

**Liquefied Natural Gas Task Force  
Meeting Summary  
October 18, 2006**

**Introductions and review of progress**

Dr. Baker asked everyone to introduce themselves and to sign themselves in.

After Introductions, Dr. Baker provided the following synopsis of the upcoming schedule:

- The Task Force is currently on schedule to produce a draft report at the Nov. 17 meeting
- Today's topic is Risk and Safety
- Next meeting is Nov. 1, and will focus on environmental issues

**Approval of Oct. 4 Meeting Summary**

Summary of the October 4, 2006 meeting was approved.

**Review of Agenda**

Dr. Baker introduced the agenda with the following reminders / announcements:

- The Task Force was formed by the Legislature and was tasked with providing comments on the AES LNG proposal at Sparrows Point.
- Today we are addressing risk and safety and have 3 speakers to address those issues.
- Also, the USCG has published a Waterways Suitability Assessment (WSA) for a proposed LNG facility on Long Island Sound on the FERC website. Dr. Baker encouraged members to review.

**Introduction of Speakers**

Mr. Dawson reminded the Task Force of the four SB 996 Issues that were assigned to the Risk and Safety Committee (numbers 1, 2, 6, and 7). He introduced the three speakers for today's meeting as:

1. Mr. Terry Turbin, FERC
2. Mr. Richard Muth, Baltimore County Office of Homeland Security and Emergency Management
3. LCDR Laura Weems, USCG

Mr. Dawson emphasized that the speakers cannot address specifics of the AES proposal due to:

1. AES has not yet filed a formal application, so no final decisions have been made, and,
2. security concerns (primarily by USCG).

Mr. Dawson asked that the Task Force members recognize these limitations and limit their questions accordingly.

### **FERC Presentation (Mr. Terry Turbin)**

Presentation (see Power Point file)

- Applicant must file 13 Resource Reports
- FERC staff is not for or against project. Rather, staff conducts a technical review, writes the draft EIS, and submits documentation to the full Commission for consideration. The full Commission makes a final decision based on their determination if the application is or is not in the public interest.
- Writing of the Resource Reports is an iterative process
- *Question (Dawson) – do you get detailed engineering information in pre-filing process?* Answer: yes.
- The Energy Policy Act gives a target date of 8 months from filing to complete EIS. It is important to remember that the timeline graphic presented applies only if all works as planned. Some applicants do not provide complete information or there are other issues which delay the process.
- *Question (Hohman) – what is a more practical timeline?* Answer: it varies greatly. In the Gulf Coast there is a lot of experience and infrastructure in place and it goes quicker. At other extreme are companies that just have a concept, and may take a year or more in just the pre-filing stage.
- *Question (Beazley) – What is the process for the public, state agencies, etc to comment and raise questions during the pre-filing stage?* Answer: The resource reports are public documents for anyone to review. FERC staff reviews and their comments are made part of the record. Anyone else's comments are also made part of the record.
- *Question (Theiss) – If applicant decides during pre-filing to relocate the terminal, how is that handled?* Answer: it depends on the magnitude of the change. If major, then process would essentially start over. Minor changes would not. FERC would make the decision if the process needs to start over.
- “LNG Project Review Process” Slide: After formal application, is the time for interventions and protests. Much of the engineering detail is in Resource Report #13 – which is what FERC intensively reviews. At the same time, USCG is doing the same.
- Engineering and safety review is done by 3 agencies: FERC (facility and pipeline), USCG (shipping to first valve), and DOT (first valve to pipeline). USCG is also responsible for security of facility. FERC is lead on coordinating all this.

- The level of risk posed by an LNG facility is assessed by FERC on a site specific basis. The information in the Sandia report is applied to each, specific application.
- Either an application passes standards or it doesn't. If it doesn't, then it will be turned down unless the issues are addressed adequately by the applicant.
- FERC staff routinely reviews facilities that have been in existence for 30 years, so much of the assessment is based on previous experience. Certain aspects of a project may meet specifications in regulation, but if FERC staff believe it can be done better in another way, they will make those recommendations to the Commission, who may choose to make those changes part of the order.
- FERC authority extends over the entire life of the plant. The FERC license is very specific and FERC staff inspects the plant every 8 weeks during construction to ensure that the applicant is adhering to the license. If not, construction will be stopped. After construction, FERC inspects at least once/year. FERC has authority to shut the plant down at any time.
- Exclusion zones are detailed in federal regulations. The applicant must calculate these, and then FERC staff re-calculates them. There are two types of exclusion zones, one based on thermal radiation protection (if spill ignites) and one based on Vapor Dispersion Zones if it doesn't ignite. The company must have legal control (own or easement) within these zones.
- Thermal Exclusion Zones – spill must be contained on site. See slide for heat levels that the applicant and FERC calculate to determine the area that falls within these zones. The applicant must have legal authority over these areas.
- Vapor Dispersion Zones – see slide. Again, the applicant must have legal control of an area that contains gas concentrations of 2.5% (note, this is ½ of volatile concentration).
- FERC relies on USCG for marine safety issues.
- Emergency Response Plan (ERP) – see slide. The ERP is a detailed set of conditions that FERC puts in the license to ensure adequate emergency response.
- The ERP must include a cost sharing plan that is coordinated closely with local agencies. This cost sharing plan must clearly state who is responsible for which aspects of the ERP, all parties must agree, and it must be approved by FERC before approval.
- Safety and Security Coordination with States – see slide.
- *Question (Hohman) – according to the slide, safety and security issues are not local issues, but State issues. Is this correct?* Answer: yes as per the Energy Policy Act.
- *Question (Hohman) – but how can that work if the locals (i.e. Baltimore County) are the primary first responders? Why does the State make the decisions?* Answer (McLean, DNR): The State (DNR in this case) does not make those decisions, but is a conduit of information from the locals to FERC. It is DNR's responsibility to work with local agencies etc to get their concerns included.
- *Question (Hoover) – how does FERC respond to State concerns?* Answer: FERC must respond to the State's concerns, but a State's lack of acceptance of that response is not equivalent to a veto of the project.

- Information on how to comment slide. Best way to address concerns is directly to FERC as explained on slide.

#### Follow-up Questions

- *Question (Hoover) – what happens after draft EIS and final EIS?* Answer: the draft EIS is issued as a public document. There is a 45 day comment period. There will also be public meetings during that 45 day period. Comments are compiled, reviewed by staff, and reissued as the Final EIS.
- *Question (Hoover) – what happens after final EIS?* Answer: The EIS is not reissued, but if there are additional comments, they could be reflected in the final order.
- *Question (Hoover) – if the USCG’s WSA concludes that the project is not acceptable, is that effectively a stop on the project?* Answer: yes.
- *Question (Donnelly) – are the public considered stakeholders?* Answer: yes.
- *Question (Theiss) – is the final meeting of the full FERC a public meeting?* Answer: yes.
- *Question (Theiss) – who is responsible for whether or not bridges are closed?* Answer: USCG.
- *Question (Rice) – What is FERC’s definition of “public interest” – what public does that include?* Answer: there is no definitive answer, but probably national public interest since FERC is a federal agency.
- *Question (Jackson) – where would the State get the resources, etc to respond to an event?* Answer: no one agency is responsible, but there is one agency (DNR) who is responsible for working among all state and local agencies. That is why the Emergency Response Plan must be in place and agreed upon by everyone before construction.
- *Question (Baker) – when is ERP prepared?* Answer: The ERP is a condition of the license which must be met before construction can begin.
- *Question (Donnelly) – what is FERC’s definition of “remote siting”?* Answer: compliance with regulations. It is specific to each site based on calculations.
- *Question (Hohman) – will “remote siting” for this case be clearly defined in the EIS?* Answer: FERC does the calculations and prints the results in the EIS. DOT is responsible party and typically accepts those.
- *Question (Beazley) – When you say “cost sharing”, how much of the cost is borne by company, federals, state, local?* Answer: there is no definitive recipe. It is up to the company to negotiate all that among all the players and get agreement. Usually the applicant bears at least some of the cost.
- *Question (Dawson) – are the specifics of who is responsible for what along with costs are all spelled out in ERP?* Answer: yes. Dawson comment: DNR had a meeting with AES to discuss, and it was his assumption was that AES would bear any additional NRP costs.
- *Question (Hohman) - Baltimore County can say that they need whatever they may thing, but since the State is the lead, don’t they have to agree with the County, and what happens if they don’t?* Answer (McLean, DNR) – The State has only 30 days to respond to FERC once the application is submitted. These comments do not go into great detail. If Baltimore County feels that it doesn’t have sufficient

emergency response capabilities, all the initial State response would say is that we do not have sufficient capabilities. Specifics of what Baltimore County needs would be worked out later.

- *Question (Hohman) – but regardless, can't FERC ignore what Baltimore County and the State say we need? Answer: FERC can force AES to address these issues before construction can begin. It is up to AES to figure out who will pay for this.*
- *Comment (Dawson) – the State (DNR) is not sanitizing Baltimore County's comments, we are just passing them on to FERC.*
- *Comment (Baker) – additionally, if this Task Force has a finding that emergency response is inadequate, then that can be part of our report.*
- *Comment (Hohman) – the primary concern is that federal agencies have a track record of not coming through with the money. Response: but FERC can and does require the applicant to make the money available before construction.*
- *Comment (Jackson) – someone has to find the money to make us safe.*
- *Question (Dawson) – isn't "cost share" a misnomer? Isn't it the job of the applicant to work all this out, regardless of who pays for it? Maybe the applicant will have to pay 100%? Answer: yes.*
- *Comment (Hohman) – but that is an oversimplification. Regardless of who pays, the applicant is not the responder. If FERC, DOT, decide that Baltimore County is OK, then AES doesn't have to pay anything.*
- *Comment (Dawson) – in the Patuxent oil spill, all the hours that State and locals spend on that, was reimbursed by the company. Maybe one of our recommendations should be that indirect costs of an event need to be covered by AES.*

### **Baltimore County Presentation: Mr. Richard Muth**

#### Presentation

- His office is responsible for coordinating response to an emergency.
- Baltimore County responds to 100's of calls daily that would still have to be dealt with despite an emergency at an LNG plant.
- General response to LNG plant falls into one of 4 categories
  1. Pool fire (spill and vapor release with ignition) – water would not work to suppress this kind of fire (would only spread). For small fires, dry chemicals would be used, but carried by trucks in small quantities. Large fires would require high expansion foam. This would control, but not extinguish the the fire. Balto County does not carry this, or have it. Primary means in both cases would be to stop the leak. Baltimore County has no experience with scale of fire.
  2. Jet fire – ignited hole in tank. Probably not common. Response would be to stop leak.
  3. Vapor Cloud – large cloud that travels over a populated area and causes suffocation by replacing oxygen. Likely more deaths and injuries than #1 or #2 above.

4. Vapor Cloud explosion – Same as #3, but cloud ignites. This is the worst case scenario.
- For small, contained fires, there would have a first alarm assignment. At an LNG plant, that would include a local battalion, local stations, HAZMAT unit, and medic unit on first alarm. Increases from there based on need.
  - Baltimore County is truly the primary responsible agency. Baltimore County would be on their own until others get there. They would be taxed. Baltimore county “could not handle this”
  - Mutual aid – agreements between jurisdictions. Happens every day. This is how they would call in assistance if needed and they would respond IF they have the capabilities. If there is a large issue (hurricane), other jurisdictions would be busy and not available.
  - Baltimore County has a couple fire boats with very limited fire fighting capabilities. City has some.
  - In addition to Fire Department response, Baltimore County Emergency Management would also coordinate with police, health departments, etc.
  - Terrorism – also part of his charge. Would this be a target and how would we respond? There have been no decisions yet.
  - Mr. Muth expressed some concerns with Sandia report:
    - The Report states that many issues are only generally understood. Report is based on many assumptions. He is concerned that there is not much hard data.
    - “a vapor cloud could extend 2,500 meters” – that is a long distance (2 miles).
  - Mr. Muth expressed some initial concerns about the AES proposal:
    - Evacuations: typically, you either shelter in place or evacuate. Evacuations are a concern because there are only limited evacuation routes out of peninsula. Any evacuation would take a long time as the road system was not designed for this. Shelter in place – would not be an option if there is a risk of explosion. Also concerns about workers in Sparrows Point itself.
    - Also have 13 schools (7,000 students) within 3 miles. Problem is that most of them do not have transportation. Will not be quick. Also have churches and day care in the area.
    - Another deficiency, is that Balto County has no good way of notifying all the public in the event of an emergency. Could use the emergency broadcast system – but that is not reliable (broadcasters option if they want to broadcast the message). There are other processes available (ex. “Reverse 911”), but they are not currently in place.
  - *Comment (Jackson) – another complication is all this varies with day (Sunday = churches, weekdays = schools, etc). Also concerned about notification and complications due to traffic circle.*
  - *Question (Theiss) – what about ethanol plant and complications from co location? Answer: may be some discussions underway to move ethanol plant, but moving it may actually expand evacuation zone.*

- *Comment (Jackson) – the mulch fire burned for 30 days. If that couldn't be put out, how would we put that out?*
- *Question (Beazley) – what about toxins released from soil or LNG as a result of a fire? Answer: that too is a concern, but it cannot be addressed currently until we know the specifics of the project and location.*

#### Questions

- *Question (Guarnaccia) – is are still patients at Ft. Howard that may have to be evacuated? Answer: yes, but fewer. They are mostly out-patients.*
- *Question (Donnelly) – are you addressing cascade effects? For example, LNG catches fire, heats area, and then ignites more fires. Answer: yes.*
- *Question (Donnelly) - How long would one holding tank burn? Answer: cannot predict until we know the specifics.*
- *Question (Hoover) – is there a process in place for a terrorism incident that takes response out of local to state to federal? Answer: Baltimore County is charged with immediate response. If they become resource depleted, then it goes to the State and so forth up to Feds. This process is in place, but it takes some time.*

#### **USCG Presentation: LCDR Laura Weems**

##### Presentation

- USCG is the law enforcement agency responsible for navigable waters and waterfront facilities. Safety and security of waterways and ports is their top priorities, and they work closely with Natural Resources Police (NRP), State Police, and others in security issues.
- USCG does not approve LNG projects. Their responsibility is to evaluate the threats, risks, and consequences, and then to collaborate closely with FERC. FERC is the licensing authority.
- The primary role of the USCG is to conduct a “Waterways Suitability Assessment” or “WSA”. Much pertinent information is available as google search on “NVIC 05-05”.
- USCG does not care if applicant succeeds or not, but rather that the process is carried out thoroughly and properly.
- WSA looks at path of vessel in port, mooring, and docking.
- To initiate the WSA, the applicant must submit letter of intent to USCG, which AES did in Spring 2006. USCG must then assess the risk and send a letter of recommendation to FERC. USCG does this through the WSA process.
- “Letter of recommendation” simply states whether or not USCG recommends that the waterway be used in this manner.
- USCG is also responsible for equipment, operations, maintenance, fire fighting, etc for the pier and wharf area.
- AES hired HPA to do the WSA. USCG is working with HPA to make sure WSA is done correctly. USCG will review and validate the WSA when complete. This has not been done yet.

- Key parts of the WSA
  - Port characterization
  - LNG characterization
  - Tanker route
  - Risk assessment of tanker operations
  - Navigational and port security
  - Risk management
  - Resources needed and identified gaps
- When complete, the WSA goes to Captain of the Port, who reviews and then makes recommendations to FERC.
- In the AES application, USCG has received the Letter of Intent, and the preliminary WSA has been filed. After final application, AES will produce and submit a “Follow-on WSA”
- USCG coordinates with state, local and federal agencies in their review of the WSA.
- Exclusion zones – USCG is responsible for “security zones”. The security zone is determined by many things. In general, they are 500 yards in every direction unless there are extenuating circumstances. There are exceptions to lower the security zone if it impinges on commercial traffic. A subcommittee (State, federal, local, private) is evaluating if a security zone is necessary, what it should be, how it would be enforced, etc.

#### Questions

- *Question (Beazley) – who designates if a bridge may be closed?* Answer: it depends on the bridge and why. The Key Bridge will not be part of the WSA because there is no transit beneath. The Bay Bridge is part of the WSA and a decision to close will be based on the wide number of pros and cons.
- *Question (Donnelly) – what about exclusion zones while at dock?* Answer: USCG is allowed to define these zones, but not done yet for this case.
- *Question (Guarnaccia) – when vessel is underway, at what point would you establish a security zone (ex. if approaching an area full of boaters, when would folks be moved out)?* Answer: If they set a security zone, it would be clearly defined and enforced. Specifics of that have not yet been determined. WSA will consider impacts to recreational and commercial activities on the water.
- *Question (Guarnaccia) – who will make that decision?* Answer: the Captain of the Port, but it is based on the recommendations of a “Maritime Security Committee” (MSC), which includes DNR, MDE, State Police, Local Police, business representatives, etc. etc.
- *Question (Baker) – is there a mechanism for public comment on this?* Answer: only indirectly via a member of the MSC. This is sensitive security issue, so the Committee’s meetings are not open to the public.
- *Comment (Dawson) – DNR is very concerned about impacts to recreational and commercial impacts.*
- *Question (Hoover) – is the decision making process a consensus or does USCG make final decision within MSC?* Answer: within the MSC, we are trying to be



- consensus group and that has not been an issue yet. The ultimate decision is the Captain of the Port's.
- *Question (Rice) – is there an LNG facility that does not require a security zone?* Answer: unknown.
  - *Question (Donnelly) – at this point, the public has no input into WSA?* Answer: citizens can provide input directly to USCG. Most appropriate would be via state agencies.
  - *Question (Hoover) – what impact does the current resources of the USCG factor into WSA?* Answer: USCG must identify gaps as part of the process.
  - *Question (Guarnaccia) – is it the USCG's responsibility to enforce the security zones and safety zones?* Answer: USCG is responsible, but may delegate. Exclusion zones are a different matter used by FERC.
  - *Question (Dawson) – relative to cost sharing, if a facility like this is licensed and there is a security zone – who is responsible financially?* Answer: it could be either way. It could be USCG, NRP, AES, or some combination of all.
  - *Question (Donnelly) – are there enough USCG staff to enforce this?* Answer: unknown since we don't have any final decisions, but USCG will identify gaps.
  - *Question (Guarnaccia) – would USCG have resources to escort both Cove Point and Sparrows Point tankers?* Answer: same as above
  - *Question (Baker) – how long after AES makes final application does USCG have to respond?* Answer: 90 days.

**Video:**

Mr. Guarnaccia showed an approximately 30 minute video on safety and security concerns.

**Final Discussion and Action Items**

Dr. Baker reminded the Task Force that at the last meeting it was agreed that the Report would consist of a series of findings and recommendations. He encouraged the Committees to begin working on that now, with emphasis on the findings first.

General group Discussion points:

- The final report should be short and directed.
- *Question (Rice) – when is 1<sup>st</sup> draft of the report due?* Answer (Baker): We would like to have draft at end of the Nov. 17 Task Force meeting.
- *Question (Rice) – can we have committee conference calls a week before to discuss and agree?* Answer (Baker): yes, the idea is to have building blocks in place before 17<sup>th</sup>.
- Clarification – draft reports are not public information. Committee's should prepare draft findings, circulate among themselves, and identify draft recommendations. Make sure we label everything as DRAFT.

Action Items:

1. ACTION ITEM: staff should re-compile questions from all 3 groups and send them out to everyone as a reminder.
2. ACTION ITEM: each Committee should come to next meeting with draft findings. If there are recommendations, that is fine also, but findings at a minimum.
3. ACTION ITEM: each committee will meet or conference call before next meeting and agree on draft FINDINGS (factual) for their group.
4. ACTION ITEM: At the Nov. 1 meeting, the Risk and Safety group should have draft material to distribute for discussion.
5. ACTION ITEM: the final report will provide as background the fact that AES has not yet applied to FERC, so it is impossible for the Task Force to provide specific recommendations.