

Appendix D

FERC's Response to Maine's SPO Advisory Report

TABLE D-1
FERC's Responses to concerns Presented in the
Maine State Planning Office Safety Advisory Report for the Downeast LNG Project

Topic	Issue	Response
The Kind and Use of the Facility	FERC Should require the applicant to identify and provide technical justification for the highest wind speed used for the analysis and the design of the marine terminal and onshore structures.	Addressed in Section 4.12.2, Front-End Engineering Design Review. The Downeast LNG terminal would be designed to withstand the effects of hurricane force winds. For the LNG storage tanks, the design wind velocity would be 150 mph per the requirements of 49 CFR 193.2067. For other process equipment containing LNG, the design wind velocity would be obtained from ASCE-7 and a 50-year recurrence interval, which is 100 mph for the terminal site. Similarly, the design wind velocity for the berth structure and surface hardware as well as site buildings would be 100 mph. Structures that support LNG on the marine berth are designed for 150 mph winds.
	FERC Should evaluate the use of tankers up to 165,000 cubic meters that may supply the facility as conducted during the ship simulation study at Marine Safety International (MSI), Newport, Rhode Island in July 2006. The evaluation should include analysis of the loads on the mooring system from the effects of passing vessel traffic and high winds.	Downeast states that it would design the mooring system and unloading platform according to U.S. regulations and international industry standards applicable to the import of liquefied petroleum gases, indicating that this design would accommodate carriers with capacities of 70,000 m ³ to 165,000 m ³ . In addition, Downeast states that it would use the <i>International Safety Guide for Oil Tankers and Import Terminals</i> (ISGOTT) as a key safety document. Breasting dolphins would be designed to resist breasting forces in accordance with <i>Oil Companies International Marine Forum</i> (OCIMF) guidelines and mooring dolphins would likewise follow OCIMF publications including <i>Mooring Equipment Guidelines</i> and <i>Prediction of Wind Loads on Large Liquefied Gas Carriers</i> .
	The applicant states that it may seek to expand the project in the future. ¹ Although Downeast LNG does not anticipate the need for additional storage tanks, the expansion would involve the additional of high pressure pumps and vaporizers. The applicant further states that certain engineering elements associated with the expansion have been incorporated into the front end engineering design for the facility. FERC should evaluate the impact to safety and security due to any engineering modifications to the facility to accommodate possible future expansion. FERC should examine whether any of these modifications would result in changes to thermal exclusion zones and vapor dispersion zones.	Addressed in Section 4.12.2, Front-End Engineering Design Review, and Section 4.12.4, Siting Requirements – Thermal and Dispersion Exclusion Zones. FERC staff performed their analysis on the facilities described in the current application. The addition of equipment or modifications that would increase storage capacity or sendout rate would require Downeast to file an amendment for review and approval by FERC. At that time, staff would analyze any proposed facilities in the amendment to ensure that they do not diminish the safety and reliability of the facility and that they comply with current regulations with regard to exclusion zones and other siting requirements.

¹ Application under sections 3(a) and 7(c) of the Natural Gas Act for the Downeast LNG Import Terminal and Pipeline Project, December 22, 2006. Docket Nos. CP07-52; CP07-53-000; CP07-54-000; and CP07-55-000. Resource Report 13, Engineering and Design Material, page 40, section 13.1.15, Future Plans.
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<p>Existing and Projected Population and Demographic Characteristics of Washington County area</p>	<p>FERC needs to clearly identify all impacted areas associated with the project which include areas utilized during the vessel transit (in and out of Head Harbour Passage and Western Passage), unloading of the vessel (or vessels) at the Pier (Passamaquoddy Bay), transfer of LNG from the pier to the storage facility in Robbinston, and transfer of natural gas from the sendout pipeline to the M&NE pipeline interconnection. FERC's identification of impacted areas should include assessment of the potential for secondary hazards from intentional and unintentional events such as building fires, forest fires, and evacuations. Impacted areas should not be defined strictly at the boundary of 5KW/m² thermal radiation flux criterion. FERC should conduct analysis defining the boundaries meeting the 1.5KW/m² thermal radiation flux for thermal radiation hazards evaluated for the vessel transit, LNG transfer, and storage facility. The State is considering extending the emergency alert and notification to at least the 1.5KW/m² thermal radiation flux boundary.</p>	<p>Identification and discussion of environmental impacts associated with the operation of the LNG terminal and the sendout pipeline, including the impacts from an ignited or unignited LNG spill are addressed in the EIS. The action area for the FERC's EIS follows the definition in 50 CFR 402.02 as "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action." Specifically, the action area considered includes the vessel transit paths for all vessel traffic associated with the project, including the waterway from the terminal out to the limit of the territorial seas [12 nm]), the terminal pier and surrounding waters, and all associated hazard zones, as defined by the Coast Guard and based upon criteria developed by Sandia National Laboratories (Sandia) in the report entitled <i>Guidance on Risk Analysis and Safety Implications of a Large Liquefied Natural Gas (LNG) Spill over Water</i> (2004 Sandia Report). The onshore action area considered in the EIS includes the LNG terminal facilities, the entire 29-mile-long sendout pipeline route, and the potential M&NE downstream expansion facilities. The impacts assessed in the EIS include the direct, indirect, and cumulative project effects under the following primary topic areas: alternatives; geology; soils and sediments; water use and quality; wetlands; vegetation; wildlife; aquatic resources; threatened, endangered, and special status species; land use, recreation, and visual resources; socioeconomics; transportation and traffic; cultural resources; air quality and noise; reliability and safety; and cumulative impacts.</p> <p>Secondary impacts such as the spread of fires away from initially affected zones are not specifically addressed, but may be addressed during the development of the Emergency Response Plan (ERP) which is required by Section 311 of the Energy Policy Act of 2005, 15 U.S.C § 717b-1(e), and which must be approved by the FERC and accepted by the U.S. Coast Guard. It should also be noted that Section 4.12.6 includes a recommendation that Downeast coordinate the development of the ERP with state/provincial, county, and local emergency planning groups during which an appropriate response to secondary hazards may be discussed and included. Recommendations included in the EIS typically become conditions of the FERC Order if the project is approved.</p> <p>Radiation flux levels and the corresponding Zones of Concern along the vessel transit are assessed in detail in the 2004 Sandia Report, the conclusions of which have been implemented in the Coast Guards' Waterway Suitability Report (attached as Appendix B) and are discussed in Sections 4.7 and 4.12. It should be noted that while Zone 2 corresponds to a 5 KW/m² thermal radiation level, Zone 3 extends farther to the vapor cloud dispersion distance to the LFL from a worst case unignited release. In this zone, impacts to people and property could be significant if the vapor cloud reaches an ignition source and burns back to the source.</p>

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	<p>FERC should identify existing and planned land uses within the 1.5KW/m² thermal radiation flux of impacted areas during vessel transit, vessel berthing and unloading, and transfer of natural gas and LNG to the storage facility, and along the sendout pipeline. Sensitive receptors, including but not limited to schools, hospitals, nursing homes, businesses, and residences, should be identified within this area. In addition, FERC should evaluate whether any affected communities meet the definition of an environmental justice population.</p>	<p>In section 4.7 and 4.12 of the EIS, we examine land uses and sensitive receptors within the Zones of Concern for the entire 16.6 nautical miles that LNG vessels would travel to the LNG terminal. In addition, we examine existing and planned residences and other structures at the terminal site and along the entire sendout pipeline route. There are no critical infrastructure facilities within the Zones of Concern along the waterway for LNG marine traffic. LNG marine traffic would pass by developed areas in Eastport, Maine and St. Andrews, New Brunswick, as well as Moose Island, Deer Island, Campobello Island, and scattered seasonal and permanent residences along the route. The impact to these areas during normal operation is primarily a visual impact.</p> <p>For the onshore facility, the 5 kW/m² thermal radiation flux is used in accordance with Federal code 49 CFR 193 and the NFPA 59A standard for LNG facilities. Other considerations based on lower thermal radiation levels, such as those proposed here by the State, may be addressed during the development of the ERP (see response to previous comment). There are no public lands or other designated federal, state, or local recreation areas located on or within 0.25 mile of the LNG terminal site. The nearest residences to the proposed LNG terminal are located along U.S. Route 1 across from the LNG terminal site. During operation, the primary impact to those residences would be visual.</p> <p>Regarding the proposed pipeline, DOT Minimum Federal Safety Standards in 49 CFR 192 defines area classifications, based on population density in the vicinity of the pipeline, and specifies more rigorous safety requirements for populated areas. These are addressed in detail in Section 4.12.9 Pipeline Safety Standards. Most of the land affected by the construction and operation of the sendout pipeline would be forest land (20.7 miles or 69.6 percent). Developed land constitutes only 2.0 miles or 6.6 percent of the route. Downeast would file site specific construction plans to minimize impacts to residences. Based on Downeast's communications, neither Robbinston nor the surrounding communities are planning residential or commercial/business developments or subdivisions that would be crossed or within 0.25 mile of the sendout pipeline.</p> <p>We specifically address environmental justice in section 4.8.6 of the EIS. We conclude that Pleasant Point Reservation, the Town of Perry, and Alexander, Baring Plantation, and Pembroke Communities could be defined as environmental justice communities. There would be no disproportionate adverse environmental and human health impacts to these communities. Rather, the proposed project would result in a substantial economic benefit to the neighboring environmental justice communities through increased job opportunities, income, and tax revenues.</p>

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	<p>Using worst case meteorological conditions, hazard assessments by FERC should include worst case scenarios for the LNG vessel(s), the LNG transfer system, and onshore storage and regasification facilities that could result from intentional acts, human error, earthquakes, and equipment failure. The FERC should assess hazards and risks including but not limited to: (1) an LNG spill or release resulting from a collision with other vessels that transit along the same route beginning at Head Harbour passage and continue to the Western Passage into Passamaquoddy Bay, using minimum and maximum size LNG vessels; and (2) the full range of credible intentional acts affecting an LNG vessel and associated marine structures as identified in consultation with the Maine Department of Public Safety and the Maine Marine Patrol. In addition, the scenarios and impact analyses should include: (1) an on-water rapid phase transition flameless explosion; (2) instantaneous LNG pool fire and the impact of the tides in the area; (3) fire from LNG flammable vapor clouds and the potential of secondary fires such as buildings and forests; (4) potential danger of asphyxiation from LNG vapor clouds; and (5) freezing impacts to humans, natural resources, and equipment in the immediate vicinity of the LNG release.</p>	<p>For onshore facilities, Section 4.12.4 discusses the Federal regulations in 49 CFR 193 and NFPA 59A for thermal radiation and vapor dispersion calculations that require worst case meteorological conditions. Exclusion zone hazard modeling for LNG fires takes account of full pipe ruptures and tank failures consistent with intentional acts and equipment failure. For LNG vessel and related impacts, the Coast Guard and FERC used the guidance contained in the 2004 and 2008 Sandia Reports, which takes into account intentional and unintentional events for carriers with capacities up to 265,000 m³. The FERC and Coast Guard consider credible worst case scenarios for LNG hazards in accordance with Federal code and recent research conducted at the Sandia National Laboratories. Given this approach, any scenarios identified by the Maine Department of Public Safety and the Maine Marine Patrol are expected to have been implicitly addressed already.</p> <p>The impacts of rapid phase transitions (RPT), asphyxiation, and freezing are addressed in Section 4.12.1, LNG Hazards. Each resource section of the EIS addresses the impact along the route for LNG marine traffic, including impacts from both an ignited or unignited LNG marine spill.</p>
	<p>FERC should justify the meteorological conditions and the source of the data to support all air dispersion modeling. Conditions used to calculate worst case scenarios should be explained and justified. A sensitivity analysis should also be performed to identify the uncertainty in the calculations. FERC should explain how the frequent fog in the area impacts the air dispersion modeling and the thermal radiation flux boundaries.</p>	<p>This is addressed in Section 4.12.4, Siting Requirements – Thermal and Dispersion Exclusion Zones. Meteorological conditions are chosen in accordance with 49 CFR 193, which requires the usage of conditions that yield worst case scenarios. Part 193.2059 requires that dispersion conditions are a combination of those which result in longer predicted downwind dispersion distances than other weather conditions at the site at least 90 percent of the time or as an alternative where the model used gives longer distances at lower wind speeds, an Atmospheric Stability (Pasquill Class) F, wind speed = 4.5 miles per hour (2.01 meters/sec). The use of worst case scenarios precludes the need for uncertainty calculations. The presence of fog has not been identified as an independent model parameter and its effect is taken into account by the inclusion of humidity as a dispersion model parameter. In addition, the presence of fog would be an attenuating factor for thermal radiation.</p>

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	FERC should explain if the results of the Sandia National Laboratories Guidance on Risk Analysis and Safety Implications of a Large Liquefied Natural Gas (LNG) Spill Over Water are applicable to the 165,000 cubic meter tanker size for this project.	This is addressed in Section 4.12.5.3. In 2008, the DOE released another study by Sandia National Laboratories, entitled <i>Breach and Safety Analysis of Spills Over Water from Large Liquefied Natural Gas Carriers, May 2008</i> (2008 Sandia Report). The 2008 Sandia Report assesses the scale of possible hazards for newer LNG vessels with capacities up to 265,000 m ³ . Using the same methodology as the 2004 Sandia Report, it concludes that thermal hazard distances are only 7 - 8 percent greater than current vessels carrying 145,000 m ³ of LNG, due primarily to the slightly greater height of LNG above the waterline. The 2008 Sandia Report also notes that the general design of the larger vessels is similar to current designs and, hence, for near-shore facilities the calculated breach size for intentional scenarios remains the same. Overall, the 2008 Sandia Report maintains the same impact zones as with the smaller vessels that were analyzed in the 2004 Sandia Report.
	The analysis of the source term associated with a potential perpetrated or accidental release from a LNG tanker should include a range of release rates including full release of all contents to loss of the smallest tank, as well as release rates ranging from five to sixty minutes.	LNG hazards and spills are addressed in sections 4.12.5, which discusses marine-based LNG spills. Release rates used in the ABS model are calculated using breach sizes found in the 2004 Sandia Report. The Sandia study conducted extensive analysis of intentional and accidental events using finite element analysis techniques and it constitutes to date the most conclusive study of the potential damage that can occur to LNG tankers. It should also be noted that the Zones of Concern used by the Coast Guard to determine marine risk mitigation measures are based on the same seminal study.
Existing and Proposed Land Use near the Location	FERC should examine whether this project will impact homeowner values, businesses, and homeowner insurance cost during construction and operation. FERC should determine if the project is consistent (from vessel transit to the interconnection of the Maritimes and Northeast Pipeline) with the impacted towns’ comprehensive land use plans and zoning requirements. FERC should discuss the extent of the legal liability for losses due to LNG spills. There are preliminary permit applications pending before FERC for development of tidal energy electrical generation facilities in the vicinity of the project. See table below. highest potential for efficient tidal power development.	Property values, insurance rates, and zoning are addressed in Section 4.8.2 and 4.7.4 of the EIS. We conclude that construction and operation of the Downeast LNG project would have no significant adverse impacts on property values in the surrounding area, nor increase insurance rates. The effect of a pipeline easement on property values would be negotiated between Downeast and affected landowners during the easement acquisition process. Downeast has also agreed to compensate residential property owners whose property abuts the project boundary, is located immediately across U.S. Route 1 from the terminal site, or is on the north shoreline of Mill Cove and faces the shoreline portion of the terminal site. Property owners would receive a one-time impact fee of \$25,000 or would be compensated for the reduced market value of properties that were sold.
	Assurance that proposed development meets state land use and environmental standards and other related natural resources protection requirements is a primary means by which the State ensures that “state and local safety considerations” as concern existing land uses, as well as features of the natural environment, are adequately addressed.	Downeast received a land use permit from the Robbinston Planning Board (Robbinston Comprehensive Plan 1996) on February 16, 2006 under its Shoreland Zoning Ordinance, and a Conditional Land Use Permit. The waterway for LNG marine traffic, although partially located within Maine’s coastal zone, is not subject to the Mandatory Shoreland Zoning Act. For the sendout pipeline, Downeast intends to apply for all state permit requirements that comprise the Maine Coastal Zone Management Program (CZMP) in the

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	<p>Accordingly, FERC should continue its efforts to work cooperatively with the State to ensure that state land use, environmental and natural resource protection standards and related issues and concerns are duly addressed.</p>	<p>third quarter of 2009. The sendout pipeline would be exempt from the City of Calais Shoreland Zoning Ordinance. A determination that the project is consistent with the Maine CZMP must be received prior to construction of the LNG terminal and pipeline.</p> <p>Major permits, approvals, and consultations required for the Downeast LNG Project are identified in section 1.2 of the EIS. The FERC encourages cooperation between applicants and state and local authorities. We also note that the Maine CZMP enforces various state and local environmental laws, regulations, standards and criteria as the state's coastal policies. FERC would require Downeast to receive a determination of consistency with Maine's CZMP for construction and operation of the proposed facility and associated vessel operations, prior to construction.</p>
	<p>A report developed by the Electric Power Research Institute² identifies sites in this area among the places in Maine with FERC should assess in the DEIS whether and how the project would affect development of tidal power at the sites for which preliminary FERC permits have been requested and other potential sites, if applicable, due to LNG vessel transit and other pertinent project elements. In addition, FERC should assess whether and how proposed or potential tidal power development in this region may be affected by the safety and security issues presented by the Downeast LNG project, singly or in combination with the proposed Quoddy Bay LNG project.³</p>	<p>Project impacts on tidal energy electric generation facilities are examined in section 4.7.3 of the EIS. Based on information provided by the tidal energy companies, the top of the turbine units would be below the maximum depth of any commercial vessel transiting during low tide. Since the LNG vessels would be transiting the Western Passage at slack high tide, the turbines would be considerably below the LNG vessel hull. In addition, LNG spills would have no impact on the turbines due to their depth in the water. Similarly, since the only equipment on the surface is a conduit connecting the turbines to the local electric transmission grid, no impacts for an accidental LNG spill is anticipated.</p>
	<p>FERC should determine the impact of operations from the Downeast LNG project coupled with the operations of the proposed Quoddy Bay LNG project on tourism activities (including those of our Canadian neighbors), cruise ships frequenting Eastport, recreational use of the waters, and commercial fishing. Operations with potential impact should include vessel traffic, security requirements, vessel berthing, and oil or LNG spills (minor or major).</p>	<p>In section 4.13 of the EIS, we assess cumulative impacts of the Downeast LNG project when superimposed on or added to other proposals in the region, including the Quoddy Bay and Calais LNG Projects. In section 4.7.3 of the EIS, we specifically address project effects on public, recreation, and special land uses. We conclude that the additional vessel traffic with moving safety and security zones could impact commercial and recreational boating during the arrival, unloading, and departure of the LNG vessels. However, as stated in the WSR, an LNG vessel traveling at an estimated speed of 10 knots would only take 18 minutes to pass by any given point. Given the limited amount of LNG vessel traffic, the implementation of vessel traffic management practices recommended by the Coast Guard in the WSR, the advance notice to United States and Canadian authorities from the LNG vessels transiting the area, and the limited time that nearby marine traffic could be interrupted, impacts to commercial and recreational marine activity would be</p>

² http://www.epri.com/oceanenergy/attachments/streamenergy/reports/Tidal_003_ME_Site_Survey_Report_REV_1.pdf

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		insignificant. To prevent and minimize impacts associated with accidental spills or releases, LNG vessels would comply with federal regulations related to fuel handling and spills in offshore areas.
Natural and Physical Aspects of the Location	FERC should evaluate the effect of the mechanical force of the tidal waters on the pier, moorings, and other marine facilities, with justification that the design is adequate within an acceptable margin of safety.	As discussed in a previous comment, Downeast states that it would design the mooring system and unloading platform according to U.S. regulations and international industry standards applicable to the import of liquefied petroleum gases, including the <i>International Safety Guide for Oil Tankers and Import Terminals</i> (ISGOTT), and the <i>Oil Companies International Marine Forum</i> (OCIMF) guidelines. Staff agrees that the use of such standards would provide for a safe design that considers the effects of marine phenomena common to many national and international platforms and terminals, including wind, tide, and the hydrodynamic effects of passing ships.
	<p>There are many environmentally significant areas, in both Maine and Canada, along the vessel transit route. FERC should identify these locations and state how they will be protected from intentional and unintentional accident scenarios of the LNG tanker vessel.</p> <p>A further concern is how the construction and operation of a LNG import facility will impact both the natural resources of the area and those people whose livelihoods depend upon those natural resources. A significant number of people in the Downeast Maine rely on natural resources-based occupations for their livelihood. The project’s economic impact should be examined not only from the perspective of a release from the facility, but also from the perspective of its potential effects on areas that generally provide the resources needed to support natural resources-based occupations that would be lost or diminished due to establishment of security zones around a LNG facility or other project-related effects. These occupations will include fisheries (lobster, scallop, sea urchin, herring, and ground fish), aquaculture, clamming, marine worm digging, wreath making, firewood harvest, blueberry harvest and other unidentified natural resources. FERC should address these considerations in the DEIS.</p>	<p>For every major resource area discussed in the EIS, we provide analysis specific to potential impacts along the LNG vessel transit route during both normal operations and in the unlikely event of an ignited or unignited LNG spill. Based on the extensive operational experience of LNG shipping, the structural design of an LNG vessel, and the operational controls imposed by the Coast Guard and the local pilots, we conclude the likelihood of a cargo containment failure and subsequent LNG spill from a vessel casualty (i.e., collision, grounding, or allision) is extremely remote. We recommend that, throughout the life of the facility, Downeast comply with requirements set forth by the Coast Guard Captain of the Port, including all risk mitigation measures in the WSR.</p> <p>Direct and indirect socioeconomic impacts of the Downeast LNG project are addressed in detail in section 4.8.2 of the EIS. Operation of the Downeast LNG facilities would result in regular LNG marine traffic in the Bay of Fundy, Grand Manan Channel, Western Passage, and Passamaquoddy Bay. Downeast estimates approximately 60 vessels per year. Given the limited amount of LNG vessel traffic, the implementation of vessel traffic management practices recommended by the Coast Guard in the WSR, the advance notice to United States and Canadian authorities from the LNG vessels transiting the area, and the limited time that nearby marine traffic could be interrupted, impacts to commercial and recreational marine activity would be insignificant. The project area would benefit from the proposed project, as it would provide small increases in population to an area that has declined in population over past decades, improved employment and training opportunities for local residents, increased personal income, and an improved tax base with increases in local revenues.</p>

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		<p>In addition, the Town of Robbinston and Downeast have finalized a “Host Community Benefits Agreement” that outlines a number of commitments being sponsored by Downeast in the event the project is developed, including a community development fund. Under the Host Community Benefits Agreement, Downeast has agreed to compensate owners of any affected business in the town that was in operation as of July 11, 2005, and that is determined by an independent arbitrator to have been adversely impacted solely by the construction and operation of the project.</p> <p>There is very limited fishing in the pier area that would be affected. Downeast has negotiated an agreement with the one potentially affected weir owner to compensate for the losses resulting from the operations of the LNG facilities. The prohibition of shoreline fishing or clamming in the immediate vicinity of the project’s pier abutment with the shore is not anticipated to be a significant adverse impact. Downeast is continuing to consult with the Cobscook Bay Fishermen’s Association, the Fundy North Fishermen’s Association, and other sources to develop a comprehensive compensation plan to address any potential loss of fishing equipment or income as a result of unavoidable impacts by Downeast LNG vessels. We recommended that, prior to operation of the Downeast LNG terminal, Downeast file the final Fishermen Communication, Coordination and Compensation Plan with the Secretary.</p>
<p>Emergency Response Capabilities near the Facility</p>	<p>The State proposes that the applicant cooperate with the Maine Emergency Management Agency to conduct a systematic assessment designed to identify the safety hazards and estimated risk levels, and to evaluate necessary response and mitigation measures. During the FERC licensing process participants in the assessment should include a broad cross-section of local safety, security, and emergency officials and personnel. The assessment should be conducted in a workshop setting facilitated by a consultant having expertise in this topic. The goal of this approach is to build a common understanding of the requirements for response to an emergency. These requirements would include resources, communications, cooperative agreements, and other measures to assure an effective plan. This workshop would also identify the fiscal impact on state and local governments and other entities for services required to protect public safety.</p>	<p>Section 4.12.2 includes a recommendation to address design, procedures, and reporting of significant and non-scheduled events. Section 4.12.6, Emergency Response and Evacuation Planning, contains a condition to the effect that Downeast should develop an ERP (including evacuation) and coordinate procedures with the Coast Guard; state/provincial, county, and local emergency planning groups; fire departments; state and local law enforcement; and appropriate federal agencies. The specific consultations proposed here by the State may be conducted during development of the ERP.</p>

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	<p>Any and all additional safety and security infrastructure, equipment and services identified provided by the state and local governments must be funded in full by the applicant. In its project authorization and certificate, if issued, FERC should detail the specific funding requirements and obligations of the applicant and ensure that these requirements and obligations are adequate to ensure that the applicant, not the State or local communities, will fully bear the safety and security related costs of the project. The cost of this workshop would be fully funded by the applicant.</p>	<p>Section 3A(e) of the Natural Gas Act (as amended by the Energy Policy Act of 2005) specifies that the ERP shall include a Cost-Sharing Plan that contains a description of any direct cost reimbursements the applicants agree to provide to any state and local agencies with responsibility for security and safety at the LNG terminal and in proximity to LNG vessels that serve the facility. The FERC has recommended that the ERP should include a Cost-Sharing Plan identifying the mechanisms for funding all project specific security/emergency management costs that would be imposed on state and local agencies. In addition to the funding of direct transit-related security/emergency management costs, this comprehensive plan should include funding mechanisms for the capital costs associated with any necessary security/emergency management equipment and personnel base.</p>
	<p>FERC will require the assistance of the appropriate federal agency to consult with the Canadian government on safety and security matters. The DEIS should identify this cooperation with the Canadian government as a requirement for the Emergency Plan to be submitted by the developer of the LNG facility.</p>	<p>Necessary coordination with the Canadian government is addressed in EIS Sections 4.12.5.5, Requirements for LNG Vessel Operations, 4.12.2, 4.12.6, Emergency Response and Evacuation Planning, and Appendix B, Coast Guard’s WSR. The WSR details Risk Mitigation Measures which must be fully implemented, including the development, by the applicant, of standard operating parameters approved by the Coast Guard and coordinated with the Government of Canada to enable the safe and secure movement of LNG vessels through Canadian and U.S. waters. In addition, a WSR Risk Mitigation Measure includes development by the applicant of an Emergency Response Plan (ERP) as required by Section 311 of the Energy Policy Act of 2005, that is approved by the Commission and accepted by the Coast Guard to enable a comprehensive and coordinated response to an LNG emergency. As the WSR explains, the ERP is developed through a transparent, public process that actively involves the Coast Guard, appropriate agencies, and key officials of state and local governments. How this process applies to Canada and whether Canadian agencies will wish to be involved are issues as yet to be determined. However, as the WSR further explains, Downeast LNG must be able to adequately demonstrate that an effective security regime has been established during the Canadian portion of the vessel’s planned route prior to a loaded LNG vessel bring allowed to transit to the facility.</p>
<p>Need to Encourage Remote Siting</p>	<p>FERC should assess in the DEIS whether emergency services are available in the area to respond to a Mass Casualty Incident (MCI). In doing so FERC should define the worst case scenarios and determine if the emergency health services are available. If FERC finds that the present state and local capacity to respond to a MCI is inadequate, FERC should state the emergency services that would be considered adequate, with justification.</p>	<p>The availability of emergency services is addressed in EIS Section 4.12.6, Emergency Response and Evacuation Planning, and Appendix B, Coast Guard’s WSR. The emergency services necessary to respond to a MCI should be considered in the development of the ERP and Cost-Sharing Plan, as discussed in responses to previous comments.</p>