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July 11, 2007

Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Ref: Quoddy Bay LNG (Docket CP07-35-000, CP07-36-000, CP07-37-000, CP07-38-000)

Dear Ms. Bose:

I am writing regarding the July 6, 2007 correspondence with your office submitted by Quoddy Bay LNG and their attorneys. That correspondence responds to various issues raised in the protest submitted by the City of Eastport, Maine. While a number of the issues raised are outside my expertise, I believe I have credible expertise in several of the topics addressed and would appreciate an opportunity to share several observations you're your agency.

I am a former Rear Admiral/Assistant Surgeon General in the U.S. Public Health Service. Much of my career has been spent in preparation for, and response to, natural and human caused emergencies and disasters. For many years, I directed the U.S. government's domestic disaster mental health program. I continue to consult and provide train to states, public health organizations and hospitals in preparedness for and response to disasters, terrorism, and emerging infectious disease.

I would like to comment specifically on Quoddy Bay LNG responses with respect to: 1.) Comparing Eastport to other jurisdictions; 2.) Their reportedly close relationship with the USCG; 3.) Their Emergency Response Plan (ERP).

Comparing Eastport to Other More Urbanized Areas

Quoddy bay and its attorneys fundamentally dismiss comparisons of Eastport's concerns to those of more urbanized areas. While virtually all essential functions become more complex with increased urbanization, most essential functions and categories of concern for local governments remain the same regardless of size and density. To virtually dismiss Eastport's concerns because the numbers of its residents are not a great as Boston or other cities I believe communicates a bias that, because your numbers fewer, you are not as important, your concerns are not as important, and risks thrust upon you by LNG are not as important. I find this attitude both inaccurate and insensitive. Quoddy Bay LNG attempts to bolster its perspective by quoting government reports encouraging other LNG projects to be developed in less populated areas. I am certain it was never the
government's intention to imply that lives and health of people are any less valuable where they

live in fewer numbers.

Issues Related to the USCG

Quoddy Bay LNG repeatedly references it close working relationship with the USCG. It even attempts to create nonexistent conflict between Eastport and the USCG fabricating Eastport's concerns as some type of criticism of, or lack of confidence in, the USCG. They term Eastport's expression of need for additional security resources arrogant and absurd. Any credible source regarding security will stress the need for comprehensive, adequate, and integrated resources at all levels of government. These resources involve people, material, and funding. Corporate creation of red herrings that pit legitimate concerns and levels of government against each other rather than facilitate comprehensive and integrated solutions to complex security problems is both cynical and dangerous.

Their response states (p.46), Quoddy Bay is working closely with the USCG to adequately manage the risks associated with LNG carrier passage in order to assure safe and secure import of LNG into the facility. This statement is inaccurate and deceptive. Apparently the USCG does not share Quoddy Bay LNG's view of the quality of Quoddy Bay LNG's responses and the status of the relationship. On June 19, 2007, Capt. Gerrity of the USCG wrote to FERC indicating that these proposals were not in compliance with applicable Federal regulations, failed to address many long documented safety and security issues (especially Canada's firm and longstanding opposition to these projects). The USCG's concerns are significant enough that they report to FERC that they are unable to complete a Water Suitability Report. The USCG is to be commended for forcing Quoddy Bay LNG to address these complex safety and security issues as a prerequisite for continuing the review process.

The tone of Quoddy Bay LNG's response to Eastport's concerns, their failure to accurately characterize their relationship to the USCG, and their complete failure to even mention the complications inherent in proposing a project in the face of Canada's opposition speaks volumes about the integrity of, and nature of future dealings with, Quoddy Bay LNG.

Emergency Response Plan

The Quoddy Bay LNG response indicates that a comprehensive ERP plan is in development (and criticizes Eastport for not participating). While I have not been party to any of the planning discussions, I am concerned that the plan will not adequately address the myriad issues necessary to protect the public's health or provide adequate health and medical care in the event of an LNG incident. This is an area where I have considerable experience and I beg your indulgence while I, once again in the context of this Quoddy Bay LNG response to Eastport's protest, share my concerns and perspectives with FERC.

Any consideration of establishing an LNG import facility must be pursued anticipating the full range of the public health, medical and behavioral health impact of an accidental or intentional incident (e.g., terrorism). In addition, the total potential impact upon effected communities, and their willingness/ability to prepare, respond, and recover from adverse incidence must be considered. This paper will identify many issues, concerns,
and questions related to some of these issues, specifically issues related to provision of emergency and specialty medical care in an event involving import and transport of LNG.

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While emergency preparedness for natural and human caused disasters and emergencies has been part of the American landscape for generations, high impact/high visibility events in recent decades have expanded and formalized emergency management on an unprecedented scale.

Currently, federal and state governments all have emergency preparedness authorities. All include health and medical factors as part of preparedness and response. All are based upon an *all-hazards* approach to preparedness and response. Local governments vary considerably in the structure, scope, sophistication, and size of emergency management capacity.

Part of the all-hazards emergency management process is the ongoing assessment of existing and emerging risks, analysis of implications for primary and secondary response organizations, and modification of plans based on changing/emerging needs. In a functioning emergency preparedness authority, health and medical considerations are always part of that ongoing process.

In the case of the proposed LNG import facilities in the Passamaquoddy Bay region, many departments and agencies are involved in review and approval of the proposals at federal, state, and local levels of government. The preparedness and response challenges are exponentially complicated by the risks posed to local, provincial, and national governments in Canada and Canada's resulting needs to expand and integrate their preparedness and response to an LNG incident in the Passamaquoddy Bay region. Unquestionably the need to undertake such an enormous and expensive process, with no perceived benefit, is at least part of the unequivocal opposition of Canadian residents and their government at every level.

All health systems are composed of several parts including public health, acute care, pre-hospital care, hospital care, specialty medical care, behavioral health and more. The capacity and integration of these components to function in a disaster or emergency is quite variable.

In disaster and emergency preparedness and response, capacity, integration, and expandability of the emergency medical system (pre-hospital) and hospital system is central. In this context, most of the design of pre-hospital and hospital emergency systems in the U. S. are based upon the primacy of the golden hour. This term commonly refers to the need to get trauma patients to appropriate definitive hospital care
in very short order. It is based upon the belief that morbidity, mortality, and post-trauma disability can be significantly reduced if that definitive care is delivered within the first hour after injury. I believe that implementing this basic tenet of medical trauma response is not practical in the event of an LNG related event in the Passamaquoddy Bay region involving significant numbers of injuries.

It is difficult to describe the scope, intensity, and duration of the physical, psychosocial, and community suffering that attends major disasters such as would occur should there be an accidental or intentional (terrorist) LNG release. Emergency medical consequences include blunt force trauma, penetrating injuries, crush injuries, and most complex, freeze and heat burns, inhalation injuries, as well as asphyxiation. The most probable and most complex health and medical consequence is burns. Burns are among the most painful and scarring (literally and

figuratively) types of injuries that survivors and their families can experience.

How big will an event be? How will we know the scope of impact? That may be difficult to assess, given surprise, potential communication disruption/compromise, multiple jurisdictions, and geography. Likely patients/victims (numbered in dozens to hundreds) include facility workers, ship crew, rescue personnel, escort security personnel, tug boat crews, and citizens in both the United States and on the mainland and islands in Canada. Given the potential nature of an event, the rural and small town nature of the region, it is highly likely that an event will constitute a *Mass Casualty Incident (MCI)*. Such an event is defined by Barbara & Macintire (in their 2003 *Mass Casualty Handbook: Hospital*) as, a combination of patient numbers and patient care requirements that challenge or exceed a community's ability to provide adequate patient care using day-to-day operations.

First medical response will likely be a combination of self-transport of those least injured, transport to hospitals by surviving friends, neighbors or coworkers, and transport to hospitals by organized emergency management system units. Those injured on the water will likely be rescued/transported by boats that will have to be notified, launched, reach the site, affect the rescue, and return to a land base where further transport will be necessary.

First responder emergency medical personnel will conduct triage sorting the injured into those who can likely survive with minimal immediate intervention, those who have a chance of survival if treated and transported quickly, and those who will likely die in any case. Their efforts will focus on those who are believed to have a chance of survival if they receive appropriate trauma care in a timely manner.

Transporting patients will be a challenge from many perspectives. For example, there are no bridges connecting Deer Island to the mainland. Weather and sea conditions may create serious challenges on both land and water. Distances are significant. Numbers of injured needing transport will quickly exceed existing transport capacity. Maine's emergency medical system has air transport capacity however, in an MCI, that capacity will likely be quickly overwhelmed.

Let me share some lessons I learned when responding to both the Oklahoma City Bombing and 9/11 in New York City. In the case of a massive and fatal explosion, recovery of bodies and body parts will quickly begin. If there is suspicion (highly likely in the current environment) that the event is terrorist related, the FBI will assume responsibility for the scene (assuming it is in U.S. territory), and it will become a crime scene. Bodies and partial remains then become evidence and the return of remains to family is frequently more complicated and delayed. Recovery of bodies and partial remains in the water will be difficult. Identifying severely burned bodies will be a difficult and lengthy process. Temporary morgues will need to be established.

Searching family members will use any means at their disposal to determine if their loved ones survived and to locate and be reunited with them. Friends and families will be insistent, extremely stressed and distraught, and angry. These factors can easily complicate early medical care.

Where will patients go? Patients will be transported to the closest facility that might be able to provide care and/or stabilize the patient for further transport. Factors in addition to patient status include proximity (How close is care and can the patient be expected to survive the trip?);

capacity (Does the hospital have room for the patient?), and capability (Can the hospital provide the specialty care needed such as burn care, pediatric trauma, etc.?).

My review indicates that the closest (to Eastport) Level I Trauma Center is located in Portland, Maine, approximately 250 miles and a six hour drive away. The *only* burn beds in Maine are located there (four beds). The closest Level II Trauma Center (no burn beds or pediatric trauma certification) is located in Bangor at best a two hour drive away. The closest hospitals on the U.S. side (Calais and Machias) are tiny facilities (25 total beds each) with very limited emergency capacity. The closest Level I Trauma Center (New Brunswick does not have a classification system for hospitals) in Canada is in Saint. John. That facility has six burn beds. For comparison purposes, the city of Boston has 67 burn beds.[1]

What Will Patients Need? Some patients will need routine emergency medical care provided either by EMS personnel or at health care facilities such as hospitals. Some will need specialty care such as burn care, pediatric trauma, orthopedics, general surgery, thoracic surgery, as well as radiological and hematological support and investigations.. Beyond the lack of these essential resources, the Passamaquoddy Bay region is ill prepared to provide other less acute, but just as essential, health services that would attend such an event. These include mental health services, medical and vocational rehabilitation, and long-term care.

Patients and their families in the U.S. (and Canada in some cases) will also need the ability to pay for these services, and to transport patients to providers over an extended period of time. Quoddy Bay LNG and others have not been clear about who will pay for these services.

By considering distance, geography, capacity, specialty care capability, and jurisdictional complexity, it is intuitively obvious that the capacity does not exist to adequately deal with an MCI caused by LNG in the Passamaquoddy Bay region. If it does not exist, can it be developed? If it can/should be developed, who should pay for and manage the expansion (U.S. & Canadian)? It is not at all clear that any of the entities in a position to approve, support, or propose these LNG sites has stepped forward and agreed to assume responsibility/liability for their decisions and to pay for the development and maintenance of expanded capacity and capability.

What Does All This Mean? It is difficult to imagine a credible analysis that would indicate that the region is adequately prepared to meet health and medical needs in the event of an LNG related MCI. It seems appropriate to pose critical questions to those entities that would approve/support/or propose these LNG operations.

Has the City of Eastport, or other jurisdictions impacted been fully informed by Quoddy Bay LNG of health and medical factors? Have the additional costs of integrated preparedness and response to an LNG caused event been calculated and accepted? Are the towns/cities prepared to expand EMS resources?

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[1] All burn bed numbers from The American Burn Association

Has Quoddy Bay LNG described how they will assure the provision of necessary health and medical services. It is hard to believe that they are prepared to provide what is required. Are they prepared to build and sustain hospitals with specialized burn units on both sides of the border? Are they willing to escrow sufficient funds to fully pay for the medical, public health, psychological, and social consequences of an accidental or intentional disaster? It seems fundamentally unjust to expect individuals, families, the health care system, and governments on both sides of the border to shoulder these risks, costs, and burdens.

In the event that these LNG facilities are constructed and become operational, it appears that Canada assumes significant risk and costly obligations while receiving no discernable benefit. Opposition to these projects is widespread, passionate, and consistent across government levels. This opposition seems to be widely acknowledged by all parties except Quoddy Bay and their attorneys. Setting aside the foreign policy implications of approving such development, what is Quoddy Bay prepared to do to assure that Canada is prepared for an adequate and integrated emergency response? Is Quoddy Bay prepared to pay to develop and implement the response and recovery?

In conclusion, I would opine that any objective assessment of the risks and the capacity of governments and healthcare systems on both sides of the border will indicate that the ability to respond adequately to an MCI does not exist. It is clear that extraordinary amounts of money would be necessary to build and maintain such a capacity. Finally, it seems a reasonable conclusion that no governments (or combination of governments), and certainly the Quoddy Bay LNG and other applicants, are not prepared to commit to that level of funding. For these reasons, it is my view that the City of Eastport is faithfully exercising it's responsibly to the members of that community. Self-serving efforts to trivialize, marginalize, and dismiss their concerns should not go unchallenged.

Sincerely,

Brian W. Flynn, Ed.D.