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May 29, 2009

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
SECOND DRAFT ENVIRONMENTAL IMPACT REPORT

PROJECT NAME : Weaver's Cove Energy Liquefied Natural Gas Project
PROJECT MUNICIPALITIES : Fall River, Somerset, Swansea, and
Freetown
PROJECT WATERSHED : Taunton River
EOEA NUMBER : 13061
PROJECT PROPONENT : Weaver's Cove Energy, LLC
DATE NOTICED IN MONITOR : April 22, 2009

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62I) and Section 11.10 of the MEPA regulations (301 CMR 11.00), I hereby determine that the Second Draft Environmental Impact Report (Second DEIR) submitted on this project **adequately and properly complies** with the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62I) and with its implementing regulations (301 CMR 11.00).

The Weaver's Cove Energy Liquefied Natural Gas Project is a proposal to construct an on-shore liquefied natural gas (LNG) terminal in the City of Fall River with a peak demand capacity of 800 million cubic feet per day of natural gas. The terminal would receive deliveries of LNG by employing a berthing and transfer station (BTS) located in Mt. Hope Bay that would connect to the on-shore terminal via a 4.25-mile-long buried submarine cryogenic pipeline. As I have noted previously in reviewing this project, the large-scale transfer of LNG using this pipeline technology over a greater than four-mile distance in a submerged aquatic environment has no prior commercial application, nor has it been evaluated in a comparable demonstration project anywhere in the world. Moreover, the area of Mt. Hope Bay where the BTS is proposed is located in Commonwealth-owned submerged tidelands, over which the Commonwealth holds absolute property rights. It is therefore incumbent upon me, and upon the state permitting and resource agencies, to closely scrutinize this proposal to ensure that a project of this magnitude is

consistent with the needs and policies of the Commonwealth and that it complies with all applicable environmental standards before it can be approved for construction.

In applying that scrutiny, it has become apparent that the project will not meet certain critical permitting requirements set forth in M.G.L. c. 91 ("Chapter 91") and its implementing regulations. Those regulations acknowledge the Commonwealth's ownership of its tidelands, which are held in trust for the public's use and enjoyment. The Commonwealth therefore exercises a great degree of caution in allowing private uses of submerged tidelands and has set appropriately high standards for environmental protection of these irreplaceable public trust resources. The current project proposal requires extensive dredging that will result in substantial and unavoidable impacts to sensitive marine habitat, and necessitates the exclusion of other users from a large area of Mt. Hope Bay to accommodate exclusive access by LNG tankers transiting to the BTS. As further outlined in the comments received from the Department of Environmental Protection (MassDEP), these aspects of the project contravene the requirements of Chapter 91 and the Waterways regulations.

As a result, the only viable avenue for permitting the current proposal is to obtain a variance from the permitting requirements. To obtain a variance, the Proponent must meet an extremely high bar to justify waiver of the Chapter 91 regulations and must document that the project is necessary to achieve an overriding public interest. As discussed further herein, the information contained in the Second DEIR detailing the Proponent's market needs analysis for this additional natural gas capacity in the Northeast has so far failed to sufficiently make that case. MassDEP has therefore expressed doubt that the project can be permitted and constructed as currently conceived. After carefully reviewing the Second DEIR, all of the numerous comments submitted in response, and after consultation with the permitting agencies, I do not believe this project, as presented, would be able to be permitted. Thus, if the Proponent chooses to proceed with the preferred alternative and seek a variance, it does so at risk of denial of required permits upon completion of MEPA review.

Project Description and MEPA History

Previously Reviewed Project

The project was the subject of an Environmental Notification Form (ENF) in 2003. The Secretary's Certificate on the ENF required the preparation of a mandatory Environmental Impact Report (EIR) and a Special Review Procedure (SRP) was established to guide the review of the project through both the MEPA and National Environmental Policy Act (NEPA) review processes. The project was the subject of a Draft EIR (DEIR) in 2004, which was found to be inadequate, and as a result, the Certificate on the DEIR required the preparation of a Supplemental Draft EIR (SDEIR). The SDEIR was also found to be inadequate and, as a result, the preparation of a Second SDEIR (SSDEIR) was required. In the interim, the project completed review under NEPA. The Certificate on the SSDEIR was found to be adequate in a Certificate issued on December 16, 2005. The Final EIR (FEIR) was found to be inadequate in a Certificate issued on April 14, 2006 and, as a result, the submission of a Supplemental FEIR (SFEIR) was required. The SFEIR was found to be adequate in a Certificate issued on July 28, 2006.

As originally proposed, the project entailed the construction of a Liquefied Natural Gas (LNG) Terminal in the City of Fall River, and natural gas pipeline facilities in Fall River, and the towns of Somerset, Swansea and Freetown. As detailed below, the original proposal has been modified significantly; however, the following on-shore elements of the project remain unchanged. The proposed LNG terminal will be located on a 55-acre site adjacent to the Taunton River within the Fall River Designated Port Area (DPA). Approximately 0.56 acres of intertidal habitat is proposed to be filled behind a steel sheeting/rip rap wall in order to straighten the shoreline. The terminal includes a 200,000-cubic meter LNG storage tank, vaporization equipment, transfer piping, and ancillary equipment. The terminal would have a baseload natural gas send-out capacity of 400 million cubic feet per day, plus capacity to provide an additional 400 million cubic feet per day for peak demand. Gas will be delivered to the Algonquin Gas Transmission system via two pipeline connections with a total length of approximately seven miles primarily along existing rights-of-way. The project also includes a truck loading facility to supply existing LNG peak-shaving facilities in New England. The project site has direct access to Route 79, a four-lane limited access highway with connections to Route 24 and Interstate 195. The project also proposed using various open trench techniques to construct two 24-inch diameter natural gas pipelines totaling 6.1 miles. One of the proposed pipelines, the 3.6-mile Northern Pipeline, would connect to the Algonquin interstate pipeline system in Freetown. The second pipeline, the 2.5-mile Western Pipeline, would cross the Taunton River and connect to the Algonquin pipeline system in Swansea. The project would also include the construction of two meter and regulation stations at the end of the pipelines in Freetown and Swansea. Both pipelines would have a design maximum pressure of 1,440 per square inch gauge.

As originally reviewed under MEPA, the project involved dredging in order to facilitate the passage of deep-draft ships that would deliver LNG to the facility via Narragansett Bay and the existing Mt. Hope Bay/Fall River Harbor Federal Navigation Channel. Specifically, the Proponent had proposed to dredge the channel to 37 feet below mean lower low water (MLLW) and deepen and expand the existing Turning Basin to approximately 41 feet, thereby removing up to 2.6 million cubic yards (cys) of material from within a footprint of approximately 191 acres. The Proponent proposed to dispose of the dredged sediment offshore at either the Rhode Island Sound Dredged Material Disposal Site or the Massachusetts Bay Dredged Material Disposal Site as the preferred alternative for dredged sediment management. Both the U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (USACE) determined that the material was suitable for open water disposal at either location. The FEIR and SFEIR proposed the use of smaller ships to transport LNG to the project site in response to Section 1948 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act (SAFETEA) of 2005, which prohibited the demolition of the existing Brightman Street Bridge.

In summary, the project, as it was certified under MEPA in 2006, was dependent upon LNG tankers transiting up the Taunton River and docking at the upland LNG Terminal to off-load their cargo. The import terminal would then store and gasify the LNG for transmission through pipelines and supply LNG for distribution by tanker truck.

Currently Proposed Project

The project was the subject of a Notice of Project Change (NPC) in 2008, which I determined required the submission of a Second Draft and Final EIR. The NPC proposed a

substitute means to deliver LNG to the terminal via a LNG tanker berth and transfer station (BTS) located in Mt. Hope Bay and a buried submarine LNG transfer pipeline approximately 4.25 miles in length under Mt. Hope Bay and the Taunton River connecting the BTS to the terminal.

As presently conceived, the BTS is a pile-driven supported structure located in Mt. Hope Bay within the jurisdictional waters of the Commonwealth and the Town of Somerset, Massachusetts. Its approximate location is two miles south of the Braga Bridge, one mile from the shoreline and 1,100 yards west of the existing federal navigation channel. The structure will have a length of approximately 1,100 feet between the mooring dolphins and a central platform of 125 feet by 250 feet. There are expected to be approximately 70 visits to the BTS by LNG vessels each year. While berthed, LNG tankers are expected to withdraw nearly 5 billion gallons of water per year for cooling and ballast purposes.

In order to accommodate the LNG tankers at the BTS, the Proponent proposes to dredge a total of 3.29 million cys of material, including:

- approximately 217,000 cys of portions of the federal navigational channel in Mt. Hope Bay;
- approximately 1.48 million cys for a 2,800-foot long dedicated private channel between the federal navigational channel in and the BTS (the approach channel); and
- approximately 1.53 million cys for an 1,800-foot diameter turning basin where the federal and dedicated channels intersect.

The federal navigational channel would be dredged to 37 feet below MLLW, and the approach channel and turning basin dredged to a depth of 41 feet below MLLW. The Proponent proposes that dredging in Mt. Hope Bay would occur from August 1 to January 14 over a three-year period in order to abide by the recommended time-of-year restrictions. The Proponent's preferred dredging method includes the use of a closed bucket for the top layers of soft clays/fines, and an open toothed bucket for harder material found in deeper sediment layers.

The Proponent proposes to transfer the cryogenic LNG to the terminal via a Pipe-in-Pipe (PiP) system comprised of two 24-inch to 28-inch cryogenic steel pipelines, insulating material, a nitrogen gas leak detection system and internal stabilization materials, all encased in a 36-inch to 42-inch steel carrier pipe that will be coated with three to four inches of material to keep the pipe submerged. The pipeline system is proposed to run from the platform in Mt. Hope Bay underwater up the Taunton River to the landside terminal, a distance of approximately 4.25 miles. The Proponent proposes to bury the pipeline system to a depth of 10 feet to provide for five feet of cover, except where deeper depths will be required to transition the pipeline under the federal navigation channel, where a depth of greater than 40 feet is necessary. Alternative trench depths or cover amounts may also be required to accommodate existing submerged infrastructure facilities or other obstructions. An area of the shoreline in Fall River will also be trenched and sheetpile will be installed to accommodate the transition of the submarine pipeline to the landside terminal. An approximately 1,150 foot long temporary launch ramp is proposed to be constructed on 64 piles in the Taunton River adjacent to the terminal site. This launch ramp will be used to transition the assembled pipeline into the trench. Dredging is also proposed for a service channel and an approach channel at the terminal.

Although the upland import terminal portion of the project was not revised, I found that the potential significance of the environmental impacts associated with the project change and its reliance on a novel application of LNG transfer technology warranted a full MEPA review process of the changed aspects of the project. As a result, I required the Proponent to prepare and submit a Second Draft Environmental Impact Report (Second DEIR) and a Second Final Environmental Impact Report (Second FEIR), thereby ensuring a thorough review of the project as it is now proposed.

MEPA Jurisdiction and Permitting Requirements

MEPA jurisdiction over this project has been established in previously issued Certificates. At the state level, the overall project will require Chapter 91 Waterways Licenses and Permit, a 401 Water Quality Certification, a Water Supply Cross Connection Permit, a Non-Major Comprehensive Plan Approval, an Asbestos Abatement Permit, approval pursuant to the Massachusetts Contingency Plan, and Superseding Orders of Conditions from the Department of Environmental Protection (MassDEP); and State Highway Access and Construction Permits from the Massachusetts Highway Department (MassHighway). The project will also require Federal Consistency Review by the Massachusetts Office of Coastal Zone Management Office (CZM), Tank Permit and Storage Approvals from the State Fire Marshal, and review and consultation by several other agencies with resource management responsibilities, including the Energy Facilities Siting Board (EFSB), the Massachusetts Historical Commission (MHC), and Board of Underwater Archeological Resources. The project is subject to the MEPA Greenhouse Gas Emissions Policy and Protocol. The project may also require a Site Assignment from MassDEP under the Solid Waste regulations.

The previously proposed project completed review under NEPA and received an Order Granting Authority under the Natural Gas Act and Issuing Certificate from the Federal Energy Regulatory Commission (FERC) on July 15, 2005, which was re-affirmed on January 23, 2006. As currently proposed, the project will require additional review by FERC; permits under Section 10 of the Rivers and Harbors Act of 1899, Section 103 of the Marine Protection, Research and Sanctuaries Act, and Section 404 of the Clean Water Act from the U.S. Army Corps of Engineers (USACOE); a Letter of Recommendation and Permission to Establish Aids to Navigation from the U.S. Coast Guard; consultation pursuant the Magnuson-Stevens Fishery Conservation and Management Act, the Marine Mammal Protection Act and Section 7 of the Endangered Species Act with the National Marine Fisheries Service (NMFS); and consultation pursuant to Section 7 of the Endangered Species Act and Fish and Wildlife Coordination and Fish and Wildlife Coordination Act with the U.S. Fish and Wildlife Service.

Because the project is proposed to be located within waters of the Commonwealth and requires Chapter 91 Licenses, subject matter jurisdiction for this project is functionally equivalent to full scope jurisdiction under MEPA and encompasses all aspects of the project with the potential to cause Damage to the Environment as defined in the MEPA regulations.

Review of the Second DEIR

I have received numerous detailed comments concerning this high-profile and controversial proposal, and several of those comments have requested that I find the Second DEIR inadequate. While I find that the Second DEIR has met the minimum requirements in response to the previously issued Scope, I have outlined herein significant additional information and analysis which would be required in order for this project to move forward.

From its conception, the purpose of the Weaver's Cove's LNG project's has been to construct the infrastructure necessary to receive tanker-supplied LNG and, then, process and store it for the region's natural gas distribution system. Weaver's Cove's original proposal contemplated tankers navigating up the Taunton River to directly offload at the LNG terminal. Consequently, the major environmental impacts of the project were concentrated within the Taunton River federal navigational channel and a proposed turning basin within the Fall River DPA. The current proposal has shifted, to a substantial extent, both temporary and permanent construction and operational impacts to Mt. Hope Bay, outside of a DPA. The result is a net increase in nearly one million cubic yards (cys) of dredge sediment over the prior proposal, a total of 3.29 million cys of new proposed dredging, and substantial and unavoidable impacts to habitat, including the permanent loss of 73 acres of winter flounder habitat.

Critical to the environmental review for this project is a comprehensive evaluation of the temporary and permanent impacts to the benthic and aquatic habitat associated with the dredging components of the project and a detailed evaluation of the potential to avoid or minimize those impacts, and where neither is feasible, to require adequate mitigation. The Second DEIR reflects an effort by the Proponents to respond to concerns on the range of impacts associated with the construction, operation and maintenance of the project's infrastructure. However, the Second DEIR has failed to adequately address two fundamental consequences of the project that would result from the shift in the project's major impacts into Mt. Hope Bay outside of the DPA. The first is that the proposed depth of dredging in Mt. Hope Bay violates the applicable provisions of the Waterways Regulations (310 CMR 9.40) and, consequently, the project would require a variance from the provisions of Chapter 91 in order to be successfully permitted. Based upon the review of the Second DEIR, the Proponent has thus far failed to establish that there is a regional market needs for the project that would justify the issuance of a variance. Secondly, should the project be able to overcome the hurdle of obtaining a variance, the Second DEIR's proposal for mitigation for the loss of flounder habitat is inadequate in regard to the scope of the measures proposed and the scale of the implied financial commitment. These informational gaps must be addressed in the Second FEIR.

Compliance with Chapter 91 Waterways Regulations

In allowing private industrial uses of public trust tidelands, the Commonwealth has long expressed a preference for the location of such uses in a Designated Port Area (DPA). DPAs have been planned as areas in which significant state, federal, and private resources are concentrated to provide the necessary infrastructure, such as deep navigation channels, to encourage maritime commercial activity and to contain the significant environmental impacts associated with that infrastructure, rather than repeat those impacts in other areas that may serve

a limited purpose. The majority of the proposed Weaver's Cove project is located outside of any DPA, and must therefore meet a higher standard of environmental protection. The scope for the Second DEIR specified that the proposed dredging to 41 feet below MLLW in order to site and operate the BTS at the Proponent's preferred location contravened the explicit dredging limits in the Waterways Regulations at 310 CMR 9.40. That provision prohibits any dredging to a mean low water depth greater than 20 feet, unless the project is located within a DPA or serves a commercial navigational purpose of state, regional, or federal significance, and cannot be reasonably located in a DPA.

As shown in the Second DEIR, the BTS would be located at the westerly end of the approach channel, with approximately two-thirds of the turning basin outside of the Somerset DPA. Existing depths throughout the approach channel are at 15 to 16 feet below MLLW with the depth increasing marginally in the turning basin in the vicinity of the federal navigational channel. Under the current proposal, the federal navigational channel would be dredged to 37 feet below MLLW, and the approach channel and turning basin dredged to a depth of 41 feet below MLLW. The Proponent acknowledges that the project does not meet the regulation's dredge depth limitation, but asserts that the project meets the significant purpose exception because FERC had determined that the previously proposed project was in the public interest because it would provide an additional source of LNG, and it could not reasonably be located in a DPA. The Second DEIR states that FERC's prior finding "...was based on the Project's stated purpose of bringing a new supply of natural gas to the New England region and to Southeastern Massachusetts, in particular, which was found to outweigh the environmental impacts of the ...Project" (Second DEIR at p. 4-27).

I find that FERC's prior ruling is not determinative of the application of the Chapter 91 regulations to this project. I note that FERC's finding of public interest under Section 3 of the Natural Gas Act does not require any "significance" finding, and the FERC approval process is not conducted as a balancing test that weighs the benefit of new gas supplies against the environmental impacts of infrastructure development and operation. More significantly, however, the exception to the dredge depth limitation applies only where a project serves a "*navigational purpose of... significance*". As stated by the Proponent, the project's purpose is to deliver a new source of supply of LNG to the Northeast market—the proposed dredging activity is simply the means by which to accomplish the project's LNG supply objectives.

As further outlined in the comments I have received from MassDEP, the exception to the limit on dredging for commercial navigational projects of significant state, regional or federal interest is intended to allow for projects such as the federal navigational channel that serve the public's interest in ensuring that shipping lanes are open for general commercial traffic. The dredging associated with the BTS project is exclusively self-serving. During periods when the tankers would be docked at the BTS, an exclusion zone established by the USCG would be in force prohibiting any navigational traffic from entering the approach channel and most of the turning basin, which may directly impact commercial and recreational vessels that attempt to navigate that area. Its purpose therefore is at odds with a significant state, regional or federal navigational interest, rather than in support of it. As noted by MassDEP, to equate the deep dredging required for the BTS with a significant commercial navigational purpose would negate the intended purpose of the regulations, which is to protect coastal open waters of the

Commonwealth from industrial operations that will create navigational obstacles to other users of the resource.

The project's contravention of the dredging limitations in 310 CMR 9.40 precludes the Proponent from receiving a Chapter 91 License unless a variance is approved in accordance with the provisions of 310 CMR 9.21. As noted above, a variance cannot be granted unless the Proponent can demonstrate that "the variance is necessary to accommodate an overriding municipal, regional, state or federal interest". 310 CMR 9.21(1)(c). The Second DEIR's market needs study contends that there is a current and future anticipated need for additional natural gas to meet New England's demand, and that this project is uniquely situated to meet that need. In its comments, MassDEP states that it has serious reservations that the additional LNG the project would supply would serve to demonstrate that the project meets the variance provision's overriding public interest standard. As indicated below, the Department of Energy Resources (DOER) shares these reservations, as do I.

Market Need for LNG

Based upon its review of the Second DEIR, the Department of Energy Resources (DOER) asserts that it is unclear to what extent, if any, that this project's LNG supply is needed either to meet the region's gas supply needs or to reduce fossil fuel use in the region. DOER contends that changes in the region's electricity and natural gas marketplaces have occurred since the Weaver's Cove project was first initiated and reviewed. The environmental benefits of the project claimed by the Proponent are premised on the assumption that its LNG supply will serve markets that would not otherwise be served in the absence of its LNG supply. The Proponent claims that if three percent of the project's throughput displaces other fossil fuels, it will offset all of the direct and indirect greenhouse gas (GHG) emissions of the project.

There are three other regional LNG projects that are all expected to begin commercial operations this year, which will add significant additional peak supplies into New England. The Northeast Gateway project is in commercial operation and has the capability to deliver .8 billion cubic feet per day (Bcf/day) on peak with an average baseload capability of up to .6 Bcf/day. The Canaport LNG project located in Saint John, New Brunswick is 95 percent complete and will be capable of delivering 1 Bcf/day with a substantial portion of that supply capable of being delivered to New England via both the Tennessee Gas Pipeline and Algonquin Gas Transmission System. Finally, the Neptune LNG project is scheduled to go into commercial operation later this year and will add an additional .75 Bcf/day of peak supply and an average baseload supply of .4 Bcf/day.

These projects are adding significant additional capacity and supply directly into New England load centers which will not only be capable of serving local natural gas demand, but will also create opportunities to serve upstream markets as well. Additionally, recent filings made by Bay State Gas Company in Massachusetts and National Grid in Rhode Island presented evidence of significant weather-normalized declines in average usage by their customers. This decline in the use of natural gas is generally being experienced by most natural gas utilities in the region. The significant increase in natural gas supplies into the region coupled with declining

usage per customer raises further questions regarding the need for the Weaver's Cove LNG project and to what extent its LNG supply is needed to displace fossil fuel use in the region.

The Second DEIR raised a number of issues with respect to the existing LNG import projects in New England, including whether sufficient pipeline capacity exists to enable the full export capacity of these projects to be delivered during peak conditions. While these issues are valid and important, the Second DEIR presents no quantitative analysis as to the need and role of the Weaver's Cove project, even assuming the validity of the Proponent's claims. The likelihood and magnitude of the pipeline distribution constraints projected by the Proponent, and the potential effect of those constraints, if realized, on the region's energy future is contingent on the outcome of multiple variables, which makes predicting the relative value of the Weaver's Cove project's additional source of LNG supply speculative. Moreover, the project's potential impacts to tidelands and its effect on the Commonwealth's interest therein will be more extensive than those which resulted from the other LNG projects discussed above.

Mitigation/Compensation for Impacts to Winter Flounder Habitat

According to the Second DEIR, approximately 192 acres of winter flounder habitat will be temporarily, adversely impacted and 73 acres will be permanently eliminated as a result of the dredging to accommodate the BTS, the approach channel and the turning basin. Subject to further analysis, the 73 acres may also be lost or seriously degraded for other habitat functions due to low levels of dissolved oxygen at the preferred deeper foraging depths and high turbidity from propeller wash. This is in contrast to the 11 acres of permanent habitat loss under the original project proposal in which the area of impact would have been largely focused on maintenance dredging in the federal navigational channel in the Taunton River and the turning basin in the DPA.

In the Second DEIR, the Proponent proposes three types of mitigation measures to address permanent habitat loss: salt marsh restoration, eelgrass planting and reducing the discharge of pollutants into Mt. Hope Bay. While these measures have value, the Second DEIR acknowledges that they will not replace the lost habitat, but only improve ecosystem components that may indirectly benefit the winter flounder population. Generally, these types of out-of-place/out-of-kind measures do not compensate for permanently lost habitat. I direct the Proponent to consider measures with a stronger nexus to the permanent loss of habitat prior to submission of the Second FEIR.

Additionally, the Second DEIR does not make explicit financial commitments to implement any of the proposed mitigation measures or otherwise provide adequate compensation if direct investment in habitat restoration is determined to be not feasible. Rather than acknowledging the cumulative impact this project will have on the already stressed population, the Proponent attempts to minimize its obligations in the Second DEIR by proposing compensatory mitigation methodologies that undervalue the consequences of the project's adverse habitat impacts. The Proponent argues that its elimination of 73 acres of flounder spawning habitat is not a significant percentage of the total potential spawning habitat in Mt. Hope Bay considering the total area potentially available at preferred spawning depth. However, reliance on habitat depth alone is an invalid basis upon which to assess the relative significance

of the habitat to be affected by this project, as is the Proponent's attempt to value the habitat in relation to the market prices for commercial catches given the highly degraded condition of the winter flounder population.

Despite significant public and pending private investment to improve the water quality of Mt. Hope Bay for the express purpose of reversing the decline of the winter flounder population, the population continues to suffer serious decline. This project moves in the opposite direction of the efforts to improve flounder stocks, and can only exacerbate their decline without the provision of adequate countermeasures. Prior to the submission of the Second FEIR, the Proponent should meet with the appropriate fisheries management and regulatory agencies, with input from affected stakeholders in the ecological health of Mt. Hope Bay, in order to identify mitigation measures and compensation that far more adequately offsets the project's impacts.

SCOPE

General

The Proponent should prepare a Second FEIR in accordance with the general guidance for outline and content found in Section 11.07 of the MEPA regulations, as modified by this Scope.

Alternatives Analysis

Market Need

The Second FEIR should respond to the DOER's request for additional analysis of market needs to account for the impact of new natural gas supply projects in the region as well as the Commonwealth's comprehensive initiatives on energy efficiency and the development of renewable energy resources. It should assess how these new projects and renewable energy and energy efficiency initiatives will affect energy demand and the need for additional natural gas supplies. I strongly encourage the Proponent to consult with DOER for guidance in addressing this scope item.

Shore-Side Berthing Project Alternative

From the perspective of the state-level environmental review under MEPA, the NPC submitted in 2008 effectively ended consideration of the prior shore-side berthing proposal. The Second FEIR should clarify whether the Proponent continues to pursue the approval of the original shore-side berthing option in addition to the preferred alternative presented in the Second DEIR in the proceedings before FERC. The Office of Coastal Zone Management (CZM) indicates in its comments that there is confusion regarding this question. CZM objected to the Federal Consistency Certification submitted by the Proponent for the original shore-side berthing option, and the objection was upheld by the Secretary of Commerce in his decision of June 26, 2008. Therefore, it is CZM's position that the shore-side berthing option is no longer a viable project alternative at the state or federal level.

Mt. Hope Point Alternative

The Water Quality Certification regulations (314 CMR 9.07) provide that no dredging shall be permitted if there is a practicable alternative that will have less impact to the aquatic ecosystem. An alternative is practicable if it is available and capable of being implemented after considering costs, existing technology and logistics in light of the project purpose. The Second DEIR compares several alternative locations and configurations within Mt Hope Bay for the berthing facility, the use of smaller LNG tankers, and various routes, trenching/installation techniques, and backfilling options for the PiP system, including the Mt. Hope Point Alternative, which appears to avoid virtually all the permanent impacts to the winter flounder habitat of the other alternatives and would result in lower quantities of dredged material. The Second DEIR notes that this alternative does not meet the Proponent's self-imposed siting criteria that the BTS be located at least one mile from population concentrations. I recognize that public safety is a major consideration in siting the facility and anticipate that the regulatory agencies with jurisdiction over safety issues will establish appropriate siting criteria. However, in the absence of a determination by those agencies on whether safety issues would preclude this alternative, the Second FEIR should provide a more informed evaluation of this alternative since its apparent environmental impacts would be substantially less than the preferred alternative.

Alternative Project Site Suggested by CZM

The Second FEIR should also evaluate an alternative project site, as suggested by CZM in its comments, using the design footprint of the Mt. Hope Point alternative but shifted approximately 5,000 feet northeast along the federal navigation channel. In essence, this would shift the location of the Mt. Hope Point alternative to a location which is farther from populated land areas while maintaining a potentially viable and environmentally superior alternative. This site has the advantage of minimizing the project's impacts on winter flounder habitat and by potentially reducing the volume of material dredged due to slightly deeper water. This site is located at a greater distance to populated land areas as compared to both the Mt. Hope Point and Alternative B sites and is well outside the 500-meter area of significant impact to public safety and property identified in the Sandia Report.

Chapter 91 Waterways

The project's exceedance of the dredge depth limits at 310 CMR 9.40 is a bar to the issuance of a Chapter 91 License for the project because MassDEP does not believe that the project would meet the pre-condition that it serves a commercial navigational purpose of significant state, regional or federal interest. The Proponent has not indicated that it would seek a variance pursuant to 310 CMR 9.21 from the dredge depth limitation if MassDEP determines that the project does not meet the exception criteria at 310 CMR 9.40. If the Proponent decides to seek such a variance, the Second FEIR should evaluate the project in relation to the variance criteria.

The variance process is intended to apply in the rare and unusual circumstances where a proposed project satisfies a public interest which overrides the public interest in waterways, but cannot be implemented consistent with the regulations. One of the essential findings that the

MassDEP Commissioner must make in order to approve a variance request is that: “the variance is necessary to accommodate an overriding municipal, regional, state or federal interest”. 310 CMR 9.21(1)(c). Additionally, the Commissioner must determine that there are no reasonable conditions or alternatives that would allow the project to proceed in compliance with the regulations, and the project must minimize interference with the public interest in waterways and provide mitigation to compensate for remaining detriments to those interests (310 CMR 9.21(1)(a) and (b)). If the Proponent decides to seek a variance, the Second FEIR should address how the project meets all the variance criteria set forth at 310 CMR 9.21.

Water-dependent uses in Mt. Hope Bay, such as commercial and recreational boating and fishing, will be affected temporarily during construction and dredging operations, and on an on-going basis due to the approximately 70 LNG deliveries annually to the BTS. The Second DEIR provides a draft Navigation Work Plan that establishes communication procedures that are proposed to be implemented to avoid navigational conflicts during dredging and construction of the pipeline and BTS. However, according to the Second DEIR, the USCG is expected to establish safety zones around the berth, which will increase the project’s long-term impact to navigation. Existing LNG facilities have safety zones that range from 200 yards in diameter when no vessel is present, to 500 yards when a tanker is off-loading. This security zone would be oval shaped and could approach 4000 feet in its longest direction and more than 3200 feet in its shortest direction. The actual area of avoidance caused by the formal security zone could be significantly larger than that formally required. While this security zone appears to be outside the commercial channel when the LNG tanker is at its berth, it does however cover a significant portion of the central part of Mt Hope Bay, which could have significant negative impacts on commercial fishing and recreational boating activity. The Second FEIR should discuss in greater detail the current usage of this area by shallow draft vessels to better characterize the project’s potential impact on the use of the bay by shallow draft vessels, and if impacts are likely, discuss LNG delivery and offloading options that would minimize the potential impacts on the navigational uses in the area.

The Second FEIR should clarify whether the safety zones are typically measured from the main structure or vessel, or from associated structures such as dolphins, and include a plan of the proposed BTS, including the outermost mooring dolphins, upon which should be superimposed the areal extent of the potential safety zones. Existing data on recreational and commercial traffic and fishing patterns in Mt. Hope Bay should then be plotted so that potential conflicts between existing uses and safety zones can be determined. This plan should include both peak vessel traffic, such as summer holiday and weekend recreational vessel traffic, non-peak traffic, and vessels destined for the Brayton Point and Somerset generating stations.

Finally, as noted above, the Second FEIR should demonstrate whether the project can meet the overriding public interest provision of the variance requirements by providing additional information relating to the Proponent’s market needs analysis.

Marine Fisheries

The waters of Mt. Hope Bay are designated as Class SA waters under the Massachusetts Surface Water Quality Standards at 314 CMR 4.00. Pursuant to 314 CMR 4.05(4)(a), Class SA

waters are “designated as excellent habitat for fish, other aquatic life and wildlife, including their reproduction, migration, growth and other critical functions, and for primary and secondary contact recreation.” The project proposes impacts within resource areas protected by the Wetlands Protection Act and its implementing regulations at 310 CMR 10.00. Specifically, the project proposes alterations of Designated Port Areas, Land under the Ocean, Land Containing Shellfish, Coastal Bank, and the Banks of or Land Under the Ocean, Ponds, Rivers, Lakes or Creeks that Underlie an Anadromous/Catadromous Fish Run.

In accordance with 310 CMR 10.25(1), the Nearshore Area of Land Under the Ocean within the proposed project site is presumed significant to the protection of marine fisheries. In its comments, MassDEP states that it considers the creation of the approach channel and the turning basin, and the deepening of the federal navigational channel, to be “improvement dredging for navigational purposes” related to vessel transits and berthing and, as such, the Second FEIR must demonstrate that the project will meet the performance standards for improvement dredging within Land Under the Ocean, including minimizing impacts on marine productivity which will result from the suspension or transport of pollutants, increases in turbidity, the smothering of bottom organisms, and the destruction of marine fisheries habitat. This portion of the scope for the Second FEIR is based on the Proponent’s preferred alternative, as presented in the Second DEIR. Further analysis of these issues may therefore be required if the Second FEIR presents a revised Preferred Alternative that implicates new or different impacts.

Impacts to Winter Flounder Habitat

From a fisheries perspective, the most critical project impact is the permanent loss of winter flounder habitat as a result of dredging the turning basin and approach channel in Mt. Hope Bay, which will deepen these areas of the estuary from 15 feet (4.5 meters) to 41 feet (12.5 meters). The Second DEIR quantifies the impacts to winter flounder due to the proposed dredging and trenching activities as temporary impacts to 192 acres of winter flounder feeding habitat and permanent impacts to 73 of winter flounder spawning habitat and minimizes the significance of the permanent loss by asserting that it represents a very small portion of the total available spawning habitat in Mt. Hope Bay. MassDEP disagrees with this assertion based on the fact that the stocks of winter flounder, both in the region and in Mt. Hope Bay in particular, are at alarmingly-low levels. Therefore, the Second FEIR should fully characterize the project’s short and long-term impacts to winter flounder.

The Second DEIR included considerable detail regarding the maximum spawning depth of winter flounder in areas that would be affected by the project. However, the Second DEIR provided information regarding the amount of Mt. Hope Bay that would be deepened below eight meters only. In its comments, the Division of Marine Fisheries (DMF) states that, as a consequence of using the eight-meter standard, it believes that the Second DEIR underestimates the amount of habitat that would be permanently impacted by the project. DMF believes that a reasonable maximum depth range for spawning inshore flounder is somewhere between five and eight meters. Therefore the Second FEIR should calculate and depict the area of Mt. Hope Bay that would be deepened beyond five meters to more accurately establish the potential extent of permanent impact to winter flounder spawning habitat.

The modeling results presented in the Second DEIR for long-term effects of the project appear to suggest that the turning basin and approach channel will not provide suitable habitat for any life stage of any of the several species of flatfishes that inhabit Mt. Hope Bay, including winter flounder. The modeling results for flushing rates in these two areas suggest that these areas will provide very low visibility for predators such as flatfishes that rely on visual cues for benthic feeding. Additionally, the data suggest that the bottom water in these areas will stagnate and will be essentially devoid of oxygen. Either of these conditions will prohibit the availability of these areas as habitat for flatfishes. To address these issues, the Second FEIR should present the results of the modeling of long-term impacts in order to predict levels of turbidity and dissolved oxygen (DO) at the bottom for each of these areas.

The modeling resulted presented in the Second DEIR for DO and turbidity in the approach channel and turning basin after dredging did not characterize levels at the very bottom of these areas nor did they compare DO and turbidity in these bottom waters to adjacent areas. Vessel effects may further compromise water quality within the bottom layers of the proposed channels. Due to the potential for very low levels of DO and high turbidity levels at the bottom of these two areas, the potential for habitat loss to bottom fish in these two areas is a definite concern. Further modeling is needed to better characterize these impacts on fish habitat. MassDEP recommends that the Proponent work with the appropriate agencies to better circumscribe the list of modeling scenarios needed to depict future DO and turbidity conditions at the bottom of the Approach channel and Turning Basin.

In the Second DEIR, the Proponent has proposed some combination of the following mitigation efforts: salt marsh restoration by removing tidal restrictions as a mitigation option; water quality improvements; eelgrass restoration in the greater Narragansett Bay ecosystem. The Proponent should continue to consult with state and federal permitting and resource agencies to finalize the approach to mitigation, including compensatory mitigation, and report on the results in the Second FEIR.

Impacts to Shellfish

While the Proponent's overall approach to the shellfish mitigation plan is sound, providing for pre-construction surveying and transplanting and post-construction seeding and monitoring, it still requires modifications. For example, DMF disagrees with the Proponent's statement that the approach channel and turning basin will be recolonized rapidly by shellfish. The Proponent also incorrectly identified the time period of the transplant program as November 1 to April 1 when it actually occurs from late April to June 15. According to comments submitted by DMF, several other issues also remain to be resolved. A revised mitigation plan for impacts to shellfish should be developed in consultation with permitting and resource agencies and should be included in the Second FEIR.

Benthic Impacts: Approach Channel and Turning Basin

In the Second DEIR, the Proponent suggests that, with the exception of winter flounder spawning habitat, the impacts to the seafloor of Mt. Hope Bay would be temporary. In its comments, DMF asserts that there will be long-term physical impacts to the seafloor, including:

decreased light levels, vessel-induced sediment resuspension, and increased levels of low DO. The Second FEIR should address these impacts based on the detailed technical comments submitted in response to the Second DEIR, particularly those submitted by MassDEP and DMF. In its comments, DMF expresses its concern that the Mt. Hope Bay ecosystem is under considerable oxygen stress already, particularly because lower DO concentrations have become established in the Brayton Point channel. Lower DO concentrations resulting from the proposed project would add to the oxygen stress in surrounding areas, thereby exacerbating existing conditions. To address this concern, the Proponent should commit to field monitoring of oxygen conditions in the Second FEIR.

If a benthic community does colonize the approach channel and turning basin, it will be a regularly disturbed community that is resistant to low or no oxygen and light conditions. This type of community is significantly different than what currently grows in Mt. Hope Bay, and is likely of lower ecosystem and commercial value. The proposed project would also drastically alter the potential for future colonization of certain organisms, such as eelgrass. As a result, the approach channel and turning basin may never provide an equivalent habitat function for benthic communities, resulting in a direct and permanent degradation of the estuarine seafloor habitat. Additionally, chronic water quality degradation due to vessel-induced sediment re-suspension can also be expected. The Proponent should take these considerations into account in proposing its mitigation program in the Second FEIR.

As requested by CZM in its comments, the Second FEIR should evaluate the project's potential effects on wave or tidally generated sediment transport at the BTS resulting from the installation of 155 48-inch diameter steel pilings and any additional scour protection that may be required. This evaluation should include an assessment of different magnitude storms, as well as fair weather, tidal and wind-driven conditions, and should be used to determine the level of impact, if any, to the benthic habitat surrounding the site. This information should also be used to determine the frequency of dredging that would be required to maintain the approach channel and turning basin at design depth. The Second FEIR should also provide information on the frequency and extent of maintenance dredging that may be expected, as well as the potential long-term potential impacts from this activity.

Benthic Impacts: Pipeline Trenching and Backfill

The Proponent proposes to construct a 4.25-mile pipeline to transport the LNG from the BTS in Mt. Hope Bay up the Taunton River to the terminal. According to the Second DEIR, this would necessitate cutting a trench generally measuring eight feet deep, but a much deeper trench, down to 40 feet below the bottom, would be necessary where the pipeline would cross the Federal Navigation channel and the Brayton Point channel. The total area to be impacted by pipeline construction is estimated at 35 acres. Where utility crossings are present, the proposal includes supporting the pipelines and cables while carefully dredging material below them. The pipeline trench is proposed to be constructed using hydraulic and clam shell excavators with environmental buckets.

Pursuant to Surface Water Quality Standards at 314 CMR 4.0, the tidal portion of the Taunton River is classified as Class SB, water "designated as habitat for fish, other aquatic life

and wildlife, including their reproduction, growth and other critical functions, and for primary and secondary contact recreation.” The Proponent has committed to working within the TOY restriction, which allows in-water work between November 1 to January 14 for the area north of the Braga Bridge to avoid impacts to fish migrations. Trenching from the bridge to the BTS would be conducted from August through October. This schedule is consistent with the previous recommendations of state and federal fisheries agencies.

A consequence of the dredging technology and the schedule is that the trench is proposed to stay uncovered for at least seven months, during which some colonization of the trench by benthic organisms is expected. Therefore, the delay between trenching and pipe installation and backfill will result in a second impact to organisms that have colonized the trench during the summer. The Second DEIR also notes that since sloughing of sediment may occur into the trench during the period in which it is open, re-dredging may be necessary prior to placement of the pipe, resulting in additional water quality impacts. The Proponent states that it will attempt to accomplish the trench clean-up within the proposed TOY restricted periods.

Based on its experience of contingencies that typically arise with pipeline projects, MassDEP is concerned that this relatively low level of commitment will result in breaches of the construction schedule to the potential detriment of fisheries resources. If cleanup of the trench is required prior to placement of the pipe pulling, coordination with state and federal permitting and resource agencies may be necessary to ensure that impacts are avoided and minimized in accordance with the applicable TOY restrictions. Therefore, the Second FEIR should present a refined contingency and mitigation plan to avoid unintended impacts, including a proposal for establishing a clear communication system by which the Proponent can communicate and consult with the resource agencies when any such construction challenges arise. The Proponent should commit to conducting a survey of the trench before the sloughed material is removed in order to identify the amount and location of sloughed material that must be removed, as well as final volume and location of backfill required. The sloughed material should be sampled to determine whether it is suitable for placement over the pipe.

The Second DEIR estimates that approximately 320,000 cys of material will be required to backfill the pipeline. This includes approximately 30,000 cys of an imported mixture of silt, sand, gravel, and crushed stone that would be placed over the pipeline where it would cross the federal navigation channel and the Brayton Point channel to protect it from anchor strikes. The remainder of the backfill material would come from sediments dredged from the proposed Mt. Hope Bay approach channel. Commenters have expressed concern that the use of this non-native material may result in habitat conversion to the extent that the coarser grained material dredged from the approach channel does not match the physical characteristics of the existing sediments along 45 percent the pipeline route. One of the advantages of this plan cited by the Proponent is the improvement to, and expansion of, shellfish habitat by providing a more suitable grain size for colonization. This plan does not give adequate value to the present soft bottom habitat for benthic organisms and the species dependent on them.

The Proponent’s proposed use of imported material, with or without a surface layer of fine sediments, are more likely to cause habitat conversion along the pipeline route, and should not be implemented. In light of the underlying significant impacts of the overall project, the

Proponent should strive to retain the original habitat characteristics and prevent additional habitat conversion impacts associated with the pipeline cover. The Second FEIR should discuss options for sorting and storing suitable material from the approach channel that would more closely match the sediments along the entire pipeline route. Finally the Second FEIR should discuss how the pipeline will be weighted down and actually emplaced. The Proponent should address this matter in the FEIR.

Entrainment, Impingement, and Cooling Water Use

The Second DEIR provides estimates for entrainment of fish eggs and larvae, including winter flounder. In summary, the projected 70 ship visits per year would withdraw 55.4 million gallons of water for engine cooling per visit, including 8.6 million gallons from Narragansett Bay, and 46.8 million gallons from Mt. Hope Bay. Additionally, 14.3 million gallons per visit would be withdrawn from Mt. Hope Bay for use as ballast water. These withdrawals would result in an estimated loss of 1,162 age-1 winter flounder, or 143 equivalent adults and are projected to kill 3.8 million eggs and 1.4 million larvae per year of sand lance, tautog, cunner, Atlantic menhaden, and bay anchovy. In response to DMF's comments regarding this issue, the Second FEIR should further analyze the potential entrainment impacts of winter flounder resulting from the proposed project in light of the significantly degraded state of fisheries in Mt. Hope Bay, particularly the winter flounder population, and the effect of recent state and federal regulations recently enacted to curtail their decline.

Given the critical state of the southern New England winter flounder stock, the project's potential impacts to winter flounder in any life stage should be avoided or minimized by the use of appropriately-sized intake screens and operational measures that reduce flow velocity into the intake. Such measures are currently used by other facilities in Mt. Hope Bay and the Taunton River. Therefore, in the Second FEIR, the Proponent should commit to measures that would minimize the intake of water from Narragansett and Mt. Hope Bays, especially during the months of February through May, when winter flounder larva are the dominant fish larva. The entrainment or impingement of fish eggs during the same seasonal period are also of concern. The Proponent should consider different options including but not limited to depth of cooling water withdrawal, mesh or screen size, approach velocity, and commit to implementing these measures in the Second FEIR.

In the Second DEIR, the Proponent suggested restocking as a method of compensating for entrainment and impingement impacts. However, it is critical that the Proponent explore the best technologies available for water intake structures that significantly reduce entrainment and impingement effects from the projected levels before considering mitigation. The Proponent should also consider measures to minimize thermal impacts to the bay from ship cooling activities. The Second FEIR should include commitments to implement these measures.

Benthic Monitoring

The Second DEIR includes a proposed benthic monitoring plan to assess the recovery of benthic habitats from unavoidable impacts from dredging, trenching and backfilling. The monitoring program will assess baseline conditions and the impacts of the project on the benthic community, and document whether the affected areas follow a trajectory of recovery after the

project construction is completed. I strongly encourage the Proponent to continue consultations with state and federal permitting and resource agencies to address concerns expressed in their comment letters, including the potential for transfer of invasive species. The Second FEIR should include a revised benthic monitoring plan based on these consultations.

Water Quality

Monitoring during Dredging and Trenching

Water quality monitoring should be conducted during trenching and backfilling. As documented in the Second DEIR, sediments in Mt. Hope Bay are predominately fine-grained. Therefore, there is a significant potential for negative water quality impacts associated with the release of suspended sediments during this intensive, multi-year dredging project. The Second DEIR includes a Draft Water Quality Monitoring Plan (DWQMP) in Appendix 3E that proposes water quality criteria, actions to be undertaken when the criteria have been exceeded, and sampling frequencies and techniques. The Second FEIR justify the proposed mixing zone and water quality criteria action levels, and otherwise provide a thorough response to MassDEP's technical comments on this topic, including modeling of potentially toxic effects to swimming and drifting organisms due to low DO and high turbidity within the mixing zone, and details regarding how the state's Mixing Zone Policy with regard to acute toxicity will be addressed. Specifically, pursuant to 314 CMR 9.07(3)(d), within the mixing zone the minimum criteria for chronic toxicity may be exceeded but the minimum criteria for acute toxicity shall not be exceeded. The DWQMP must be modified to include acute toxicity monitoring inside the mixing zone to demonstrate compliance with this requirement.

Dredged Material Disposal

The Proponent has submitted a 401 Water Quality Certification application for the proposed project, which claims that analytical data of the sediment collected from 2003 to 2007 provides a good characterization of the existing sediment condition in the lower Taunton River and Mt. Hope Bay. However, neither the Second DEIR nor the 401 application included any data evaluation correlating the 2003-2007 data to the proposed BTS because the data was collected within the existing federal navigation channel and the federal turning basin. The Second FEIR should provide a thorough response to MassDEP's technical comments regarding this issue.

When the pipeline installation is complete, the trench will be backfilled with suitable material to return the trench area to its approximate pre-existing contours. The preferred alternative is to backfill the majority of the pipeline route with sediments dredged from the proposed approach channel. In aggregate, a little more than half the route length is characterized by sandy silts, silty sands and coarser sands. A little less than half the route length is characterized by soft silts/clay. According to the proposed construction sequence and schedule, dredging of the approach channel will occur in the first and second year of construction, while trenching for the pipeline will occur in the first year and backfill will occur in the second year. In order to achieve this "dredge-load-backfill" approach, the Mt. Hope Bay turning basin would have to be dredged in the first year and the approach channel would have to be dredged in the

second year. In its comments, MassDEP states that it believes that this approach is somewhat unrealistic. The Second FEIR should evaluate the need for an intermediate facility for stockpiling the suitable backfill material. If an intermediate facility is necessary, the Proponent must prepare a sediment management plan, which should include, at a minimum, sediment containment design, method of sediment dewatering and other best management practices in managing the sediment.

LNG Terminal Site

The plans provided in the Second DEIR indicate that the service channel is to be dredged to a depth of 25 feet below MLLW. It cannot be determined from these plans whether the service channel is in fact located in the DPA, as stated in the Second DEIR. The Second FEIR should include a plan of the proposed service channel, drawn at a reasonable scale, with the DPA boundary line superimposed on it.

The plans included in the Appendix 4A show a historic high water mark on the terminal site indicating the presence of filled tidelands. According to MassDEP, the historic high water mark is based on License No. 58 issued in 1920. According to historic plans, the historic high water mark is likely more landward of the line shown in the Second DEIR. The Department can provide the Proponent with more information concerning the historic high water mark at the site upon request.

Stormwater Management

The Second DEIR does not appear to contain information related to stormwater management and does not provide information related to compliance with the stormwater management standards contained within 310 CMR 10.05(6)(k) through (q) and 314 CMR 9.00. The Second FEIR should present information about the stormwater management systems that will be located in the landside terminal facility and the BTS.

Air Quality

In its comments, MassDEP states that the Second DEIR largely addressed all of the issues raised in the Secretary's Certificate dated November 21, 2008 with regard to air quality permitting. The Second FEIR should provide the additional technical information MassDEP requested in its comments.

Greenhouse Gas (GHG) Emissions

According to the Second DEIR, the annual amount of greenhouse gases (GHGs) that the project would emit is estimated at 321,000 tons per year (tpy), which is significant compared to other projects that have been reviewed under MEPA for compliance with the GHG Policy and Protocol. As such, it is incumbent upon the Proponent to demonstrate that every feasible measure to mitigate the project's GHG emission have been carefully and fully evaluated both in terms of its potential for reduction, cost effectiveness and general applicability to the proposed facility and processes. In the Second DEIR, the Proponent makes the case that the project's

delivery of natural gas to the New England region will have an overall mitigating effect on GHG emissions which far outweighs the emissions that would be produced by the project itself. As noted elsewhere in this Certificate, DEP, DOER and I have expressed doubts concerning the Proponent's analysis of this issue and require additional information in order to fully evaluate this claim. Nevertheless, the Proponent must still demonstrate, in accordance with the GHG Policy and Protocol, that:

- The sources of GHG emissions have been identified;
- The GHG emissions attributable to each source have been quantified;
- The project has complied as far as is practical with the methodology as set forth in the GHG Policy; and
- Applicable mitigation measures have been identified and evaluated.

The Second DEIR has largely complied with the first three of these requirements concerning the analysis of emissions, but certain issues remain to be clarified. I direct the Proponent to DOER's comments and ask that the Second FEIR respond to those comments. This response should address in particular DOER's suggestions concerning the feasibility of employing a combined heat and power system.

With respect to identification and evaluation of mitigation measures, the Proponent indicates that it is considering a menu of community-based mitigation measures focused on education and community improvements, including the installation of renewable energy units at schools, a green jobs program linked to low-income housing, energy efficiency projects, and conversion of municipal school buses to operate on compressed natural gas (CNG). I agree that proposing off-site mitigation measures for this type of project is consistent with the GHG Policy, and the measures offered are worthy of further consideration. The Proponent should continue to explore these concepts with DEP, DOER and the MEPA office and should provide updates on its proposals in the Second FEIR. In addition, because this is a fossil-fuel based project, I request that the Proponent specifically consider making a commitment to funding renewable energy projects and I encourage the Proponent to consult with the agencies to identify funding opportunities that may be available in the project area. I also encourage the Proponent to consider purchasing some portion of the facility's electrical power from renewable off-site sources. Beyond identifying its preferred mitigation program in the Second FEIR, the Proponent should indicate the extent of its monetary commitment to implement these measures and a preliminary implementation schedule. The Proponent should consult with the MEPA Office, MassDEP and DOER to finalize these commitments.

Safety and Security

I continue to acknowledge that there is significant public concern about whether the project, including both elements already a part of the FERC-approved LNG Terminal and elements newly proposed as part of the offshore BTS, can be safely operated in the affected project area, including the Massachusetts waters where elements are newly proposed. Questions that continue to be raised encompass both effects on Fall River and nearby Somerset of possible fire or explosion at the LNG Terminal site, effects on Fall River and other nearby communities from possible LNG tanker or transfer facility spills in Mt. Hope Bay or the Taunton River, and

the effects of any potential breach or failure of the over 4.25-mile long buried pipeline. Adding to the above concerns is the potential for the LNG terminal and BTS to be attractive targets for terrorist attack. Furthermore, in addition to the issue of direct safety impacts on area population and property, local emergency responders must have the resources and training to respond to project-related contingencies.

In its comments, the Executive Office of Public Safety and Security (EOPSS) references the Advisory Report it submitted to FERC and the USCG in February, 2009, which assessed the safety and security implications, costs, and overall burdens on emergency responders posed by the project. EOPSS identified a number of concerns, issues to consider, and recommendations related to the safety and security of the project, including the newly proposed BTS. In its comments, EOPSS states that the Proponent has failed to adequately address the safety concerns articulated in the Advisory Report in the Second DEIR. Throughout the Advisory Report, EOPSS has questioned whether it is humanly possible to prevent, protect, and recover from public safety incidents arising from the project's operations, and whether it would be reckless to proceed with the project in light of these concerns. In addition, there remain substantial questions concerning the Proponent's commitment and ability to supply the necessary resources required to prepare for and continually review and assess threats, emergency plans, and the mitigation of potential incidents should the project go forward.

The Second FEIR should provide a comprehensive response to EOPSS's concerns, as well as those expressed by several commenters, including but not limited to CZM, DMF, the City of Fall River, the Town of Somerset, and the Coalition for Responsible Siting of LNG Facilities, concerning the public safety aspects of this project.

Responses to Comments

The Second FEIR should include a copy of this Certificate and each comment letter received. In order to ensure that the issues raised by commenters are addressed, the Second FEIR should responses to all substantive comments. This directive is not intended to, and shall not be construed to, enlarge the scope of the Second FEIR beyond what has been expressly identified in this Certificate.

Mitigation and Draft Section 61 Findings

It is generally recognized that even with careful efforts to avoid and minimize impacts and employ best management practices, this project will result in unavoidable temporary and permanent impacts to marine fisheries resources and habitats, which will require mitigation. Because efforts to avoid and minimize the project's adverse effects have not been finalized and agency review is still ongoing, I recognize the challenges of addressing a comprehensive mitigation package at this point in the project's development and review. However, in order to for me to determine that the Second FEIR has adequately and properly complied with the requirements of MEPA, significant additional mitigation commitments must be reflected in the Second FEIR.

I acknowledge that the Proponent has worked cooperatively with state and federal permitting and resource agencies thus far on developing appropriate mitigation strategies and

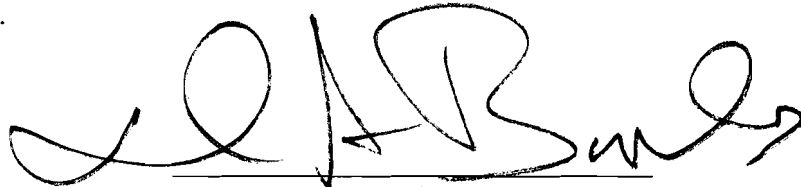
projects, including compensatory mitigation, for unavoidable impacts to natural resources, and expect this consultation to continue. Specifically, I expect that the Second FEIR will include enforceable commitments by the Proponent to implement a comprehensive package of mitigation and compensation measures based on continued agency consultation. The Second FEIR should include an up-to-date summary of all proposed mitigation and compensation measures, as well as Draft Section 61 Findings for use by state agencies that will be asked to issue permits for the project.

Circulation

The Second FEIR should be circulated in compliance with Section 11.16 of the MEPA regulations and copies should be sent to any state agencies from which the Proponent will seek permits or approvals and to the list of commenters noted below. Copies of the Second FEIR should also be made available for public review at the Fall River, Somerset, Swansea, and Freetown Public Libraries. The Proponent should contact the MEPA Office to discuss a method for circulation of the document via CD-ROM rather than bound paper copies, thereby minimizing paper waste.

May 29, 2009

Date



A handwritten signature in black ink, appearing to read 'Ian A. Bowles', written over a horizontal line.

Ian A. Bowles

Comments received on the Second DEIR:

5/18/09 Louis A. Bousquet
5/19/09 Department of Energy Resources (JJ Ballam)
5/20/09 Representative David B. Sullivan
5/20/09 Joseph Callahan
5/20/09 Manuel Alves
5/20/09 Anthony Morettini
5/21/09 Stephan Brigidi
5/21/09 Michael L. Miozza
5/21/09 Elizabeth A. Higgins, EPA New England
5/22/09 Dennis F. Luttrell, Somerset Town Administrator
5/22/09 Holland & Knight (on behalf of the City of Fall River and the Fall River
Conservation Commission)
5/22/09 Taunton River Watershed Alliance, Inc.
5/22/09 Mass Audubon
5/22/09 Department of Environmental Protection
5/22/09 Office of Coastal Zone Management
5/22/09 Charlie Cavalcante
5/26/09 Coalition for Responsible Siting of LNG Facilities (Ronald Thomas)
5/26/09 Conservation Law Foundation
5/26/09 Division of Marine Fisheries
5/26/09 Executive Office of Public Safety and Security
5/26/09 Executive Office of Public Safety and Security (follow-up e-mail)
5/22/09 Roger Williams University
5/26/09 Save Bristol Harbor (Cara Cromwell)
5/26/09 Save Bristol Harbor (MaryKae Wright)
5/26/09 Joseph Arruda
5/26/09 Nancy Durfee
5/26/09 John Keppel
5/27/09 Coalition for Responsible Siting of LNG Facilities (Joseph Carvalho)
5/27/09 Department of Energy Resources
5/28/09 Rhode Island Department of Environmental Management

IAB/RB/rb