they were comfortable with that information, they could then look at the proposal. He is recommending that they meet every other week on Tuesday nights as the meeting room is available then. If they find they need to meet more frequently or less frequently, it could then be addressed. Members agreed 6:30 was a good time and their next meeting would be on April 12, 2016.

Chief Gallagher stated that he felt that each meeting should have a primary focus. Tonight's was the administrative tasks as well as their meeting with Mario Tavolieri. He has made arrangements for their next meeting for two visitors to come in. The first will be Mr. Norman Seymour, Director of the Mass Fire Academies' flammable gas and alternative fuel program. They have one of the two sites in the country for training with LNG. The second half of that meeting would be with the National Fire Protection Association (NFPA) which is responsible for writing the codes and standards, including the standard 59A which is on the siting, operation, and maintenance of LNG facilities. Mr. Guy Colona, Director of the 59A project, would be walking them through this code so they will know what the standards are as far as the siting of an LNG facility.

Chief Gallagher advised that he has also been in contact with FERC. That is the Federal entity that will ultimately decide if Access Northeast brings this project to Acushnet.

They will be coming back to Acushnet, possibly in mid April. This will be an opportunity for the public to attend this meeting and comment to that Commission regarding this project. Those comments will become an official part of the record. This will not be a question and answer session but questions regarding the process will be entertained. He has asked the Director of the group that will be coming to Acushnet if they would have any time to talk to this Committee prior to the public meeting. The Director has agreed but the date and time is still to be established. It might have to be on the same day before the public meeting.

Chief Gallagher thought that those three meetings would be a great way to start off this endeavor to get as much information as possible about the basics of LNG, the role of the NFPA standards, and then have a face to face conversation with the FERC officials on what their process is about. After that, he felt they should be all set with background information and it would be time to move forward with the specifics of this project. If it was agreeable to the members, he would then like to invite the proponents from Access Northeast in for specific questions at their April 26, 2016, meeting. This was acceptable to members present.

Chief Gallagher advised the next item on the agenda was the meeting mail. He wanted to discuss what had been sent out. He had sent out an email regarding receiving documents sent to FERC. Residents are also able to access this by going to ferc.gov, click the Documents and Filing tab, click eSubscriptions, and follow the registration requirements. The Acushnet project is part of Docket #16-1. He had also sent links to the digital presentations of SCNU and Access Northeast with the Board of Selectmen. Chief Gallagher stated that he had also included his March 24, 2016, letter to Mr. Jeffrey R. Martin of Eversource regarding information about the liquefaction process and information regarding emissions from that process.

Chief Gallagher then introduced Mr. Mario Tavolieri, the Site Manager of the existing LNG facility on Peckham Road. Mr. Tavolieri stated that the Acushnet facility was constructed in the early seventies. The primary operations consisting of storage, trucking, boil off, and vaporization. This facility can inject vaporized LNG into the Eversource gas distribution system. It does not have liquefaction capabilities. Chief Gallagher stated that as he understood it this was a peak shaving facility, and its purpose was to store LNG and at times of peak residential demand turn it back into a gas and put it out into the distribution system. Mr. Tavolieri said that was correct. In terms of vaporization, they come on line to supplement pipeline gas during the coldest times in winter months.

It was asked that the term boil-off be explained. Mr. Tavolieri replied that boil-off occurs 24/7. It is a small amount of vaporization from the liquid stored within the tank. It is a natural occurrence of the liquid turning back to a vapor on its own because insulating capabilities are not at 100% to keep that at -260°. The top surface of that liquid then boils off and is piped from the tanks to compressors. It is then compressed to distribution pressure and it goes out the same pipeline as the vaporized gas. Chief Gallagher clarified that there was no pipeline going into the facility. He asked the size of the one going out. Mr. Tavolieri said that it was 16 inch. He said that once the vaporization season was over and the inventory was lower, they refill the tanks via trucking. Chief Gallagher advised

that in the city of Everett there is a maritime based LNG importing facility. There is a pipe that goes out into the ocean and there is a docking mechanism that allows the tankers to pull up offshore and offload LNG which is then piped to the storage facility in Everett. There they fill the tractor trailers which would then deliver to Peckham Road. When demand calls for it, the LNG would be moved from the tank to the vaporizers. The vaporizers are a warm water bath with the ability to take the LNG product and process it and heat it up and then re-inject it into the pipeline that leaves the facility.

Chief Gallagher then asked Mr. Tavolieri to speak about their detection and notification systems. Mr. Tavolieri responded that they do have qualified and trained staff working at the facility including him, five operators, and some technicians. They also have process equipment with predetermined operating limits that are monitored. If these limits are reached, the equipment has the ability to either shut down or give them a warning. There are also hazard detection systems, gas detection systems, smoke detection systems, infrared, and ultraviolet systems. They have numerous suppression systems on site in advance of any kind of response that the Chief might be involved with. Those systems are scattered and strategically placed throughout the plant. Throughout the years those systems have been expanded and upgraded.

Chief Gallagher asked Mr. Tavolieri to speak about an unwarranted spill of LNG. Chief Gallagher said that he understood that they had a bottom withdrawal and bottom feed system. Throughout the course of the pipeline there are gates and valves. If a leak were to occur there is the ability to isolate it and shut it down either downstream or upstream of the leak. Mr. Tavolieri added that on the piping system and the equipment there are safety valves that will react to a system upset and protect the equipment. In terms of any kind of leakage or response to a system upset, isolation of the facility is their priority response. Chief Gallagher noted that if there was a release there are graded troughs that would capture the LNG that was released and slope it toward a larger containment pit where the interaction of the liquid and the ambient air would form a vapor cloud that would boil-off. Mr. Tavolieri said that was correct.

Chief Gallagher asked Mr. Tavolieri to describe the tanks. Mr. Tavolieri replied that there were two tanks. Tank one was 110 feet and Tank two was 120 feet. The diameter was approximately 86 feet. Chief Gallagher advised that they both sit in a pit in a bermed in area that is designed to hold 100% of the capacity of the tanks plus an additional amount so if there was ever a catastrophic rupture of the tank the entire product would stay within the confines of that bermed area. Mr. Tavolieri agreed that was true.

Chief Gallagher said that he was hesitant to ask about security but he would think that Mr. Tavolieri's company, as well as their insurance providers, were comfortable with the level of security at the Acushnet facility. Mr. Tavolieri said that was correct. He said that it would be known if you walked up to the plant and you would be monitored possibility from multiple locations.

Chief Gallagher asked Mr. Tavolieri to walk them through the various inspections that they experience. Mr. Tavolieri replied that their facility is regulated by the Massachusetts Department of Public Utilities. They can access the facility at any time but they usually inspect every couple of years. Their last inspection was in July of 2015

when no issues were found. They also have their own internal controls and audits where they measure their own performance. Mr. Roy asked if the Town would be informed of any violations and have there been any. Mr. Tavolieri stated that the Town would be informed and there had been no violations. Chief Gallagher said that might be a recommendation to be made to the Board of Selectmen to make it mandatory, at the local level, to find out about violations immediately so that they could monitor that corrections were made. However, this plant does not have a history of violations or emergencies. Mr. Lima asked if inspections were done by any other agencies. Mr. Tavolieri said they could be subject to the State Department of Environmental and they do have a plan for storage of waste and containment. Mr. Lima asked if OSHA did routine inspections or just for cause. Mr. Tavolieri said routine inspections have not happened.

Chief Gallagher wanted to clarify the following item that had been included on an SCNU handout. "The facility trucks in LNG, stores it as LNG and trucks it out as LNG during times of high demand to power plants. Mr. Tavolieri said that was not true. For the record, trucks come into the facility full, they offload the trucks to replenish their inventory, and they leave empty. In order to supplement the distribution system in the winter months, they use the vaporization process on the LNG which leaves in the gaseous form in the pipeline. Although the infrastructure is there to send trucks with LNG to other facilities in emergency situations, that has never happened.

Chief Gallagher said that he would also like to clarify the following SCNU statement. "The existing 40+ year old tanks would remain in place and may be a public safety concern in their own right." Chief Gallagher felt that it had been established if this was a currently a public safety concern they would know about it, but the record speaks for itself. Chief Gallagher asked what the life cycle was for one of these plants. Mr. Tavolieri stated that with proper maintenance the plant could run indefinitely without issue.

Chief Gallagher noted that there had been a letter that went to FERC with some valid concerns about the proposed facility. It had been submitted by a retired Acushnet firefighter. Two incidents had been referenced that had occurred at the present facility. The first dated back to 1989 when a telephone pole supplying the Acushnet LNG plant was hit by lightning. It blew out the electric supply and shut down the telephone lines. Chief Gallagher noted that at that time there was a dedicated phone line that went from the fire alarm panel to the fire station and that would transmit the emergency line. That meant for the period of time when the phone line was down the facility could not communicate with them. Mr. Tavolieri responded that is not an issue anymore. They now have a wireless notifier that will register into the Acushnet Fire Department. Chief Gallagher advised that ten years ago they did change from telephone lines to radio signals not only for the LNG plant but also for the other buildings in Town that they monitor. He noted that it is powered by AC, a generator in case of a power outage, and then batteries in the radio master box in case of a generator failure.

Chief Gallagher advised that the second item mentioned was when seven inches of rain filled one of the pits and the water got close to the base of the tank and the pump there had failed. Mr. Tavolieri said that the pump for Tank 2 has been replaced. It is a newer pump with greater capacity. They also added a spare pump to the plant. Chief Gallagher

said that the issue had also been raised regarding a labor dispute and how that would be handled. Mr. Tavolieri said that he would be at the plant and trained personnel would be brought in from other facilities. Plans are drawn up as they come closer to those dates of labor negotiations.

Mr. Lima asked how much LNG is stored in the tanks. Mr. Tavolieri replied that the tanks are never 100% full but possibly in the mid to high nineties. From that point forward, the boil-off process happens. They are losing inventory daily and they are also losing a certain percentage of inventory regardless if they vaporize or not. Mr. Lima asked if that extra head space in the tanks posed any type of risk. Mr. Tavolieri said that it did not. It is designed to handle that boil-off at whatever level the tank is. The amount of boil off you have is a reaction to barometric pressure.

Chief Gallagher stated that there have been many units of measurement applied to this project but what could they establish as a baseline so they were making accurate comparisons. Mr. Tavolieri said that the ratio of liquid to gas is 600:1. They store currently in Acushnet a billion cubic feet of gas which equates in liquid form to 145,000 barrels or 6 million gallons.

Mr. Lima asked for an explanation of the structure of the tank. Mr. Tavolieri said that the outer tank is steel and there is an insulating barrier. The inner tank is made out of 9% nickel material in one tank and an aluminum material in the other tank. It has to hold up to the cryogenic temperatures of the LNG. He noted that they are self refrigerating. Chief Gallagher asked if the foundations were heated or refrigerated in any way. Mr. Tavolieri stated that they were not refrigerated but they do maintain a warm foundation under the tanks. Chief Gallagher stated that in the example that was raised with the heavy rainfall, if the water had gone above the base of the tank was the LNG ever at risk. Mr. Tavolieri said the insulation is between the tanks. The water would not have hurt the tank or insulation in any way and would not have gotten to the product. Chief Gallagher noted that is why they do not put water on LNG fires as it introduces a warmer medium which causes a violent reaction. Mr. Tavolieri said that it would increase the vaporization rate as you were adding heat. Mr. Lima asked how deep the tanks were in the ground. Mr. Tavolieri said they actually sit on the concrete foundation. They are not below the grade.

Chief Gallagher asked if it would be of any value to see what an inspection report of an LNG facility looks like. Mr. Tavolieri said that they could easily Google it as it was a public document. Chief Gallagher felt that it would be helpful to see what the regulators are looking at. He would work at getting some type of document from DPU to see what it is they are looking for when they come in for an inspection.

Mr. Roy asked if tank design is much different now. Mr. Tavolieri said that it was but he would defer to Access Northeast about the design of the proposed facility. Chief Gallagher advised that the construction used for the tank in Waterbury, Ct is the type of construction they would see if this project moves forward. Although it was built years ago, it is ¼ inch 9% nickel steel as the inner thermos, an appropriate amount of insulation based upon the quantity of product that needs to stay insulated, ¼ inch steel on the outside, encased in 2½ feet of steel reinforced concrete with 10 inches of concrete on the

dome. Mr. Roy asked if the old design was inferior. Mr. Tavolieri said that the present tank is perfectly safe and that over the years they have added safety features to the facility. Chief Gallagher noted that design has changed from bottom fed and bottom drawn to top fed and top drawn. At the current facility, primary containment is in the vessel with secondary containment in the pit. In new construction, primary containment is in the vessel with secondary containment being the concrete walls with possible tertiary containment in the pit.

Mr. Lima asked if in the history of the facility had there been any serious injuries or fatalities. Mr. Tavolieri said that there have been some medical responses but they were not related to the site. Mr. Lima also asked about security measures. Mr. Tavolieri replied that he would really not get into specifics as it was too detailed for him to talk about. Chief Gallagher asked if the FAA had imposed a no-fly zone over the facility. Mr. Tavolieri said that had not been done. Mr. Lima requested that they be provided a list of any safety violations over the last ten years. Chief Gallagher said that he would request that information from the Mass DPU. Mr. Lima said that he would also like to see the inspections from the past three years.

Mr. Lima asked what the current evacuation plan was in case of an accident. Chief Gallagher said the plans are such that if there were a release of LNG, Eversource will respond with their metering equipment. There is a protocol for the metering to occur in a given area around the spill. They are looking for the percentage of natural gas in the air. The flammable range is between 5-15%. They are looking for the sweet spot, where it is heading, and what are the weather predictions. They have plans in place to evacuate the local residents and if necessary to change and enlarge that area. They do have reverse 911 which gives them the ability to draw a circle around the affected area and contact residents within that. Chief Gallagher noted that if they do in fact wind up hosting this facility they may want to reach out to communities that have this type of facility and see what went into their emergency response plan.

Mr. Lima asked if their monitoring systems were continuous and what emissions they were monitoring. Mr. Tavolieri said that they monitor natural gas. Chief Gallagher asked what emissions they create. Mr. Tavolieri said they use electricity for most of their operating facility and equipment. They do have some natural gas fired pieces of equipment. The other gas fired units would be the vaporizers.

Chief Gallagher said as they move through some of the issues, one of the specific issues they will need to focus on is public health. From what he has seen in his own research, there are some real concerns about emissions from compressing stations that are part of an interstate pipeline system, but that is not planned in this project. The new process for them is liquefaction which will use refrigerants and engines to push the refrigerants through the different piping. Mr. Lima asked if compressors would be part of the process. Chief Gallagher responded that as he understood it compressor stations were not proposed but there would be engines that would be turbines that would be used in the liquefaction process. He said that would be discussed further into this process.

Ms. Labonte asked if there was any LNG facility that did have a no fly zone. Chief Gallagher said that he had spoken to the Chief in Everett and the tanks on the Express

Way were in direct path of Logan Airport. He thought that sending a letter to the FAA to find out what criteria they use to establish no fly zones over storage facilities of LNG or other fuel sources would be a good idea. The Chief advised that he has also spoken to Congressman Keating who has offered his assistance and the assistance of his staff in getting answers to questions of the Federal nature. Mr. Maltais asked if tanks are designed for an accidental impact. Mr. Tavolieri said that impacts are designed into the tank but he did not know how big of an impact. He did not have that design criteria or information.

Chief Gallagher thanked Mr. Tavolieri for coming in. He felt that tonight had been beneficial and that they, as well as the public, had learned about some of the issues.

Mr. Roy then made the motion, seconded by Mr. Lima, to adjourn the meeting. **VOTE – UNANIMOUS**

8:54 – MEETING ADJOURNED.

THE NEXT MEETING IS TO BE HELD ON APRIL 12, 2016, AT 6:30.

Respectfully submitted,

Cathy Murray

COMMONWEALTH OF MASSACHUSETTS

TOWN OF ACUSHNET

122 MAIN STREET, ACUSHNET, MA 02743
LNG ADVISORY COMMITTEE



TEL.: (508) 998-0250 FAX: (508) 998-0203

Tuesday, April 12, 2016 Town Hall Meeting Room

- I. Call to Order at 6:30 p. m.:
- II. Pledge of Allegiance:
- III. Meeting Minutes to be approved:
- IV. Introduction of Committee Members:
 1. Mr. Paul Pelletier, Nestles Lane
- V. Meeting Mail & Unfinished Business:
 - 1. Items sent by the Chair to Committee Members
 - 2. Follow-up on comment from 3/28/16 meeting (Mr. Lima)
 - 3. On-site visits to Acushnet & Waterbury, CT LNG facilities (Mr. Lima)
- VI. Appointments:
 - 1. Mr. Norman Seymour, Director of Flammable Gas Programs at the Massachusetts Firefighting Academy (MFA), or another
 - 2. Mr. Guy Colona representing the National Fire Protection Association (NFPA), or another
- VII. Discussion of Future Meeting Dates and Topics:
- VIII. Public Comment Period:
- IX. Adjournment

LNG Advisory Committee Acushnet, Massachusetts Minutes of Meeting April 12, 2016 6:30 Approved on April 26, 2016

ATTENDANCE: Chair Chief Kevin Gallagher, William Lima, Jr., Dennis Maltais, Paul Pelletier and John Roy

Chief Gallagher opened the meeting at 6:32.

Chief Gallagher stated that one of their members had not been at the first meeting and he asked that he introduce himself. Mr. Paul Pelletier replied that he was an abutter of the proposed project. He has not made up his mind yet if he is for or against the project. He looks forward to sorting through all the information out there and then making a recommendation as to what direction they should go in this endeavor. Chief Gallagher agreed that he finds that the residents want more information and they want to learn as much as possible about this project. That is the primary goal of this Committee, to get down to those issues that they will need to advance to the Board of Selectmen and for them to then package and send that to the Federal Agencies.

MEETING MINUTES

Mr. Lima made a motion, seconded by Mr. Roy, to accept the Minutes from the March 28, 2016, meeting.

VOTE: Mr. Lima, Mr. Maltais, Mr. Roy, Chief Gallagher – **AYE** Mr. Pelletier – **ABSTAIN**

MEETING MAIL & UNFINISHED BUSINESS

Chief Gallagher discussed the following items that had been enclosed in the meeting mail:

- The first was a copy of the document used by the DPU when conducting an inspection of an LNG facility. A link was also provided.
- A letter had also been sent to Mr. Richard Wallace requesting a copy of the July 2015 Comprehensive Inspection Report on the existing LNG facility in Acushnet and copies of the most recent Specialized Inspection Reports covering the past ten years.
- There was a request from Ms. Murray, the secretary, to send copies of draft minutes to members prior to a meeting for review. Members were all agreeable to that procedure.
- A copy of the draft agenda with requests for any additional items. There was also
 a link to the Town's website which included the video from their original
 meeting.

- Information regarding his contact with the Attorney General's office. This is related to the questions of necessity of more gas in general and the pipeline/storage project in particular. He was reassured that a State entity was actually looking into the necessity of the proposed project.
- A document submitted by the company called ENGIE which runs the Everett import facility and their claim that this project is not needed. They have the capacity to import, to store, to vaporize, and to push out into the pipeline the amount of gas that proponents are saying the region needs.
- The Supplemental Project filing by Access Northeast which includes alternatives to this site.
- The response to Chief Gallagher's letter to Jeffrey Martin, Director of Planning and Siting for Eversource, requesting additional information on the liquefaction process. Mr. Martin also requested that matters that members wanted to discuss on April 26, 2016 be identified in advance.

Chief Gallagher also discussed on-site visits by the Committee to the Acushnet site and the site in Waterbury, Connecticut. Waterbury has the type of construction that would be similar to one of the tanks that is proposed in Acushnet. They also have a liquefaction station. The question had been asked if they could go as a group. Ms. Labonte did advise him that they are allowed under the Open Meeting Law as an Advisory Committee, and one who will not have the final say in what the Town says, to go to the sites as long as they do not deliberate. He thought that a weekend would be better for the Waterbury site as they would have to travel a distance to get there. He noted that the Board of Selectmen did request \$1,500 from the Reserve Fund for the use of this Committee. That would include the stipend for the secretary as well as any other expenses that they may incur.

APPOINTMENTS

Chief Gallagher advised that Mr. Guy Colonna, from the National Fire Protection Association, (NFPA) was present to discuss their role and how it applies in the proposed project. Mr. Colonna stated that he appreciated the time to address the Committee and help them understand what NFPA's role is in their consideration of the request to expand the LNG storage capacity in the Town of Acushnet. Their document NFPA 59A will play a role in that. He was the Division Manager for the Industrial and Chemical Engineering Group. His expertise is in Chemical Engineering. NFPA has about 300 codes and standards. The standards in his department deal with hazardous material and industrial facilities. His team deals with flammable liquids, combustible dust, and various gas applications. The following items were on Mr. Colonna' agenda to be discussed:

- o The NFPA standards development process
- o The Technical Committee on LNG
- o An overview of NFPA 59A
- o The NFPA consensus standards, adoption and enforcement of the standards
- o Any questions members might have

Mr. Colonna began his presentation with the history of the NFPA. It was founded in 1896 and is now headquartered in Quincy, Massachusetts. They have regional offices throughout North America. Regional Managers and Directors work with State Legislators to promote adoption of the latest addition of their codes and standards. In many instances, they also work at the local level. Many of their documents are used around the world, particularly as there is currently a focus on LNG and having additional items fueled by it, including cruise ships. NFPA has approximately 60,000 members, represented by more than 80 trade and professional organizations.

Mr. Colonna advised that the mission of NFPA is to help save lives through information, knowledge, and passion. Their first standard was the sprinkler standard. That information not only needed to be pulled together but then disseminated to building owners, sprinkler manufacturers, consultants, designers, manufacturers, etc. They still do that today. Their staff and members are devoted to eliminating death, injury, and property and economic loss due to fires, electrical, and other related hazards. Their information and knowledge comes from over 300 codes and standards, research and data analysis, training and certification, public education such as Fire Prevention week, outreach, and advocacy.

Mr. Colonna stated that NFPA is a voluntary consensus standards developing organization (SDO). They follow the protocol of the American National Standards Institute (ANSI). That means they agree to set a certain set of criteria for how they will develop codes and standards. Those criteria include openness, transparency, and lack of dominance. Anyone can attend the meetings and propose changes. They have a number of different, engaged interests, but no group can be dominant over another. Their consensus is they must have at least two thirds majority on any change that goes into their codes or standards. He noted that their documents are revised every five years. Their codes are voluntary so they are not involved in enforcement but rely on the State or local jurisdictions. Their codes are also incorporated into the Federal regulations. He would return to this item as 59A was utilized by several of the Federal Agencies that are involved in siting LNG facilities, land based, as well as, marine based. These standards are developed by committees served by over 5,000 volunteers.

Mr. Colonna said that with today's technology it is easy to go to NFPA's various web pages for each of the documents and see where the committee is in the process. Their home page is located at www.nfpa.org. They can also access the specific code at www.nfpa.org/59A. All their codes are available to view on line.

Mr. Colonna advised that there are a number of resources that support their process. Those resources are applications with statistical data. They have some fire incidents databases that they manage. This information can be used to guide committees with any changes that might need to be made. They look at events, and they have done fire investigations over the years. They also have a Fire Protection Research Foundation. That Foundation is presently involved in collecting incident data related to any kind of LNG related fires. The Foundation can clarify the need for research and establish funding sources from affected stake holders. They facilitate the conduct of the research project and then disseminate the results.

Mr. Colonna went through some of the history of NFPA 59A. The first edition of it was adopted in 1967. A committee on LNG was established separately to develop a much broader scope standard in 1969. Then in 1971, the first edition of NFPA 59A was developed under that broader scope. The purpose of 59A was to provide minimum fire protection, safety, and related requirements for the location, design, construction, security, operation, and maintenance of LNG plants.

Mr. Colonna then explained the scope and what it applies to, and what it does not apply to. The scope applies to facilities that liquefy natural gas, and facilities that store, vaporize, transfer, and handle LNG. It applies to training of all personnel involved with LNG. It also applies to the design, location, construction, maintenance, and operation of all LNG facilities. Mr. Colonna noted that it does not apply to frozen ground containers, portable storage containers stored or used in buildings, or LNG vehicular applications, including the fueling of LNG vehicles.

Mr. Colonna advised that one of the important aspects is that NFPA codes and standards are intended to not be applied retroactively. The provisions of the standards do not apply to facilities, equipment, structures, or installations existing or approved prior to the effective date of the standard, unless it is otherwise specified. Some of their committees go through and selectively establish retroactive provisions for certain features. The AHJ (Authorities having jurisdiction) may apply the standard retroactively if the existing situation presents an unacceptable degree of risk. The retroactive requirements can be modified if their application is impractical.

Regarding equivalency, Mr. Colonna said that the standard does not prevent the use of systems, methods, or devices of equivalent or superior quality, strength, etc. over those prescribed by the standard. Technical documentation is required to demonstrate that equivalency and it still must be approved by the AHJ.

Mr. Colonna then discussed the chapters in NFPA 59A. Chapter 1 is the Administrative section. It includes the retroactivity, equivalency, scope, and applications information. Chapter 2 is the reference publications. Chapter 3 is definitions. Chapter 4 is the general requirements or fundamental elements. Chapter 5 is the plant siting and layout. It includes the prescriptive set of requirements that would apply to any facility that must comply with NFPA 59A. Chapter 15 is an alternative to following Chapter 5. This says that you are going to do a risk based, performance based analysis. It is allowing you from a siting standpoint to demonstrate through analysis that you have achieved the same outcome of the prescriptive requirement of Chapter 5.

Chief Gallagher then said as he understood it the importance of each NFPA chapter being a stand alone chapter is it has shall language or there is "no wiggle room". Mr. Colonna replied that NFPA has four types of documents; codes-what you have to do; standards-how to do it. These have shall language. There are also two non-mandatory documents; recommended practices and guides. These have should language. Codes and standards use the word shall and which means they are intended to be mandatory. Chief Gallagher then asked what the difference was for a section in the annex. Mr. Colonna replied that the annex was not mandatory.

Mr. Colonna advised that Chapter 4 was General Requirements. It applies to all facilities covered by 59A. It includes basic requirements for corrosion control, control centers, sources of power, records, the presence of noncombustible materials in the area, and ignition source control. Chapter 5 refers to Plant Siting and Layout. It provides the criteria for plant and equipment siting. It includes requirements for spacing for containers, vaporizers, process equipment, loading and unloading facilities. It also looks at design, capacity, and the siting of secondary containment and impounding areas, and environmental concerns such as ice and snow and impacts from those factors. Chapter 5 also includes provisions for building and structure design classifications, concrete design, materials, and reinforcement, and portable facilities.

Chief Gallagher noted that the plant siting would be one of the most important initial decisions if the project was approved, and he believed the proponents would have to demonstrate to FERC that the siting had met certain criteria. Mr. Colonna said that was correct. Chief Gallagher stated that by siting they were referring to the actual placement of the tanks within the property. His understanding of the prescriptive Chapter 5 was there were two significant tests that are used vapor dispersion and heat dispersion. He explained it as blocking off the top of the tank and exposing the contents to the ambient air and then lighting it on fire. The code says that the heat that leaves the property must be at a certain level. The tank is then moved around until you achieve that temperature. The other standard is a release that would generate a vapor cloud. Chapter 5 specifically says that the concentration is at the distance where it is 50% of the lower flammable level (LFL). Mr. Colonna advised they are looking at where that cloud goes down wind and at the point where you are still at 50% of the LFL. Chief Gallagher stated that if you achieved that thermal radiant trigger in this prescriptive manner then you are good to go as far as building. Mr. Colonna said that was correct, and it looks at the outcomes of a release. One is a cloud that does not ignite and the other is it ignites quickly and you are looking at that thermal incident to the surrounding area.

Mr. Lima asked if the volume of the LNG factored into that. Mr. Colonna replied after evaporation the vapor cloud would still have to form. The warming of the LNG takes a bit depending on the atmospheric conditions so the volume is not the most important factor, but the warming of the LNG and it mixing to the right concentration. Chief Gallagher then clarified that the requirement is when the heat in the fire scenario gets to the property line it is at tolerable levels, and when the vapor cloud hits the end of the property line it is 50% below ignition.

Mr. Colonna then discussed Chapter 12 which is Fire Protection, Safety, and Security. It covers the equipment and procedures designed to minimize the consequences of releases. It provides basic plant security provisions. Chief Gallagher asked Mr. Colonna to comment on a 1977 study that had indicated a potential of 70,000 casualties from an accident at an LNG off shore facility with a 30 mile radius damage area. Chief Gallagher noted that at an off shore facility there would be no boundaries to hold the LNG in a confinement area. He asked if this 30 mile cloud would be feasible in a land based facility that had followed siting requirements in Chapter 5. Mr. Colonna said based on models that had been developed and improved, that kind of distance wasn't anything that he had ever seen.

Some other items covered under Chapter 12 are fire protection which must be provided. The extent is determined by evaluation of individual facilities. There must be an Emergency Shutdown System (ESD) at any LNG facility. Chapter 12 also includes requirements for gas, fire, and leak detection, fire protection water equipment, and for extinguishing equipment if the analysis determines they are necessary. Finally, it also includes requirements for personnel safety and security.

Mr. Colonna advised Chapter 14 was related to Operating, Maintenance, and Personnel Training. It provides for the minimum requirements relating to safety during the operation and maintenance of LNG plants. All facilities must have up-to-date operating procedures and a maintenance manual. It also includes requirements for emergency procedures, monitoring operations, transfer of LNG and flammables, maintenance of components, personnel training, and record keeping.

Mr. Colonna stated that Chapter 15 was the Performance, Risk Assessment, Based LNG Plant Siting. This is the alternative approach to the siting requirements in Chapter 5. It includes the calculation of risks to persons outside the boundary of the LNG plan from releases. Documentation from these calculations is required, and must be approved by the AHJ. Chief Gallagher said that he understood that where Chapter 5 looked only at risks within the boundary of the property lines, Chapter 15 allows for the expansion of that into the local neighborhood. Mr. Colonna said that was correct. Chief Gallagher said that in addition, it was stated that the risk calculated shall be compared with values of risk to which the population in the general vicinity of the proposed or existing plant may be subject to due to natural causes, or from other human activities. Chief Gallagher asked if they could assume if Chapter 15 were used, included in human activities would be the dangers posed by terrorism. Mr. Colonna replied that there is a reference in the Annex to the Department of Homeland Security's Chemical Facility Anti-terrorism Safety and Security (CFATS). That reference means if I am a proponent and I am doing this analysis, part of that would be what kind of security I am ensuring so that my facility is not compromised from that risk scenario.

Mr. Lima asked if the risk assessments took into consideration a complete spill within the boundary. Mr. Colonna replied that there are a number of tables that give the probability of failure and different types of scenarios. In doing analysis, he could pick which of the failure modes he wanted to look at as the basis for his risk assessment. Mr. Lima asked how those probabilities were determined. Mr. Colonna said it was in a variety of ways. They are looking at enhancing that probability data but a lot of it is historical.

Mr. Colonna advised he wanted to discuss how NFPA comes into play. Adoption can be at the Federal level. NFPA 59A is incorporated by reference into US DOT/PHMSA regulations at 49 CFR Parts 191 and 193. At the current time, it is the 2001 and 2006 editions. There is conversation about them updating to a more recent edition. Chief Gallagher asked when Chapter 15 was part of these two codes. Mr. Colonna replied it was part of Annex E in 2006, so not mandatory. Chief Gallagher stated so there was no Federal requirement that has proponents do an alternative to Chapter 5. Mr. Colonna said not at the current time. Chief Gallagher noted that because the Federal Government had not adopted multiple revisions of NFPA 59A Acushnet was limited to the Chapter 5 risk based analysis from a regulatory requirement. Mr. Colonna said that was correct.

However, adoption can also be at the State level. Massachusetts has adopted the NFPA 1 which is the 2012 edition. This edition incorporates by reference into 69.8, which is on Gas and LNG facilities. This edition adopts the 2009 edition which still has Chapter 15 as Annex E. The AHJ still has the ability, through retroactivity, to decide if a distinct hazard exists and to incorporate provisions that are different. The NFPA definition of AHJ is very broad and could be the State Fire Marshall or local jurisdiction officials.

Chief Gallagher asked what Mr. Colonna would consider the Gold Standard on risk assessment on siting. Mr. Colonna responded that Chapter 5 is more specific to explicit things. Chapter 15 is dependent on how I choose my probabilities. As long as it is felt that those probabilities are representative of what might really be experienced, then the QRA is the stronger approach because it is more rigorous. Chief Gallagher asked if the proponents could do both. Mr. Colonna said there is nothing stopping them from that. Chief Gallagher noted that the ultimate purpose of the risk assessment is not only where the tanks would meet all the criteria but also what mitigation factors might be required or requested in order to mitigate the risks that are found.

Chief Gallagher advised that the presentation had been very informative. Committee members had no additional questions. Chief Gallagher asked Mr. Colonna if they could follow up with him via email if they had additional questions. He said that would be fine, and he would also send copies of NFPA 59 the 2016 edition.

Chief Gallagher advised that the next appointment of the evening was with Mr. Norman Seymour who was the Director of the Flammable Gas and Alternative Fuels Program at the Massachusetts Firefighting Academy (MFA). He was also a member of the Hopkinton Fire Department. Chief Gallagher noted that Hopkinton also had an LNG peak shaving facility which included the liquefaction process.

Mr. Seymour advised that their role at the Fire Academy is to train industry personnel and fire service personnel in handling releases and fires involving flammable gases, in this case, LNG. They are fortunate to have the facility they have and because of the relations they have with a couple of very large gas associations, they have the ability to release the materials, set it on fire, and extinguish it. This gives them a lot of real experience.

Mr. Seymour stated that he has been a member of the fire services since 1987. They do have a peak shaving plant in Hopkinton with two pipelines that come into town. About this time of year, they will start taking the gas off the pipeline when the demand goes down. They then liquefy it and put it into the storage tanks. Much of what comes into the Acushnet facility originates from Hopkinton. The facility has a capacity of 36 million gallons and opened up in 1971. They have not had any significant issues there in his tenure. He has been with the MFA since 1992 and with the Gas Program since 1994. He took over as the Coordinator in 2007. People that work at these facilities come to them for training. He noted that he was also a member of the State Hazmat Response Team.

Mr. Seymour started with the history of LNG. He advised that LNG has been around since 1912 when it was first commercially used in West Virginia. It was first transported by ship in 1959. In the seventies, there was a building boom of facilities and they started

to import a lot of LNG to help with energy needs, and one of those facilities was at Everett, Massachusetts. With the exception of Distrigas, most of those facilities are now going through the process of trying to become an exporting facility due to the abundance of natural gas in this country. There are about 100 LNG storage facilities in the United States. They are seeing a lot more commercial applications for LNG. It is also an alternative fuel for trucking fleets and marine operations.

Mr. Seymour advised that it is all natural gas, and people don't always understand that. They have taken that natural gas that might be in the street and changed the vapor to a liquid for storage. It is an economical way to store and move energy. Mr. Seymour explained that natural gas is mostly methane. In its natural state it is colorless, odorless, and it is a natural thing that happens when things decompose.

Mr. Seymour stated that they concentrate on things from a first responder perspective. If there is a release what is it going to do, how is it going to act, and what can they do about it. They want to remember that it is not toxic, but it will eliminate the oxygen in a space. Although you can become unconscious, they can improve your condition by removing you from that environment. It is odorless and mercaptan is added so they can determine if there is a problem. It has a flammable range of 5-15%, which is at the lower end of the scale.

Mr. Seymour said when they talk about vapor density, which is important for emergency response; they want to know if there is a release, where is it going to go. The only way they can tell where these vapors are is with a combustible gas indicator, but if you don't put it in the right place it's not going to tell you anything. Vapor density is a way of comparing a vapor to air. Air has a value of 1 and methane has a value of .5, half the density of air. Mr. Seymour stated that the Federal standard for the odorant that is added requires that you be able to smell it at 20% of the LEL or 1% in air. He noted that if you get exposed to it for as few as five minutes, it affects your sense of smell. Massachusetts does exceed that standard.

Mr. Seymour advised that LNG is 97% methane, 3% ethane, and has trace quantities of propane and butane. It is produced by cooling the natural gas. They do not spend a lot of time with the firefighters dealing with the liquefaction process because they are not all exactly the same. If you have one in your community, you have to be familiar with the materials that are used there because sometimes those can be hazardous. The liquid itself is colorless and odorless. You cannot odorize LNG so you will not smell it if it gets out. It is non-toxic but it will displace oxygen.

Mr. Seymour then discussed specific gravity which refers to a material's density when compared to water. Water has a value of 1.0. Anything with a specific gravity less than 1.0 will float and anything with a specific gravity greater than 1.0 will sink in water. LNG has a specific gravity less than half of water. In theory, it wants to float but when it comes in contact with water, it absorbs the heat from the water and turns back to a vapor. LNG weighs 3.5 pounds per gallon compared to water which weighs 8.3 pounds per gallon. It is not soluble in water but if it did it would go back into a vapor so it doesn't become an issue. Mr. Seymour then spoke again about vapor density. He advised that when LNG is -260°F it is heavier than air, but at -170°F it is lighter than air. That is

important to the person holding that combustible gas indicator as the closer you get to the release, the closer to the ground the meter needs to be to detect the vapors. Mr. Seymour explained that the expansion rate is 600 to 1. That means every cubic foot of liquid will create 600 cubic feet of vapor. There is not a more efficient way to store and move energy.

Mr. Seymour also discussed the fire characteristics of LNG. Its flammable range was 5-15% and its ignition temperature was 1,000-1,200 degrees. The flame spread is 300-400 feet per minute. He described it as a slow and rolling effect. He explained that the white cloud in the photograph was actually moisture in the air. The cold vapors coming into contact with that moisture. The vapors are not visible so you have to have that combustible gas indicator to identify where the vapors are but it gives them an idea of where they need to deploy their equipment.

Regarding storage pressures, large capacity vertical tanks are typically .5 to 1.0 psi. Chief Gallagher clarified that there were no mechanical means to pressurize the tanks. That comes from the pressure built up by the boil off. Mr. Seymour said that was correct. There are other small vertical tanks and those operate between 60 and 70 psi. Normal over the road pressure in a transporter is 8 to 10 psi.

Mr. Seymour advised members of the BTU comparisons which was the energy that they actually got off the fuel. LNG was 75,000 per gallon, Propane was 84,300 per gallon, and gasoline, depending on the blend, was around 112,000 per gallon. Mr. Seymour stated that some of the specific hazards they would be concerned with from an emergency responder perspective were that flammable range, it is explosive in a confined space, it is an asphyxiant, and it is a very severe cryogenic. Mr. Seymour then discussed how various types of weather would impact a spill. He noted that they do have a lot of experience dumping this stuff on the ground and pushing it around. They have done this in all kinds of conditions such as sunny days, dry days, rainy days, snowy days, etc. From a firefighters standpoint one of the things they have learned over the years is that it is incredibly predictable.

Mr. Colonna then discussed tests that he had been a part of in the desert. They would get high winds, and they were looking for the vapor dispersion characteristics. They would look for the more stable cloud, so they could collect data they wanted to put with the model. If you have a strong wind with a release, it is going to push that cloud further before you get enough heat in it that it starts to rise so that distance is going to be greater that its traveled before you start getting enough buoyancy that occurs. However, with that strong wind you are dispersing it, and when it does start to evaporate you don't have that high concentration. Mr. Pelletier asked how the wooded landscape would affect the forward progression. Mr. Colonna replied that trees are actually turbulence and would disperse the cloud. Grass, bushes, or even equipment would provide turbulence and disturb the cloud so instead of having a nicely formed cloud, it would be torn apart and you end up with smaller pockets where that liquid might turn into a gas at the right concentration. Those are factors that generally favor the dissipation of a cloud and the reduction of a hazard.

Mr. Seymour stated that they do not use water to extinguish a fire as that just adds heat and makes the fire bigger, they use dry chemicals. It interrupts the chemical chain reaction and puts the fire out. Anytime they deal with a flammable or combustible, the best way to put the fire out is to shut off the supply.

Mr. Seymour also discussed the road transportation of LNG. There are some distinct features of an LNG transporter. The first is the size of it. It is very large as it is a tank within a tank, and also the 8.3 pounds per gallon allows them to carry a little bit more. Mr. Seymour noted that the LNG trucking industry actually has an emergency response plan and they help them test it periodically. Changes have been made to the plan because of the drills they have done. There are pressure building coils under the belly of the tank used when the LNG is unloaded. Mr. Seymour then described the construction of the tank. It is a double shelled container. The outer shell is made of 1 inch carbon steel, and the inner shell is made of ½ inch high strength aluminum. There is a space between them which contains an insulating medium and it is placed under a vacuum.

Mr. Seymour talked a little about where we would be finding LNG next. There are portable vaporizers that have become an important part of LNG transport. They can be used to supplement gas supply to customers while plants are off line. LNG would be off loaded from the transporter to the vaporizer where it would be converted to natural gas. The gas would be odorized before being put into the gas main. In the northeast, LNG is being used as an alternative to Propane. LNG storage tanks are being connected to portable/fixed vaporizers and odorant stations. Chief Gallagher clarified that there would be a requirement for these storage tanks, in case of a rupture or release, that there be an impoundment area that is designed to capture 100% of the volume of the container plus a little bit more. Mr. Seymour replied it is usually 110%. If there are multiple tanks, the containment would be designed for 110% of the largest tank.

Mr. Lima asked if they would be able to contain a 36,000 gallon or a major spill at the Hopkinton Site. Mr. Seymour responded that it was a large containment area. It was obviously built for more than one tank, but most of the time what they have there are multiple smaller containment areas. Chief Gallagher noted that at the current facility, the two tanks each sit inside of a bermed in area that would capture 110% of the product if it were released, but that is because it is a single wall container. The second area of containment is that berm. What is proposed is a dual wall or the metal container and then the concrete insulation. The standard allows for that to be the berm. There are other risk mitigations that may come into play such as a tertiary containment which would be the berm.

Mr. Lima asked if there were any homes in close proximity to the site. Mr. Seymour responded that there is a very large development going in immediately adjacent to the site. It was for 700 homes in the upper part of the land near the plant, and 400 homes on the lower side of Route 135. Chief Gallagher asked Mr. Seymour if they would be considered abutters. Mr. Seymour replied absolutely, and these were also considered high end homes.

Mr. Lima said that there are concerns about toxic emissions from benzene, toluene, and xylene (BTX). Could he speak to that? Mr. Colonna replied that when you are

producing crude oil you may get either oil or gas. When you get crude oil, three of the most common ingredients in it are BTX. All three are very common solvents. Those things are not soluble in gases. You will not find any of those solvent based materials that you would find in crude. It would be a concern in an oil based application, but he has never been aware of it in any gas application.

Chief Gallagher asked Mr. Seymour to comment on restrictions of who can drive down the public way in between the storage tanks on one side, and the machinery on the other side. Mr. Seymour said there was not. The only restrictions, in regard to the facility, are there are set times when the LNG trucks can be on the road and there is a set route that the trucks can take. They are not allowed to be on the road anytime the school buses are on the road. Chief Gallagher noted again that the Hopkinton facility was split by a road that allows public access with no restrictions. He asked how the LNG was moved from one side to the other. Mr. Seymour replied that there were insulated pipes underground that go from the liquefaction process to the tanks. Chief Gallagher stated that it appeared that their experiences were the same. They have had no fire based incidents at the plants nor any spill based incidents. They also saw a response to 9/11 with additional fences, gates, and security systems. The difference is Hopkinton has a liquefaction process and there is a public way under which there is a piping that carries LNG.

Chief Gallagher asked if there would be additional security measures in place on Monday, the day of the Boston Marathon. Mr. Seymour said there was nothing that they do but the plant might bring in additional security personnel for monitoring. Mr. Lima noted that the Hopkinton facility was built in 1971. Does it follow the standards from that time? Mr. Seymour said they are currently in the process of trying to upgrade the liquefaction process. Mr. Lima asked if the facility met the current standards. Mr. Seymour could not speak to that but knew that it met the standards when it was constructed. He could say that in the fifteen years that he has been dealing with the plant, the only incident there has been was a leak in the pipeline outside the fence. Mr. Lima asked what the emergency plan would be if they had complete spillage of the contents of a tank due to a rupture. Mr. Seymour replied they have high expansion foam systems on site, but it would depend where in the containment area the spill was. There are two access roads so they would come up the upwind side, and then they would begin metering. He would anticipate that you would walk that fence line, and probably not get a hit on the meter because that has been their experience. Weather conditions would have an impact.

Chief Gallagher asked if there were any last questions before they finished with their agenda items. There were none. He thanked Mr. Seymour for his presentation and all the information he had provided. Chief Gallagher advised that their next meeting was on April 26, 2016. They will meet with the proponents of the project. This will be designed as a question and answer session. He felt that they did not need to take the time to go through the PowerPoint on why this project is necessary. He would like to use that time as wisely as possible. Mr. Martin from Eversource, the Siting Manager, will come prepared to discuss liquefaction. He has asked if there are any other items they would like to discuss. Chief Gallagher said he would like to forward this to Mr. Martin so that they could get answers that night. The following were some of those questions:

- Which risk assessment tool are they using, Chapter 5 or Chapter 15?
- What are the alternatives to Acushnet?
- What were the reasons the site in Rhode Island was dismissed?
- Is this project a prelude to an exporting facility?
- A response to the letter from Distrigas that said they were able to meet the area's needs.

Chief Gallagher then asked if anyone from the public would like to comment. No one spoke. Chief Gallagher advised that he was starting to prepare the meeting scheduled for May 10, 2016. He stated that one of the issues they had wanted to discuss was security. He was trying to arrange for some security experts to come down and talk about how facilities like this are secured. He also wanted to ask if they would be open to extending a blanket invitation to other Town Departments, Boards, and Committees that may have questions and or concerns to attend that meeting.

Chief Gallagher advised that tentatively FERC would be in Town on April 28, 2016, for a scoping session. The plan is for them to be at the Ford Middle School. They will explain that they are there to take public comment that will then become part of the permanent record. It has been expressed to him that these FERC representatives will make time prior to that meeting to meet with this Committee. They would meet with them at approximately 3:00 P.M., and at least three members would be needed for a quorum.

Mr. Roy said that a question he would have would be the effect on property values. Mr. Pelletier said that he had spoken to one realtor and, in his opinion, values would increase as the revenue coming in would reduce the tax rate. He felt that they should get opinions from additional realtors. Chief Gallagher stated that he knew that the Board of Selectmen had asked the Principal Assessor to study this issue. She was agreeable to coming in for that meeting but would want to first share her data with the Board of Selectmen. Chief Gallagher would recommend that she speak to her counterparts in Hopkinton to see how that facility has affected values. He also suggested contacting Fairhaven to see how the properties next to the wind turbines were affected. Chief Gallagher then advised that there is a FERC document on line where an expansion of a facility in Maryland was approved. One of the sections in that document is a half paragraph response on property values which said that opponents did not provide sufficient documentation to say that the approval would have a harmful affect on property values. He would ask FERC officials what was not provided that would justify such a minimal response from them.

Chief Gallagher suggested taking a ride to Hopkinton and driving through that neighborhood and speaking with people. He noted that when he had gone to Waterbury they had brought in fire officials, police officials, and other town representatives to discuss how this facility had impacted their Department and Town. Maybe something like that could also be arranged. Mr. Lima advised that he would be sending his list of recommended questions for the next meeting to Chief Gallagher and the entire group by tomorrow. Chief Gallagher said he would take any questions or concerns he received via email and put together a draft letter and then circulate it for their review. When he got the okay from them, he would then send it off.

Mr. Lima then asked how the size of the facility in Hopkinton compared to the proposed facility. Chief Gallagher replied the proposed facility was significantly larger. These tanks would be 165 feet high by 265 feet in diameter. At Waterbury, they would see the same type of construction, but it would be smaller. He noted that the tanks had also been reduced by 10 feet. They might want to ask Mr. Martin why the tank size had been reduced. Mr. Lima would also ask the question why so big? Chief Gallagher said that tomorrow he would circulate the letter from Distrigas that states that this whole project is not needed as they can meet the capacity. If they say the capacity is there and they still want to construct these two mammoth tanks, why is there such a disconnect between what Access Northeast is claiming is needed and what Distrigas is saying they can provide.

Mr. Roy then made the motion, seconded by Mr. Pelletier, to adjourn the meeting. **VOTE – UNANIMOUS**

9:52 - MEETING ADJOURNED.

THE NEXT MEETING IS TO BE HELD ON APRIL 26, 2016, AT 6:30.

Respectfully submitted,

Cathy Murray

COMMONWEALTH OF MASSACHUSETTS







TEL.: (508) 998-0250 FAX: (508) 998-0203

Tuesday, April 26, 2016 Town Hall Meeting Room

- I. Call to Order at 6:30 p. m.:
- II. Pledge of Allegiance:
- III. Meeting Minutes to be approved (votes may be conducted):
- IV. Introduction of Committee Members:
- V_{\bullet} Meeting Mail & Unfinished Business (votes may be conducted):
 - 1. Items sent by the Chair to Committee Members
- VI. Appointments:
 - 1. Mr. Jeffrey Martin; Director, Project Planning and Siting, Eversource Energy (or another) (votes may be conducted)
- VII. Discussion of Future Meeting Dates and Topics(votes may be conducted):
- VIII. Public Comment Period:
- IX. Adjournment

LNG Advisory Committee Acushnet, Massachusetts Minutes of Meeting April 26, 2016 6:30 Approved May 10, 2016

ATTENDANCE: Chair Chief Kevin Gallagher, William Lima, Jr., Dennis Maltais, and John Roy

ABSENT: Paul Pelletier

Chief Gallagher opened the meeting at 6:33.

Chief Gallagher first had members introduce themselves to those present. He advised those in attendance that this Committee had been established for the purpose of learning more about the Access Northeast proposal. They have been working through the local issues of importance and bringing in subject matter experts. Their goal is to present recommendations, concerns, and areas of interest to the Board of Selectmen in order that they might deliberate and formulate the Town's official response to FERC. Chief Gallagher noted that the people attending tonight had been invited to attend this meeting. They had also been supplied topics that the Committee wanted to discuss to ensure that the proper personnel were present.

MEETING MINUTES

Mr. Roy made a motion, seconded by Mr. Maltais, to accept the Minutes from the April 12, 2016, meeting.

VOTE – UNANIMOUS

MEETING MAIL & UNFINISHED BUSINESS

Chief Gallagher discussed the following items that had been enclosed in the meeting mail:

- An email to Dennis Galvam at Eversource to arrange a tour of the Waterbury, CT facility. This will include a meeting with Waterbury officials such as Police, Fire, and Emergency Management so they can discuss their experiences and how the facility impacted their Departments. This tour has been set for May 7, 2016.
- A letter that had been sent to FERC from Engie, the company that operates the Distrigas LNG import facility in Everett, MA, that challenges the necessity of the proposed project.
- A copy of the July 2015, DPU Comprehensive Inspection Report on the existing LNG facility in Acushnet. Chief Gallagher noted that all items on the report had been rated satisfactory or not applicable.
- The April 14, 2016, memo that Chief Gallagher had sent to the Board of Selectmen inviting them to attend tonight's meeting.

- The March 24, 2016, letter from Chief Gallagher to Mr. Jeffrey Martin requesting information on the liquefaction process. The April 22, 2016, response letter from Mr. Martin was also included.
- The April 14, 2016, letter from Chief Gallagher to Mr. Jeffrey Martin asking if Access Northeast would voluntarily conduct both Chapter 5 and Chapter 15 from the NFPA 59A defined risk assessment.
- Information advising that The Massachusetts Energy Facilities Siting Board has scheduled a meeting on May 12, 2016, at the Ford Middle School at 7:00 P.M. This meeting is an opportunity for the public to comment on the proposed project.
- An email from Mr. John Peconom of FERC advising that they would not be able to meet with them at this time. Chief Gallagher stated that he did not have a definite date but thought it might be sometime during the third week of May. He would let them know when the date was confirmed.
- A copy of the draft agenda for tonight's meeting.

Mr. Lima asked if his list of requests for Eversource had been forwarded to them. Chief Gallagher replied that he had sent those to Mr. Martin via email. Mr. Martin advised that Eversource was in receipt of them.

APPOINTMENTS

Mr. Dennis Galvam, from Eversource and part of the Access Northeast team was present. He introduced Mr. Phil Suter their consultant from CH-IV. Mr. Galvam stated that one of the questions that has come up with this project is will they be exporting natural gas from the proposed site. He stated that the specific purpose of Access Northeast is to allow for domestic natural gas to flow to the region's energy power plants. It is to ensure electric service for reliability and to stabilize prices for customers. He said there is no export component to the Access Northeast project. He also noted to Mr. Lima that his letter had been received and some of those questions will be coming up on the tours that they will be having in Acushnet, as well as in Waterbury, and they will be addressing some of those concerns at that time.

Chief Gallagher stated that as he understood it this project was petitioned to FERC for the storage and pipeline exclusively and there is no export component included in that petition. He noted that in conversations with FERC officials if exporting was in the business plan for this facility, there is a different set of processes and approvals required. Mr. Galvam said that was correct and it would have to be specifically detailed within the application process.

Mr. Jeffrey Martin, Director of Project Planning and Siting, from Eversource Energy was also present. He advised the Committee that he would first like to give them a quick update on the project which he hoped would answer some of the questions that had been put to them. They submitted last November to FERC a request to follow the pre-file process. The benefit to this process is that they can engage with the agencies, FERC as well as others that are involved. This front end engineering and design process allows them to get feedback from the agencies, the public, and other stakeholders very early in the process. They can then act appropriately on this feedback so the outcome can be

affected for the better, for the community, for the stakeholders, and ultimately for the customers.

Mr. Martin advised they are now five months into that process. They have submitted Environmental Resource Reports. There are typically thirteen of them required for a project of this nature, and they all deal with different subject matter. In December, they filed their initial draft of Resource Reports 1 and 10. Resource Report 1 focuses on what the project is, the scope, the purpose and need, and what it is they are proposing to build. That focus is not just on the LNG component but all of Access Northeast. Resource Report 10 deals with project alternatives such as the No Action Alternative, Route Alternatives, and Site Alternatives. They are soliciting feedback from those initial reports and their intent is to update those based on that feedback. After those updates are made, they will be submitted to FERC approximately in late June with all of the remaining Resource Reports. Most of those reports deal with Environmental issues such as wetland impacts, impacts to streams, soils, etc.

Chief Gallagher asked if there was a report that covered security. Mr. Martin replied that Resource Report 11 touches on security. Resource Report 13 talks about engineering and design criteria. They anticipate those reports will be filed in late May. Resource Report 13 will have the detail on the design of the facility. They have been working to finalize, improve, and optimize the plot plan arrangement with the specific intent to try to minimize impacts on site and to the community. Things they have been focusing on are impacts to wetland resources and situating building and equipment to minimize visual, as well as, noise impacts. That should be on the FERC docket by late May and then available to view. Mr. Martin noted that the reason he is going through this timeline is so they could understand that they are very early in the process, and this is why they decided to go through the pre-file procedure. There is still a lot of opportunity for public involvement and input. This project, consisting of Spectra Energy, Eversource, and National Grid, intends to hear the local concerns, and do what they can to address them.

Chief Gallagher asked if the door ever closed for public comment. Mr. Martin replied that as he understood and coming up very soon, FERC would be issuing the Notice of That is the mechanism that the Agency uses to initiate the National Intent. Environmental Policy Act (NEPA) scoping process. FERC is the lead agency responsible for administering the environmental review to ensure that all reasonable alternatives have been considered, and once they make a decision on a project they can defend that decision as approving a project that is the least environmentally damaging and practical alternative. There will then be other public scoping meetings which are additional opportunities for the public to speak directly to the agency and provide input and comments. They have been informed that the week of May 16th is being targeted for scoping meetings, including one here in Acushnet. There will then be a public comment period. Mr. Martin advised that comments that are submitted during that period must be taken into account by them. Their responses to those comments would be reflected in their updated Resource Reports.

Chief Gallagher asked if they responded to individual comments. Mr. Martin replied that it is difficult to respond to each comment but what they try to do is to group the comments by specific issue or concern and respond in totality to that concern. If there is

a comment that raises a unique issue that hasn't been raised by others, they would respond specifically to that issue. Mr. Martin noted in regards people who have not gotten a response from FERC as of yet, that is not uncommon. They are required to respond specifically to those that are submitted during the comment period. The Agency will guide them if something comes in before or after a comment period, but if it is a significant issue that has merit, they would likely ask them, if the Agency was unable, to then respond to that issue. He did note that if there were comments that did not raise an issue or had no merit, they would probably not be required to respond to them. He also wanted to mention that the Energy Facilities Siting Board (EFSB) for Massachusetts is also planning to conduct a series of public meetings sometime within the next two weeks.

Mr. Martin continued that last week they completed a balloon study which is part of the visual impact analysis. Part of the charge for them is to evaluate the visual impact to the surrounding community when they build these tanks. When you determine where the tanks will be located and their dimension, someone comes out and inflates and raises a balloon at the center location of each of those tanks with the intent of having the bottom of the balloon represent the top of the proposed tank. They identify a number of sensitive visual receptors around Town; in this case about 20 were identified. They then visit each one of those locations and evaluate what they can see when those balloons have been elevated. They take the results of that analysis and prepare the visual simulations that the Agencies want to see. The preliminary results of that will be included in one of the Resource Reports that will be filed.

Mr. Martin stated that he had mentioned Resource Report 10 had been submitted in December. They are working on updating it for submittal in June. They have spent a considerable amount of time working with the Agencies, not only FERC but the Army Corps of Engineers, and the EPA to evaluate the alternatives analysis they had conducted for the project, specifically in regard to site alternatives for the LNG facility. Those results will also be presented in June. Mr. Martin advised that the letter from Engie was also referenced, and the Agencies have specifically asked them to go back and reevaluate their review of the existing facilities here in New England and evaluate the appropriateness and the practicalness of relying on those facilities. Chief Gallagher said that he understood that there had been a challenge to their Resource Report 10 which included alternatives. Mr. Martin replied that was correct. The initial feedback had been positive but indicated that it was not robust enough, and that they needed to look at a broader area.

Chief Gallagher then began to discuss NFPA 59A. He briefly explained for those present that it was a standard by the National Fire Protection Association on the production, storage, and handling of LNG. It is referenced by the Federal Code and plays an important role in the siting, maintenance, and operation of LNG facilities. The NFPA is an internationally acclaimed public life safety and fire protection entity. The Federal Code references NFPA 59A, the 2001 edition, for the siting of the tanks but the Federal Government has only updated this code once. In 2006, they did update and adopt two sections. There have been no updates since that time. Chief Gallagher noted that was important because of two methods of assessing risk for the purpose of locating the tanks on the site. The only code that is acknowledged by the Federal Government is Chapter 5, which provides for two tests which measure vapor release and heat release. For example,

one test would assume the top of the tank was cut off and the contents ignited. The heat that would be released from there has to reach a certain level before it leaves the property line. That is the thermal flux test. The second test is the same principal but you assume that the inner core was breached. The LNG would then be confined by the exterior concrete walls. There you would measure the release of vapors and where those vapors pass the property line they are required to be 50% below the lower flammable limit (LFL.) The flammable range for LNG is 5-15%. Chief Gallagher noted that these prescriptive tests are only measuring to the property line.

Chief Gallagher advised that in 2009 the NFPA developed a performance based assessment which was in the annex which means it was recommended but not required. In 2013, it moved from the annex to being a stand alone section, Chapter 15. This is important because the quantitative risk assessment method of Chapter 15 takes into consideration risks beyond the boundaries of the property. He feels that the residents of Acushnet expect an assessment that takes into account risks to individuals, risks to neighbors, risks to society, natural disasters, and manmade risks which could include acts of terrorism. Chief Gallagher said the 2016 document is not in play because the Federal Government hasn't gotten around to update its code to reference this document. It, however, provides a tool that he thought captures a lot of the concerns that have been heard from Town residents such as the risk to individuals in the neighborhood, the risk to their property, the proximity to schools and healthcare facilities, and the threat of terrorism. Although a lot has changed in fifteen years, there is no legal requirement for the proponents to consider a Chapter 15 analysis.

Chief Gallagher then stated on April 14, 2016, he wrote to Mr. Martin on behalf of the Committee laying out their concerns and their specific interest in the risk assessment models that are available. He asked if the proponents would consider doing a Chapter 15 QRA, or a more in depth type of assessment, in addition to the mandatory Chapter 5 assessment. He then asked Mr. Martin if they have come to any determination in regards to that request.

Mr. Martin replied that they have received the request, and they are currently evaluating it but were not prepared to give the Committee a definitive response tonight. They are endeavoring to do the work they need to do so they can provide them with that response. Mr. Martin noted in the letter there were two questions. The first question was which method will Access Northeast adopt Chapter 5 or Chapter 15. What is required of them is compliance with Chapter 5, and they have no choice in that. The second question was would they consider doing both. As he said, they are evaluating that request and trying to understand what is involved. This is something that is not frequently done in the US so they need to understand how it is done, who are the qualified firms that could do it, what is the scope of work involved, how long does it take, what, if any, effect this will have on the ongoing regulatory process, and the ramifications of that effect. Mr. Martin said the resulting report would then become a public record meaning anyone can then review that report. They might not necessarily object to that but FERC would have to live with that. If people commented to FERC, they would then expect a response from that Agency, and they have no idea what the ramifications of that would be.

Mr. Roy stated that Chapter 15 looks at the surrounding area around the plant. As someone that is coming into the community, why wouldn't they want to be a good neighbor and tell us the risks? Mr. Martin replied that he didn't say that they didn't want to but that it has not been done for LNG facilities in the US, so they need to figure out how to do it and who can do it. Mr. Roy said that he would like to know what the implications are going to be for the people that live around there. The results of the evaluation should speak for themselves, and they should be doing this no matter what. Chief Gallagher added that he could not underscore enough the importance of the Chapter 15 assessment to this community. He noted that the Board of Selectmen also voted last night to instruct the Committee to aggressively pursue with the proponents the Chapter 15 risk assessment.

Chief Gallagher advised that in attendance tonight were representatives from Representative Koczera's Office. They apologized for Representative Koczera who could not be present tonight. They submitted a letter for the record. Chief Gallagher read the letter into the record. It supported the in depth type of assessment defined in Chapter 15. Chief Gallagher stated that he believed that this was the most important issue, at the current time, at this phase of the project. He then asked Mr. Martin what the time frame would be in providing the Committee an answer. Mr. Martin replied that possibly not by the next time they met, but he thought it would be within the next month.

Chief Gallagher stated that a new component to this Town would be the liquefaction process, which is when the gas vapors are turned into a liquid. It could involve different chemicals and emissions that are a great concern to a number of residents. Chief Gallagher would also like clarification on compressor stations and the type of compressors that are used in liquefaction. Mr. Martin stated that compressor stations are typically part of the pipeline infrastructure and are intended to add compression to natural gas within the system in order to move the gas from point A to point B. There is a compressor station that is proposed in Rehoboth but there is not one proposed in Acushnet. There are compressors that are proposed, and he deferred to Mr. Phil Suter to explain that process.

Mr. Suter advised that you need the compressor to provide energy and pressure to move the nitrogen around the cycle. They will use a natural gas turbine driven. They take natural gas from the pipeline and it goes through pretreatment, gets cleaned up, and then it goes into liquefaction. They then use as fuel gas part of the components that get separated in liquefaction along with the boil off. You might then take a slip stream which is a small stream coming off the feed gas line to make up that remaining 5% to use as energy to draw the compressors which in turn will provide the power to circulate nitrogen in the system which is used for refrigerant.

Chief Gallagher said that one of the questions they have asked is what type of liquefaction system will be used, as his research has indicated that there are multiple refrigerants that are used in bringing that gas down to -260°. Were they definitive in saying that it would be nitrogen only? Mr. Suter said yes. Mr. Martin asked if it would help to provide a comparison of mixed refrigerant systems to understand why from hazardous and environmental standpoint nitrogen is a better alternative.

Mr. Suter advised that on this size system the two main types of technology they are using are a nitrogen expander system and a single mix refrigerant system (SMR). The SMR system uses a combination of propane, ethane, methane and some other heavier components to provide the necessary refrigeration to chill LNG. It is a little more efficient system, but the cons are the safety factors associated with propane, ethane or ethylene storage which are flammable hydrocarbons. The nitrogen system is safer as it is not flammable but it is a single component so you can't tune the system. They have elected to use the nitrogen system.

Chief Gallagher asked about emissions. Mr. Martin replied anytime you burn gas in a compression unit there are going to be emissions. They are not far enough into the design where they can be prescriptive about the equipment that they are going to use, but they do expect within the next few weeks to be in a position to select that equipment and work with vendors to understand what the likely emissions will be. He would say the same regarding noise emissions. Mr. Martin advised that acceptable air and noise emissions in Massachusetts are governed by the State.

Mr. Lima asked comparing a compressor station versus a compressor that runs liquefaction equipment are the sources of the emissions different between the two. Mr. Martin was unsure. Mr. Suter replied that the emissions from liquefaction come out of the stack. It is a byproduct of the combustion that goes up an exhaust stack. That is the main emission from the liquefaction compressors. Mr. Lima asked what that fuel that is burned is composed of. Mr. Suter said the fuel gas from the turbines comes post pretreatment. In pretreatment, you remove the contaminants that could freeze up during liquefaction. The fuel gas that they're using is a combination of fuel gas that drops out during liquefaction. It is mainly methane and ethane and some heavy components like propane and also a blend of some of the boil off gas which is mainly methane and Mr. Lima asked how they would monitor the emissions from these compressors. Mr. Martin replied that would all be dictated by the permitting process. When they did have those specifics, they would come back and share that information. Mr. Lima asked if they were aware of the current air emission limits for these contaminants. Mr. Martin said that was not his area of expertise but he could bring in expert members of the team to a subsequent meeting if that was the desire of the Committee.

Chief Gallagher said just to be clear there is a distinction between a compressor station and the compressors. The compressor station is attached to the pipeline, takes the gas out, does a quick treatment but then builds up the pressure and shoots it further along the stream. The compressors that would be used if this moves forward push the nitrogen through the liquefaction process. Mr. Martin said that was correct. Chief Gallagher said that in Mr. Martin's letter he stated that he was estimating two gas turbines each with an estimated 27,000 megawatt or horsepower output reading will be needed. He asked how loud these would be, and if they were required to mitigate noise. Mr. Martin yes they are required to mitigate once it is determined to be necessary. They have done some initial ambient noise monitoring on site. The background noise levels now are about 30 dBA. He believed the requirement in Massachusetts was that you cannot add more than 10 dBA at the property line. They would again then have to work with the vendor to understand what the likely noise generation would be. They will need to model noise generation, not

just from the compressors, but from other equipment and activity that is on site, and they will have to comply with that standard. It is their intent to work with the community so that if there are issues, they will address them as they come up.

Chief Gallagher said that he understood the site to be 250 acres with only 15 acres being used currently. It is estimated that the footprint of the new plant would be 155 acres, leaving 80 acres as a buffer zone. Would that buffer zone aid in noise reduction? Mr. Martin said that it would. Chief Gallagher then asked if the noise studies that had been conducted had been seasonal. Mr. Martin said that the studies were done in leaf off conditions. It is the expectation that the ambient noise levels that they identified are the quietest noise levels, for day, night, and time of year.

Mr. Martin wanted to emphasize that they were early in the process. The benefit to these discussions is they can hear the concerns of the community, and they have time in the process to address them to the best of their ability. In this pre-file process they are not coming to the Town or other regulatory authorities with a fully baked plan and simply asking for approval. They are going through this process together so as they receive the input, the plans evolve, they respond to it so that ultimately they get to that fully baked plan. The plan benefits from the review and all the input that has been received. Mr. Lima asked when that plan would be complete. Mr. Martin replied that the next iteration of the plan would be submitted in late May. That would only be considered step 2 of a multi step process with the agencies, with the final application to be filed with FERC in November.

Chief Gallagher asked how long the pipeline would be in Acushnet. It was found it would be 2.86 miles in totality with 1.7 miles in Acushnet. The pipe would be 24 inches in diameter. Chief Gallagher said that there was a reference to a metering and regulating station. Mr. Martin replied that on site there would be a self contained M & R station. It meters the feed gas coming in so they can account for how much is being consumed. The regulating portion controls the pressure.

Chief Gallagher then asked moving from there, was there then a structure. Mr. Suter replied it is an outside skid. It is an above ground outside structure with a cement foundation and individual metering. From there, it would go to pretreatment. Chief Gallagher asked if pretreatment was a structure. Mr. Suter said that pretreatment was a series of vessels or beds designed to take some of the components out of the feed gas that would freeze. It is designed to remove water, CO2, and anything that would solidify. It gets the gas to a state where it could be liquefied. Mr. Suter said that it is like a distillation column. It looks like a tall circular column where they run a solution that will remove the impurities. It will also have filters to remove some of the solid components that are in the feed gas. In the filters, you will have some knock out drums which will allow for any liquids that would accumulate to drop and be dropped out. There would then be separation units and a dehydrator bed that would take out the water. Chief Gallagher clarified that this was an exterior operation. Mr. Suter said they were all exterior on a cement foundation. Chief Gallagher asked what happened to the items that were extracted. Mr. Suter responded the CO2 and the H2S is passed through a thermal oxidizer for combustion. That is a process where you combust it and convert it into materials that can be discharged to the atmosphere safely. Chief Gallagher asked if there

would be a stack. Mr. Suter said that there would be. Chief Gallagher said that he was assuming that those emissions would be regulated. Mr. Suter responded in the affirmative.

Mr. Suter advised regarding the dehydrator bed usually a two or three bed system is run. One bed would be in service and the other bed would be regenerating, so you take water out and then you put water back into the regeneration gas stream. That regeneration gas stream can then either be consumed as fuel or can be put back into the pipeline and sent back out to the facility. The third bed is cooling down. Chief Gallagher asked if any hazardous material was generated and then stored on site. Mr. Suter said nothing is stored on site. It is all used as fuel, or it is sent back into the pipeline. There is nothing hazardous that is stored on site. Mr. Suter did note that there was a guard bed that contacts mercury and keeps it in the guard bed. That is disposed of by a certified third party. Chief Gallagher asked if that was the same plan for the nitrogen that is used in liquefaction. Mr. Suter said nitrogen would be used for two purposes. The first is purging, when you want to clean out operations and as a refrigerant. You will have very small losses of nitrogen through seal leaks and other small leaks. Nitrogen will be brought in via over the road truck, and it will be stored on site in a nitrogen tank. Chief Gallagher said that he did know that based on the quantity that is brought on site; permitting and licensing would be required either locally or through the State Fire Marshall's Office.

Chief Gallagher asked what a flare stack was. Mr. Suter replied a flare stack is something that you use in the event of emergencies to dispose of gas in an overpressure situation. Chief Gallagher asked if this was post treatment. Mr. Martin asked if the Chief was asking if there was any potential for something other than methane to be vented. He replied that emissions were one of the areas that they want to focus in on and be comfortable that the emissions from everything are meeting established standards. Mr. Martin said any emissions from the site have to be regulated. Chief Gallagher asked why there would be an ignition source, the flame in the flare stack, in an environment that could leak methane. Mr. Suter stated that they have a ground flare. There are walls that are shielding around the flare. There is a relief header that comes into the ground flare and individual tips within the flare and those can be lit. In the case of an upset condition, the enclosure around the flare provides safety from personnel going too close to the ground flare. If you ever did have a release, LNG vapors are cold and stay closer to the ground as they warm up and become buoyant and disperse upwards. As they disperse, they get beyond their level of flammability. Chief Gallagher asked if that ignition source would be shut down in the case of a leak and an emission of vapor. Mr. Suter said that it would depend. You would have to go through a hazard and operability process and determine what shut down conditions would be. It would also depend on the location of the ground flare. Mr. Suter stated that typically the ground flare is sited remotely or it is moved away from potential releases. In the updated plot plan, the ground flare is located a little further away from the pretreatment facility. There is a substantial distance between the LNG process piping, the LNG pumps, the vaporizers, and the liquefaction There are certain things you want to do from a layout perspective, to minimize that event from happening.

Chief Gallagher summarized that the gas is moved through pretreatment, through metering and regulating, and it is now housed at liquefaction. Is that housing external or enclosed? Mr. Suter said that it is put into what is called a cold box. There are a few different types of aluminum heat exchangers which are used to cross paths with the nitrogen and the LNG. They will be housed in a box that is tall and looks like rectangle on its side. All the liquefaction equipment is located within that box and it is usually purged with nitrogen and filled with perlite insulation to try to keep heat out to maintain the efficiency of the liquefaction system.

Chief Gallagher asked where the compressors that run the liquefaction process were located. Mr. Suter stated that they were inside a compressor building. There is a building adjacent to liquefaction. It is enclosed on all sides and has two compressors. The exhaust stacks come out on back on the opposite side away from liquefaction. The enclosure of the compressors provides weather protection and can mitigate noise.

Chief Gallagher want to clarify that the liquid product is then piped to the tank and is top fed through a pipe that goes up the side of the tank and then pumped in, rather than bottom fed at ground level, which is the current situation in Acushnet. The product is then removed from the tank in a similar manner. Mr. Suter said that was correct. The LNG is transferred from liquefaction to the tanks. It goes up the side of the tank and they have both top and bottom fill capabilities but both of those penetrations are through the top. When you are discharging LNG you have intake pumps that are submerged, and it takes the LNG out through the top. This is a more inherent safer design because there are no penetrations below the liquid level.

Chief Gallagher stated that at the end of the process LNG is at the vaporization area which is now currently enclosed. Would that remain the same with heated water changing it back into methane to be sent back out into the pipeline? Mr. Suter replied yes. Chief Gallagher asked if any compressor was used to provide pressure as it was sent out. Mr. Suter said there are no compressors on the send out system. There are pumps that are used to bring it up to pipeline pressure. The only compressors are when you take the boil off from the tank and either use it within the fuel gas system or send it off to the pipeline.

Chief Gallagher asked if there were any questions. Mr. Maltais asked after they were done scrubbing what was the purity of the gas. Mr. Suter said that it would be in the parts per million or 99.999... natural gas. Mr. Maltais asked if there were any contaminants being let into the atmosphere once the gas is treated. Mr. Suter replied that after pretreatment the contaminants are moved down to the parts per million type level. The composition of the gas would depend on the feed gas that is coming in. It would be anywhere from 95% to 90% methane with that remaining percent being a combination of ethane, propane, and heavier. Mr. Maltais said so that would eliminate anything coming out of the stack to a very minimal amount. Mr. Suter said that from a purity standpoint they are talking about parts per million, but when natural gas is burned it is combusted and the byproducts of that combustion is what comes out of the stack.

Mr. Lima said that on the liquefaction process it had been mentioned that the system was purged a couple of times a year as maintenance. Mr. Suter replied that you were not

liquefying the entire year but rather it was a season. You would liquefy to fill up the tank, and then you would stop liquefying and purge it with nitrogen which would allow you to do maintenance on the equipment if necessary. Mr. Lima noted that there had been an issue that occurred in the Plymouth Washington site. The operators generally purged the gas that helps cool the natural gas into a liquid state. The day preceding the accident the operators had not purged the equipment so when an employee started on the following day a mixture of gas and air auto ignited inside the system and caused a rapid increase in pressure. This pressurization exploded unit processing equipment along with piping causing shrapnel to fly into a LNG tank approximately 300 yards away. There is some operator error that could factor into this process. Mr. Suter advised that is a FERC jurisdictional facility and an investigation was done. They've provided recommendations in their environmental impact reports for projects. There are requirements they develop for purging and principles in accordance with 193 requirements. He thought it referenced the AGA purging and appropriate practices. FERC includes recommendations to review those purging practices to make sure they are done with nitrogen or anther inert to not allow that condition to recur. Mr. Lima asked if that practice had been adopted in the industry. Mr. Suter replied that it is typical and a lot of folks will use nitrogen if they have it on site for purging. There are some older facilities that might have different practices but this is the more common.

Mr. Lima said that it had been stated that some of his requests would be covered at the next tour. There are some requests that he made that are more facility related as far as the current facilities. Other requests dealt with vapor dispersion and also with the heat issue. His thought was that those issues could be followed up at a future Eversource meeting. Mr. Martin said several of those concerns would be answered when they submit their Resource Reports in either May or June. There was a request for a list of existing power generators which they would provide. They are struggling with the request for an annual average consumption of natural gas at each generator. They are reviewing that request to see if they have that data as well as the appropriateness of releasing it. There was also a request for organizational structure. Mr. Martin asked if a work chart with the functional titles of those positions would be acceptable. Mr. Lima said that was fine.

Mr. Martin stated regarding certain specific information about the existing facilities operating procedures and security plans; they would need to evaluate that and the appropriateness of submitting it and making it public record. If they respond to that request they need to do it in a way that protects the information for the safety of the facility and the community.

Chief Gallagher asked if there were any additional questions. There were none. He stated that the meeting had been extremely informative, and he looked forward to a determination from them regarding the Chapter 15 performance risk assessment. Mr. Martin replied that his expectations and those of the Committee were very clear to him.

DISCUSSION OF FUTURE MEETING DATES AND TOPICS

Chief Gallagher then advised that they had tentatively set their next meeting to be May 10, 2016 with one of the topics to be security. It was Mr. Pelletier's idea to visit

Waterbury and take a tour there so they would be a little more versed in the security at that plant and hopefully before that date they would be able to see the Acushnet plant as well. In framing expectations for that meeting, to ask the operators of other facilities to come in and tell us their safety plan is not something they would be agreeable to and not a good question to ask. They need to approach this from a different angle. He is attempting to get a representative from the Massachusetts Fusion Center which is where information regarding known risks is passed to. It is his understanding that it is run by a cooperative of Federal Agencies and the Massachusetts State Police. Those larger security concerns are analyzed there and then passed on to local law enforcement and officials. Chief Gallagher stated that if there is a question as to the risks associated with having large scale LNG stored in your community, then they need to understand the framework by which information gets passed and this would be a benefit to them.

Chief Gallagher said that he had received an email from Sarah Breslin of the Massachusetts Attorney General's Office. He noted that they had a conversation about the limitations of this Committee and one of the things they had agreed is that they don't have the expertise to pass judgment on the necessity of a project like this but the Attorney General's Office is monitoring issues regarding necessity. Ms. Breslin has agreed to attend the May 10, 2016, meeting for a discussion regarding what the Attorney General is doing specific to the question of necessity.

Chief Gallagher said for future meetings he knew that a local issue was environmental concerns and the impact this project would have on the Peckham Road area. He suggested that they set a night aside to discuss issues regarding wetlands, the role of their Conservation Commission, and other State and Federal Agencies that are involved. He would like to have representatives come in and brief them on what their role is in this project. Chief Gallagher stated that the focus for May 24, 2016, would then be Conservation and environmental issues.

Mr. Lima said that they may also want to have an expert in emissions come in. Emissions may or may not be an issue at this particular site but it is an area they should look at. Chief Gallagher said that he would start working to secure a representative, who is an expert in that subject matter, from the Department of Environmental Protection (DEP).

Chief Gallagher reviewed the following dates:

- May 7, 2016 Tour of the Waterbury facility.
- May 10, 2016 The LNG Advisory Committee's next scheduled meeting.
- May 12, 2016 The Massachusetts Energy Siting Commission's meeting in Town to solicit public comment.
- May 19, 2016 Tentative FERC meeting date also for public comment.

PUBLIC COMMENT

Chief Gallagher stated that at this time he would open up the meeting to public comment. It was said that out of 155 acres almost 65 acres of the site were wetlands how would that effect this project. Chief Gallagher noted that the expectation of this evening was that

public comment would come to the Committee for dispersal to the proper person for a response. He asked Mr. Martin if he would like to address this question now or at a later time. Mr. Martin replied that he could address it now. They are now engaged in an intensive review and assessment of the site. The figure quoted is based on a delineation that was performed in 2008 which they are aware of but they do not have any of the background data that helps them understand how those results were reached. summer, they sent some consultants out to re-delineate the site and then submitted an Abbreviated Notice of Resource Area Determination (ANRAD) to the local Conservation Commission. It is a process where the local Conservation Commission can review the work that has been done in the field. The end result is called an Order of Resource Area Delineation (ORAD). As part of the Commission's review they elected to bring in a third party for an additional review. During the winter months, this third party conducted his own evaluation of the site. The results of that evaluation differed greatly from their consultant's review of the site. There was quite a disparity between the two sets of results. They then elected to withdraw the ANRAD and send their consultants back into the field to conduct a more intensive evaluation. Spring is the optimal time to conduct these evaluations. They expect to have them completed by early June so they can be submitted with their Resource Reports. Their intent is to get back to Merilee Kelly and the Commission and present the results of the additional evaluation. They will then make a determination as to whether they should submit a new ANRAD. If they are in agreement with the results of the work they may not have to do that, they could then submit their Notice of Intent to the Conservation Commission for the project.

Mr. Lima asked how the results from the 2016 work that was just completed compare against the 2008 result. Mr. Martin replied they are fairly similar. Mr. Lima asked if that give him a level of confidence that those results are accurate. Mr. Martin said it did not. They were not calling into question the qualifications of the third party, John Rockwell, nor calling into question his results. They just recognize that there is a very large disparity between his findings and theirs. They want to take the time to go back out and get it right. Mr. Martin said that when they have completed their delineation, they will go through the process of trying to optimize the site plan in order to minimize their impact on wetland resources on the site. However, there are competing siting requirements, NFPA, and the need to situate the tanks in certain locations to comply with those criteria. Their hope is to be able to minimize that impact and the extent to which it will add permanent impacts and the extent to which they have unavoidable impacts. It will be up to the project to develop an appropriate compensatory mitigation program. That program may have multiple elements such as replication of wetlands either on site or off site, conservation of other land areas, and improvement of other existing wetlands. Mr. Martin noted when questioned that this was not moving an existing wetland but creating a new one. Those areas affected would no longer be wetlands.

Mr. Cabral said his general comment was that you say that you are listening to the community and are making adjustments based on that but this community has 250 acres that they have zoned residential. Based on zoning, in his opinion, the community does not believe that this is an appropriate place for the one of the largest LNG storage facilities on the east coast. This is where we live and these are our homes. Now Eversource is going to come in without regard to local zoning, without regard to what the neighborhood wants, go to FERC, who doesn't care about us, who doesn't care about our

neighborhoods, who doesn't care about our wildlife and our wetlands and they are going to do whatever they want. Thank you for coming in and the wonderful presentation, but what we think is we don't want this here.

Chief Gallagher said wishing this away is not going to work, and he said that with all due respect. The reality is the proponents came to this Town and said we own a parcel of land and we want to use it. There is now a Federal process that governs how that is reviewed. There are challenges and multiple reviews by a host of entities. What he hears from Mr. Cabral and others at this point in the development is frustration, as they do not have much trust in bureaucracies. They have seen in multiple examples how government fails them. In this case, the oversight, the reviews, and the input of multiple entities are still the process. One of the complexities of this is that the plant has been a good neighbor, but the enormity of this proposal is unsettling. This is the largest LNG facility on the east coast. It is an industrial operation, and it will sit in the middle of a residential neighborhood. Their job is to vent those local issues and concerns such as the siting of the tanks, the applicability of a higher standard of public safety review, wetland concerns, security and safety, and the things that they will be forced to live with on a day to day basis if the project comes to fruition. Please understand that they hear the frustration and what is going to impact the decision makers will come from the local level. It needs to be developed and then addressed to the appropriate people.

Mr. Les Daiken stated he had one comment and it was taken from Dr. David Brown who is a toxicologist at the Center of Disease Control in Atlanta. He stated on January 30, FERC is not responsible for protecting the public's health. The burden of proof with regard to safety is not for the proponents to prove but rather residents must prove it unsafe. Mr. Daiken asked how could they do that unless and until it is there, and then it is too late. Chief Gallagher replied that the knowledge that they have is that there are State entities that monitor established criteria and force those standards. There is a reliance on the established structure to do what they are supposed to do.

Mr. Lima requested that the Board of Health be present at the meeting where emissions are discussed. Chief Gallagher said that was a good point. He was going to suggest that at one of their final meetings, after they get through the subject matter experts, they make the invitation to all Town Departments to come in to let them know what their individual concerns were.

One attendee of the meeting thanked the Committee for making this an easy to understand meeting. She also asked if it was determined that this was a hazard to the citizens of the community and it was brought to the Board of Selectmen and they were told that the Committee doesn't feel that this is a good situation for our Town or in the best interest of all the people, will it have any effect? Chief Gallagher replied that will be the exact question that he will ask of the FERC representative when they come to Town. He suggested that she go on the FERC website and read their decisions and review their response to issues raised. He was personally surprised to see how short those responses were to what he was sure was a lot of effort on the part of the local community. It made him also wonder how much input does a local official have. He was going to ask how were the local concerns that got more than a small one paragraph answer packaged to get attention. What is the best way to put something together that will make a significant

impact to FERC? Chief Gallagher felt that it was important to find out what those best practices were and to follow them. It was asked if there would be a Town vote. Chief Gallagher noted that at the Selectmen's meeting last night they instructed the Town Administrator to request the Town Clerk come in and advise them on the process by which they get a referendum question on the ballot. They didn't say what that question would be but just wanted to be educated on the process. Chief Gallagher asked if there were any additional questions. There were none.

Mr. Roy then made the motion, seconded by Mr. Maltais, to adjourn the meeting. **VOTE – UNANIMOUS**

9:19 - MEETING ADJOURNED.

THE NEXT MEETING IS TO BE HELD ON MAY 10, 2016, AT 6:30.

Respectfully submitted,

Cathy Murray

COMMONWEALTH OF MASSACHUSETTS

TOWN OF ACUSHNET

122 MAIN STREET, ACUSHNET, MA 02743 LNG ADVISORY COMMITTEE



TEL.: (508) 998-0250 FAX: (508) 998-0203

Tuesday, May 10, 2016 Town Hall Meeting Room

I. Call to Order at 6:30 p. m.: П. Pledge of Allegiance: III. Introduction of Committee Members: IV. Meeting Minutes to be approved: Meeting Mail & Unfinished Business (votes may be conducted): 1. Items sent by the Chair to Committee Members VI. Appointments: 1. Major Christopher Mason, Commonwealth of Massachusetts Fusion Center (State Police) (or another) 2. Atty. Sarah Bresolin, Office of the Massachusetts Attorney General (or another) VII. Discussion of Future Meeting Dates and Topics: VIII. Public Comment Period: IX. Adjournment

LNG Advisory Committee Acushnet, Massachusetts Minutes of Meeting May 10, 2016 6:30 Approved June 21, 2016

ATTENDANCE: Chair Chief Kevin Gallagher, William Lima, Jr., Dennis Maltais, Paul Pelletier and John Roy

Chief Gallagher opened the meeting at 6:32.

In accordance with the Open Meeting Law, Chief Gallagher announced that the meeting was being recorded by video and audio.

Chief Gallagher then had members introduce themselves to those present. He advised that the Clerk was not present due to another commitment.

MEETING MINUTES

Mr. Roy made a motion, seconded by Mr. Lima, to accept the Minutes from the April 26, 2016, meeting.

VOTE: Mr. Lima, Mr. Maltais, Mr. Roy, Chief Gallagher – **AYE** Mr. Pelletier – **ABSTAIN**

MEETING MAIL & UNFINISHED BUSINESS

Chief Gallagher discussed the following items that had been enclosed in the meeting mail:

- A copy of the draft agenda for tonight's meeting.
- The formal Notice of Intent from FERC, as well as, information relating to the Access Northeast Scoping Meetings.
- A draft of the memo that was sent to all Town Departments, Boards, and Committees.
- An email from Mr. Peconom, the Environmental Project Manager from FERC, who was agreeable to meeting with them before the scoping meeting scheduled for May 18, 2016, at 3:00 p.m. Chief Gallagher noted that this would be an open public meeting.
- The May 3, 2016, email from Chief Gallagher cancelling the site visit that had been scheduled for May 7, 2016.
- The May 3, 2016, email from Mr. Roy requesting that the Committee investigate the effect of LNG storage facilities on property values. The response from Chief Gallagher indicating that Ms. Koska, Principal Assessor would share with the Committee the report that had been presented to the Board of Selectmen.

- A copy of the May 1, 2016, letter sent to both Mr. Mark Marini, Secretary of the Department of Public Utilities and Mr. Robert Shea, Presiding Officer on the Energy Facilities Siting Board by Mr. Roger Cabral.
- The May 9, 2016, email from Chief Gallagher advising that Saturday, May 21, 2016, would be the new date for the site visit to Waterbury.
- A copy of the May 6, 2016, letter from the Commonwealth of Massachusetts, Office of the Attorney General, requesting an extension to the Scoping comment deadline.
- A draft copy of the letter that will be sent to FERC from the Committee also requesting an extension to the Scoping comment deadline.

APPOINTMENTS

Chief Gallagher advised that one of the issues that became very clear and was at the top of the list for concerns was security. People do want to know how much of a risk it is to have LNG in a community. Tonight, Major Christopher Mason of the Commonwealth of Massachusetts Fusion Center was present to give them a briefing on how security in the State works.

Major Mason advised that post September 11th it was realized that there was a real failure to share information or 'connect the dots' that reached down from the national level to the local and state levels. There was also a failure to link collective knowledge of those in the field to national priorities and a difficulty in sharing or exchanging that classified information. What came out of this was the idea to develop what became known as Fusion Centers. They are managed by State and local entities with some federal funding through the Department of Homeland Security (DHS) and designed to be the focal point for the receipt, analysis, gathering, and sharing of threat related information for all hazards, crimes, and terrorism. The mission of the Fusion Center is to inform decision makers of threats and the local implications of national intelligence. They try to bring in personnel from other agencies both informally and formally to work together and share information and intelligence. They also do outreach to the private sector and public sector to identify concerns and potential threats.

Major Mason stated that one of the primary ways they interact with the public and law enforcement is through suspicious activity reporting. They have a very uniform intake and vetting process and strict civil liberties and privacy templates they lay against the information as it comes in. They take that information in, review it and try to add some local and state contacts to it, and then forward it to their federal partners who repeat the process. If it, the information, continues to rise to a level where it is actionable it would be forwarded to the Joint Terrorism Task Force (JTTF) for operational consideration. They are constantly looking at the suspicious activity reports for any trends or connections. That is one way they try to stay ahead of the threats.

Major Mason advised that there were two fusion centers that exist within the Commonwealth, the Boston Regional Intelligence Center (BRIC) which services the Boston Metro area and the Commonwealth Fusion Center (CFC) which services the rest of the State. These two centers work very closely together. In addition to that, they are

part of a national network of fusion centers that exist within the United States and the territories. These centers have the ability to network, to speak to each other, and to share information. The DHS is one of the prime funding mechanisms for them. It provides them with training and policy guidance. In the fusion center network, there is mutual support for critical incidents and information sharing. They have to have a certain level of transparency otherwise the public will not accept what they do. For that reason, they do everything through a lens of privacy, civil rights and civil liberties protections.

Major Mason advised that one way the CFC provides support for local law enforcement is to provide situational awareness, for example, a bomb threat. They would get that message out and then decision makers in the field can make a decision in context. They provide trends, tactics and procedures of criminal or terrorist activities. They try to enlighten and educate law enforcement of the behaviors they should be looking for and the things they need to be concerned about in the community. These are the trends that they see and that you need to be aware of. They also have a critical infrastructure program. Major Mason said that the Fusion Center serves as a conduit for threat information and this goes both ways. They also provide support for special events such as the Boston Marathon, and if communities had any special concerns with local events.

Major Mason stated that what he would like them to walk away with tonight is if they become aware of a threat and they receive intelligence of a threat against a particular event, concern, or critical infrastructure within a community, they are going to find a way to get that information, even if it is classified, down to the local decision makers.

Chief Gallagher thanked the Major for his presentation. Chief Gallagher said that there was a great deal of energy such as nuclear, electric, gas, etc. moving through the Commonwealth. How is that monitored and how is a threat against any of those translated to Chief Alves? Major Mason replied suppose some information developed internationally that someone was going to conduct an attack on the energy sector on a specific piece of critical infrastructure. That information would roll down hill internationally and probably be shared with the FBI. They have people collocated with the FBI, and they have people from the Massachusetts State Police assigned to the JTTF. They would receive that classified information, vet it, and take a look at how it would potentially impact the Commonwealth. They would identify critical infrastructure within the community that would be impacted by it, and they would make that threat known to local law enforcement so they can act in advance of it.

Chief Gallagher noted that it had been mentioned that not only are they taking information that is provided by others, analyzing it, and passing it down but they are pulling in information that is gathered locally and doing the same. Major Mason said that was correct, they are both speaking and listening. If they are receiving information from the intelligence community that these threats exist, they are relaying that down to the lowest level where it can be acted upon, but they are also taking information in. If there is a trend, the analyst will pick up on it and that is information they will want to report right back out to local law enforcement. They would most likely also inform the stakeholder of it.

Chief Gallagher stated that Major Mason had mentioned the JTTF and possible actionable consideration. Could he speak to that for those who were unsure of what that meant? Major Mason said sometimes people observe what they think is suspicious behavior or activity. They would have to investigate and determine if it was an innocent encounter, or if it was necessary to pursue further.

Chief Gallagher then stated regarding the Boston Marathon which began in the Town of Hopkinton, where they have 5 billion cubic feet of LNG stored in three tanks, he would imagine that in security briefings that facility may come into some review. Major Mason responded that it would be fair to say all critical infrastructures along the entire route of the Marathon are reviewed. Chief Gallagher said they have been reading that the Department of Homeland Security classifies LNG storage as a risk for terrorism. Could he comment on that? Major Mason said not without having the context of what that was given in.

Chief Gallagher asked if there were any additional questions. Mr. Lima asked when the Fusion Center came into existence. Major Mason replied that shortly after 9/11 there was a desire to address some of the concerns raised in the 9/11 Commission. Mr. Lima asked given their large database has there been any information that would tell if there has been any level of suspicious activity at LNG facilities. Major Mason said he would say they are aware of the threats that exist with any critical infrastructure including LNG. They are constantly evaluating any suspicious activity that is related to those critical infrastructures. Mr. Lima then asked if there was any hard data or evidence of this. Major Mason said that they at the CFC do not have hard data relative specifically to his LNG question.

Chief Gallagher asked Police Chief Alves if there was anything he would like to add from a local perspective. Chief Alves said that the Fusion Center is probably a new term for most people present tonight. He does receive emails either daily or weekly to update him, the department, and the town on anything that may be coming up. That information does come in and is actively used. It does have an impact on the way they do police work and the way they help to protect the community. The Fusion Center is a real resource to the town and they do use it.

Chief Gallagher advised that their next appointment was with Atty. Sarah Bresolin of the Office of the Massachusetts Attorney General. She had been kind enough to reach out to them on the question of project necessity and the need for increased energy infrastructure in the Commonwealth. Atty. Bresolin thanked all that were present for their interest in this matter. She also introduced her colleague Mr. Steven Marshalek. Mr. Marshalek is the Regional Director of the Attorney General's office in New Bedford which also serves Acushnet. Atty. Bresolin stated that she worked for the energy and telecommunications division which is part of the Attorney General's office. They represent Massachusetts customers in the delivery of natural gas, water, electricity, and telecommunication services. They are the rate payer advocate and they work at the State, regional, and Federal levels to make sure that energy delivery and telecommunication delivery to residents of Massachusetts is safe, reliable, and affordable. This is the lens that is being used to evaluate the entire Access Northeast pipeline project and specifically, the proposed facilities in Acushnet. They believe that this pipeline does not necessarily

measure up to the standards that were just stated. They are looking into the need and the necessity of increased natural gas infrastructure in the Commonwealth. One of the ways the Attorney General's office first challenged this need and necessity was through a report that was commissioned and released in November of 2015. This report found that there were no significant regional electric reliability issues through 2030. The report actually relied on conservative assumptions and also looked at a worst case scenario using the winter of 2004 which was one of the coldest winters in the last couple of decades. It was found in the very worst case there were about 26 hours over 9 days from now until 2029 that there would be a very tiny shortfall. However, this shortfall could be addressed in alternative ways. These ways are less expensive and less environmentally detrimental. They include energy efficiency, demand response which is when the electric grid can communicate with appliances or machinery in households or factories and ask that machinery to turn off during times when the grid is particularly taxed, and also the use of renewables.

Atty. Bresolin said that one of the options the report did look at was increased use of LNG. However, it was interesting that there was no mention of new construction for new infrastructure, no pipelines, no storage, no liquefaction, or gasification. The report found that the current LNG infrastructure is presently under utilized. One of the solutions looked into increasing the use of current infrastructure and increasing the number of imports through the Distrigas terminal in Everett. This report did demonstrate that the Access Northeast proposal is more costly, worse for the environment, and in short there is no reason to build it. Since that report was commissioned and released, the AG has begun participating in two filings that are currently at the State regulatory level at the Department of Public Utilities, one is filed by Eversource and one is filed by National Grid. These filings are how the utility companies ask for approval for natural gas transportation and storage agreements that they will sign with Algonquin Gas Transmission, one of the equity owners in the pipeline and proposed facility. They have been working very diligently and are now under the discovery process which is the opportunity to ask questions and review the responses.

Atty. Bresolin stated that the residents here, as well as the Committee, will be happy to know that the AG is not the only party to the proceedings that are looking to the question For example, some of the other stakeholders are the of need for this pipeline. Conservation Law Foundation and NextEra Energy Resources. They have also been doing due diligence and have similar questions and concerns. Atty. Bresolin advised the following are some of the AG's questions: Are current LNG facilities and infrastructure constrained? What kind of impact the proposed facility will have on new facilities. Would a local LNG facility be capable of liquefying domestically sourced gas less expensively than it can import LNG? If the facility is not sited here, will the pipeline still be built? After looking at some of the concerns raised in the discovery phase, they still feel there is no conclusive evidence that the capacity that will be generated through this project will actually be fully utilized. One of the major concerns of the Attorney General is that right now it is proposed that the ratepayers will pay for this infrastructure and if it is not fully utilized, the ratepayers are still going to have to pay for it. They believe there has been insufficient analysis to show that domestically sourced LNG will actually be less expensive than imported LNG. They have also learned that there will have to be some significant upgrades to the proposed LNG facility location. Eversource has indicated that they will require about 15-20 additional megawatts of electricity to operate the facility so they are looking into how much this will cost, what does it mean, and whether the DPU actually has to approve these types of upgrades.

Atty. Bresolin stated that gave them a good idea of the types of concerns the AG and some of the other stakeholders have. They are also looking into other things, but this speaks specifically to the need issue which she had been asked to discuss. They continue to challenge the utilities to their claim that this is necessary for New England and that it will decrease costs to ratepayers. They will continue to do so throughout these proceedings. She also wanted to note that it was not her division that is leading the charge on the FERC proceeding but it was actually the Division of Environmental Protection but that she was monitoring it. She noted that FERC had corrected the deadline on the docket for comments to May 31, 2106, due to the Memorial Day holiday. There was still no word if they will extend the deadline.

Atty. Bresolin also advised that the applicant at the Federal level, Algonquin Gas Transmission, and not Massachusetts Utilities will be releasing a series of resource reports at the end of June. This is another reason why it would be great to extend that deadline so people could review them and then submit their comments. Resource Reports 11 and 13 will address the LNG facility specifically. For those present, that FERC docket filing number was PF16-1. In conclusion, Atty. Bresolin wanted them to know that the Attorney General was acutely aware of the controversy surrounding the proposed facilities here in Acushnet and recognized that there are people in favor of the facilities. They are working hard to ensure that the regulators have all the information they need in order to make the most informed decision and will benefit from the work they are doing. She was happy to take any questions the Committee might have.

Chief Gallagher said that earlier Atty. Bresolin had forwarded him a link that listed a lot of the documents that the Attorney General's office had initiated as well as those that had been received. Is that something that could be shared at this meeting for the public to access? Atty. Bresolin replied that was on the Department of Public Utilities website and the Eversource docket number is 15-181 and the National Grid docket number is 16-05. In those, you can find every single party that has attempted to intervene and whose intervention was accepted, all of the requests for discovery, the companies responses, all of the memos, and the decisions the DPU has published.

Chief Gallagher stated that although Atty. Bresolin had noted that FERC was not in her division, he felt she was more familiar with that process than they were. He said that he was becoming more concerned that without the extension of the deadline that comments would be cut off on the 31st of May. He has been told that you can continue to comment but for FERC to accept the comment and find something in it of interest that they would challenge, the 31st is the deadline. Atty. Bresolin replied that she believed that as this is such a large file FERC would like to hear from as many people as possible, on as many different issues, as soon as possible. It was correct that the earlier comments came in the better and perhaps the more attention is paid to them. However, you can continue to comment until, she thought, a decision on the pre-filing application is finalized. Chief Gallagher said that it is puzzling that the deadline to comment comes before the release of documents that you would want to comment on. Atty. Bresolin said they agreed and

stated that something else that has been done is to submit initial comments and within that reserve the right to submit further comments.

Chief Gallagher then asked if the electric reliability study incorporated facilities that were coming off line such as Pilgrim and some of the others. Atty. Bresolin replied yes that the report was actually delayed to take into account the announcement that Pilgrim was coming off line. Chief Gallagher then asked if the AG had a strategy if FERC did allow this project to proceed. Are there other mechanisms that can be used if you find the necessity issue is so clear that you would be willing to pursue it in other areas? Atty. Bresolin replied that the DPU's order allowing electric distribution companies to purchase gas capacity was appealed by two parties and an appeal of a DPU final order goes to the Supreme Judicial Court (SJC.) They anticipate the SJC decision to be released in August. If it is found that the DPU was incorrect in law to grant permission for electric distribution companies to buy gas capacity, then the landscape totally changes. If Access Northeast project is built, they would have to find another way to fund it as rate payers would not be on the hook. They are eagerly awaiting that decision but in terms of long term strategy, she could not comment on that right now but did say that this is a very important issue to the Attorney General.

Mr. Pelletier asked if they could get a court order against FERC if they do not extend the deadline for additional comments. Atty. Bresolin said she did not know the answer to that. She has never heard of such a mechanism but that did not mean it did not exist. Mr. Lima asked when looking at the energy needs of the area, why was there such a large discrepancy in the numbers from the AG compared to Eversource and National Grid. Atty. Bresolin replied that it comes down to calculations and variables. The AG is trying to dig into Eversource and National Grid models and calculations but some of it is proprietary and confidential so they don't necessarily know everything that goes into that evaluation. She agreed that it is the same geographic area and similar resources yet they come out on two different sides. She thought the AG's study looked at six different alternatives. They really looked at renewable, energy efficiency, and demand response, with most of those in a combination together. She believed that the companies also looked at that, but it was looked at differently with not as much time used in that evaluation. Mr. Lima said that he was having a hard time with the size of the tanks and quantity when they are being told that this is to cover the needs of approximately 30 days of the year. Atty. Bresolin said they were too, and it something that is baffling a lot of people. If these facilities are really meant to be peak shaving facilities withdrawing LNG only on those coldest hours of the coldest days of winter, they are questioning why they are building the liquefaction, vaporization, and the storage tanks, and why it is all necessary. Mr. Lima asked if Eversource was leveraging the closure of the power plants to their advantage so they can say this is exactly why this project is needed. Atty. Bresolin said she would imagine that they are, but she could not definitively say that they are and whether or not they would still be proposing this project if those plants were not closing.

Mr. Roy then said that last week when Mr. Martin was before the Committee it was said that if they wanted to use this facility for export; it would have to be in the application. Atty. Bresolin said that was correct and they would have to build an export terminal. She believed there was only one at this time in the US and that it was in Texas. This was a

whole other permitting process with FERC. Mr. Roy asked if this could be amended on an application. Atty. Bresolin replied that she imagined it could but that it would have to be done soon. She said that in the discovery questions when it has been asked, they have been emphatic there is no plan to export natural gas. She did clarify that she believed it could be an addition down the road but it does require an additional process at FERC and it is extremely costly apparatus. Chief Gallagher said that it was important that they drew a distinction between exporting LNG and exporting natural gas. They currently have an LNG storage facility that takes in LNG from tankers (trucks) and they have the capacity to export that but they never have. It is part of the design that if it is needed in a mutual aid type of situation, it can be done. Atty. Bresolin asked if he meant ship overseas. Chief Gallagher said no, over the road. When the conversation turns to exporting LNG from this facility, he understood that was when FERC would have to permit them to be an export facility. Atty. Bresolin said that was her understanding. Chief Gallagher said there were economic issues that made that a challenge because without a pipeline going to a shoreline so a tanker could fill up and go overseas, you were left trucking it out which would require many tankers. This would not make export of LNG from the proposed site economical. Chief Gallagher said next was the question of exporting methane in the pipeline to a facility where it is liquefied, and then shipped out overseas. The whole export question is confusing given the scope of the proposal here is intake of methane, liquefying, storing, vaporizing, and exporting out through the pipeline into the grid versus storage, movement of LNG to a tanker to go overseas. He just wanted to clarify that.

Chief Gallagher then asked Atty. Bresolin to talk about the ISO. Atty. Bresolin replied that the New England Independent System Operator is the regional manager of energy markets. FERC sets the regulations for the markets and then the ISO manages those regulations. Chief Gallagher asked if the ISO contradicts what the AG has said. Attv. Bresolin said that she believed that the president of the ISO has said that additional capacity would be useful. Chief Gallagher asked how there could be such a big disconnect where one independent agency that advises the Federal Government can say that there is a need and studies managed by the AG say that there isn't. Atty. Bresolin said a good way to look at it was the AG represents consumers, the rate payers. ISO New England manages the markets and the supply of energy in New England and in that role an abundance of energy would be ideal for them, as they would not have to worry whether there was going to be a brown out or a black out. It would make managing the grid in New England a lot easier, but it could be very expensive for the rate payer. There needs to be some solution where there is safe and reliable energy, but that is affordable for the rate payer. If the DPU approves the contracts that Eversource and National Grid want to sign with Algonquin then that approves the structure and sets the standard. The AG can continue to represent the rate payers to ensure the rates charged are fair. Mr. Lima asked based upon the \$3.2 billion cost of the project, has the AG determined what the cost would be to the ratepayer. Atty. Bresolin said the entire cost would be charged to the ratepayer but she would have to get back with a specific amount. Chief Gallagher asked if the cost of the project would be broken down by states and those costs be charged to ratepayers only in that state. Atty. Bresolin said that filings have been started with the public utilities in other states. However, if they are not approved they have not yet been able to get a clear picture on whether Massachusetts ratepayers would have to

foot the bill for ratepayers in other states. Chief Gallagher asked if there were any additional questions from the Committee. There were none.

PUBLIC COMMENT

Mr. Roger Cabral noted that the Department of Energy just approved the ability of a company that Spectra is a part of to export gas through New England out to Nova Scotia. They have applied for permission to reverse the flow of the gas in one of the pipes that had been bringing gas down from Canada to New England. They wonder why the LNG tank in Acushnet is so big. It is his opinion that they have all this gas that would normally be servicing the area but with the ability to export gas to Nova Scotia, they will need to replace that gas from the local market. Therefore, it will be true that they will not use the facility for export but they will use it to backfill the system.

Mr. Les Dakin advised that they just opened a 1,000 acre export facility in Louisiana. There are four other export facilities under construction and 22 others being permitted. He believed that either now or down the road, they are going to want to export. Ms. Wendy Gracia of Freetown commented regarding the discrepancy in the energy need reports. She said to consider the source and what there is to gain for the energy companies compared to the Attorney General.

Mr. Bob Bousouir said that he had asked Mr. Galvin what the difference would be between the money they would get back from lower rates against the cost. Mr. Galvin had taken his name down and said that he would get back to him. It had been at least a month and he had not received any answer. Atty. Bresolin said that the utilities have done a calculation that shows the number of dollars that will be saved by ratepayers for building the infrastructure in terms of breaking it down. She was not as familiar with that part of the filing.

Ms. Maria Connolly felt there was nothing stopping Eversource for asking for a permit to export after the construction is completed. Mr. David Hammond from New Bedford thought it was logically obvious that export is the end desire of this project and this would be through the New Bedford harbor. This area would become a greater potential terrorist target because of the highly concentrated population. Chief Gallagher said that Major Mason had indicated that all critical infrastructure is a potential risk not just LNG. They need to be sure that their comments reflect what is actually said and are not just speculation. Chief Gallagher noted that comments needed to be limited to the Acushnet facility as that was the scope of this Committee. Mr. Hammond said that his comments were for the benefit of the Attorney General's office in consideration of possible permitting processes that might go forward.

Ms. Emily Johns of New Bedford asked if the Resource Reports would be coming from FERC. Atty. Bresolin said they are company reports that Algonquin Gas Transmission will be drafting. They will go to FERC and then go onto the docket. Chief Gallagher noted that in the Notice of Intent from FERC there is a schedule of when the various Resource Reports will be submitted. FERC has challenged some of the information from

these reports by the proponents. She should continue to monitor the site as additional reports are submitted.

Ms. Gracia asked why they are being allowed to segment this project when it is all connected and actually just one huge project. She stated that smaller projects are able to be pushed through the permitting process quicker. Is the AG looking into that because Algonquin was found in fault in 2014 by the Supreme Judicial Court for segmentation of a project? Atty. Bresolin replied not to her knowledge but she would look into it.

Chief Gallagher advised that one of the alternatives that is being looked at is in Burrillville, RI. It is on property that is owned by Eversource, extremely rural, and adjacent to the pipeline. Atty. Bresolin noted that it was an expansion of an existing facility. Chief Gallagher said that in addition to an alternative site that is close to an elementary school, they are also looking at an alternative site. That is the one that FERC pushed back on and said that it had been dismissed too early and they wanted additional information as to why. Chief Gallagher noted that this shows that FERC is looking at this and requiring a better argument on alternative sites.

Ms. Gracia noted that she was talking about going through the motions of alternatives and one of those alternatives was next to an elementary school which was clearly not going to be a viable alternative. The point is they want it where they want it, they want the siting that they want and when FERC says to look at alternatives, they look at ridiculous alternatives and come back to say this is obviously the only one that makes sense. Mr. Lima added that he had reviewed that option and one thing that had struck him was the overall cost of the Burrillville site in comparison to Acushnet. Chief Gallagher said that one of the arguments against it was that it would require an additional 17 miles of pipeline and the cost associated with that. It was also his understanding that building the Acushnet site would be easier because of the roads versus roads that would have to be created for access in Burrillville. However, if you are talking about a \$3 billion project, the cost of building roads is incidental. He felt that was one of the issues that FERC does push back on and does require a better argument for. Mr. David Sol noted if they, the ratepayers, are paying for the project anyway what difference the additional cost made.

Ms. Michelle Keith, from Dartmouth, MA, said she appreciated the Attorney General's Office finding on their behalf but when it comes to safety how do they protect themselves. They are trying to fight powerful companies and the Federal Government but how can the best express their own power. Atty. Bresolin replied that commenting in the docket was one of the most effective ways to have their voice heard. They should also make sure they go to the FERC meeting next week and express those concerns.

Ms. Keith also questioned a recent decision where the Judge had deferred back to a FERC decision. Atty. Bresolin said that she could not speak specifically about that decision as she was not familiar with it but typically the Courts do like to grant deference to administrative agencies particularly if they are interpreting their own regulations and policies. Atty. Bresolin said that one of the arguments in front of the Supreme Judicial Court (SJC) that was made is there is a statute and the AG interprets it differently than utility companies. She said that the easiest way to solve this would be to get the

Legislature to amend the part of the law that is unclear. However, that is unlikely to happen before the Court releases its decision in the summer.

Atty. Bresolin then spoke about intervener status. She noted that she could only speak to the State level and not the Federal level. At the State level, before the Department of Public Utilities you can apply for intervener status. You have to be able to show that the decision is going to impact you and no one else represents your interests. The AG is often granted intervener status when they request it because they do represent the rate payers of Massachusetts. When you are a full intervener you have the right to receive documents from all the parties, you have a right to ask questions and do discovery, and you have a right to do cross examination in proceedings. Chief Gallagher noted that the Town's legal counsel, Kopelman & Paige, has been in contact with the Board of Selectmen, through the Town Administrator, to discuss the Town's ability to be designated as an intervener and those conversations are under way.

Chief Gallagher advised on the matter of public safety, that is a real concern. If a proposal does come to fruition, his research is showing it is a good practice to engage consultants to challenge reports and to have reports peer reviewed. At some point, this Committee will discuss making some recommendations to the Board of Selectmen for some consultants to be brought in. His own vested interest would be in public safety capabilities. They will need to know what changes will come down and what needs might they have such as staffing, apparatus, and assets. He did that in Waterbury, but that is a city not a town. There will be challenges for him, Chief Alves, their Emergency Management Agency, and their Building Department, and they will need to start that study and have it peer reviewed. There may be some studies that need to be conducted on the impact of this project on property values, property insurance, title insurance, mortgages and mortgage rates. They are coming to the point soon where they will begin to frame their report to the Board of Selectmen, but this community is going to need to formally challenge some of the reports that are out there or at least initiate reports that may not be out there. He noted that they will need some source of funding to generate these kinds of reports.

Mr. Sol said that it had been said that water does not work on these fires. Chief Gallagher replied that there is a role for water in an LNG fire but it is not to put the fire out. It is used for exposure protection or cooling other structures that heat may be travelling to. It is also a mechanism by which you can move the vapor, if necessary. Mr. Sol asked if there is fire in Hopkinton or Waterbury does the Fire Department show up with the dry chemicals or are they on site. Chief Gallagher stated that the dry chemical is presently on site at the Acushnet facility. There is enough to meet the NFPA standards on extinguisher use for the type of occupancy that's been given there.

Chief Gallagher noted that the Achilles heel of the existing plant would be the off loading of the trucks due to human interaction which can cause errors although it never has. Facilities are designed with a primary and secondary means of containment. The rupture of a tank and the spilling of all its contents has never happened but it is designed as if it will happen. A leak in a pipe is more probable. If a tank or pipe does leak, there are systems in place where it is going to create vapor and the contents will be captured in a trough pitched to an impoundment area. The impoundment area is in the middle of the

facility. There are set facts that went into the construction of that such as if the impoundment area is filled and ignited, the temperature will not reach a critical degree at the property line. The vapor will not be explosive at the property line. That has all been engineered in but it is computer modeling. Their fight right now is their request that temperature and vapor concentration tests not be the only ones they use when they site the tanks. They want them to go into the neighborhood and find out what the risk of the tanks being in those positions pose to the residents, the schools, nursing homes, etc. They are waiting to hear back from the proponents to learn if they will voluntarily do this which is in Chapter 15 of the NFPA standards. Chief Gallagher said this project would be made better by performing both the prescriptive and performance based siting.

Mr. Sol asked for a clarification of what would happen if there was a fire. Are they saying that if there is a fire and it is coming from a leak, is it their intention to go there and contain that fire until it is shut off? Chief Gallagher replied that might be one of the options the incident commander would consider doing. It may be safer to let a twelve by twelve pool of LNG burn than it is to put it out and not be able to control where the vapors go. He noted that is a very real probability although it might be unsettling to folks who are hearing that for the first time but it is an option that they have. Mr. Sol said then they are going to let it burn and hopefully be able to contain it so that it is not going to be able to do further damage. Chief Gallagher said that was correct but he noted that part of the siting requirements of the NFPA is that systems be placed in a particular area so that threat is diminished.

Ms. Chris Tarini of Nestles Lane asked where was the containment for the pipeline that would be coming right alongside their houses. What happens to a leaking pipe underground? Chief Gallagher said that he could not answer to that but he did understand that was a concern. Mr. Lima noted that Governor Baker has been a large proponent of this natural gas infrastructure. He asked Atty. Bresolin if he had been receptive to their findings and analysis. Atty. Bresolin replied that she could not speak to that. She was unaware of any comment that had been provided yet by the Governor. Chief Gallagher thanked Atty. Bresolin for her time and coming before the Committee.

DISCUSSION OF FUTURE MEETING DATES AND TOPICS

Chief Gallagher then advised that last on the agenda was the topic of future meetings and topics. He noted that from what they had heard tonight and assuming there will be no extension to the public comment period, they may need to start wrapping this up. They need to start getting their thoughts together, get the report together, and get that to the Board of Selectmen to allow time for the Board to review and put together their comments as well. Initially, they thought they would have until November to complete this but as that is not the case, they need to sharpen the focus of when they need to have the product delivered. They will probably best be able to address that next week when FERC is in Town. He knew that they did have some more topics that they wanted to delve into and some other subject matter experts that they wanted to call in to educate themselves and the community, but the clock was ticking and they needed to understand that.

Chief Gallagher said their next scheduled meeting is May 24, 2016. On their agenda was a discussion with their Conservation Commission who is the permitting authority for wetlands. According to Town Counsel, they do have a considerable amount of influence in issues that have been raised about wetlands and that is under their purview. He has been in touch with the Conservation Agent and there are some levels of Government above the Town, which is the State and Federal Government that they might want to reach out to the Massachusetts Department of Environmental Protection (DEP) and Environmental Protection Agency (EPA.) If it was okay with them, he would reach out to try to get some people in for the topic of conservation issues.

Chief Gallagher stated that he would also like to bring in Kelly Koska, their Assessor, to give them the report that she had previously given to Board of Selectmen. He would like to come up with a plan of how they are going to address the issue of possible impacts this project might have on property values that night as well. They need to be thinking how do they capture that topic and get it addressed. Mr. Lima asked if it would be possible to reach out to realtors in the Waterbury area. Chief Gallagher said that he has reached out to the Hopkinton Chamber of Commerce to provide them with a contact. One of the things that he wanted to do on their Waterbury tour is to get contact information for a similar group there. He has made an inquiry to the Greater New Bedford Realtors Association to see if they have any data or through them they could find someone who could speak authoritatively on this topic.

Chief Gallagher asked if there were any other topics they would want on the agenda. Mr. Lima said they have not really touched much on the pipeline in Acushnet, Freetown, and the surrounding communities. In light of the recent accident in Pennsylvania, it has elevated concerns of the general public in Acushnet. He felt that it was a necessity that they dive into pipeline safety and some of the overlying standards and rules associated with it regarding public safety. Chief Gallagher said that tomorrow he would reach out to PHMSA, in hopes that they could get a representative to come in and answer any questions. They should also review the Pennsylvania incident, and see if PHMSA can at least provide them with a preliminary report regarding it. Mr. Lima said whereas Spectra will oversee the pipeline, would it be beneficial to get them in as well. Chief Gallagher said absolutely. He would try to arrange that for June 7, 2016. Chief Gallagher said as they were unsure of what FERC would tell them about the time frame for getting comments to them, they might want to reserve the rest of June for their discussions in report writing unless there were other topics where they would want people to come in for.

Mr. Pelletier said if this project is to supply natural gas for electric generation, why not site their own storage tanks next to their property and all this would be eliminated. This would allow for smaller tanks that could be spread out. Chief Gallagher said if they could conclude their information gathering meetings on June 7, 2016, they might then need to meet more regularly so they can work their way through the items they want in the report to the Board of Selectmen. If they are going to request Spectra to come in on June 7th, maybe the last group to talk with is the proponents again with questions that have come up since the last time they were here. Chief Gallagher noted that if they didn't get the extension, they would need to start working on the report to the Board of Selectmen no later than the middle of June.

Chief Gallagher suggested they could exchange emails about firming up the rest of the schedule, but they should lock in May 24, 2016, for environmental and conservation and property values with the Assessor. It will be determined after they meet on May 18, 2016, with FERC where they go from there. However, they should still get Spectra in for pipeline safety and Eversource in to give them an opportunity to ask one more round of questions. It was then suggested to have ISO come in also as they set the standards and manage the energy needs for the Northeast.

Ms. Keith then advised that there was an organization called Community Environmental Legal Defense Fund (CELDF.org.) This organization works with communities about issues like this and maybe they could help the Town with legal costs. Mr. Cabral said that he has been reading about emissions from facilities like this. Their group has written to both local and State health boards but it might be helpful if they have someone who is independent come in and talk about this. Chief Gallagher said that they are making an attempt to also have regulators in attendance on May 24, 2016 to discuss emissions.

Ms. Labonte then asked if the Resource Reports would be available on the town website. Chief Gallagher replied that all their agendas, minutes, presentations, and communications are posted on the website. He received a hard copy of the initial filing with a DVD so the answer to that question really rests with the proponents. Do they have a link to a site they could put on the website or does the Town have the capability of downloading the DVD to a storage unit and then linking it there.

An audience member commented that although she knew a member of the Fusion Center was coming, she did not know what he was going to talk about and therefore, she had no questions to submit prior. Her questions would have been what they have done to prevent incidents. From her perspective, it was useless. Chief Gallagher thanked her for her comment but said that his take away from the presentation was there are folks that are concerned and rightfully so that if this project is approved, Acushnet becomes a terrorist target. If he heard correctly, then presently there is a way if a CIA operative overhears some chatter about LNG, there is a mechanism by which that information gets passed along at the highest level of intelligence agencies, and then transmitted to a State entity, that is interacting with other intelligence services at the Federal, State, and local level. The fact that they are picking up information that local police agencies develop is huge. They analyze it, they grade it, and they then decide whether actionable consideration is required. He would have loved to see that level of interaction prior to 9/11, but they learned from that. They have to assume that this is working well for them. They don't know the level of things that might have happened locally, statewide, or nationally because of the efforts of people like this. He was not going to dismiss the Major or the Fusion Center as they provide a valuable asset to the Commonwealth and as a citizen he was thankful they were there.

Chief Gallagher asked if there was anything further. Mr. Pelletier said he would like to urge the people present and those at home to put pressure on FERC to at least extend the comment period. He would ask why they are in such a hurry. Give this Committee the time to do their job.

Mr. Roy then made the motion, seconded by Mr. Pelletier, to adjourn the meeting. $\mathbf{VOTE} - \mathbf{UNANIMOUS}$

9:13 - MEETING ADJOURNED.

THE NEXT MEETING IS TO BE HELD ON MAY 24, 2016, AT 6:30.

Respectfully submitted,

Cathy Murray

COMMONWEALTH OF MASSACHUSETTS





TEL.: (508) 998-0250 FAX: (508) 998-0203

Wednesday, May 18, 2016 Town Hall Meeting Room

- I. Call to Order at 3:00 p. m.:
- II. Pledge of Allegiance:
- III. Introduction of Committee Members:
- IV. Appointments:
 - 1. Mr. John Peconom; Environmental Project Manager, Federal Energy Regulatory Commission (and others) (votes may be taken)
- V. Discussion of Future Meeting Dates and Topics
- VI. Adjournment

LNG Advisory Committee Acushnet, Massachusetts Minutes of Meeting May 18, 2016 3:00 Approved June 7, 2016

ATTENDANCE: Chair Chief Kevin Gallagher, William Lima, Jr., Paul Pelletier, and John Roy

ABSENT: Dennis Maltais

Chief Gallagher opened the meeting at 3:05.

Chief Gallagher first had members introduce themselves to those present. He advised those in attendance that there was only one item on the agenda, and that was a discussion with representatives from the Federal Energy Regulatory Commission (FERC) and also some other Federal Agencies.

APPOINTMENTS

Mr. John Peconom was present. He advised that he was the FERC Environmental Project Manager. He is responsible for conducting the environmental review for the Commission as it reviews this project. The FERC is a five member independent agency appointed by the president which is responsible for the regulation of the siting and construction of interstate natural gas facilities. In this case, the planned facility is a jurisdictional facility for the Commission. The Commission is required by the National Environmental Policy Act to consider the environmental impacts of any action it may take. The environmental staff is responsible for conducting that environmental review and providing the environmental information to the Commission for its consideration.

Mr. Peconom advised that the environmental process for this project consists of a prefiling environmental process. In the pre-filing process there is the opportunity for early engagement of stake holders to identify and resolve issues prior to the company filing an application. Ultimately, if a company wants to build a project like this, they need to file an application with the FERC. That application will consist of Resource Reports. Those reports cover a number of items such as the effects to the environment, what the potential impact to the environment will be, and any measures to avoid, minimize, or mitigate those impacts on the environment. The Commission's staff uses the application to then prepare information for the Commission's consideration as it makes a decision. The prefiling process is designed to make that application complete. It is done because stakeholders are invited early in the process to provide input. The people who live in the community know the environment better than they do, so they need that input in order to understand the concerns and issues that they will need to focus on in their environmental review. Mr. Peconom stated that the pre-filing process involves a scoping period. They have public meetings open for public comment. They also have a comment period when they ask people to send them their comments. All of those things are taken into consideration as they do their review. Mr. Peconom advised that his managers hold him responsible for making sure that public comments are addressed. They have received a number of comments to date. They will go back to Washington, D.C. and make sure that every environmental issue that has been identified is addressed in their review. The pre-filing process is complete when the company files an application.

Mr. Peconom said that once an application is filed with the FERC they do an application review to ensure that the application is complete. Upon having all the information necessary to conduct their environmental review, they then prepare a draft Environmental Impact Statement. This Statement is prepared in cooperation with other Federal and State agencies, for example, the US Army Corp of Engineers, the Environmental Protection Agency, US Fish and Wildlife Service, and other State agencies. They then prepare an Environmental Impact Statement (EIS) that summarizes what they think the impacts on the environment will be that would result from the project. The report is organized into the following sections: the affected environment, the potential impacts on the environment, the measures to avoid and minimize those impacts, and the staff's conclusions about what those impacts will be.

Mr. Peconom advised that the other components of the EIS included alternatives analysis. In the pre-filing process, they try to better understand what the wetlands issues are, what the community's issues are, the safety concerns, and all the things they need to think about when they do their environmental review. This pre-filing process started in November of 2015, and is scheduled to last about one year. After that time, they will then file an application. It takes them anywhere from eight months to one year to complete their environmental review. Typically, after they receive an application and depending on its completeness, it could be anywhere from six to eight months before they issue a draft EIS. That draft statement will be issued for public review and public comment for a period of 45 days. All comments filed on the draft EIS will then be incorporated as appropriate into the final EIS. It could take anywhere from four to eight months to issue the final EIS. The Commission considers that, as well as the other aspects of the project such as economic, the rates, safety issues and then decides whether or not to approve the project.

Mr. Peconom stated regarding the alternatives analysis, the question they are asking is are there other sites available. They have reviewed what the company has provided, and as of their last supplement, they had identified 30 potential alternatives. It is their job to make sure all those alternatives are explored and considered and then to determine whether this site or some other site is a better location for this facility. Chief Gallagher said it was his understanding that the proponents submitted Resource Report 10 which contained the alternatives. FERC had the option of accepting it or sending it back to the proponents for additional work which had occurred. Mr. Peconom said yes, draft resource reports had been filed, and they had reviewed and commented on them. Chief Gallagher noted that this was a good example of how this process is designed to work.

Mr. Peconom noted that they can receive hundreds or even thousands of letters on a project. Sometimes through this means other locations are suggested and that information is passed on to the proponents. Although they do not have the resources to respond to each individual letter, each one is read and considered and the information is passed on. They also reach out to other agencies and ask for their comments and concerns. Mr. Roy asked if the EIS would be on only the areas within Eversource's property or would it include property outside of that. Mr. Peconom replied that there were a couple of things going on with the alternatives. They have a plan they want to implement at the Acushnet facility, but is that particular design the only way it can be accomplished? Possibly or possibly not, but that is why they are asking them to look at alternatives at that site and at other sites. Mr. Peconom continued that the proponents had identified a number of sites in their initial draft resource report and FERC had done their own analysis of that site and asked them to look at several more sites. The proponents then went back and looked at more sites based on that input.

Chief Gallagher asked how you would weigh an alternative site and what the factors in that would or could be. Mr. Peconom said in the EIS there is an alternative section. There are three general criteria to start off with in terms of what they will consider for an alternative. The first one is it meets the stated purpose of the project. The second criterion is that it is technically and economically feasible and practical. The third one is that it provides a significant environmental advantage over the proposed action. Those are the evaluation criteria for determining whether or not they will take an alternative forward. When they look at a site there are a number of factors to consider, for example, wetlands, proximity to houses, endangered species habitat, water bodies present, geology, soils, vegetation, wildlife, zoning, adjacent land uses, etc. The challenge of their jobs is to try to find a balance and compare the sites the best that they can. He also stated that after an application is filed they are looking at it for at least a year.

Chief Gallagher noted that he understood there would be thirteen reports that would be filed. Mr. Peconom said that was correct and some of the topics that are covered are property values, land use, socio-economics, environmental justice, aesthetics, noise, air quality, reliability, and safety. He said that he could also leave the Committee a listing. He advised that all this information could be accessed by the public in the FERC e-library system. In that library, you will find Resource Reports 1 and 10, which are required to be filed within 30 days in the pre-filing process. They then go out for the scoping period. One of the criticisms they get in regards to that is there is not enough information to provide meaningful comments. He understood that concern but they want to start off and get those big concerns addressed and then as more information is presented supplemental comments can be provided.

Mr. Peconom advised that the Notice of Intent (NOI) identifies the 30 day comment period but in reality they do accept comments throughout the pre-filing process. Chief Gallagher stated that was an issue in Town. Mr. Peconom said that he understood that could be a concern but he repeated that they do accept comments throughout the pre-filing process and also once the application has been filed. Chief Gallagher noted that the Committee is on record for requesting a 45 day extension to that 30 day deadline and the Board of Selectmen, is as well. Today they also received a letter that was sent to FERC from Congressman Keating, the Mass Audubon Society, and the State Attorney General

who have all expressed their interest in seeing that deadline extended. Chief Gallagher explained that to them a deadline is a deadline. He was not sure if Mr. Peconom was prepared tonight to discuss their request for an extension or what the true deadline is. Mr. Peconom replied that in the NOI they identified the date but he did put in some language that said the Commission would continue to receive comments throughout the pre-filing process. He has not seen the Congressman's letter, but he would take that request back to the Commission discuss it and make a decision. He appreciated the concern but he did want people to know that comments can come in after that deadline.

Chief Gallagher advised when looking at areas of local concern, putting together a list, and making recommendations to the Board of Selectmen, they did not want to run afoul of a deadline that is established but not true. They want to get that list to FERC through the Board of Selectmen but it is not going to be ready for at least a month, and there may be some actionable items on that list. Could they get a sense of how much time they have? Mr. Peconom agreed that the sooner comments are submitted the better. In the NOI, they included currently identified issues. They do accept comments after that 30 day comment period, and the proponents are planning on filing their Resource Reports in June. They will be working on that for a couple of months, and the Committee's comments will probably dovetail on that as they see if those issues have been addressed. Mr. Peconom stated that it is possible if they were to receive a set of draft Resource Reports that were incomplete and had a lot of TBD's, they could ask for another version. If it looks like they are in good shape and they just need some additional information to fill it out, they could then push it to the application. He could not give them an exact date of when they needed their comments but he thought in June would be fine.

Chief Gallagher replied knowing that all the Resource Reports would be submitted by the end of June gave them very little time to work through them to see if there were local issues that they want to have addressed. Mr. Peconom advised that the proponents are now in the process of accessing the impact to the wetlands and as that information became available to them and the public, he expected people to provide additional comments on it. Mr. Lima asked why then establish a time line for the end of May? Mr. Peconom replied that they did want to get people started and sometimes that deadline does motivate people to get that letter to them.

Chief Gallagher noted that at the request of the Board of Selectmen the Town Clerk researched the process by which the Town could hold a non-binding referendum. It was her determination that such a question would have to be on a municipal ballot. However, their municipal election is in April. The results would be communicated to FERC but because they fall outside of pre-filing and they would be five months into the review of the application, could they be assured that the results would be considered.

Mr. Peconom replied yes. He stated that the proponents plan to file in November but it could be some time after that. Once they do receive that application it takes them four to six months to prepare the draft EIS. It then takes another four to six months to issue the final EIS which would take them to the summer or even possibly the fall of 2017 when the Commission would then take a vote. Mr. Peconom said that results of the Town vote would be submitted to their record and the Commission would be aware of it as it takes up the matter. Mr. Pelletier asked how weight that had with the Commission. Mr.

Peconom replied not being a member of the Commission, it was hard for him to say. They have to determine the benefits to the area, country, and the region. They also have to take into account the cost and then make a decision based on whether the benefits to the country outweigh the costs. Their policy statement does take into account the impact to the landowners. As part of every order issued by the Commission, there is standard language that encourages companies to work with local agencies and officials, and within local laws and ordinances. However, those laws and ordinances cannot end the project.

Mr. Lima asked if the Town chose to be an intervener in this project at what point would they be able to do that. Mr. Peconom said it would be when an application is filed. He believed it was within 30 days. Mr. Lima asked if it would then be too late after the public ballot was taken in April. Mr. Peconom stated that there might be some flexibility, but he would have to speak with the Office of General Counsel. Chief Gallagher asked if most communities filed to be interveners. Mr. Peconom stated that in his experience not most but some do.

Mr. Roy asked if the President's initiative to reduce green house gases through the EPA affected their decision at all. Mr. Peconom said that he was part of the environment staff and was preparing the environmental review. He could not speak to that question. The FERC is a reactive agency that is required to act on applications that are filed. The decision that he makes is limited to the EIS. He could not speak for the Commission.

Chief Gallagher asked if no action was an alternative. Mr. Peconom said that it is the first alternative that is looked at. They next go into pipeline route alternatives, storage facility alternatives, site location alternatives, and other site alternatives. Chief Gallagher noted that in regards to project necessity the Massachusetts Attorney General (AG) has publicly stated that in her opinion, the project is not necessary. The ISO says that it is. How does that factor in the FERC review? Mr. Peconom stated that was outside the environmental review but the Commission does do a need analysis. The project has to be in the public need. What the Commission ultimately issues, if it approves a project, is a Certificate of Public Need, so they will need to assess if the project is truly needed.

Chief Gallagher asked in the construction stage do they ever go beyond, with recommendations, the codes and standards required or does FERC have the ability to require more. Mr. Peconom replied that once they make a conclusion, they have the option as environmental staff to recommend additional mitigation or additional measures if they feel it is necessary. The Commission can then adopt these recommendations and make them a requirement of the Certificate, they can choose not to, or they can add recommendations of their own. A Certificate generally has a few standard conditions and then additional measures the staff believes are necessary. It depends on the specifics of the case.

Chief Gallagher then asked who is the check and balance in regards to the size of these tanks. Is there an entity that would look at that? Mr. Peconom said the FERC will ask to justify those size tanks are needed. They are the entity that would do that, and the proponent has to prove that they need those tank sizes. He understood that the tanks were large. They would also look at aesthetics and where they would be viewable from. Although there is a tree buffer on the site, it would depend on how the facility was laid

out. They will still have to see what the visual assessment looks like. They do challenge proponents to prove that the facility is sized right. Mr. Lima asked if they looked at the exclusion zones, the distance between the center of the tank and the outer boundary. Do they take into consideration temperature, wind, various variables, or close proximity to homes. Mr. Peconom replied that he was the Environmental Project Manager but he almost has a Co-Project Manager which is their LNG Engineering Group. They are the ones responsible for assessing what those exclusions will be. There are regulations from the Department of Transportation (DOT) of what those distances are and that is part of the site optimization. The tanks can likely go in some places but not in others. Mr. Lima asked if he thought the models used for determining those outer boundary limits were robust and reliable. Mr. Peconom said he believed they were but he would have to defer to the LNG engineers on staff.

Chief Gallagher said to continue with that, Mr. Peconom might know that they have asked the proponents to voluntarily conduct a quantitative risk assessment modeled after Chapter 15 of the present NFPA code. As only the prescriptive risk assessment in Chapter 2 in the 2001 codes is in play right now, others have asked FERC to require a Chapter 15 review but the request has been declined simply because of the Federal Code. They have asked the proponents themselves to do this, as they believe it is in the best interests of this community. Could that impact the FERC process because it is not required by the Federal Code? Mr. Peconom said that question has been passed on and he expected to have a better answer when the lead Fire Safety/LNG engineer returned from paternity leave. He could not answer as to how that would affect the process.

Mr. Lima asked if a human health assessment would be conducted, especially where toxic emissions may be an issue. Mr. Peconom said that the EPA sets the National Ambient Air Quality Standards (NAAQS) which is baseline air quality for humans. All of their projects have to be compliant with the NAAQS. That is a common request that they get now, and it is an evolving issue. They do need to address it in some form or fashion, but he did not know if it would be in the form of a full health impact assessment. How those assessments are done is still being worked on. Mr. Lima asked if the limits the EPA establishes are based upon an average concentration over a period of time or looking at spikes. Mr. Peconom said that he would have to get back to him on that and how those levels are calculated.

Mr. Lima then asked if FERC has ever approved a facility of this size and magnitude. Mr. Peconom replied that a facility like this is not that dissimilar from an LNG export project or an LNG import project that you typically find on the Gulf Coast. If you take away the shipping aspect, then there are storage tanks so that would be similar to the project planned here. He would refer them to any of those recent Gulf Coast LNG projects but not focusing on the shipping aspect. They could look at those analysis as well as the mitigation measures that were required there. Mr. Lima asked if these facilities were very isolated from population. Mr. Peconom replied they vary. They are on the coast so population density varies. Chief Gallagher then asked if there was a similar size land based LNG storage facility. Mr. Peconom said he thought that there was one in Florida. It was in the paperwork that he had provided them and called the Floridian Natural Gas Storage Project. He thought that would be the best example for an inland facility.

Chief Gallagher stated that he would like to turn to local conservation issues. His understanding of the local regulatory involvement is that almost all of the decisions are deferred to the Federal Government but the Town does retain certain regulatory responsibility over the use of wetlands. It was said that a State Permit was needed in this case. Chief Gallagher said that the Town was a player in the issuance of that permit. He said that it was his understanding that the Army Corps of Engineers has an interest in the use of the wetlands and is one of the stakeholders when it comes to conservation and wetland issues.

Corey Rose then addressed the Committee. She advised that she was the Senior Project Manager from the US Army Corps of Engineers. They have a very specific process pertaining to the review of projects for impact to wetlands. Their regulatory jurisdiction is under Section 404 of the Clean Water Act. That is the Federal review for impacts to waterways and wetlands. From their interpretation of the review, it would appear that most of the wetlands on the potential LNG site would fall within their jurisdiction. They have the 404(b) (1) guidelines which are EPA regulatory guidelines. With the passing of the Clean Water Act, those guidelines were added to the process for evaluation of impact to wetlands and were delegated to the US Army Corp of Engineers. Through that process, they evaluate the potential impacts for projects to the wetlands and waters. There is a prescribed process to do that in which they look at 404 (b) (1) alternatives analysis. That analysis identifies what alternatives are reasonable and practicable. They also do a very similar NEPA analysis and review to the FERC.

Ms. Rose stated that in this particular case, they will be working with FERC as a cooperating agency on that National Environmental Policy document, the EIS, in the particular role to directly assess the impacts to wetlands and waters. They have a requirement under that analysis to look at, not only on site alternatives, but also off site alternatives. They look at alternatives currently owned by the project proponents and alternatives, not currently owned, that could be reasonably purchased or obtained. They would look at a larger scope of review than a local community. As a result of that, they make a determination out of all the other alternatives considered based on the overall project purpose, which will be defined by the Corps if the project is the least environmentally damaging alternative. Under the Clean Water Act and under those 40 CFR guidelines, the Corps is not allowed or permitted to issue an authorization for a project if they cannot say it is the least environmentally damaging practical alternative. She said that she could not tell them if there were too many wetland impacts or too few wetland impacts or what was reasonable or practical right now, but they were going to be looking at a lot of other alternatives for that. If there is an alternative being considered that could be reasonable, practicable, or feasible from both an engineering standpoint and the project purpose based on the various nuances that go into the specifications, they would need to make a determination that there was no other alternative that would have less impact on the environment.

Chief Gallagher asked if at some point the now thirty sites get whittled down and the Acushnet site would then be compared to that smaller list of alternatives. Ms. Rose said that was correct. They have actually met with the project proponent twice, and they have asked them to broaden their scope of analysis to look at additional sites. They would be

looking at on site reconfiguration and potential off site relocation. They would also be looking at the feasibility and practicability of specification of design of those tanks. Could there be smaller tanks? Could they be segregated so they could be at multiple sites? Chief Gallagher noted that they then were the check and balance on the overall size of the tanks. Ms. Rose replied no. They ultimately have to defer to what engineering requirements and specifications will identify but there is the potential to reduce the size of the tanks and there is also the potential to reconfigure and to then reduce the wetland impacts.

Chief Gallagher asked if there was going to be one acre of wetlands that is permanently impacted is there an alternative on the site for that happening. Ms. Rose replied yes. They would look at what they have identified in terms of their criteria. They include those exclusion zones and include any kind of requirement that would be associated with the FERC process, with the DOT process for hazard and safety, as well as any entry or exit points, security, etc. Then taking all those factors and moving them around on the site is there any way to configure this to minimize the impacts. The off site process is the same. They will defer to FERC for their aspects of the project and then make their own determination specific only to the wetlands and water of which project option is the least environmentally damaging.

Chie Gallagher asked if there were going to be acres permanently impacted did her agency oversee the way that is compensated and how did that process work. Ms. Rose replied that their process is set out in their regulation 33 CFR, Part 320-322 with Part 331 referring to their mitigation requirements. That specifies what those minimum criteria are for mitigation for compensation. First, they have to look at the avoidance aspect in terms of onsite and offsite. They need to look at minimization of those impacts on site and see if there are measures and ways to minimize impacts such as managing storm water in a certain way or whatever it happens to be. Then they get to that third part in which they have mitigation guidelines which are on their website. In those mitigation guidelines, there are several different tables and one of them is called the mitigation ratio table. They are based on the type of wetland being impacted and there are various ratios. For example, forested wetlands have a ratio anywhere between 3:1 and 8:1. As New England does not have mitigation banks, they have an in lieu fee. They are required to look at various different steps in terms of how to approach mitigation. The first is banks but because they do not have them here, their next step is an in lieu fee. Those are individual agreements that are set up by third party organizations who maintain this fund. Through this fund, whenever a mitigation is required for an unavoidable impact to wetlands, the project proponent that receives the permit would have to pay into this fund based on a certain calculation of credit that would go to that third party to hold and then a task force for the Environmental Protection Agency, the US Army Corps of Engineers, the US Fish and Wildlife Service, Massachusetts DEP, and all the other parties that are associated with it would review proposals for enhancement and restoration of habitat to replace functions that were lost. That is done on a watershed basis, meaning it is developed into zones based on watersheds. Money taken from a proponent would have to go back to the same watershed but it did not mean it would be the same community.

Chief Gallagher asked if Ms. Rose was familiar with this area's water shed. Ms. Rose said she was not. The Corps was still in the pre-application phase. They have looked at

the two Resource Reports that have been filed, but as part of the process they are doing the same thing that FERC is doing. They are starting to determine what the impacts are, and they are starting to reach out to see what the community's concerns are pertaining to waters and wetlands. As part of the process, she will educate herself very thoroughly on the resources here as well as along the entire pipeline corridor. She did walk around the site today and looked at several different wetland delineation lines and talked about the technical proficiency of them and how they are going to approach evaluation and verification of those wetland boundaries.

Chief Gallagher asked what role their local Conservation Agent had in the decision of those wetland delineation lines. Ms. Rose replied that Massachusetts has delegated authority for certain things to the community which will then have a role within the process of The Wetland Protection Act. The Corps being the Federal project review for wetlands and waters under Section 404 will also work in partnership with MA DEP as they will have their own regulatory review. MA DEP will reach out to the community and they do have a very inclusive process. Chief Gallagher asked if it were feasible to think that the fund would finance mitigation in this community. Ms. Rose replied yes. The holder, or the organization that holds the fund, which in Massachusetts is the MA Department of Fish and Wildlife, when they have reached a certain amount of money will put out requests for proposals for enhancement and restoration of habitat within a resource area. Anybody within the public, anybody within municipalities, or any third party organization can put in a request or proposal to use those funds for a restoration project. Chief Gallagher then asked if Acushnet wetlands are destroyed then how do they ensure that Acushnet natural resources are enhanced. Ms. Rose replied that she did not know if she could tell them there was an assurance for that but if there is a good restoration project from an ecological perspective it would have a good chance of being considered.

Mr. Roy asked if there was a conflict in determination, who had final jurisdiction over it. Ms. Rose stated that there isn't going to be a conflict in determination as there are two definitions of what a wetland is. For the Federal perspective, the definition of a wetland is includes three parameters which are vegetation, hydrology, and hydric soils. In the State of Massachusetts the definition is based not quite specific on hydric soils. Generally what happens in Massachusetts is the line is very close together. It is possible that the applications filed for the Town or the DEP could have a different line than the one filed with the Army Corps of Engineers. Mr. Roy asked what would happen in that case. Ms. Rose said there would then be two separate processes. If they did issue an authorization for a project there would be authorization to fill Federal wetlands based on the Federal boundary. If the State issued an authorization it would be based on that wetland line that has been submitted to them and is under their Wetland Protection Act.

Mr. Lima asked what a restored wetland generally looked like. He felt that wetlands are very well established and take hundreds of years to develop. They cannot be replicated. Ms. Rose said she would have to agree. In many cases, trying to replicate something that has taken hundreds of thousands of years to develop is very difficult. From a physical perspective it looks like a natural wetland but underneath the soil, from a chemical and biological perspective, it is usually very different which is why they are using in lieu fee more. It allows them more flexibility to find ecologically sustainable restoration. Rather

than recreating a wetland, they might look at restoring a stream system, enhancing flood plain functions, or establishing wetland habitats specific for wildlife. It will be based on the function of the wetland being impacted.

Ms. Rose explained that they will have the applicant define the functions of that wetland, and they will also make their own analysis of what the value and functions of that wetland are. They will attribute that to any potential impact and as a result identify what types of functions need to come out of an in lieu fee project. Mr. Lima asked if any rare species would be reestablished on the new parcel. Ms. Rose said that they would not have a hand in that but that would be under the jurisdiction of the Department of Fish and Wildlife.

Chief Gallagher said the issue had been raised if they were clearing a significant amount of acreage what happens to the storm water runoff. Ms. Rose replied they will look at the impact to wetlands and waters and storm water will be part of that component but EPA will also be reviewing this application. They will be commenting directly to the Corps and to FERC. Their responsibility is specific to wetlands and storm water. They will be providing them recommendations and evaluations on that portion of the review. Any project in Massachusetts will have to meet Massachusetts Water Quality Guidelines in order to get a Water Quality Certificate from the State so there are very specific criteria that the Department of Environmental Protection will have that they will apply to this evaluation. They may have more stringent criteria if EPA identifies things that are within their purview that they request to be modified, but at a minimum it has to meet State water quality criteria and manage storm water on site.

Mr. Lima said a major concern is potential flooding to abutters. He asked once the site is built out if there would be any agency monitoring it. Mr. Peconom replied that FERC would be out there on a regular basis, in some cases daily, in some cases weekly. They also have an 800 number and at that point, where he will still serve as Project Manager, people can call in if they have an issue or concern and they would investigate it. Ms. Rose added that if the Corps did issue an authorization for something they have compliance responsibility. They will go out and will do a compliance visit to ensure that the project is built in specification of the plans they do authorize and if there are adverse impacts as a result of construction such as sediment runoff issues or storm water issues. They will go out after the project has been designed to ensure that it is only impacting those wetlands. Mr. Peconom said that the FERC also has a number of measures that they require a company to adhere to in regards to storm water. If there was an impact off site, it would need to be addressed and mitigated as soon as possible.

Chief Gallagher asked if a list of all the various agencies involved could be provided to them. Mr. Peconom said that he did have a table that he could give them. Chief Gallagher then asked Mr. Peconom what he could tell them, as a community, were the best practices for getting concerns addressed at the highest level. Mr. Peconom replied this Committee was doing exactly what it should be in educating itself about the project and the process. If folks want to see issues addressed and changes made, they, FERC, need to hear about it. They also should reach out to their elected officials and have them write letters on their behalf. They should use the avenues they can to make their voices heard whether it's through press releases, news articles, or advocating to State and

Federal officials. He stated that he thought persistence helps. He noted that they must realize that this is a long process.

Chief Gallagher asked when the next opportunity to publicly speak would be. Mr. Peconom said typically the next public input opportunity would be on the draft Environmental Impact Statement, although he was willing to come back up here and address the Committee again. Mr. Lima wanted to clarify that once the Resource Reports came out in June, they would have an opportunity to publicly comment at that point in time, and they were not limited to a hard date of May 30th. Mr. Peconom responded that was correct. Any comments can still be provided at the website.

Mr. Lima said as they knew the Federal Codes are based upon standards that were generated years ago and dated back to 2000. Since then NFPA standards have been updated to include risk assessment. Is FERC taking a look at these new standards as they come out and readjusting the rule book relating to LNG siting. Mr. Peconom said the answer is yes. They are actively involved in tracking these developments, and what the new regulations may be.

Mr. Pelletier asked what the qualifications were of the Commission that makes the final decision. Mr. Peconom said there are five members on the Commission. Each one is appointed by the President and confirmed by the US Senate. It is split up between the two parties, two Democrats and two Republicans with the fifth member being from the sitting President's party. It is likely that this will change after the election and one member has already indicated that they will be leaving the Commission. He noted that information about the members was available on the FERC website.

Mr. Lima asked if the Corp would be reviewing the wetlands assessment for the pipeline as well. Ms. Rose said that was correct. They would be reviewing the entire application for specific impacts to wetlands and waters. They have no jurisdiction over the pipeline itself but wherever it crosses a wetland or water, they will be looking at that potential impact. They will also be looking for alternatives to minimize the impact as a result of those crossings.

Mr. Peconom noted that although the FERC was the lead Federal agency it was not the only one. The FERC standard order has a condition that the project cannot move forward until all Federal authorizations have been granted. Mr. Lima asked what happens if one permit cannot be obtained, would they look at potential alternate sites or would they override that decision. Mr. Peconom said that if a project does not have all its Federal permits, it cannot move forward. Chief Gallagher asked if part of that was the acquisition of all the applicable State permits. Mr. Peconom said if the State permit is a delegated Federal permit then that would be a Federal permit. If a project did not have a State permit, or it was still outstanding, it is possible that project could not move forward without that permit. Ms. Rose said an example was the Water Quality Certification. The Corp could not issue an authorization for a project if it does not receive that Certification from the State. They could not then issue a permit and as a result of that FERC would not be able to and the project could not move forward.

Chief Gallagher then thanked all the officials who had come in for their time and effort in addressing the Committee.

Mr. Roy then made the motion, seconded by Mr. Pelletier, to adjourn the meeting. VOTE-UNANIMOUS

4:36 - MEETING ADJOURNED.

THE NEXT MEETING IS TO BE HELD ON MAY 24, 2016, AT 6:30.

Respectfully submitted,

Cathy Murray

TOWN OF ACUSHNET 122 MAIN STREET, ACUSHNET, MA 02743 LNG ADVISORY COMMITTEE



TEL.: (508) 998-0250 FAX: (508) 998-0203

Tuesday, May 24, 2016 Town Hall Meeting Room

I. Call to Order at 6:30 p. m.: П. Pledge of Allegiance: III. Introduction of Committee Members: IV. Meeting Minutes to be approved (votes may be conducted): Meeting Mail & Unfinished Business (votes may be conducted): 1. Items sent by the Chair to Committee Members VI. Appointments (votes may be conducted): 1. Mr. Henry Young, Acushnet Town Planner 2. Ms. Merilee Kelly, Agent for the Acushnet Conservation Commission 3. Ms. Kelly Koska, Principal Assessor for the Town of Acushnet 4. Mr. Paul Chasse, Executive Director of the Greater New Bedford Association of Realtors VII. Discussion of Future Meeting Dates and Topics (votes may be conducted): VIII. Public Comment Period: IX. Adjournment

TOWN OF ACUSHNET 122 MAIN STREET, ACUSHNET, MA 02743 LNG ADVISORY COMMITTEE



IX.

Adjournment

TEL.: (508) 998-0250 FAX: (508) 998-0203

Tuesday, June 7, 2016 Town Hall Meeting Room

I.	Call to Order at 6:30 p. m.:
II.	Pledge of Allegiance:
III.	Introduction of Committee Members:
IV.	Meeting Minutes to be approved (votes may be conducted):
V.	Meeting Mail & Unfinished Business (votes may be conducted): 1. Items sent by the Chair to Committee Members
VI.	 Appointments (votes may be conducted): 1. Mr. Eric Johnson, ISO-New England 2. Ms. Karen Gentile, Pipeline & Hazardous Materials Safety Administration (PHMSA) 3. Mr. Brian Kuta, Spectra Energy
VII	• Discussion of Future Meeting Dates and Topics (votes may be conducted):
VII	I. Public Comment Period:





TEL.: (508) 998-0250 FAX: (508) 998-0203

Tuesday, June 14, 2016 Town Hall Meeting Room

- I. Call to Order at 6:30 p. m.:II. Pledge of Allegiance:III. Introduction of Committee Members:
- ${
 m IV.}\,$ Meeting Minutes to be approved (votes may be conducted):
- V. Meeting Mail & Unfinished Business (votes may be conducted):
 1. Items sent by the Chair to Committee Members
- VI. Discussion on / Drafting of: Report to Selectmen (votes may be conducted):
- VII. Discussion of Future Meeting Dates (votes may be conducted):
- VIII. Adjournment





TEL.: (508) 998-0250 FAX: (508) 998-0203

Friday, June 17, 2016 Town Hall Meeting Room

- I. Call to Order at 6:00 p. m.:
- II. Pledge of Allegiance:
- III. Introduction of Committee Members:
- IV. Meeting Minutes to be approved (votes may be conducted):
- V. Meeting Mail & Unfinished Business (votes may be conducted):
 1. Items sent by the Chair to Committee Members
- $VI.\,\,\,{
 m Discussion}$ on / Drafting of: Report to Selectmen (votes may be conducted):
- VII. Discussion of Future Meeting Dates (votes may be conducted):
- VIII. Adjournment





TEL.: (508) 998-0250 FAX: (508) 998-0203

Tuesday, June 21, 2016 Town Hall Meeting Room

- I. Call to Order at 6:30 p. m.:
- II. Pledge of Allegiance:
- III. Introduction of Committee Members:
- IV. Meeting Minutes to be approved (votes may be conducted):
- V. Meeting Mail & Unfinished Business (votes may be conducted):
 1. Items sent by the Chair to Committee Members
- $VI.\ {
 m Discussion\ on\ / \ Drafting\ of:\ Report\ to\ Selectmen\ (votes\ may\ be\ conducted):}$
- VII. Discussion of Future Meeting Dates (votes may be conducted):
- VIII. Adjournment

Appendices

4) Letter to the U.S. Federal Energy Regulatory Commission (FERC) from the U.S. Environmental Protection Agency (EPA)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1 5 POST OFFICE SQUARE, SUITE 100 BOSTON, MA 02109-3912

June 13, 2016

Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street, N.E., Room 1A Washington, D.C. 20426

RE: EPA Comments in response to FERC Notice of Intent for the Access Northeast Project, Docket No. PF16-1-000

Dear Ms. Bose:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, we submit the following comments as part of the NEPA scoping process for the Federal Energy Regulatory Commission (FERC's) proposed Environmental Impact Statement for the Access Northeast Project (AN) proposed by Algonquin Gas Transmission LLC (Algonquin) in New Jersey, New York, Connecticut, Rhode Island, and Massachusetts.

Our comments are based on information provided in FERC's April 29, 2016 Notice of Intent (NOI) document for the AN Project, an interagency site visit and meeting with the applicant and information contained in pre-filing draft resource reports filed by the applicant. According to that information Algonquin intends to install, operate and maintain a project capable of delivering up to 925 million cubic feet per day of natural gas on the existing Algonquin pipeline system. The project includes replacement of portions of existing Algonquin pipeline with larger capacity pipe in New York and Connecticut, the addition/extension of pipeline loops in Connecticut and Massachusetts, and the installation of new pipeline segments in Massachusetts. Other work includes the establishment of pig launcher and receiver facilities, new mainline valves and compressor station work along the proposed project alignment. The compressor station work includes modifications to existing compressor stations and the addition of a new compressor station to add a total of 165,560 horsepower on the Algonquin system.

The project also includes the construction and operation of a proposed Liquefied Natural Gas (LNG) Storage Facility on 210 acres in Acushnet, Massachusetts. The project proposes two LNG storage tanks with a combined capacity of 6.8 billion standard cubic feet and other liquefaction and regasification infrastructure. A new 2.86 mile pipeline will connect the LNG facility to the existing Algonquin gas transmission system. According to the NOI project construction will disturb 1,866 acres of land with the majority of the land disturbance related to pipeline installation. Approximately 58 percent of the pipeline construction activity will take

place in areas previously disturbed by other pipelines/utilities. Based on information submitted by Algonquin, the LNG facility proposes to fill approximately 65 acres of wetland.

The construction and operation of the AN Project, especially the proposed Acushnet LNG storage facility and associated infrastructure, could result in a wide range of direct, indirect and cumulative impacts to resources that are within EPA's areas of jurisdiction and expertise. Based on our review of available information, the FERC NOI identifies many of the potential environmental impacts that need to be examined in the EIS. However, we have specific concerns about the consideration of alternatives and the potential for the project to impact wetlands, drinking water, groundwater, and air quality (during both construction and operation of the project). Our attached comments in response to the NOI and the applicant's resource reports provide detail and direction on how to address these issues in the EIS.

Please contact me at 617-918-1025 with any questions regarding our scoping comments.

Sincerely,

Timothy L. Timmermann

Associate Director, Office of Environmental Review

Enclosure

Scoping Comments for the Access Northeast Project

Alternatives

Our comments in the wetlands and aquatic resources section below explain why potentially significant impacts to those resources signals the need for a comprehensive look at alternative sites for the LNG storage facility. In addition we recommend that the EIS consider whether the demand being addressed by this project could be otherwise met by other currently proposed pipeline expansion projects in the region, existing infrastructure, or alternative sources of energy including renewable sources such as wind and solar. Moreover, we recommend that FERC's analysis consider whether the project purpose and need could largely be met without the LNG facility. This question is warranted due to the limited range of time the facility is projected to operate in any given year and the projection that almost half of the project gas will be provided through proposed pipeline expansion. The EIS would also benefit from an explanation of the relationship of the three Algonquin projects (SPECTRA AIM, Atlantic Bridge, Access Northeast) to each other and why they were not considered as one project given system linkages similar geography, ownership and timing across the three.

Drinking Water Supply

These comments address a number of areas of concern with respect to the planned pipeline construction and operation that could affect public and private drinking water supplies. Our comments are general in nature as the Algonquin Resource Reports related to drinking water issues were not available while we were preparing these scoping comments. We intend to review the draft resource reports and update them as appropriate in the future.

Alignment Alternatives

We recommend that the EIS provide specific information regarding the location of public drinking water supply source water protection areas. This information could then be used to help FERC and Algonquin develop pipeline alignment alternatives that avoid crossing state-defined source or municipality-defined water protection areas, including Wellhead Protection Areas.

Groundwater Impacts

Prevention of negative impacts to aquifers (e.g. creating a preferential flow path for water and/or contaminants, limiting recharge through the construction of large impervious surfaces or causing the discharge or pollutants) during project construction and other pipeline related activities should be a high priority. EPA recommends including prevention and mitigation plans to address potential long-term impacts to water resources in proximity to the constructed pipeline. Trenchless construction methods such as Conventional Bore and Horizontal Directional Drilling (HDD) can be used as effective means to minimize and avoid impacts to wetlands and surface waters during construction. The AN Supplemental Project Information Filing notes sixteen locations (spread through Connecticut and Massachusetts) that are under consideration for the use of HDD. Because Conventional Bore and HDD may be conducted at depths much greater than trenching, they have the potential to create groundwater flow pathways that did not exist prior to construction (i.e. preferential flow pathways). We recommend that the FERC analysis address whether any portion of the pipeline construction has the potential to convey groundwater and/or contaminants from one location to another, thereby spreading contamination or

dewatering an aquifer. Excavated and backfilled trenches with pipelines in place below the seasonal high groundwater table may disrupt groundwater flow in this manner as well. EPA recommends that the EIS address this potential impact, and that steps be identified and required by FERC to prevent water movement along the alignments wherever excavation or trenchless construction methods will be used below the seasonal high water table. We also recommend that areas where alignments will pass in close proximity to groundwater resources, as defined in the Resource Reports, and/or areas near drinking water sources (including private wells) be prioritized for these measures.

For the portions of the alignments that will utilize trenchless construction methods, we recommend that the EIS provide engineering specifications for the planned construction activities. These specifications, including both map views and cross section views (e.g. distance-depth diagram) of trenchless construction areas, are vital to assess potential impacts to groundwater resources. Cross-sections of trenchless construction areas should include, among other things, aquifer materials and bedrock features (e.g. fractures) which may be intersected by the alignments. We recommend that these cross-sections and plan views be made readily available for review by stakeholders.

With respect to construction activities, we recommend that the FERC EIS contain specific measures to evaluate whether any project construction or operation leads to public or private well impacts. The discussion should be broad enough to cover pre and post-construction assessments (over an appropriate time period) to determine if project activities affect a water supply. A full hydrogeological assessment conducted by a qualified professional may be required.

We recommend that the EIS specifically discuss whether any of the proposed pipeline construction will require blasting and whether the blasting has the potential to impact public or private water supplies or groundwater flow. We recommend outlining specific steps in the EIS for contacting well owners (both private and public) in advance of blasting, and for establishing baseline conditions. Blasting near bedrock wells poses a significant risk to the water quality and capacity of those wells. EPA recommends that alternatives to blasting be fully explored, and that the EIS describe how blasting within close proximity to bedrock wells will be avoided.

Crossing Impacts to Rivers, Streams, Reservoirs and Source Protection Areas
According to the AN Supplemental Project Information Filing the proposed project will "affect approximately 220 waterbodies during construction." We recommend that the EIS provide a breakdown of drinking water supply streams, rivers, reservoirs and source water protection areas (including recharge to wellhead protection areas) that would be crossed or potentially impacted by construction activity.

Activities associated with construction and operation of the pipeline through these critical areas could impact drinking water resources. We recommend that FERC coordinate with public water suppliers to determine if they could be affected by the proposed pipeline and associated facilities. We recommend that the EIS address concerns expressed by public drinking water suppliers whose sources of supplies or protection areas may be impacted and that the EIS include descriptions of site-specific Best Management Practices (BMPs) that will be employed at each water supply area to mitigate any construction or storm water runoff related impacts.

Additionally, we recommend that the EIS identify and address concerns at pipeline crossings through areas with known or potentially contaminated sediments. We recommend that State hazardous waste programs be consulted to identify any actual or potential contaminated sites. We recommend that precautions (BMPs) to mitigate sediments that may be suspended during the horizontal directional drilling operations upstream of public drinking water supply intakes be identified in the EIS.

We recommend that the EIS examine the potential impacts of stormwater discharges from the project. During construction, it is likely that sediment and pollutant laden stormwater could be released into rivers, streams, reservoirs and the drawdown areas for water supply wells. Although one or more NPDES and state stormwater permits may be required, we recommend that the EIS examine whether the basic requirements of those permits could be enhanced to assure a greater degree of protection.

The discharge of nutrients into many water bodies is a growing concern and new control technologies are being continually developed, and we recommend they be examined and discharges to waters with Total Maximum Daily Loads be identified and BMPs adequate to attain applicable load reductions be applied.

Sole Source Aquifers

We recommend that the EIS identify all potential construction impacts and the mitigation techniques used to reduce impacts to Sole Source Aquifers, especially where construction is planned, on any state cleanup sites, Superfund sites other contaminated areas, such as junkyards, or leaking underground storage tank sites within the project area. Within the states of Connecticut, Massachusetts and Rhode Island, there are thirteen (13) designated Sole Source Aquifers. Please consult with our EPA Region 1 Drinking Water Program to confirm whether the planned project would be located within any of these Sole Source Aquifers recharge areas.

Ted Lavery
US EPA-Region 1
Drinking Water Program-Source Protection
Lavery Ted@epa.gov
(617) 918-1683

Additional information on the program can be found at:

https://www3.epa.gov/region1/eco/drinkwater/pc_solesource_aquifer.html

State Drinking Water Program Contacts for Consultation on Source Water Protection Areas Additional contact information is provided below for the states' respective source water programs. We suggest consulting with state source water program contacts and addressing their comments and concerns in the EIS.

Connecticut Department of Public Health Source Water Protection Unit Contact: Eric McPhee, Supervising Environmental Analyst 410 Capitol Avenue, Hartford, CT 06134

Website: www.ct.gov/dph/publicdrinkingwater

Email: <u>Eric.McPhee@ct.gov</u> Phone: (860) 509-7333 Fax Number: (860) 509-7359

Emergency Number: (860) 509-8000)

Massachusetts DEP Drinking Water Program

Source Water Assessment Program Contact: Kathleen Romero, Coordinator 1 Winter St., Boston, MA 02108

Email: Kathleen.Romero@state.ma.us

Phone: (617) 292-5727

Website: http://www.mass.gov/eea/agencies/massdep/water/drinking/source-water-protection-

<u>for-drinking-water-supplies.html</u> Emergency Number: 888-304-1133

Rhode Island Department of Environmental Management

Contact: Ernie Panciera, State Wellhead Protection Coordinator

Water Resources 235 Promenade Street Providence, RI 02908-5767

Phone: (401) 222-4700 Ext 7603 Email: ernie.panciera@dem.ri.gov

Rhode Island Department of Health

Contact: Clay Commons, Acting Source Water Protection Coordinator

Office of Drinking Water Quality
3 Capitol Hill - Cannon Bldg

Rm 209

Providence, RI 02908-5097 Phone: (401) 222-6867 ext. 2237 Email: claye@doh.state.ri.us

Website: http://www.health.ri.gov/programs

Bureau of Water Supply Protection NYS Department of Health

Contact: Dr. Roger Sokol, Director Empire State Plaza, Corning Tower

Room 1110

Albany, NY 12237 Phone: 518-402-7650

Land Conservation

We recommend that the EIS identify if the proposed alignment will cross any conservation land purchased for the protection of drinking water sources and other natural resource protection

areas. We recommend that the EIS identify alternatives to the current alignment to limit the impact to these areas.

Request for GIS Information

GIS mapping is an essential part of impact assessment. EPA, and we assume other stakeholders along the proposed project corridor, would benefit from access to GIS data for the proposed alignment that can be easily downloaded or served to a GIS for use and analysis. We recommend that FERC, or Algonquin, provide access to online mapping that allows users to interact with maps and map layers. The online mapping would allow stakeholders to view and interact with maps of the proposed alignment locations for the entire project, including choosing which map layers to view at various map scales. All of the layers used to create project maps for the EIS could be made accessible including those for: water (e.g. drinking water protection areas; aquifers, etc); fish, wildlife; vegetation; cultural resources; socioeconomics; geological resources; soils, land use (e.g. known contamination sites, etc.); recreation and aesthetics; air and noise quality. There are many, readily available, commercial mapping applications that can be used to establish this capability. As one example, EPA offers its NEPAssist tool which facilitates the environmental review process and project planning in relation to environmental considerations.

Wetlands and Other Aquatic Resources

We recommend that the EIS provide a detailed description of the wetlands/water bodies and vernal pools along the pipeline alignment and proposed facility installations that includes their location as well as an assessment of their ecological functions and services. We recommend that the EIS also describe the portions of the pipeline construction work that will involve discharging dredged or fill material in wetlands or other waters of the United States that will be subject to the permit requirements of Section 404 of the Clean Water Act (CWA). The EIS should include an evaluation of ways in which each alternative alignment, or project related facility such as the proposed LNG Storage tanks, liquefaction facility, gasification facility, compressor stations and other associated infrastructure can be designed/sited to avoid, and where unavoidable, minimize impacts to wetlands and other waters of the U.S.

Discharge activities must comply with EPA's regulations issued under CWA Section 404(b)(1), referred to as EPA's Section 404(b)(1) Guidelines (the "Guidelines") (40 CFR Part 230), which include the following requirements: that there be no practicable, less environmentally damaging alternative to the proposed action; that the activity not cause or contribute to violations of state water quality standards or toxic effluent standards; that the activity not jeopardize endangered or threatened species or violate requirements to protect marine sanctuaries; that the activity not cause or contribute to significant degradation of waters of the United States; and that all practicable and appropriate steps be taken to minimize potential adverse impacts to the aquatic ecosystem (40 CFR 230.10). The Guidelines further establish a presumption, which the

We recommend that the wetland assessment be prepared in a manner consistent with the Army Corps of Engineers New England District descriptive approach to wetland assessment as presented in *The Highway Methodology Workbook Supplement Wetland Functions and Values - A Descriptive Approach*, NEDEP-360-1-30a, November 1995.

applicant has an opportunity to rebut, that for projects that are not water-dependent, less damaging, practicable alternatives exist that do not involve activities in special aquatic sites such as wetlands. Ideally, the information presented in the EIS will support the evaluation of alternatives and associated impacts required under the Guidelines and a better informed permitting process.

Unavoidable impacts to wetlands, surface water resources (impacts to rivers/streams quality and flow), and wildlife should be fully disclosed in the EIS. These impacts include but are not limited to: direct filling of wetlands or other waters for pipeline construction and/or operation; temporary impacts to wetlands or other waters resulting from access for construction and/or operation purposes; indirect² impacts, such as clearing impacts resulting in a change (either permanent or temporary) of cover type within a wetland (e.g. converting a forested wetland to an emergent or scrub/shrub wetland); indirect impacts resulting from erosion or sedimentation into wetlands or water bodies; and induced growth which can result from construction of the project (i.e. additional development induced by the development of the pipeline).

In addition, we recommend that all construction practices that will be utilized to minimize impacts be documented. Specifically, we recommend standard conditions to protect wetlands be documented in addition to steps that may be taken to reduce impacts to particularly sensitive areas such as vernal pools. We recommend that the EIS also provide comprehensive information to explain how stream and river crossings will be constructed to avoid and minimize impacts and similarly how impacts to state and federally listed endangered species will be avoided/addressed. In addition, we recommend that the EIS:

- discuss the advantages and disadvantages associated with each of the alternatives considered (with respect to wetland and aquatic resource issues) and the rationale for selecting pipeline alignments and compressor station and other project facility designs and locations with respect to potential impacts to wetland, stream and vernal pool ecosystems. For all sections of the proposed pipeline that will be on new alignment, the alternatives analysis should show how the alignment was designed to minimize aquatic impacts. In addition to access to the GIS data layer showing streams and wetlands, photographs and/or aerial photos or the project corridor can be very helpful at the scoping stage. For the Massachusetts and Connecticut portions of the alignment, we recommend that Massachusetts (Bio Map) and Connecticut Wildlife Action Plan (WAP) information be correlated to project plans/aerial photos, in all locations that are on new alignment. We recommend that WAP information also appear on the USGS maps to clarify colocated utility corridors.
- identify wetlands along the pipeline route and at facility and construction staging locations (either within the right-of-way or in close proximity) that support rare and exemplary natural communities. We recommend that the EIS describe specific mitigative measures to ensure that these communities will be protected from potential direct,

² We note that under Section 404 of the Clean Water Act these types of impacts are referred to as "secondary impacts," but that for clarity and consistency we are using the term "indirect impacts" in this letter.

indirect and cumulative impacts associated with the pipeline, compressor stations, and other project facilities.

- clearly identify the locations of temporary and permanent access roads and construction staging areas and discuss how wetland and other aquatic ecosystems will be protected from direct and indirect impacts associated with these activities.
- describe the long-term right-of-way maintenance techniques planned for the project. We recommend that the discussion include: an analysis of the effects of maintenance techniques on plant life and wildlife habitat; an explanation whether herbicides will be used; and whether specific buffer zones will be established around wetlands and other waters where herbicide application would be prohibited. We recommend that the analysis be expanded to discuss the potential for the introduction of invasive species and methods to control their spread over the life of the project.
- discuss and describe appropriate buffer zones to avoid or reduce indirect effects of
 construction to streams and wetlands (which may vary depending on the wetland
 community type described). The EIS should include enough information to show the
 type and location of wetlands in the project area. This information will help us to assess
 the potential impacts of the proposed action and to determine the effectiveness of the
 mitigative measures proposed.
- include a comprehensive discussion of measures to further reduce impacts to water bodies and aquatic organisms along the pipeline routes including the use of directional drilling and time of year restrictions to control instream construction work periods. We recommend that the EIS also provide detailed contingency plans that fully describe the process that will be followed should the chosen construction technique prove unsuitable (for example, failure of the directional drilling). EPA suggests that this process description identify other potential construction techniques and the approvals necessary before a major modification can be made to agreed-upon (and permitted) construction protocols.

In addition, we recommend that the EIS describe a strategy for determining adequate mitigation to compensate for all unavoidable direct, indirect and cumulative impacts to wetlands and aquatic resources from construction and operation of the project. We recommend that the EIS describe how the project will be consistent with the 2008 Compensatory Mitigation Rule (33 CFR Part 332, and 40 CFR Part 230, Subpart J, also discussed in detail at the Corps website referenced in the footnote below). Compensatory mitigation will also need to comply with the US Army Corps of Engineers (Corps) New England District Compensatory Mitigation Guidance.³

³ The US Army Corps of Engineers (Corps) New England District Compensatory Mitigation Guidance can be found at:

http://www.nae.usace.army.mil/Missions/Regulatory/Mitigation/CompensatoryMitigationGuidance.aspx.

We recommend that this strategy specifically describe the methodology that will be used to determine the amount and type of mitigation that will be necessary to address direct, indirect and cumulative impacts to wetlands and other aquatic resources, and the approach that will be used to develop an appropriate mitigation package. This description and analysis should include but not be limited to a clear presentation of the following impacts and the compensatory mitigation strategy proposed to offset those impacts:

- Direct Impacts (the placement of fill) to wetlands, streams and vernal pools.⁴
- Temporary Impacts (alteration to wetlands that will be restored to previous condition; for example, cutting trees, or the placement and use of swamp mats or temporary access roads or staging areas for the construction process) to forested, shrub and emergent plant communities.
- Indirect Impacts, including but not limited to: the permanent conversion of forested
 wetlands to scrub-shrub wetlands; permanent conversion of forested wetlands to
 emergent wetlands; removal of forested cover (upland or wetland) within 100' of any
 vernal pool; and removal of forested cover (upland or wetland) within 100' of any
 stream.

Lastly, we recommend that the EIS discuss wetland impacts associated with operation and maintenance of project pipelines and other facilities and whether compensatory mitigation is necessary to address these impacts.

LNG Facility

As discussed above, EPA's Guidelines include several requirements that must be met for a discharge of dredge or fill material into wetlands or other waters of the U.S. to be permitted. Two of the Guidelines' requirements are of particular importance when evaluating the proposed project: (1) that no discharge of dredged or fill material shall be permitted which will cause or contribute to significant degradation of the waters of the United States (40 CFR 230.10(c)); and, (2) that no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem (40 CFR 230.10(a)).

Significant Degradation – 40 CFR 230.10(c)

It is important to note that the Guidelines require that no alternative be permitted that causes or contributes to significant degradation of waters of the U.S. According to preliminary information provided by Algonquin, development of the Acushnet LNG facility has the potential to impact at least 65 acres of forested wetland on the Acushnet site. Because current wetland delineation and assessment of the ecological functions and services of aquatic resources on the proposed site is incomplete, there is not enough information available at this time to conclusively determine the total impacts of the proposed Acushnet LNG facility, or whether those impacts

⁴ We recommend that the EIS identify the number of pools what would be impacted directly by the project (with the number impacted being more important than the total acres of vernal pool impacted). However, secondary impacts to vegetation within 100' of the vernal pools can remain as a simple total of square feet.

would result in significant degradation. However, it should be noted that the estimated direct impact to 65 acres or more of wetlands for the proposed Acushnet LNG facility (not including the additional project impacts associated with pipeline work) if permitted, would represent one of the largest direct impacts allowed in New England to date. It is therefore critical that all practicable alternatives for design and location of the LNG facilities, as discussed below, be fully considered to reduce project impacts.

Alternatives - 40 CFR 230.10(a)

As part of the alternatives analysis discussed above, it is important that the EIS provide a complete, detailed evaluation of alternatives for the proposed LNG facility. A discussion of alternatives for the LNG facility was presented in Algonquin's April, 2016 Supplemental Project Information Filing ("Supplemental Report"), which expanded upon the earlier alternatives analysis presented in Resource Report 10. While these reports provide useful information, commensurate with the severity of impact, we recommend that the EIS consider a greater range of alternatives than presented in the Supplemental Report, as well as provide more detail on each alternative considered and its associated environmental impacts.

The LNG facility is a unique project feature in that it is a standalone facility that can be situated in a wide range of locations along the pipeline route. Because of the severity and potential significance of the estimated impacts to aquatic resources at the Acushnet site, we strongly recommend that FERC consider a much broader range of LNG facility siting alternatives to meet the project purpose than presented to date. For example, the Supplemental Report limited the study area for siting the LNG facility to a radius of five miles from the G system line. The Supplemental Report notes that locating the LNG facility in close proximity to the G system would be optimal, so the range of alternatives considered was within a five mile radius of the G system. However, other LNG site locations, while perhaps not optimal, might nonetheless be practicable and less environmentally damaging alternatives that meet the project purpose and therefore warrant full consideration.

It is our understanding that Algonquin has expanded the study area of potential LNG facility sites to a radius of ten miles. While this expansion of the study area for possible LNG facility sites is appropriate, as EPA noted in recent meetings with FERC, Algonquin and the Corps of Engineers, the critical criterion for determination of appropriate locations for the LNG facility (or other project features) is practicability. Site locations at distances greater than ten miles from the G system, or which tie into the main gas pipeline system at some other location, must be evaluated and demonstrated to be impracticable before being eliminated from consideration. Further, we note that under the Guidelines, "available" sites are not limited to those currently owned or controlled by the applicant, but also include those that can reasonably be obtained, utilized, expanded, or managed to fulfill the basic project purpose.

Similarly, as EPA suggested during a recent meeting with FERC and Algonquin, that alternative LNG facility designs be considered to determine if environmental impacts can be reduced while still meeting the project purpose and need. For example, a design using several smaller, separate LNG storage facilities, each near different subsets of regional power generating facilities, could eliminate limitations presented by the search for a relatively large (150 acre) site to accommodate two large LNG storage tanks at a single site. By reducing the required area for

each LNG facility site, the number of potential practicable locations would likely increase, thus increasing the likelihood of finding sites that would result in less environmental harm. Whether considering single or multiple LNG facilities, alternate locations or designs should be fully considered, such as sites near water bodies, or the incorporation of other engineering or design features, that could reduce required site area and thus potentially increase the number of less damaging site alternatives.

Again, in assessing alternative sites, the key criterion for facility location and design (size and number of LNG facilities, engineered features to reduce required site area, etc.) is practicability. While cost, desirability of location, etc., is taken into consideration, the fact that an alternative may have reasonably greater costs, or be sited in a less than optimal location, does not necessarily render that alternative impracticable.

As we discussed in interagency meetings, we recommend that the EIS be prepared to meet the requirements of both NEPA and address the requirements of Section 404 of the Clean Water Act. We support this coordinated environmental review and believe that it will save time, avoid redundancy and make it easier for the public to participate in the process. EPA intends to continue to work closely with FERC, the Corps and Algonquin during the NEPA pre-filing process to support a comprehensive analysis of alternatives and to strengthen the NEPA and Section 404 processes going forward.

Air Quality Analysis

General Conformity

The Access Northeast Project will be located in portions of New Jersey, New York, Connecticut, Rhode Island, and Massachusetts. The broad scale project map for New England indicates that the project may be located within a number of carbon monoxide and fine particle attainment areas with current maintenance plans in place, as well as two ozone nonattainment areas. Project components located within these areas need to be evaluated for applicability to the Federal General Conformity regulations. (The General Conformity regulations can be found at 40 CFR 93.150 – 165.) Specifically, if the total of direct and indirect emissions of a criteria pollutant or precursor in a nonattainment or maintenance area caused by a Federal action would equal or exceed the applicability thresholds established in 40 CFR 92.153, the requirements of general conformity must be satisfied.

The attainment and nonattainment areas with a current maintenance plan in place within the project areas in Connecticut and Massachusetts appear in the following chart. General conformity is applicable in these areas. In addition, the chart identifies the general conformity applicability thresholds from 40 CFR 93.153, in tons per year (tpy), for each of these areas:

National Ambient Air Quality Standard (NAAQS)	Name of Area	Air Quality Designation	General Conformity Thresholds (tpy)
Connecticut see 4	0 CFR 81.307	<u> </u>	
2008 ozone NAAQS	Greater Connecticut	Marginal Nonattainment*	NOx: 100
2008 ozone NAAQS	Connecticut Portion of New York-Northern New Jersey-Long Island, NY-NJ-CT	Marginal Nonattainment*	VOC: 50 NOx: 100
Particulate Matter	Connecticut Portion of New York-Northern New Jersey-Long Island, NY-NJ-CT	Attainment with a maintenance plan in place (Effective 10/24/2013)	Direct PM _{2.5} , SO ₂ , and NO _X (unless determined not to be a significant precursor): 100 VOC or ammonia (if determined to be significant precursors): 100
2006 24-Hour PM _{2.5} NAAQS	Connecticut Portion of New York-Northern New Jersey-Long Island, NY-NJ-CT	Attainment with a maintenance plan in place (Effective 10/24/2013)	Direct PM _{2.5} , SO ₂ , and NO _X (unless determined not to be a significant precursor): 100 VOC or ammonia (if determined to be significant precursors): 100
Carbon Monoxide (CO)	New Haven-Meriden- Waterbury	Attainment with a limited maintenance plan in place (Effective 12/04/1998)	
СО	Connecticut Portion of New York-Northern New Jersey-Long Island	Attainment with a limited maintenance plan in place (Effective 05/10/1999)	CO: 100
Massachusetts so			·
СО	Waltham area	Attainment with a limited maintenance plan in place (Effective 04/22/2002)	
СО	Worcester area	Attainment with a limited maintenance plan in place (Effective 04/22/2002)	

^{*}Effective June 3, this area is elevated up to moderate nonattainment status. See <u>81 FR 26715</u>; May 4, 2016. However, the general conformity thresholds do not change.

On March 6, 2015 (80 FR 12264), EPA published the Final Rule for "Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan Requirements." This final rule revoked the 1997 ozone National Ambient Air Quality Standard effective April 6, 2015; hence, conformity is no longer applicable to the 1997 ozone NAAQS, and accordingly, is not addressed in the above chart.

In addition, in October 2015, EPA adopted a more stringent ozone NAAQS of 0.070 parts per million (ppm). (See 80 FR 65292; October 26, 2015.) However, EPA has not yet designated areas pursuant to the 2015 ozone NAAQS. Therefore, that standard is also not addressed in the above chart. (The designations timeline is for states to submit recommendations to EPA by October 2016 and for EPA to issue designations by October 2017.)

There are currently no nonattainment or maintenance areas for the current NAAQS in Rhode Island. (See 40 CFR 81.340.) Therefore, general conformity does not currently apply in that State. Conformity does apply in areas in New Jersey and New York (see 40 CFR 81.331, and 81.333, respectively).

EPA is available to work with FERC during the development of the EIS to help address general conformity and insure general conformity is satisfied prior to any trigger of the "take or start Federal action" requirement.

Reducing Diesel Emissions

Given the public health concerns about diesel exhaust from heavy duty diesel trucks and other heavy duty construction equipment, EPA encourages the project proponent to commit to the use later model diesel engines where possible. Alternatively, we encourage the project proponent to require diesel retrofits where practicable, require the use of cleaner fuels, and institute idle reduction measures to minimize emissions from diesel construction equipment. Retrofit technologies may include EPA verified emission control technologies and fuels and CARB-verified emission control technologies. A list of these diesel exhaust control technologies can be accessed at https://www.epa.gov/verified-diesel-tech/manufacturer-contact-list-clean-diesel. A list of approved idle reduction technologies can be found on the Agency's SmartWay site here: https://www.epa.gov/verified-diesel-tech/smartway-verified-list-idling-reduction-technologies-irts-trucks-and-school. Additionally, operator training to reduce unnecessary idling of equipment to supplement the adoption of these technologies is encouraged.

The Northeast Diesel Collaborative has prepared model construction specifications to assist in developing contract specifications that would require construction equipment to be retrofitted with control devices and use clean fuels in order to reduce diesel emissions. The model construction specifications can be found on the Northeast Diesel Collaborative web site http://northeastdiesel.org/pdf/NEDC-Construction-Contract-Spec.pdf.

We recommend that FERC identify specific exhaust emission mitigation measures in the EIS and require a binding commitment from the applicant to implement these measures to help reduce and minimize the air quality impacts from construction of the proposed project.

Regional Impacts of the Project

In addition to the typical analysis of air pollution from construction impacts and operation of the project, we suggest that the EIS also include an assessment of how the project is likely to provide regional environmental benefits due to reductions in emissions for the electric generation sector.

State Air Permits and Licensing

New or modified compressor stations may be subject to state air quality permitting or other state air quality emission regulations. We encourage the applicant to coordinate early on with the appropriate State Air Quality Agencies to identify applicable requirements. The EIS should describe these requirements in detail, especially the opportunities for public involvement regarding siting, and mitigation for impacts associated with operations of the compressor station facilities. The EIS would be improved by including in the siting discussion an explanation of how much flexibility in compressor station siting exists along the pipeline route and whether/how the compressor station locations suggested for the project avoid/minimize community impacts. We encourage a transparent permitting process that encourages early public input in the state permitting process.

Greenhouse Gas Emissions

EPA recommends that FERC include an estimate of the direct and indirect greenhouse gas (GHG) emissions caused by the proposal, a discussion of the impacts of climate change, and an analysis of reasonable alternatives and/or practicable mitigation measures to avoid, reduce, or compensate for GHG emissions caused by the proposal in the EIS. Incremental emissions mix rapidly in the atmosphere and have global-scale incremental impacts. In addition, CO₂ emissions have centuries-long impacts, including global scale changes in ocean acidity, sea level, and mean temperature, as well as changes to local drought and precipitation levels. For purposes of informing decisionmakers and the public, EPA recommends this context be provided, and that estimated GHG emissions levels be used as a general proxy to compare emissions levels from the proposal, alternatives, and potential mitigation. In other words, alternatives with higher levels of emissions make greater contributions to the impacts and risks of global climate change.

In addition, we recommend that the design of the proposed action consider GHG reduction measures and improvements to the proposal's resilience to projected climate change scenarios. We recommend that the EIS make clear whether commitments have been made to implement measures to avoid, reduce, or compensate for GHG emissions and/or to adapt to climate change.

Emissions

The EPA recommends that the EIS estimate the direct and indirect GHG emissions caused by the proposal and its alternatives, including emissions caused by the production, and use of the natural gas to be transported. Examples of tools for estimating and quantifying GHG emissions can be found on CEQ's website.⁵ These emissions levels can serve as a reasonable proxy for climate change impacts when comparing the alternatives and considering appropriate mitigation measures.

⁵ https://ceq.doe.gov/current_developments/GHG_accounting_methods_7Jan2015.html

The EPA recommends that the EIS describe measures to reduce GHG emissions associated with the project, including reasonable alternatives and other practicable mitigation opportunities, and disclose the estimated GHG reductions. The EPA further recommends that the EIS commit to implementation of reasonable mitigation measures that would reduce project-related GHG emissions.

Climate Change Adaptation

We recommend that FERC provide a summary discussion of climate change and ongoing and reasonably foreseeable effects of climate change relevant to the project and the project study area relevant to the proposal, based on U.S. Global Change Research Program assessments.⁶ These future climate scenarios included in the assessments can be useful when considering measures to improve the resiliency of the proposed project to the impacts of climate change as well as mitigation for potential impacts of the proposal that will be exacerbated by climate change.

The EPA recommends that, consistent with federal policy, the proposal's design incorporate measures to improve resiliency to climate change where appropriate. These changes could be informed by the future climate scenarios addressed in the "Affected Environment" section. The alternatives analysis should, as appropriate, consider practicable changes to the proposal to make it more resilient to anticipated climate change. Changing climate conditions can affect a proposed project, as well as the project's ability to meet the purpose and need presented in the EIS. One such example would be infrastructure located in coastal regions that may be affected by sea level rise.

Effects of Climate Change on Project Impacts:

When considering the potential impacts of the proposal, we recommend FERC consider the future climate scenarios in the "Affected Environment" section to determine whether the environmental impacts of the alternatives would be exacerbated by climate change. If impacts may be exacerbated by climate change, additional mitigation measures may be warranted.

Methane Leakage

We recommend FERC include estimates of expected methane leakage from the proposal and consider potential best management practices to reduce leakage of methane associated with operation of the expansion facilities. EPA has compiled useful information on technologies and practices that can help reduce methane emissions from natural gas systems, including specific information regarding emission reduction options for natural gas transmission operations. This information may be found at http://www3.epa.gov/gasstar/methaneemissions/index.html.

Environmental Justice

Pursuant to Executive Order 12898 - Federal Actions to Address Environmental Justice in Minority and Low-Income Populations, "Each Federal Agency shall analyze the environmental effects, including human health, economic and social effects, of Federal actions, including effects on minority communities and low-income communities, when such analysis is required by NEPA. Mitigation measures outlined or analyzed in an environmental assessment, environmental impact statement, or record of decision, whenever feasible, should address

⁶ http://www.globalchange.gov/

significant and adverse environmental impacts of proposed Federal actions on minority communities and low-income communities." We encourage FERC to fully consider environmental justice issues as it prepares the EIS for the project.

Guidance⁷ by CEQ clarifies the terms low-income and minority population (which includes Native Americans) and describes the factors to consider when evaluating disproportionately high and adverse human health effects. The EIS should include an evaluation of environmental justice populations within the geographic scope of the project. Assessment of the project's impact on minority and low income populations should reflect coordination with those affected populations.

We suggest that community level data be used to determine the presence of low-income and minority populations in the project area that may be potentially impacted. We recommend comparing this data to municipal or state level data to ensure that minority and low-income populations are properly identified. Community level data is the most useful in that it captures EJ populations that may be present at the municipal level but not identifiable when the analysis occurs at a broader level such as at the census tract level. This approach will ensure that the presence of minority and low-income populations are not artificially diluted or inflated and that the characteristics of the potentially affected communities are identified in order to evaluate potential impacts from the proposed action. Where community level data is impractical to develop, census tract data may be an appropriate source of demographic information.

EPA's EJSCREEN is an environmental justice screening and mapping tool that utilizes standard and nationally consistent data to highlight places that may have higher environmental burdens and vulnerable populations. EJSCREEN can be accessed at http://www2.epa.gov/ejscreen. Moreover, the NEPA Committee of the Interagency Working Group (IWG) on Environmental Justice recently released the Promising Practices for EJ Methodologies in NEPA Reviews. The report contains a compilation of methodologies used across the federal government for EJ analyses in the NEPA process.

An important component of project success is related to effective community engagement that fosters public understanding of the project and its impacts, and the range of solutions and steps to mitigate impacts. Communication with potentially affected EJ populations along the project route and near the LNG facility site(s) for the balance of the NEPA process, during project permitting, and as the project moves into the construction and operation phase will be critical. In particular, we recommend a robust public involvement strategy to inform and engage a broader spectrum of the EJ populations about the types of work and impacts they can expect during project construction and operation. The strategy should provide high quality, consistent, timely and appropriately targeted information such that it is clear and easily understood by a diverse audience. Please refer to EPA's EJ website⁸ for additional information.

We acknowledge that FERC is, for legal status purposes, a commission and not an agency; however, given the importance of environmental impacts to disadvantaged communities,

⁷ Environmental Justice Guidance under the National Environmental Policy Act, Appendix A (Guidance for Federal Agencies on Key Terms in Executive Order 12898), CEQ, December 10, 1997.

⁸ http://www.epa.gov/environmentaljustice/

particularly with a project of this magnitude, we encourage FERC to respect the spirit of the Executive Order. We believe proactive engagement of the environmental justice community will add value and minimize objections to the project.

EPA is willing to assist Algonquin and FERC to help improve the outreach to affected EJ populations along the project alignment. Please contact Deborah Brown of EPA's Environmental Justice program at 617-918-1706 for additional assistance with this outreach.

Impacts to Health & Monitoring of Project Impacts

EPA recommends that the EIS include an analysis of the potential for health impacts to host communities from the Weymouth compressor station that will be enlarged as a component of the AN project and for the Acushnet LNG storage, liquefaction and gasification facility. We recommend that the assessment address emissions during normal operations and during limited duration and/or infrequent events, including start-up, shutdown, blowdown, and flaring. EPA also recommends that FERC consider requiring the applicant to develop a monitoring plan for the Weymouth and Acushnet facilities. We recommend that facility monitoring assess pre- and post-construction emission exposure so as to address citizen concerns regarding facility emissions, particularly emissions of particulate matter (PM) and hazardous air pollutants (HAPs). The monitoring plan should include timing that will evaluate peaks of no more than 20 minutes, since it is the short term peaks that can trigger asthma and cardiovascular incidents. EPA suggests that the EIS also discuss the complete range of mitigation measures/design technologies that will be implemented to reduce emissions from the Weymouth and Acushnet facilities during all phases of project operation. We recommend that the EIS include an evaluation of the potential air quality gains from the implementation of electrified compressor station units to reduce emissions to host communities. Additionally, we recommend that FERC conduct a project-specific quantitative human health risk assessment that addresses chronic and acute risk categories for both normal and infrequent project-related emissions at each affected community, and that includes an assessment of maximum project-related impacts and cumulative impacts, particularly in environmental justice areas affected by the project.

We also recommend that FERC require submission of data from the monitoring effort to appropriate state and local authorities for review on a quarterly basis and that additional mitigation be required for emissions should monitoring data show that potential health impacts are significant. We recommend as a benchmark for significance an increased lifetime cancer risk of one in one million and a hazard index in excess of 1. These benchmarks were considered in the assessment FERC prepared for the New Market project. That analysis may serve as an appropriate template for an AN health impact assessment.

Children's Health Issues

Pursuant to Executive Order 13045 on Children's Health and Safety, we recommend the EIS identify and assess environmental health and safety risks that may disproportionately affect children. Analysis and disclosure of these potential effects under NEPA is important because some physiological and behavioral traits of children render them more susceptible and vulnerable than adults to health and safety risks. Children may be more highly exposed to contaminants

because they generally eat more food, drink more water, and have higher inhalation rates relative to their size. Also, children's normal activities, such as putting their hands in their mouths or playing on the ground, can result in higher exposures to contaminants as compared with adults. Children may be more vulnerable to the toxic effects of contaminants because their bodies and systems are not fully developed and their growing organs are more easily harmed.

We recommend that an analysis of impacts to children from construction and operation of the pipeline, as well as the Weymouth and Acushnet facilities, be included in a NEPA analysis if there is a possibility of disproportionate impact on children related to the proposed action. EPA views childhood as a sequence of lifestages. Therefore, exposures to children at each lifestage, as well as pregnant and nursing women, are relevant and should be considered when addressing health and safety risks for children.

Because children may be more susceptible to noise levels, mobile source air pollution, construction dust, and the chemicals associated with building and construction materials, we recommend that the NEPA analysis specifically address the potential direct, indirect, and cumulative impacts of the proposed project on children's health, including consideration of prenatal exposures (exposures that may be experienced by pregnant women).

For more information on how to characterize and address children's exposures and susceptibilities to pollutants of concern, please see our August 14, 2012 memo "Addressing Children's Health through Reviews Conducted Pursuant to the National Environmental Policy Act and Section 309 of the Clean Air Act.⁹

Please contact Kathleen Nagle, EPA New England's Children's Environmental Health Coordinator at 617-918-1985 with any questions regarding the consideration of Children's Health issues.

Tribal Coordination

The NOI explains that FERC is using the scoping process to solicit the views of interested Indian tribes and the public on the project's potential effects.

Since several federally recognized tribes claim cultural affiliation with at least some of the impacted areas of the proposed area of potential effect, it is recommended that all tribes in the impacted states be invited as a consulting party.

• In New England, this includes the Mashantucket Pequot Tribal Nation, the Mohegan Tribe, the Narragansett Indian Tribe, the Wampanoag Tribe of Gay Head (Aquinnah), and the Mashpee Wampanoag Tribe. Additionally, the Stockbridge-Muncee Band of Mohican Indians, headquartered in Bowler, Wisconsin with a Tribal Historic Preservation Office in Troy, NY, likely claims cultural affiliation with a portion of the area of potential effect (APE) that traverses western Massachusetts, and may be interested as a consulting party.

⁹ http://www2.epa.gov/sites/production/files/2014-08/documents/nepa-childrens-health-memo-august-2012.pdf

- In New York, this includes the Oneida Nation, Onondaga Nation, Seneca Nation, Cayuga Nation, Tuscarora Nation, the Saint Regis Mohawk Tribe, and the Shinnecock Nation.
- For the portion of the APE located in New Jersey, there are two federally recognized tribes currently residing in Oklahoma that may claim cultural affiliation, as their ancestral homelands include sections of New Jersey. These tribes include the Delaware Tribe of Indians (http://delawaretribe.org/services-and-programs/historic-preservation/states-and-counties-covered-by-dthpo/) and the Delaware Nation (http://delawarenation.com/).

Pipeline Construction

We recommend the EIS for the AN project specifically address the following issues:

- Pipeline materials and corrosion protection proposed for the pipeline;
- How pipe sections will be joined and how leaks will be detected and addressed;
- Measures to protect the pipeline should it pass under a heavily trafficked road to prevent damage from heavy loads;
- Proposed trench backfill material and a description of precautions to avoid damage to the pipe or its coating.

Analysis of Indirect and Cumulative Impacts

The Council on Environmental Quality's (CEQ) NEPA regulations require EISs to evaluate growth-inducing changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems that result from the proposed action and alternatives. The regulations define indirect (sometimes called 'secondary') effects as those "which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." The regulations state that impacts include ecological, aesthetic, historical, cultural, economic, social, or health impacts, whether direct, indirect, or cumulative. The CEQ NEPA regulations define cumulative impacts as "...the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time."

The AN project is one of several Algonquin projects proposed in the NY/New England Region in addition to the SPECTRA AIM and Atlantic Bridge proposals. All three projects include work to replace/expand portions of the Algonquin mainline and some portions of the projects, in New York for example, are located next to each other. The AN project intends to utilize the compressor station to be built for the Atlantic Bridge project (with the addition of more horsepower). We recommend that the EIS contain a detailed account of cumulative impacts to forest land, wetlands, and emissions from the project and proposed compressor station upgrades. We recommend a cumulative impacts analysis for the EIS broad enough to encompass all of the construction and operation air emissions at a regional level.

Appendices

5) Letter to the U.S. Federal Energy Regulatory Commission (FERC) from the Commonwealth of Massachusetts Department of Environmental Protection (MA DEP)



Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

One Winter Street Boston, MA 02108 • 617-292-5500

Charles D. Baker Governor

Karyn E. Polito Lieutenant Governor Matthew A. Beaton Secretary

> Martin Suuberg Commissioner

MEMORANDUM

TO: Federal Energy Regulatory Committee

FROM: Deputy Commissioner Gary Moran

Massachusetts Department of Environmental Protection

DATE: May 31, 2016

RE: EIS Scope Comments to FERC for the <u>Access Northeast Project (ANE)</u>;

FERC Docket No. PF16-1-000

The Massachusetts Department of Environmental Protection (MassDEP), appreciates the opportunity to provide comments to the Federal Energy Regulatory Commission (FERC) as part of the Environmental Impact Statement (EIS) for the Spectra Energy — Access Northeast Project (ANE Project). MassDEP understands that FERC will require a full EIS and that the proponent will file an Environmental Notification Form with the Massachusetts Environmental Policy Act Office (MEPA). MassDEP expects to file detailed comments as part of the MEPA review process.

The MassDEP recognizes that the ANE Project is in the process of preparing a cumulative impact analysis for the Project that will be provided in the draft Resource Reports to be filed with the FERC within 60 days following the end of the scoping period. To assist in this effort, the following comments are being provided to FERC for consideration in its scoping of a comprehensive review of environmental impacts in accordance with the National Environmental Policy Act. The attached comments arise from the Notice of Intent issued by FERC on April 29, 2016 requesting preparation of an EIS.

This information is available in alternate format. Call Michelle Waters-Ekanem, Diversity Director, at 617-292-5751. TTY# MassRelay Service 1-800-439-2370

ANE Project Description –

The components of the ANE Project consist of pipeline facilities, compressor stations, and a Liquid Natural Gas (LNG) storage facility. The specific project elements in Massachusetts include:

1. Mainline Pipeline Facilities

In Massachusetts, the project will involve the construction of approximately 28.9 miles of mainline pipeline and looping comprised of the following:

- 3.0 miles of 24-inch diameter connector pipeline from Algonquin's existing G-System pipeline to the Access Northeast LNG Facility in Bristol County;
- 21.7 miles of 30-inch diameter pipeline loop in Norfolk County, along Algonquin's existing Q-1 System; and
- 4.2 miles of 30-inch diameter pipeline loop in Norfolk County ("I-8 System Loop").

2. Pipeline Lateral Facilities

Construction of 26.8 miles of 16-inch diameter pipeline lateral ("West Boylston Lateral") in Middlesex and Worcester Counties;

3. New Compressor Station

Construct a new compressor station in Rehoboth, Bristol County;

4. Upgrade to Proposed New Compressor Station

Add 10,320 horsepower to a compressor station proposed for construction as part of the Atlantic Bridge Project Weymouth, Norfolk County and currently under FERC review.

5. LNG Storage

Construction of a new LNG facility on approximately 210-acre site in Acushnet adjacent to an existing Eversource-owned LNG facility. The LNG facility will be run as a peaking facility to supply natural gas during peak periods of demand and interconnected to the Algonquin Mainline Pipeline G-System. The LNG facility components include:

- two LNG storage tanks with a total combined capacity of 6.8 billion cubic feet;
- liquefaction and regasification capability;
- an on-site pipeline that connects the LNG facility to the proposed pipeline connecting to the Algonquin Mainline;
- a new access road to serve both construction and operation of the LNG facility;
- assorted on-site operation and maintenance structures and equipment.

Regulatory Review Discussion -

Wetlands Program

The wetlands proposed to be impacted by this project are presumed to serve important statutory public interests including storm damage prevention, flood control, prevention of

pollution, protection of public and private water supplies, protection of ground water supply and protection of fisheries. The total wetland impacts in the ANE Project Supplemental Report (Table 5-3) for the project are estimated to total 158.8 acres. The individual project elements, and associated wetland impacts, are comprised of the following:

•	Lateral - West Boylston 16-inch Lateral [Medway to West Boylston]	26.3 acres
•	Mainline –	
	 Acushnet 24-inch Connector [Freetown to Acushnet] 	4.9 acres
	 Q1 30-inch Loop [Medway to Canton] 	55.9 acres
	o 18 30-inch Loop [Braintree to Weymouth]	6.5 acres
•	Rehoboth Compressor Station	0.0
•	Weymouth Compressor Station	0.0
•	Access Northeast LNG Facility [Acushnet]	65.0 acres

The Supplemental Report indicates that, of the five project elements, wetland impacts are limited to the Mainline and Lateral pipelines as well as the LNG Facility. No impacts were identified for the compressor stations however Table 5-5 of the report includes a quantitative assessment of soil characteristics and identifies 12.2 acres of hydric soils at the Rehoboth Compressor Station. The EIS should reconcile this information and describe clearly what, if any, wetland impacts will also result from work related to the Rehoboth Compressor Station.

The EIS scope should require that all delineation of jurisdictional resource areas be accomplished through flagging in the field, surveying, and then presented on a scaled site plan. All resource delineations should comport with the following guidance:

- Boundaries of Bordering Vegetated Wetlands (BVW) "Wetlands Protection Program Policy: Bordering Vegetated Wetlands Delineation Criteria and Methodology" (MassDEP 1995), Delineating Bordering Vegetated Wetlands Under the Massachusetts Wetlands Protection Act (MassDEP 1995);.
- Delineation of the Mean Annual High Water Line (MAHWL) of all perennial rivers should be performed in accordance with regulations and the use of "bankfull field indicators";
- USGS topographic quadrangle maps reviewed to identify "presumptive" perennial streams; streams should be included in plans — unless the presumptive status of a mapped perennial stream is overcome. Identification of Riverfront Area should be placed on the plan;
- Jurisdictional intermittent streams should have the Bank resource area identified in addition to the centerline of the stream.

MassDEP does not distinguish permanent from "temporary impacts" in the Act or regulations. The EIS scope should include requirement for the description of "in-situ" replacement, i.e., the

excavation and fill disturbance will be "replaced" in accordance with regulation within the footprint of that disturbance. Mitigation for the project should consider: 1) project design modifications that avoid and minimize wetland impacts; 2) wetland replication; 3) wetland enhancement; 4) stormwater management and erosion and sedimentation controls; 5) mitigation for impacts to vernal pool and rare species habitat, including in-place and in-kind restoration and 6) mitigation to replace lost functions and values in a manner consistent with the Wetlands Function and Value Methodology promulgated by the USACOE.

The Proponent should also include the project's impacts on Coldwater Fishery Resources, Massachusetts Habitat of Regional or Statewide Significance (CAPS), and Prime Farmland.

It is anticipated, that numerous mitigation sites will need to be presented. The EIS should be scoped to require a range of mitigation proposals for review and evaluation by regulatory agencies comprising mitigation measures, including replication and restoration, sufficient to contribute to the protection of wetland resource interests. An evaluation should include the evaluation of off-site replication areas with the expectation that more detailed information on mitigation will be developed as part of the permit process. Mitigation sites should be designed to preserve critical functions, such as flood storage volume, at each locality. Restoration of various impacted wetlands may also be considered for inclusion as part of the mitigation effort. In addition, corrective measures or additional mitigation may be necessary in the event that those chosen or portions of those chosen are not successful. High levels of assurance are needed that any mitigation areas proposed on sites that would be taken by eminent domain can in fact be acquired and meet the requirements of the mitigation area. The ANE Project should provide a pre-qualification process to assure that parcels proposed for purchase or taking can be acquired and that said firms contracted to undertake mitigation are qualified and competent to perform projects of the size and scope expected. The ANE Project should also provide sound financial assurances to ensure financial capability to accomplish mitigation.

The EIS scope should also include a description of how each project component will comply with each of the MA Stormwater Standards. Stormwater discharges are subject to the stormwater standards in the Wetlands Protection Act Regulations and the Water Quality Certification Regulations.

Wetland Permitting Pathways

Unless a demonstration can be made that the ANE Project constitutes the maintenance, repair, or replacement, but not a substantial change or enlargement of an existing and lawfully located structure in the service of the public, the Project is not exempt from the Wetlands Protection Act. Other permitting pathways would include compliance with performance standards, qualification as a "limited project" pursuant to 310 CMR 10.53(3)(d), or a variance pursuant to 310 CMR 10.05(10). The project proponent and MassDEP have had a preliminary discussion

about the permitting pathway for various components of the project, but that discussion is not complete. Commitments have been made to further discussion of this issue in the near future.

As a limited project, the ANE Project is required to: seek reasonable alternative routes/facility locations (including regional alternatives beyond immediate local jurisdiction); use best available measures to minimize adverse effects during construction; and substantially restore the surface vegetation and contours of the area.

In the event that the project, or a portion of the project, is determined to require a variance under the Wetlands Protection Act, the proponent is required to address three criteria: 1) That there are no reasonable conditions or alternatives that would allow the project to proceed in compliance with the Wetlands Regulations; 2) that mitigation measures are proposed that will allow the project to be conditioned so as to contribute to the protection of the interests identified in the Wetlands Protection Act; and 3) that the variance is necessary to accommodate an overriding community, regional, state or national public interest, or to avoid an unconstitutional taking of property without compensation. A Variance from the requirements for Water Quality Certification would be required for the placement of fill in an Outstanding Resource Water (ORW), including any Certified Vernal Pool.

The EIS should be scoped to clarify, justify, and provide both qualitative and quantitative data to support the proposal and facilitate MassDEP's review. MassDEP expects the ANE Project to apply and avoid, minimize, mitigate approach to wetland impacts.

LNG Facility Alternatives

The LNG Storage Facility portion of the project proposes significant impacts to as much as 65 acres of wetland resources areas by clearing, converting plant communities and by filling. As proposed, this project element would qualify as one of the largest proposed wetland alterations in the history of the Commonwealth of Massachusetts. The LNG Alternatives Study Area as presented in Figure 4.2-1 of the <u>ANP Supplemental Project Information Filing (April 2016)</u> should be fully vetted as part of the alternatives analysis associated with the proposed siting of the Acushnet LNG facility. Alternatives addressed in the EIS should include a description of each alternative, the cost of the alternative, the wetland impacts of the alternative, and an explanation of why the alternative was accepted or rejected.

The EIS should elaborate on why the proposed Acushnet LNG site will minimize the need for additional facility upgrades and/or equipment as opposed to the other LNG site alternatives within the Mendon to Rochester G-System study area. The EIS should demonstrate how the maximum of 5 miles from the mainline was determined to be the geographic limit for locating LNG sites and identify what the actual, versus potential, environmental and stakeholder impacts would be for installing the pipeline connection between the LNG facility and the mainline.

Another alternative LNG site was proposed in Burrillville, Rhode Island. Although this site appears to have been dismissed due solely to cost considerations, the FEIR should be scoped to require a cost comparison of this site with the costs and environmental impacts associated with the proposed Acushnet site or possible sites beyond the Mendon to Rochester G-System study area. The details on this site should include an evaluation of both the economic and environmental consequences of the Burrillville alternative associated with the installation and enlargement of the required pipeline. The cost comparison of each alternative should be reflected as a percentage of overall project cost.

Mainline and Lateral Pipeline Alternatives

The study corridor for the Access Northeast Project is listed as 600 feet wide. The EIS scope should include field evaluations that examine the whole width of 600' as part of the alternative analysis for avoiding wetlands in the pipeline. The EIS should also examine alternatives available for the replacement of existing pipeline with larger diameter pipeline. For all pipeline routes, the EIS should include a review of alternatives routes considered, particularly opportunities for co-location along existing routes parallel to the proposed routes. In addition, a discussion should be included about what, if any, alternative delivery points could be used to supply the Access Northeast Project service area. Include details of available route alterations.

- Provide any information on costs for installation, maintenance and replacement for standard and "non-standard" pipeline/facility configuration.
- More fully document the cost differentials among all alternatives. The comparison of estimated alternatives' costs should incorporate costs of land acquisition, construction, excavation, and mitigation.

The EIS scope should include a requirement for a complete and detailed description of the extent of the wetlands impacts, creating tables with potential wetlands impacts for each alternative. Critical areas such as Priority Habitats, Areas of Critical Environmental Concern (ACEC's), vernal pools, ORW's etc. merit particular attention. Each alternative should be closely evaluated based on the functions of these critical areas — rather than relying solely on the square footage of resource areas impacted. The EIS should also clarify the definition of Vernal Pool in use (as defined by which agency; Corps, State, local Bylaw) and should provide additional information about water withdrawals for hydrostatic testing.

The EIS should also be scoped to require a substantive review and/or documentation of efforts undertaken to obtain construction standard waivers which avoid and/or minimize environmental impacts but would still achieve project objectives.

401 Water Quality Certification for Discharge of Dredged or Fill Material Pursuant to the Federal Clean Water Act

For any portion of the project that involves dredging, the MassDEP will require that the ANE Project include a quantitative and qualitative evaluation of the physical and chemical characteristic of the dredge material, a description of dredge material dewatering methodologies, a discussion of the proposed beneficial reuse of sediment or disposal of excess dredged materials, and description of related mitigation measures.

The EIS should address the need for the ANE Project to coordinate with state and federal fisheries agencies to develop a work schedule that will ensure the protection of the species of concern during sensitive life-stages. The EIS should require the ANE Project to obtain documentation from the MDFW as to the presence or absence of mapped diadromous fish runs in the proposed project corridors and associated time-of-year (TOY) restrictions. Any such TOY restrictions will be applied to in-water construction activities in the 401 Water Quality Certification.

The Project is proposing Horizontal Directional Drilling beneath the Charles River (3 locations), Fisherville Pond, Flint Pond, Mill Pond, Newton Pond. The Proponent should address mitigation plans in the event that inadvertent returns occur during the drilling (i.e. bentonite spill into wetlands). There will be 158 acres of wetlands will be affected in Massachusetts. The Proponent should better define "Wetlands Affected" in the project planning (e.g. filled/replicated, lost, or temporary alteration/restoration).

Waterways: Chapter 91

Geographic areas subject to the jurisdiction of M.G.L. c. 91 and the Waterways Regulations at 310 CMR 9.04 include filled and flowed tidelands, navigable rivers and streams and Great Ponds. The navigable waterbody crossings referenced for each segment of the ANE Project are listed in Table 5-1 of the Supplemental Project Information Filing Report, include:

- West Boylston 16-inch Lateral [Medway to West Boylston] 31 (minor¹), 11 (intermediate), and 6 (major) for a total of 48 waterbody crossings;
- Acushnet 24-inch Connector [Freetown to Acushnet] 1 (minor), 2 (intermediate), 1 (major) for a total of 4 crossing;
- Q1 30-inch Loop [Medway to Canton] 17 (minor), 14 (intermediate), 1 (major) for a total of 32

¹ Stream crossings are defined as Minor: < 10 feet; Intermediate as >10 - ≤100 feet; and Major as >100 feet.

• 18 30-inch Loop [Braintree to Weymouth] 2 (minor), 1 (intermediate), 2 (major) for a total of 5 crossings.

The proponent proposes to utilize dry (dam-and-pump, flume crossing, etc.), open cut crossing methods, and horizontal directional drilling (HDD). In total, eighty-nine (89) waterbody crossing are intended for Massachusetts. Of these total crossings, Horizontal Directional Drilling is under consideration for twelve (12) crossings. See Table 5-2 of the Supplemental Project Information Filing Report.

The forthcoming EIS should be scoped to provide more detailed information as to: the extent of jurisdiction; the identity of the structures and uses within jurisdiction that require authorization; determination of the water-dependency of these structures and uses; evaluation as to whether these structures where previously authorized; and, whether the proposed uses meet the applicable performance standards.

Activities requiring chapter 91 authorizations include construction or substantial enlargement of an existing, previously authorized gas line, or accessory structures. Authorization is also required for any proposed dredging or fill within jurisdictional areas. The installation of temporary construction equipment crossings in non-tidal rivers or streams, Great Ponds, flowed or filled tidelands also requires Chapter 91 authorization. Conversely, no license is required for the maintenance, repair and minor modification of previously authorized structures and uses within c.91 geographic jurisdiction

In particular, the EIS scope for the ANE Project should include a discussion of the following for the Wetlands Protection Act, 401 Water Quality Certification and Chapter 91 filings:

- Identify the specific method for each water crossing where these methods will be employed;
- A schedule to consult state agencies regarding time restrictions of waterbody crossings.
- Consultations with state agencies to identify waterbody crossings on impaired streams/waterbodies containing contaminated sediments (if any).
- The review of construction methods appropriate for different flows and the waterbody
 width which minimize environmental impacts. Proposed crossing methods also should
 occur, where possible, at sites where the impact would be minimized and within the
 right of way (ROW). If HDD will be the preferred crossing method in a particular
 waterbody construction, the ANE Project should provide sufficient scientific data to
 determine the suitability of the geological properties that allows the achievement of the
 necessary cover depth below the riverbed.
- ANE needs to consider that the application of HDD technology requires a significant staging - workspace area. The minimum workspace footprint needed to operate the HDD equipment is 50,000 square feet (200 feet wide by 250 feet long, 1.15 acres,

approximately) at the entry and exit sides. The EIS should address foreseeable problem areas where the waterbody crossing is within a wetland or difficult at locations where other constraints such as geology or land ownership constrain the available lay-down area.

- The "Best Drilling Practices Plan & Monitoring and Clean-up of Horizontal Directional Drilling Inadvertent Returns" ("BDP Plan") should include mitigation measures for an inadvertent release of drilling fluid, or slurry of bentonite clay and water, into the aquatic environment or other wetland resources. Also, provide information of how bentonite waste will be handled before and after HDD process in and around a waterbody.
- Assess the potential impacts resulting from multiple crossings (i.e., Charles River).
- Blasting activities proposed at water crossings where dense till or bedrock is present and cannot be avoided. Potential impacts on waterways resulting from this activity should be discussed in the EIS and assessed in order to consider alternative excavation methods. Every effort should be made to minimize blasting in waterbody crossing.
- Site-specific construction plans and scaled drawings identifying all areas to be disturbed
 by construction for each waterbody crossing must be developed in consultation with
 MassDEP's Wetland and Waterways Program. The plan also should include a full
 description of all impacted areas at the waterbody crossing, such as: work areas, spoil
 storage areas, sediment control structures, etc. For the Ch. 91 application filing
 purposes, those maps should include:
 - Delineation of historic high and low water marks;
 - o Indication of any base flood elevation of the statistical 100-year storm event.
 - o Bathymetric data (soundings or contours).
 - Provide site-specific crossings construction plans, and a description of the equipment to be installed, and where construction equipment crossings will be installed.
 - O Description of how the ANE Project will restore stream channels and banks to pre-construction conditions after the project is completed or at postconstruction phase. Revegetation of disturbed riparian areas is required. These measures are included in the erosion and sedimentation control plan (E&SCP). Algonquin should prepare a separate revegetation and monitoring plan for the post-construction phase, not only for the riparian areas, but also for all affected areas (including ROW) in waterbody crossings.

Rare species Habitat

The EIS scope should require a completion of anticipated surveys for federal- and state-listed threatened and endangered species. The current assessment of Rare, Threatened, and Endangered Species includes:

- Northern long-eared bat (threatened);
- Box Turtle (special concern);
- Wood Turtle (special concern)
- Bald Eagle Boylston, West Boylston, Freetown

The project should identify and map all estimated habitats of rare wildlife in the project corridor. Construction schedules should be proposed for work on the right of way which incorporates relevant time-of-year restrictions (TOY) and identifies areas required to be avoided or bypassed during the appropriate TOY restriction dates. Close coordination with the Massachusetts Natural Heritage and Endangered Species is urged.

Air Quality

MassDEP, through its regulations at 310 CMR 7.00, administers an air quality new source permitting program. Based on MassDEP's discussions with ANE Project representatives to date, three locations have been identified in Massachusetts that will require Air Quality permits: the proposed compressor in Rehoboth, the proposed compressor in Weymouth, and the proposed LNG storage facility in Acushnet.

Although MassDEP maintains the right to gather the necessary information under its own authority, we request that FERC also address the following issues as part of the EIS so the information can be presented in a holistic manner.

MassDEP will require that the Applicant submit a Comprehensive Plan Application ("CPA") for each of the three facilities. These applications will be reviewed in accordance with MassDEP Air Pollution Control Regulations at 310CMR 7.02. As part of each CPA, the Applicant will be required to submit the results of air dispersion modeling, used to predict the dispersion of the air emissions from the facility and estimate the resulting impacts. The air dispersion modeling will be used to determine whether the emissions from the proposed facilities will exceed the Significant Impact Level ("SIL") for each pollutant. The SIL is a *de minimis* threshold used to determine if pollutant emissions have a significant impact. If model-predicted results are below the SIL, it is presumed that the new emissions will not cause nor contribute to a violation of the National Ambient Air Quality Standards ("NAAQS"), and there will be no significant deterioration of air quality; i.e., emissions will not cause a worsening of the air quality. Additionally, the dispersion modeling will be used to ensure that the emissions from the facility, as a whole, with background concentrations added to the model-predicted results, do not exceed the NAAQS. The NAAQS, which are established by the EPA, are designed to provide

protection of the public health, including protecting the health of sensitive populations, such as asthmatics, children, and the elderly. Additionally, these standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

Each of the three applications will need to establish Best Available Control Technology ("BACT") for each criteria pollutant. BACT means an emission limitation based on the maximum degree of reduction of any regulated air contaminant emitted from, or which results from, any regulated facility which the MassDEP determines is achievable for such a facility. This determination is made on a case-by-case basis, taking into account energy, environmental, economic impacts and other costs. BACT may include a design feature, equipment specification, work practice, operating standard, or any combination thereof. The Applicant should clearly identify BACT, as proposed for each Facility.

Each of the turbines installed in conjunction with this project will have applicable requirements in the United States Environmental Protection Agency's ("USEPA")Regulations at 40 CFR 60 Subpart KKKK — "Standards of Performance for Stationary Combustion Turbines." Reciprocating engines installed in conjunction with this project must either comply with the requirements of MassDEP's Industry Performance Standards for Engines and Combustion Turbines at 310 CMR 7.26(40) through (44) or be included in the CPA for the purposes of air quality and BACT analysis. Additionally, engines will have applicable requirements in the USEPA's Regulations at 40 CFR 60 Subpart IIII - "Standards of Performance for Stationary Compression Ignition Engines or Subpart JJJJ — "Standards of Performance for Stationary Spark Ignition Internal Combustion Engines," and 40 CFR 63 Subpart ZZZZ "National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines." MassDEP has not accepted delegation for Part 60 Subparts IIII, JJJJ, KKKK or Part 63, Subpart ZZZZ for facilities that are not subject to the Title V Operating Permit program. The authority for the implementation and enforcement of these Federal regulations rests with the USEPA.

MassDEP Regulations at 310CMR 7.09 address nuisance conditions caused by dust during construction. The Applicant should indicate all dust mitigation measures that will be taken. This requirement is applicable to the entire length of the project and is not necessarily limited to the compressor and storage facilities.

If this project includes the disturbance of any facility or equipment that contains asbestos, the Applicant may be subject to the requirements in MassDEP's Asbestos Regulations at 310 CMR 7.15.

Noise Mitigation

FERC Regulations at 18 CFR 380.12(k)(4)(v)(A) limits noise attributable to any new compressor station to an average day-night sound level of 55 decibels A weighted ("dB(A)") at a noise sensitive area ("NSA"). This differs from the MassDEP Noise Control regulation at 310 CMR 7.10, which prohibits unnecessary or uncontrolled sound emissions that may cause noise, or the MassDEP noise policy, which quantifies the sound impact at the Facility's property line or nearest residence that constitutes noise, as 10 dB(A) over background. MassDEP's Noise Policy also prohibits the creation of a puretone, which is a variation of more than 3 dB(A) on adjacent octave bands. While a 55 DB(A) sound level may be generally protective of sound impacts, as a day-night average it may not adequately address peak, episodic events, which may have brief impacts in excess of MassDEP's 10 dB(A) standard. Specific noise mitigation strategies should be proposed. Additionally, the EIS should outline the strategy for noise impact modeling, including identifying all equipment that will be evaluated, identifying any nearby residences and sensitive receptors that will be evaluated for impacts and a discussion of any background monitoring that may be required.

Drinking Water

The Massachusetts of Environment Protection is tasked with the protection of Public Water Supplies. Massachusetts regulations (310 CMR 22.01 (1)) state that:

"310 CMR 22.00 is intended to promote the public health and general welfare by preventing the pollution and securing the sanitary protection of all such waters used as sources of water supply and ensuring that public water systems in Massachusetts provide to the users thereof water that is safe, fit and pure to drink."

It has been brought to MassDEP's attention that the proposed Access Northeast natural gas pipeline will pass through Zones I and II of several public supply wells owned by the Town of Walpole, presenting potential adverse effects on water quality in the area. Pertinent portions of the drinking water regulations are stated below.

310 CMR 22.21(1)(b)(5) states in part: "that current and/or future land uses within the Zone I are limited to those directly related to the provision of public drinking water or will have no significant adverse impact on water quality."

Additionally, 310 CMR 22.24 regarding the Sale, Transfer of Property Interest, or Change in Use of Water Supply Land states that:

(1) No supplier of water may sell, lease, assign, or otherwise dispose of, or change the use of, any lands used for water supply purposes without the prior written approval of the Department.

The Department will not approve any such disposition or change in use unless the supplier of water demonstrates to the Department's satisfaction that such action will have no significant adverse impact upon the supplier of water's present and future ability to provide continuous adequate service to consumers under routine and emergency operating conditions, including emergencies concerning the contamination of sources of supply, failure of the distribution system and shortage of supply.

- (2) Land Transfers Any sale, transfer of property interest or change in use of land acquired for water supply purposes may also require approval by a b vote of the Legislature, in addition to Department approval. (Massachusetts Constitution Amend. Art. XCVII, Section 243)
- (3) Easements The Department will not approve any grant of easement for pipelines, or other conduit, carrying liquid petroleum products within the Zone I of a PWS. For other public utility easements within Zone I, the Department may require as a condition of any grant of such easement an express perpetual prohibition on the use of fertilizers, pesticides, herbicides, and other non-mechanical means of vegetation control within the area subject to the easement.

As part of the approval of the easement, the Department will require information to determine that there no adverse impact on water quality.

This should include information that necessary measures are taken to prevent a release of oil and hazardous materials during construction in the Zones 1. These should include but not be limited to no fueling of machinery, no storage of oil and hazardous material, regular inspection of machinery for leaks and ready availability of spill containment materials. Information should also include any leaching that could occur of the pipeline materials into surrounding soils and groundwater.

The Former Metal Bellows Facility (RTN 4-0261) has contaminated the Town of Walpole Washington Well #6. There is concern that the disruption of the native soils and the placing of fill for the pipeline may cause a preferential pathway from the Former Metal Bellows Facility to the Walpole well felid. The EIS should provide information regarding the depth of the pipeline construction in relationship to historical groundwater elevations and any construction techniques, focusing on the backfill of the excavation, which will be used to prevent a preferential pathway for the migration of contamination to impact the Town of Walpole supply wells.

Water Supply

The proponent should notify MassDEP's Drinking Water Program in the appropriate Regional Office and the Public Water System(s) when work will commence in all Zone A and Zone I Protection Areas and at the completion of the work in these areas. All public water supply wells

and source waters should be clearly marked in the field for protection. The public water sources and Protection Areas should be depicted on all plans and maps given to contractors working in those areas along with instructions to be aware of the sensitive nature of the Protection Areas. Vehicle access to the Protection Areas should be limited to what is necessary for the project and no vehicles should be left overnight in the Protection areas. Tree cutting, stripping, and grading should be limited to what is required for the project and no fertilizers or other lawn application products are to be used after loaming and seeding. MassDEP should review and approve any easements in accordance with 22.24(3).

For additional information, please do not hesitate to contact MassDEP me or Director for the Office of Ombudsman and Special Projects Kathleen Kerigan at (617) 292-5915 or Kathleen.Kerigan@State.MA.US.

Sincerely,

Gary Moran

Deputy Commissioner

Massachusetts Department for Environmental Protection