

Responses to Comments on the Draft EIS

AES

20080619-0108 FERC PDF (Unofficial) 06/16/2008



June 16, 2008

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

Re: AES Sparrows Point LNG, LLC and Mid-Atlantic Express, L.L.C.,
Docket Nos. CP07-62-000, CP07-63-000, CP07-64-000, CP07-65-000

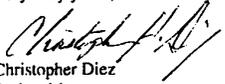
Dear Ms. Bose:

Pursuant to the Federal Energy Regulatory Commission's "Notice of Availability of the Draft Environmental Impact Statement for the Proposed Sparrows Point LNG Terminal and Pipeline Project" ("Notice"), issued April 25, 2008, applicants AES Sparrows Point LNG, LLC and Mid-Atlantic Express, L.L.C. (together "AES") hereby submit their comments on the Draft Environmental Impact Statement ("DEIS") issued by Commission Staff, in conjunction with the other cooperating agencies, in the captioned proceedings.

In accordance with the Notice, AES is filing an original and two copies of its comments on the DEIS. One copy of the comments has been labeled for the attention of "Gas Branch 2." AES will also file a copy of its comments on the DEIS with the Army Corps of Engineers ("ACOE") to be included in the formal project record maintained by the ACOE, as provided for in the Notice.

If you have any questions concerning the enclosed submission, please contact the undersigned at (716) 439-1273, ext. 211.

Very truly yours,


Christopher Diez
Project Manager
AES Sparrows Point LNG, LLC
Mid-Atlantic Express, L.L.C.

Enclosure

cc: Ms. Joanne Wachholder, Federal Energy Regulatory Commission
Mr. Richard Yuill, AMEC
Mr. Joseph P. DaVia, Army Corps of Engineers
Mr. Elder Ghigiarelli, Maryland Department of the Environment
Mr. Bruce Michael, Maryland Department of Natural Resources

AES Sparrows Point LNG, LLC and Mid-Atlantic Express, LLC
140 Professional Parkway, Suite A, Lockport, New York, 14094
Tel: 716-439-1273 • Fax: 716-434-7514

ORIGINAL

FILED
SECRETARY OF THE
COMMISSION

Mid-Atlantic
Express

2008 JUN 16 P 4: 36

FEDERAL ENERGY
REGULATORY COMMISSION

**Comments of AES Sparrows Point LNG, LLC and Mid-Atlantic Express, L.L.C. on the
Draft Environmental Impact Statement dated April 2008
CP07-62-000, CP07-63-000, CP07-64-000, CP07-65-000**

In accordance with the Comment Procedures set forth in the Notice of Availability of the Draft Environmental Impact Statement for this Proposed Sparrows Point LNG Terminal and Pipeline issued in these dockets on April 25, 2008, AES Sparrows Point LNG, LLC and Mid-Atlantic Express, L.L.C. ("AES") submit their comments on the Draft Environmental Impact Statement ("DEIS") prepared by the Staff of the Federal Energy Regulatory Commission ("FERC") in cooperation with the U.S. Army Corp of Engineers ("ACOE"), the U.S. Coast Guard ("USCG"), and the U.S. Environmental Protection Agency ("EPA").

As a preliminary matter, AES commends the Commission's Staff and the cooperating federal agencies for the exhaustive effort undertaken in developing this document. AES also appreciates the efforts of the various state agencies with which it has been working and interested stakeholders in helping to identify many of the important issues addressed in the DEIS. AES is supportive of most of the contents of the draft, which is thorough and generally balanced in its assessments and recommendations. In that regard, to the extent they are not addressed in these comments, AES supports the analysis and conclusions in the DEIS. AES respectfully requests that the Staff and the cooperating agencies take into consideration the following comments in developing the Final Environmental Impact Statement ("FEIS") for this Project.

The comments follow the outline of the DEIS and the section number, page number, and paragraph are specified for each comment. In addition, each comment is separately numbered according to the chapter in the DEIS in which it is located. The paragraph reference is based on the page number. Paragraphs are counted beginning with the first full paragraph of each page and each bullet point is counted as a separate paragraph. The specific language commented upon is set out in bold type.

AES's response to the recommended mitigation measures, both those in the body of the document and those contained in Section 5, Conclusions and Recommendations, are being provided in a separate submission.

EXECUTIVE SUMMARY

ES-1. Page ES-2: Public Outreach and Comments

AES Comment: This section of the Executive Summary focuses on the public outreach performed by FERC. This section, and subsequent sections in the body of the DEIS, do not include any reference to the extensive public outreach performed by AES beyond what was required during the pre-filing period, as well as prior to the pre-filing period. AES's outreach efforts were documented in materials provided to FERC in its original application at Table 1.8-2 of Resource Report 1, *General Project Description*. Because these outreach efforts exceed the Commission's requirements under 18 CFR §157.6(d), AES submits it is appropriate that they be

AES1-ES-1

AES1-ES-1 The Executive Summary has been updated to include a statement regarding AES's public outreach efforts as well as FERC's public meetings on the DEIS and the pipeline route and variations site evaluation visits.

discussed in the FEIS. Documenting fully the AES outreach program, in addition to efforts undertaken by FERC, could be relevant for record review purposes.

ES-2. Page ES-4; Paragraph 3: "Along the marine transit route, potential impacts, though short-term, could be significant to boaters and fishermen by interfering with their normal and accustomed practices of using the Chesapeake Bay and the Patapsco River. In addition, LNG ship transit (with the traveling safety/security zone) may impact special marine events. We have recommended that AES develop guidelines to minimize disruption to waterway users."

AES Comment: AES submits that the use of the word "significant" is unwarranted in describing potential impacts to boaters and fishermen. First, the descriptive material found in the body of the DEIS does not support this characterization. Indeed, even accepting one-sided and inaccurate claims of certain commenters (which are addressed below in the appropriate sections and per the request for additional public comment on potential impacts to fishing and recreational boaters at DEIS Page 4-164; Section 4.8.5.2; Paragraph 2), the potential impacts have not been shown to rise to the level of "significant."

AES1-ES-2

AES1-ES-2 FERC staff's determinations are based on our review and analysis.

AES1-ES-2a

Information previously provided by AES to FERC, including information provided in its July 31, 2007 response to FERC's Data Request dated July 11, 2007 (Responses LURA 25 to LURA 27), and information contained in the Waterway Suitability Report ("WSR") issued by the USCG on February 25, 2008, indicates that there will be *minimal* disruption along the main shipping channel and during final maneuvering and docking. For the majority of the route between the Chesapeake Bay entrance to the Bay Bridge, the ships will be moving at approximately 18 knots. At that speed, the ships, including the 500-yard security zones fore and aft of the vessels will pass a given point in approximately two minutes. The ships will transit under the Bay Bridge at approximately 10 knots, then gradually slow to 3 to 5 knots at the Cut-Off Angle. At 10 knots, the ships, including the 500-yard security zones fore and aft of the vessels, will pass a given point in about *four* minutes.

AES1-ES-2a Comment noted.

AES1-ES-2b

As for potential impacts to boaters and fishermen during final maneuvering and docking in the immediate vicinity of the Terminal Site, i.e., the turning basin, information previously provided by AES to FERC in its July 31, 2007 response indicates that the maximum potential disruption would be on the order of 0.4 percent of the hours in each week. Even if one were to include the entire transit along Marine Channel when considering potential impacts to fishermen and recreational boaters, i.e., the general vicinity of the Terminal Site, the potential impact would still only amount to a little over one percent of the hours of the week. It is also important to note that the potential impacts both in the immediate vicinity of the Terminal Site and in the general vicinity of the Terminal Site (i) would occur adjacent to the highly industrialized Sparrows Point Peninsula (which is not an attractive boating or fishing area), and (ii) would only occur when there are fishermen or recreational boaters present (which occurs less frequently at night and during colder months).

AES1-ES-2b Comment noted.

AES1-ES-2c

Additional information relating to the minimal disruption to boaters and fishermen, including further elaboration on the fact that the security zones only apply to inbound vessels (at various points in the document, the DEIS incorrectly assumed the security zones also applied to

AES1-ES-2c Section 2.7.1.6 has been updated.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

outbound vessels), are provided throughout this document. See AES Comment 4-65 [Section 4.8.5.2; Page 4-164; Paragraph 3] for a list of all comments related to maritime impacts.

AES1-ES-2d

Regarding the cited recommendation, AES will continue working with the USCG to develop a Vessel Transit Management Plan ("VTMP") that will, among other things, contain guidelines intended to minimize disruption to waterway users. The VTMP will be completed prior to commissioning of the facility.

AES1-ES-2d Comment noted. See revised section 2.6.1.

ES-3. Page ES-5; Paragraph 5: "The Coast Guard's February 25, 2008 Waterway Suitability Report (WSR) for AES's proposal identifies specific risk mitigation measures which must be in place to responsibly manage the maritime safety and security risks of the proposed LNG facility. Accordingly, we have recommended that the proposed facility comply with all requirements set forth by the Coast Guard."

AES1-ES-3

AES Comment: AES continues to work closely with the USCG to ensure that all appropriate measures necessary to responsibly manage the potential maritime safety and security risks associated with the transport of LNG to the Project are in place. To this end, AES attaches correspondence from Captain Brian D. Kelley, Captain of the Port Sector Baltimore, to Christopher H. Diez of AES dated May 16, 2008 in which the USCG states that the additional risk mitigating measures ("RMMs") proposed by AES "meet or exceed the levels of safety and/or security I required in the WSR" provided certain additional requirements are addressed. See Attachment A. AES subsequently addressed those additional requirements to the satisfaction of Sector Baltimore, and is awaiting written confirmation of same. AES will forward the written confirmation to FERC once it is received. In addition, it should also be noted that AES is currently working with the USCG in developing the VTMP that will address how each of the RMMs will be implemented.

AES1-ES-3 The FEIS has been updated to include a discussion about the correspondence between the Coast Guard Sector Baltimore and AES. Please see updated section 4.12.5.5.

ES-4. Page ES-6; Paragraph 2: "The Coast Guard's preferred alternative is the issuance of a positive Letter of Recommendation (LOR) (i.e., the waterway is suitable) with a range of conditions and limitations as discussed in the WSR. . . . AES would need to develop a cost sharing and Transit Management Plan along with the Coast Guard, state, and local entities to ensure the necessary resources are available to make the waterway suitable for increased LNG vessel traffic. The Coast Guard may issue an LOR with conditions finding the waterway suitable for LNG vessel traffic."

AES1-ES-4

AES Comment: AES continues to work closely with the USCG to ensure that all appropriate measures necessary to responsibly manage the potential maritime safety and security risks associated with the transport of LNG on the Chesapeake Bay are in place. Also, as discussed above, AES is currently working with the USCG in developing the VTMP that will address how each of the RMMs, including the additional RMMs required by the WSR, will be implemented. The VTMP will also address assignment of responsibilities between USCG, local entities and private security for each of the RMMs, and will also address cost sharing for these responsibilities. AES notes that the VTMP is not required until prior to commissioning of the facility.

AES1-ES-4 Comment Noted.

SECTION 1 – INTRODUCTION

1-1. Section 1.0; Page 1-1; Paragraph 1: “In this document, the two projects will be referred to jointly as the Sparrows Point Project, or the Project.”

AES1-1-1 AES Comment: The FEIS defines the term “Project” yet does not follow through in many parts of the document with use of the defined (capitalized) term. To avoid any confusion regarding which facilities are being described, AES recommends that the defined term be used consistently where appropriate.

AES1-1-1 The FEIS has been updated to consistently use the defined terms "Sparrows Point Project" and "Project."

1-2. Section 1.2; Page 1-2 to 1-3; Paragraph 10 to Paragraph 1: “With interconnections to three existing interstate pipeline systems, the Project would also be capable of supplying natural gas to other portions of the East Coast.”

AES1-1-2 AES Comment: In its formal application dated January 8, 2007, Mid-Atlantic Express noted that it “may also provide interconnections with the facilities of LDCs and/or other entities.” This should be reflected in the FEIS text.

AES1-1-2 Section 1.2 has been updated to reflect the potential for interconnections with facilities of LDC's and/or other entities.

1-3. Section 1.3.3; Page 1-7; Paragraph 3: “We have determined that Sparrows Point LNG Project shippers will need to coordinate with the Navy in advance of LNG traffic in Chesapeake Bay and, when necessary, adjust their arrival and departure schedules so that LNG tankers do not interfere with naval operations that require clearance of the Surface Danger Zones. This coordination may be in conjunction with or in addition to early notification to the Coast Guard.”

AES1-1-3 AES Comment: Coordination among all stakeholders including the USCG, U.S. Navy, cruise ships, other LNG vessels, and the security providers will be addressed in the VTMP, which is required to be completed prior to commissioning of the facility, per USCG regulations.

AES1-1-3 Comment noted. See revised section 2.6.1.

1-4. Section 1.3.3 Page 1-7; Paragraph 4: “We also discussed with the Regional Port Operations Officer that the Sparrows Point LNG Project might entail 120 to 150 vessel calls per year (approximately 2 to 3 vessel calls per week), and that the LNG ship traffic in the Brewerton Channel might delay ship traffic to the POB by 45 minutes to 1 hour for each LNG ship call at the terminal. The naval Regional Port Operations Officer has indicated that this should not cause significant impacts to naval operations at the POB.”

AES Comment: AES agrees with the Naval Regional Port Operations Officer’s statement that the proposed LNG operations will not cause significant impact to naval operations. Impacts to Naval Operations will be proactively minimized in ways set forth below.

AES1-1-4 *First*, as discussed in AES Comment 1-3 [Section 1.3.3; Page 1-7; Paragraph 3] above, specific procedures for coordinating with naval operations in the Chesapeake Bay will be included in the VTMP. The VTMP will include periodic scheduling meetings where planned naval operations will be identified and LNG vessels arrivals scheduled around the naval operations. Procedures for handling classified naval operations will be addressed in the VTMP.

AES1-1-4 Sections 4.12.5.4 and 4.12.5.5 include discussions on the Transit Management Plan to be developed by AES in consultation with the Coast Guard and participating agencies.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

AES1-1-4a *Second*, the Maryland Pilots Association will actively manage the flow of commercial traffic in the Chesapeake Bay. As seen in the letter from the Maryland Pilots contained in Attachment B hereto, the Maryland Pilots fully expect that any potential disruption associated with the passage of LNG ships in the Brewerton Channel (lasting a total of less than one hour) can be effectively managed by means of appropriate scheduling and spacing between ships. The Maryland Pilots will use the same scheduling techniques to ensure naval vessels are not delayed by inbound LNG vessels. The specific statement from the Maryland Pilots reads in pertinent part as follows:

Pilots have a unique ability to control a variety of factors that mitigate congestion in the navigational channels serving the Port. Among them are departure times, vessel speed underway, coordination of passing opportunities, and the ability of the on-board pilot to know the real-time position of other vessels. Based on these factors, and subject to the U.S. Coast Guard's recommendations on Sparrows Point LNG traffic, the Association of Maryland Pilots is confident that vessel transits for LNG and non-LNG traffic, and especially for schedule-sensitive cargos such as container vessels, can be effectively managed to avoid potential disruption.

Third, special circumstance that might require a naval vessel to encroach into the security zone (this assumes that the draft of the naval vessel is sufficiently deep to require that it pass close to the LNG ship in the deep water shipping channel) would be handled via radio concurrence from the Escort Commander of the boats assigned to enforce the security zone or the USCG Captain of the Port ("COTP"). Establishment of a security zone does not mean "no access," it simply means limited and controlled access as directed by the Escort Commander or the COTP.

AES1-1-4b Accordingly, in any special circumstance that might require a naval vessel to move outside of the schedule established by the USCG and Maryland Pilots, arrangements may be made to either delay the LNG vessel's arrival or to allow the naval vessel to transit through the security zone.

AES1-1-4c Based on the foregoing, there should be *no delay* to naval operations into or out of the Port of Baltimore expected as a result of the LNG traffic proposed by AES unless (i) the traffic is outside of the schedule established by the Maryland Pilots and/or coordinated pursuant to the VTMP, and (ii) the naval traffic could not maneuver around the LNG ship as it transited through the Brewerton Channel. Should any such special circumstance occur, the LNG ships would be viewed no differently than any other vessel in the Harbor.

1-5. Section 1.4; Page 1-11; Paragraph 1: "Since initiating the Project in 2005, AES and Mid-Atlantic Express have conducted open houses for the general public, attended several meetings with federal, state, and local agencies, and met with various elected officials in Maryland and Pennsylvania."

AES1-1-5 AES Comment: The cited language does not capture the extensive public outreach performed by AES, as noted above in AES Comment ES-1 [Page ES-2], and as shown in the materials provided to FERC in Table 1.8-2 of Resource Report 1, *General Project Description*. AES believes that this extensive outreach program greatly exceeded the Commission's requirements under 18 CFR §157.6(d). Because public outreach is an important part of the NEPA process, including analysis of issues related to Environmental Justice, AES requests that the FEIS include

AES1-1-4a Comment noted. Please see response to comment AES1-4-78.

AES1-1-4b Please see response to comment AES1-1-4a.

AES1-1-4c Comment noted.

AES1-1-5 Section 1.4 has been updated to include a statement regarding AES's public outreach efforts.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

a more complete description of AES's outreach program. This is particularly important given the standards for review of Environmental Justice issues, which include early and ongoing opportunities for public involvement where potential Environmental Justice issues exist and thorough documentation of the efforts undertaken to avoid those issues.

SECTION 2 – DESCRIPTION OF PROPOSED ACTION

2-1. Section 2.3.1.2; Page 2-20; Paragraph 4: "The tanks would be supported on concrete piles and topped with a pile cap."

AES1-2-1 AES Comment: In the current design, the piles are steel H-piles and not concrete.

2-2. Section 2.7.1.3; Page 2-37; Paragraph 4: "The LNG terminal design would include a fire fighting system composed of fixed and portable fire water systems, a fixed and portable dry chemical extinguishing system, and a high expansion foam system."

AES1-2-1 Section 2.3.1.2 subsection Storage Tank Construction has been updated to state, "The tanks would be supported on steel H-piles with a pile cap."

AES1-2-2 AES Comment: The current LNG Terminal design includes hydrants and hose reels, but no fire trucks or portable tanks for fire water. AES requests that this be clarified in the FEIS.

AES1-2-2 See updated section 2.7.1.3.

2-3. Section 2.7.1.5; Page 2-38; Paragraph 1: "The vessel shall be prepared to get underway within 60 minutes under its own power with tug assistance on scene in 30 minutes. All emergency shutdown systems must be operable."

AES1-2-3 AES Comment: Regarding tug assistance, the WSR states that "While the LNG vessel is moored at the LNG facility, one towing vessel shall remain on scene in immediate standby (capable of getting underway in less than one minute) and two additional towing vessels shall be available in 10-minute standby." In an emergency, e.g., fire at the terminal, the mooring lines would be released and the tugs could immediately get the LNG vessel off of the dock and away from the threat. The VTMP will require that one towing vessel remain on scene in immediate standby (capable of getting underway in less than one minute), and two additional towing vessels shall be available in 10-minute standby as specified in the WSR. The VTMP will also require the Terminal Operator and the Vessel Operator to test the emergency shutdown systems before beginning a cargo transfer. A USCG cargo transfer monitor team may observe the tests of the emergency shutdown systems. This should be reflected in the FEIS.

AES1-2-3 The FEIS has been updated to reflect the requirements of the WSR.

2-4. Section 2.7.1.6; Page 2-38; Paragraph 2: "Security zones will be established by the COTP per 33 CFR 165.503. The safety/security zone of 33 CFR 165.500 applies to LNG vessels operating on the Chesapeake Bay. No vessel may enter the safety and or security zone without first obtaining permission from the cognizant COTP. The COTP may make changes to the established zones through the appropriate regulatory process."

AES1-2-4 AES Comment: AES notes that the WSR states that "The security zone of 33 CFR 165.503 and the safety/security zone of 33 CFR 165.500 apply to LNG vessels operating on the Chesapeake Bay. No vessel may enter the safety and/or security zone without first obtaining permission from the cognizant Captain of the Port (COTP)." The relevant portion of 33 CFR 165.503 states as follows: "No vessel may approach within 500 yards of a passenger vessel or vessel carrying a

AES1-2-4 AES would be required to comply with the WSR.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

[Certain Dangerous Cargo, i.e., a material defined as CDC in 33 CFR 160.204] . . . unless traveling at the minimum speed necessary to navigate safely . . . [and] no vessel or person may approach within 100 yards of a passenger vessel or vessel carrying a CDC." The cited language ensures that there is a single set of consistent regulations for the entire Chesapeake Bay.

AES1-2-4a Note that outbound LNG ships are not subject to this regulation. See AES Comments 4-64 [Section 4.8.5.2; Page 4-164; Paragraph 2] and 4-109 [Section 4.12.5.5; Page 4-255 to 256; Paragraph 19 to Paragraph 1].

SECTION 3 – ALTERNATIVES

3-1. Section 3.1.3; Page 3-3; Paragraph 8: “The use of other nonrenewable energy sources such as coal or oil would result in greater impacts to air quality, and regulatory requirements and public opposition make the use of nuclear energy in the Project area unlikely.”

AES Comment: AES agrees with FERC’s conclusion in Section 3.1.3 that public opposition to and regulatory requirements for expanded nuclear energy capacity in the Project area would likely preclude nuclear energy from playing a role in meeting the energy needed by the region. In addition, as the DEIS states in Section 1.2, there is still an anticipated growth in demand for nuclear generation in the region, at a rate of 0.4 percent per year. Even if nuclear energy could be expanded commensurate with the projected increased demand, there is still a need for the additional natural gas supply to the region that the Project helps to meet. AES requests that this position be reflected in the FEIS.

AES1-3-1

AES1-2-4a See AES1-ES-2c, AES1-4-64 and AES1-4-107.

AES1-3-1 Comment noted.

3-2. Section 3.2.1; Page 3-5; Table 3.2-1: Broadwater LNG is listed as having been approved by FERC, with state approvals pending.

AES Comment: Since the publication of the DEIS, New York State has objected to coastal zone consistency of the Broadwater LNG project under the Coastal Zone Management Act. AES suggests that Table 3.2-1 be updated accordingly.

AES1-3-2

AES1-3-2 Table 3.2-1 has been updated to reflect the status of all projects included in the table at the time this FEIS went to print.

3-3. Section 3.2.3; Page 3-8; Caption 2: LNG Terminal Onshore Site Alternatives

AES Comment: AES performed a site screening exercise in comments submitted to the NOAA Triennial Review of the Maryland coastal zone management program, where it evaluated only land use classification and distance to residential areas. The land use classification included those areas designated as Intensely Developed Areas (“IDA”) pursuant to the Maryland Coastal Zone Act and those areas designated for industrial use. When the areas meeting these two criteria were overlaid on those areas greater than one-mile from residential land use, it was discovered that there are only six locations in all of Maryland that meet all three criteria. Of those six locations, only three were in close proximity to existing deep water shipping channel access. Of those three locations, only one – the location proposed by AES to locate the LNG Terminal – was available for development. The other locations are currently occupied by other

20080619-0108 FERC PDF (Unofficial) 06/16/2008

AES1-3-3 existing uses. AES requests that this important background information to the analysis that was undertaken be reflected in the FEIS.

The full text of the screening exercise is contained in Attachment C.

3-4. Section 3.2.3; Page 3-8; Paragraph 3: "The port within which a proposed liquefaction facility would be located should already have deep water (i.e., channel depths greater than 40 feet) to minimize the amount of dredging that would be required to accommodate deep-draft LNG vessels."

AES1-3-4 AES Comment: This statement should be corrected to refer to a proposed *regasification* facility, not a liquefaction facility.

3-5. Section 3.2.3; Page 3-21; Paragraph 2: "[U]ncertainty exists about the property and asset ownership of the Mittal Steel Sparrows Point facilities, making acquisition by AES more problematic."

AES Comment: As noted by AES in previous documents, on February 20, 2007, the U.S. Department of Justice ordered Mittal Steel Co. NV to sell its Sparrows Point mill location. The sale was ordered because of concerns that the recent merger between Mittal and Arcelor S.A., another large steel manufacturer, along with continued ownership of the Sparrows Point plant, would cause substantial harm to the tin mill market competition in the eastern United States. On August 1, 2007, investment group E2 Acquisition Corp., led by Esmark Inc. of Illinois, agreed to buy the steel plant for \$1.35 billion. The E2 team included Franklin Templeton Investments; Companhia Vale do Rio Doce, a Brazilian iron ore producer; and Industrial Union of Donbass Corp., a Ukrainian steel company. Deadlines to complete the sale came and went throughout the remainder of the year until the deal was officially cancelled in December. The U.S. Department of Justice trustee subsequently appointed investment bank Morgan Stanley to manage and complete the divestiture of the steel plant from ArcelorMittal. On March 21, 2008, Russian steelmaker OAO Severstal announced that it was buying the steel plant at Sparrows Point for \$810 million in cash. That acquisition was approved by the Department of Justice on April 15, 2008, and closed on May 7, 2008. To ensure an accurate record, AES submits that this background information should be reflected in the FEIS.

AES1-3-5

3-6. Section 3.2.4; Page 3-23; Paragraph 8: "We are not aware of any existing docks in the project area that could accommodate construction of a GBS. Therefore, a new graving dock would need to be created for a project-specific GBS."

AES Comment: A graving dock is present on property located on Sparrows Point, south of the proposed site of the LNG Terminal. AES believes the graving dock is still in service, however, AES is not aware of its capacity, suitability, or availability for use in constructing a gravity-based structure of the size discussed in the DEIS. If deemed appropriate, this information should be noted in the FEIS.

AES1-3-6

AES1-3-3 Comment noted.

AES1-3-4 The text of the FEIS has been updated from liquefaction facility to regasification facility.

AES1-3-5 Section 3.2.3 has been updated to reflect the new ownership of the Mittal Steel property by OAO Severstal.

AES1-3-6 Comment noted.

3-7. Section 2.3.5; Page 3-26; Paragraph 8: "The heated HTF is then circulated through a shell-and-tube heat exchanger to warm and vaporize the LNG (see Section 2.2.1.3 for a description of the proposed process).

AES1-3-7 AES Comment: The FEIS should be corrected to note that the HTF process is described in 2.1.1.3, not 2.2.1.3.

3-8. Section 3.2.7.1; Page 3-29; Paragraph 5: "AES has indicated that they would use a clamshell dredge method with hopper dredges for transporting the dredged material to the Dredged Material Recycling Facility. AES has also committed that they would use an "environmental bucket" if the COE permit conditions require it. In our consultation with the COE and EPA, we have concluded that the environmental bucket (or equivalent) could deal effectively with the contamination issues of the surface layer of sediments in the area to be dredged. With this draft EIS, we are requesting comments from agencies, the applicant and individuals on whether or not a requirement to use an environmental bucket (or equivalent) is appropriate."

AES Comment: AES has worked very closely with the Baltimore District of the ACOE and MDE to understand agency concerns relative to dredging and to address in its filings potential impacts that may result from dredging associated with the Project. AES also solicited public input with respect to the planned dredging and specifically followed public input on compounds to be tested for in the course of sediment sampling and characterization for the Project. FERC Staff has thoroughly presented and evaluated the dredge data gathered in the course of the Project in Section 4.3.2.4 of the DEIS. AES appreciates the thorough treatment of the data gathered.

AES1-3-8 In the course of soliciting further input from the relevant agencies as to controls that may be imposed on dredging, AES requests that, when considering any further input from the agencies the FERC Staff and ACOE take into consideration normal practices associated with dredging in the Port of Baltimore ("POB") over the last several years in order to have the present Project treated consistently with respect to ongoing practices in the POB. Since the performance of the sampling in June 2006 and August 2007, AES solicited from ACOE copies of data for other dredge projects in the POB; specifically, the types and magnitude of sampling required for permitting purposes and dredging methods allowed in issued permits. AES is aware that of 23 large dredge projects in the POB for which copies of the permits and environmental sampling data were solicited; none were required to gather dredge quality data for purposes of a permit application. Further, of the limited permit copies provided by the ACOE (six permits), none had environmental bucket, silt curtains, or other similar controls imposed on the projects. AES recognizes the dredging associated with the LNG Terminal is larger in single (not cumulative) magnitude than other projects in the POB and, accordingly, has pledged in its filings to use appropriate controls where warranted. As indicated in Section 4.3.2.4, dredging of the shallow sediment has the potential for disturbance of sediment with poorer chemical quality; however, sediments of this quality have been dredged in the POB previously (and in late-2006 in the same footprint proposed by AES) without the degree of sampling that has been required here, and without the dredging controls contemplated for application to the Project (the permit issued for the dredging performed in late-2006 also allowed for hydraulic dredging). In evaluating input

AES1-3-7 Section 3.2.5 of the FEIS has been updated with the correct section reference as noted.

AES1-3-8 FERC appreciates AES' commitment to use an environmental bucket (or equivalent). FERC staff have consulted with COE and EPA. The COE is the authorizing agency under Section 10 of the Rivers and Harbors Act of 1899 for work (including dredging) or structures in, over, or under navigable waters and under Section 404 of the Clean Water Act of 1972 for the discharge of dredged or fill material (including filling and grading activities) into waters of the United States (including jurisdictional wetlands). In addition to adherence to all applicable federal, state and local laws, regulations and standards, AES would have to adhere to any conditions that may be attached to the COE permit approved/issued.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

and agency recommendations on potential controls, AES requests that the FERC Staff look to ensure that AES is treated consistently in these agency recommendations with other routine dredging that occurs in the POB almost every day.

3-9. Section 3.3.3; Page 3-45; Paragraph 4: "The SHA reviews this information and if final recommendation is to proceed, a letter is sent to the Federal Highway Administration (FHWA) for their review and concurrence. The exception process is expected to take about 3 to 5 months from submittal."

AES1-3-9 AES Comment: As of June 12, 2008, AES had not received any indication from SHA as to the decision on its Exemption Application that was filed on December 12, 2007. In the Application, AES presented three potential routes for location of the Pipeline. Two of the routes required SHA's approval for use thereof. The third route did not require SHA approval. AES will inform FERC of the SHA decision once it is provided.

3-10. Section 3.3.3; Page 3-46; Paragraph 9: "Mid-Atlantic Express also stated in its November 2007 filing that in its consultations with the SHA, that the SHA indicated that Route Variation 1A was preferred to the proposed route. Mid-Atlantic Express indicated it would apply for its SHA exceptions to the Utility Policy in December 2007. To date, we are not aware that the SHA has issued a decision."

AES1-3-10 AES Comment: See Comment 3-9. [Section 3.3.3; Page 3-45; Paragraph 4]. Also, the information relative to AES consultations with SHA stated in this section is correct with one clarification. Where it is stated that Mid-Atlantic Express "indicated it would apply". AES clarifies that Mid-Atlantic Express did indeed apply to SHA for exception to the Utility Policy on December 12, 2007. AES requests that this update be reflected in the FEIS.

3-11. Section 3.3.3; Pages 3-55, 3-60, and 3-62; Figures 3.3.3-5, 3.3.3-8, and 3.3.3-9: These figures present the preferred route and Variations 6, 9, and 10.

AES1-3-11 AES Comment: There are call-out boxes included in these figures that inadvertently are missing text labeling for limited portions of the Mid-Atlantic Express Pipeline Route. AES is providing graphic content to rectify the missing labels in order to provide better figures for the FEIS.

3-12. Section 3.3.3; Page 3-61; Paragraph 3: "In addition, it appears that some structure, includes homes, have been constructed abutting the existing right-of-way, which would leave little space for the construction of a new pipeline."

AES1-3-12 AES Comment: This should be re-worded in part to state "... some structures, including homes, have been constructed . . ."

AES1-3-9 In appendix B of its comments on the DEIS, the State of Maryland (see Accession No. 20080616-5079) has indicated that the Maryland State Highway Administration (SHA) has denied the AES request for an exception to the SHA Utilities Policy. See revised section 3.3.3.

AES1-3-10 Please see response to comment AES1-3-9.

AES1-3-11 See updated figures 3.3.3-5, 3.3.3-8 and 3.3.3-9.

AES1-3-12 This typographical error in section 3.3.3 has been corrected.

SECTION 4 – ENVIRONMENTAL ANALYSIS

4-1. Section 4.1.1.1; Page 4-7; Paragraph 3: “These readings may not be representative of ground water conditions due to the lack of well pumping or bailing prior to obtaining the groundwater readings.”

AES Comment: The ground water elevation measurements were collected from cased boreholes during the course of the geotechnical investigation, without the installation of monitoring wells or piezometers. Measurements were collected from multiple test bore locations across the site following a period of equilibration within the test bore (typically overnight). Accordingly, the measurements should be representative of approximate groundwater elevations, and AES requests that the FEIS note this.

4-2. Section 4.1.1.1; Page 4-7; Paragraph 4: “Southwest of the terminal site, a graving dock operates groundwater pumps that depressed the local water table up to 20 feet.”

AES Comment: To the knowledge of AES, the graving dock remains active today and the reference to this in the FEIS should be modified to “depresses” instead of “depressed.”

4-3. Section 4.1.1.1; Page 4-7; Paragraph 6: “Geotechnical testing performed on soil cores included measurements of soil settlement characteristics, bearing capacity, dynamic loading response and other foundation design related factors.”

AES Comment: In the Flooding and Groundwater section, Paragraph 6 refers to the offshore geotechnical vibrocore sampling program, objectives and results, but this final sentence refers to the onshore geotechnical testing objectives for the Terminal Site. The FEIS should be modified to correct this.

4-4. Section 4.1.1.2; Page 4-9; Paragraph 4: “periodic meetings between affected landowners and M.A.E., as needed, to provide relevant information to the landowners, either as a scheduled group meeting or individual;”

AES Comment: The M.A.E. acronym is not defined in the DEIS. AES suggests the reference be changed to “Mid-Atlantic Express”.

4-5. Section 4.1.1.2; Page 4-11; Paragraph 1: “Shallow bedrock soils and heavy vegetative cover at these crossings indicate a low potential for slope failure during construction.”

AES Comment: The mapped soil resources indicate a relatively thin soil layer; therefore, for clarity, this statement should be modified in the FEIS to refer either to shallow bedrock or thin layer of soils.

4-6. Section 4.1.1.2; Page 4-11; Paragraph 3: “A review of this detailed localized mapping identified only one specific mapped feature in this zone present along the project

AES1-4-1

AES1-4-1 Groundwater levels detected in boreholes approximates the depth to groundwater.

AES1-4-2

AES1-4-2 All sections of the FEIS that contain discussions related to the graving dock have been updated to reflect its active state as appropriate.

AES1-4-3

AES1-4-3 Section 4.1.1.1 subsection Flooding and Groundwater has been updated.

AES1-4-4

AES1-4-4 The reference made to M.A.E. in section 4.1.1.2 subsection Blasting has been changed to Mid-Atlantic Express.

AES1-4-5

AES1-4-5 Section 4.1.1.2 subsection Landslides has been updated to reflect the suggested modification.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

area, a potential depression at MP 80.4 in the town of Downingtown was present and mapped as a potential karst feature.”

AES1-4-6 AES Comment: This feature identified on the localized mapping was a *potential* depression. No evidence of the feature was observed in the field during surveys. To ensure accuracy of the reference and observed conditions, the statement should be revised in the FEIS to “...in the Town of Downingtown was mapped as a potential karst feature.”

4-7. Section 4.2.1; Page 4-13; Paragraph 4: “In addition, the sample analyses from a previous investigation at Sparrows Point in 2005 (samples GZ-15S, T-7 and T-9) were made available for comparison.”

AES1-4-7 AES Comment: In this statement it should be clarified in the FEIS that from the extensive previous site investigation data at Sparrows Point in 2005, only these three samples GZ-15S, T-7 and T-9 are summarized as they contained detections above the Maryland soil cleanup standards for protection of groundwater or non-residential cleanup values for SVOCs or PCBs. The 2005 previous investigation included over seventy soil sample locations.

4-8. Section 4.2.1; Page 4-16; Paragraph 2 and Page 4-17; Paragraph 1: “AES has filed a “Potentially-Contaminated Soils Management Plan.” Although this plan has addressed some of the issues necessary to protect the workers at the site and the public from construction involving potentially contaminated soils, the FERC staff finds that some items are missing or lacking detail. This includes:

- adding ranges of SVOCs, PCBs, and metals that have been detected;
- specify an 11.7eV probe if PID is to be used;
- since a PID will not detect low concentrations of SVOCs, PCBs, and metals in soils, field test kits should be used in the sampling program; and
- state that all soils from areas with documented exceedances will be handled as contaminated.

Therefore, we recommend that:

Prior to construction, AES file an amended “Potentially-Contaminated Soils Management Plan” with the Secretary. This amended plan should be developed in consultation with the appropriate agencies and should include:

- a. ranges of detected concentrations of SVOCs, PCBs, and metals;
- b. use of an 11.7eV probe photo-ionization detector;
- c. use of field test kits to detect low concentrations of SVOCs, PCBs, and metals in soils; and
- d. a commitment that all soils from areas with documented exceedances should be handled as contaminated.”

AES1-4-6 See revised section 4.1.1.2 subsection Karst Topography and Subsidence.

AES1-4-7 See the revised text in section 4.2.1.

AES1-4-8 AES Comment: AES confirms that the soil and Potentially-Contaminated Soils Management Plan will be amended in consultation with appropriate agencies, as needed. However, two of the summary statements and recommendations should be modified in the FEIS to state as follows:

AES1-4-8a b. use of an 11.7 eV probe photo-ionization detector (or organic vapor monitor with flame ionization detector);

AES1-4-8b c. use of field test kits to detect low concentrations of SVOCs, PCBs, and metals (or laboratory analysis to characterize excavated, segregated or stockpiled soils)

These two modifications are intended to ensure that workers at the site and the public are protected from construction involving potentially-contaminated soils in accordance with the Plan's intent. The other two recommendations (a. and d.) will be incorporated into the revised "Potentially-Contaminated Soils Management Plan".

4-9. Section 4.2.2; Page 4-17; Paragraph 5: "Because of the extensive operational experience of LNG shipping, the structural LNG vessel design, and the navigational safety and security controls further described in section 4.12, the above marine LNG spill scenarios are not high probability events that would impact soil resources along the waterway for LNG marine traffic."

AES1-4-9 AES Comment: Given the summary of information presented in this section, and to maintain consistency with the prior paragraph, the likelihood of spill scenarios should be modified in the FEIS to "low probability", rather than "not high probability."

4-10. Section 4.2.3; Page 4-18; Paragraph 5: "Beltsville-Croom-Leonardtown (MD-002) – This association... Approximately 12.2 percent of the pipeline crosses this soil association."

AES1-4-10 AES Comment: To ensure accuracy of the soils data references, the percentage of the Mid-Atlantic Express Pipeline crossing the Beltsville-Croom-Leonardtown should be modified in the FEIS to 3.3 percent.

4-11. Section 4.2.3; Page 4-20; Table 4.2.3-1; Data Entry Line 1 under Lancaster Co. heading: "MP 48.1-49.2 Chrome-Conowingo-Nashminy Yes No No No"

AES1-4-11 AES Comment: To ensure accuracy of the soils data, this (first) data entry line on Page 4-20 of Table 4.2.3-1 under the Lancaster Co. heading, as listed above, should be deleted in the FEIS.

4-12. Section 4.2.3; Page 4-20; Table 4.2.3-1; Data Entry under Lancaster Co. heading: "MP 49.2-70 Chester-Glenelg-Manor No No No Yes"

AES1-4-12 AES Comment: To ensure accuracy of the soils data, this data entry on page 4-20 of Table 4.2.3-1 should be modified in the FEIS. The MP reference should be changed to "49.2-56.3".

4-13. Section 4.2.3; Page 4-20; Table 4.2.3-1; Data Entry under Chester Co. heading

AES1-4-8 Comment noted.

AES1-4-8a See revised text in section 4.2.1.1.

AES1-4-8b See revised text in section 4.2.1.1.

AES1-4-9 Section 4.2.2 has been revised. The revised text does not change the overall meaning and purpose of the statement.

AES1-4-10 The percentage of the Mid-Atlantic Express pipeline crossing of the Belts-Croom-Leonardtown soil series has been updated to 3.3 percent.

AES1-4-11 See updated table 4.2.3-1.

AES1-4-12 See updated table 4.2.3-1.

AES1-4-13 AES Comment: To ensure accuracy of the soils data, an additional row of data should be added into Table 4.2.3-1 in the FEIS, directly below the Chester Co. heading above the line for MP 70.4-72.1. The inserted line of soils data should be:

“56.3-70.4 Chester-Glenelg-Manor No No No Yes”

4-14. Section 4.2.3; Page 4-20; Paragraph 2: “These facilities would permanently impact about 0.2 acre of prime farmland soils.”

AES1-4-14 AES Comment: The above-ground valve facilities referenced in this sentence affect either prime farmland (0.05 acres) or farmlands of statewide importance (0.15 acres). In the FEIS this should be clarified for consistency with the rest of the section (other areas of farmlands of statewide importance are identified in the summary).

4-15. Section 4.2.3; Page 4-21; Paragraph 4: “Thus the potential impacts of compaction would be minimized in residential areas.”

AES1-4-15 AES Comment: AES will undertake efforts to minimize the potential impacts of soil compaction as summarized in the DEIS. However, the FEIS should be clarified to state that for any impacts that might occur, restoration measures will also undertaken to mitigate such impacts. This sentence should therefore state that impacts will be “minimized or mitigated in residential areas.”

4-16. Section 4.3.1.1; Page 4-28, Paragraph 8: “Construction of the pipeline would create ground disturbances, and thus potential groundwater impacts at depths no greater than six feet below the existing surface, with the exception of HDD segments.”

AES1-4-16 AES Comment: As indicated in Resource Report 2, *Water Use and Quality*, filed with the FERC, AES requests that in the FEIS this sentence read: “Construction of the pipeline would create ground disturbances, and thus potential groundwater impacts at depths no greater than seven feet (minimum of three foot of cover over a thirty inch pipe, in most areas and four feet in agricultural areas) below the existing surface, with the exception of segments installed utilizing trenchless construction techniques (HDD, Jack-and-Bore, etc) or areas where existing grade requires deeper excavation.”

4-17. Section 4.3.2.2; Page 4-31; Paragraph 6: “The LNG Terminal would be situated on Sparrows Point along the Patapsco River. MDE (2005) has designated the Patapsco River is as Classification II for Tidal Water indicating migratory spawning and nursery use (February 1 through May 31), shallow water submerged aquatic vegetation use (April 1 through October 30), open water fish and shellfish use (January 1 through December 31), seasonal deep water fish and shellfish use (June 1 through July 30), and seasonal deep channel refuge (June 1 through September 30).”

AES1-4-17 AES Comment: The FEIS should note that the area of proposed dredging and construction is devoid of submerged aquatic vegetation and shellfish use. Biological studies conducted by AES show that the area immediately offshore of the Terminal Site is utilized mainly by highly mobile transient fin-fish species as noted in Resource Report 3, *Vegetation and Wildlife*.

AES1-4-13 See updated table 4.2.3-1.

AES1-4-14 Section 4.2.3.1 has been revised as follows, "These facilities would permanently impact about 0.2 acre of soils classified as prime farmland or farmland of statewide importance."

AES1-4-15 Section 4.2.3 subsection Compaction Potential and Mixing has been updated to reflect AES's commitment to the undertaking of restoration measures to mitigate any soil compaction impacts that may result from construction of the pipeline. As a result, the last sentence of this section has been revised to read, "Thus the potential impacts of compaction would be minimized or mitigated in residential areas."

AES1-4-16 Comment noted.

AES1-4-17 Comment noted.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

4-18. Section 4.3.2.3; Page 4-34; Paragraph 1: "Octoraro Lake supplies water to Chester County, Pennsylvania. The lake is about 0.2 mile north (upstream) of the proposed pipeline route at approximately MP 56. However, the pipeline crosses Tweed Creek at MP 56.93 and Leech Run at MP 58.09, both of which flow west into Octoraro Lake. The Tweed Creek crossing is within 2000 feet of the lake and the Leech Run Crossing is within 4000 feet of the lake. Thus, during pipeline construction, accidental hydrocarbon spills within these two creek basins could enter Octoraro Lake. The water intake for the Chester Water Authority in Octoraro Lake is northwest of pipeline MP 56.6; it is just below the confluence of the impounded East and West branches of Octoraro Creek."

AES1-4-18 AES Comment: In this section of the FEIS, AES suggests that reference be made to the AES SPCC Plan that has been developed to avoid or minimize the potential for spills of hydrocarbons associated with construction of the Project.

4-19. Section 4.3.2.4; Page 4-35; Paragraph 1: "Each sample was submitted under an intact chain of custody to a Maryland certified laboratory for the analysis of organic and inorganic parameters in accordance with EPA promulgated methods for VOCs; (EPA Method 8260B), SVOCs (EPA Method 8270C), chlorinated pesticides and PCBs (EPA Method 8081A), priority pollutant metals (EPA Methods 6020A), and total cyanide (EPA Method 9012). Additional parameters of analysis included tributyl tin by VIMS Method 338, Total Organic Carbon (TOC) by ASTM Method D5373, and hexavalent chromium (Cr6+) by EPA Method 7196A. Tributyl tin and hexavalent chromium were analyzed based on community input received relative to sediment quality and industrial practices in the area."

AES1-4-19 AES Comment: Dioxins were also analyzed in the June 2006 sampling effort using EPA Method 8290. AES recognizes that the FERC Staff has included discussion of the dioxin results later in this DEIS Section, but the summary of analyses described in this paragraph is missing this one category of compounds. For completeness, AES suggests that a reference to dioxins be included here as well.

4-20. Section 4.3.2.4; Page 4-35; Paragraph 6: "Current AES plans do not call for this area to be dredged, since the turning basin and the unloading platform have been relocated further to the north. PAH compounds did not exceed the PELs within any of the four vibracores sampled at depth (figure 4.3.2.4-4);"

AES1-4-20 AES Comment: This statement suggests that AES's plans may change. In the FEIS, it should be amended slightly to read as follows: "However, AES's plans do not call for this area to be dredged, since the turning basin and the unloading platform have been relocated further to the north. PAH compounds did not exceed the PELs within any of the four vibracores sampled at depth (figure 4.3.2.4-4)."

4-21. Section 4.3.2.4; Page 4-39; Paragraph 2: "tributyl tin was detectable in 10 of the 16 samples, but exceeded 10 nanograms/gram (ng/g) in only four samples. The maximum

AES1-4-18 Section 4.3.2.3 has been updated to include a reference to the SPCC Plan.

AES1-4-19 Section 4.3.2.4 has been updated.

AES1-4-20 Section 4.3.2.4 has been updated.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

value of 75 ng/g was recorded for core HA-115, a shallow sample, collected approximately 800 feet south of Pier 1 and the existing dry dock”

AES1-4-21 AES Comment: FERC Staff has appropriately noted in other places of this Section the sample locations that are inside as opposed to outside the planned dredge area. AES requests this also be recognized in the FEIS relative to this bullet statement about tributyl tin and sample location HA-115, which is located south of and outside the current planned dredge area.

4-22. Section 4.3.2.4; Page 4-40; Figure 4.3.2.4-2 – Sediment Analytical Results, Shallow Samples June 2006.

AES1-4-22 AES Comment: The sediment results call-out boxes located in the lower left-most portion of the figure appear to be missing a link to the sediment sample location to which the results apply. Further, it appears there may be two call-out boxes overlapping one another.

4-23. Section 4.3.2.4; Page 4-43; Paragraph 3: “Within the 2006 samples collected by AES, there are apparent depth related trends for all PAH compounds and metals. For most measured constituents, the maximum values were recorded in the shallow samples (0 – 2 feet). The exceptions were for bis (2-ethylhexyl) phthalate and pyrene, for which maximum concentrations were measured in intermediate samples (2 – 10 feet). For the deep samples (>10 feet), all PAH compounds were non-detectable. All metals in the deep samples essentially reached background levels for marine sediment; that is, the maximum concentrations were at or below levels of metals concentrations measured in the fine particles (silt and clay) of nearshore, non-contaminated sediments (Wedepohl, 1960). Thus, there is a strong correlation of increasing contamination from deeper sediments (deposited many years ago) to shallower sediments (deposited more recently). Below 10 feet in the sediments, there is little or no evidence of contamination in the Sparrows Point nearshore sediments.”

AES1-4-23 AES Comment: There have been comments submitted to FERC or made in public forums on the Project that describe sediment at depth as being of similar or poorer chemical quality than the sediment at the surface of the profile. AES appreciates FERC’s independent and objective evaluation of the data collected for the Project, comparison to other unbiased sources of data for the POB, and conclusion that the actual sediment profile is consistent with what has been stated by AES in its written submittals to FERC and other agencies; namely that sediment contains a greater contaminant load in the shallower surface sediments, and concentrations decrease with depth such that below 10-foot depth in the sediment profile they are relatively free of contaminants. FERC staff should consider highlighting this point in the FEIS.

4-24. Section 4.3.2.4; Page 4-44; Paragraph 9: “Elutriate testing is a method developed by EPA and used by the COE to test sediments for suitability for ocean disposal and also for so-called inland disposal (EPA and COE, 1991). It is a procedure to determine the amount of chemical constituents that are released to the water column when sediments are mixed with water. AES performed elutriate testing on four sets of sediment composites collected from the Sparrows Point nearshore sediment vibracores in June 2006. AES also conducted elutriate testing on all 12 sample cores collected in August 2007.”

AES1-4-21 The bullet pertaining to tributyl tin in section 4.3.2.4 subsection Chemical Analysis, June 2006 Samples - Analytical Results has been updated to identify the sample location (HA-115) with respect to the planned dredge area.

AES1-4-22 See revised figure 4.3.2.4-2.

AES1-4-23 Comment noted.

AES1-4-24 AES Comment: As indicated in Comment 3-8 [Section 3.2.7.1; Page 3-29; Paragraph 5], information was solicited from the ACOF on sediment sampling results associated with other projects recently permitted for dredging in the POB. In addition to a relative absence of chemical quality information on sediment itself for these other projects, it also appears that elutriate testing has not been required routinely for other dredge projects, which could be in the FEIS.

4-25. Section 4.3.2.5; Page 4-53; Paragraph 2: “We expect that the results of these modeled impacts from tug propeller wash can also be applied to dredging activities in a general sense.”

AES1-4-25 AES Comment: The Propeller Wash Sediment Impact Study (“PWSI Study”) performed by AES and delivered to FERC in Appendix 2G of Resource Report 2, *Water Use and Quality*, estimated erosion rates based on the disturbance to bottom sediments caused by large, high-powered tugs. The force applied to create the disturbance, i.e., a propeller, is significantly different in all respects to the disturbance caused by dredging. Because the disturbance caused by dredging is passive and vertical in nature, as opposed to active and multi-directional in nature, the impacts modeled in the PWSI Study *should not* be applied to dredging activities other than to posit that the disturbed sediments would not affect Bear Creek. In its May 7, 2007 and August 15, 2008 responses to MDE’s Data Requests, which were also filed at FERC, AES provided the information below that more accurately assesses potential impacts than the PWSI Study:

AES1-4-25a AES evaluated the potential for siltation from dredging and impact on biotic resources in the general area of the LNG Terminal. The Fort Carroll oyster reef restoration project, or Project 64, is an education-based oyster reef restoration project on upper Chesapeake Bay oysters (NOAA 2006) that is located about 1,500 feet away from the closest area proposed to be dredged (West Northwest from the approach channel). Multiple studies (Borrowman (2006), Dredge Research, Ltd. (2003), Tubman & Corson (2000) and Collins (1995)) have reported turbidity plumes may be generated from dredging activities; dredging from clamshell, hydraulic, and hopper dredging within soft sediments are highest within the dredge site and decrease with distance away from the site. These studies furthermore determined that at a distance of about 400 meters (1,200 feet) or greater away from the dredge site, turbidity levels were generally negligible and had little to no impact on oyster bed survival and growth (Kennedy and Breisch 1981). Given that the closest point of any dredging activity to the oyster restoration site is at least 1,500 feet away from the dredging site, it is anticipated that there will be no negative impacts on the Ft. Carroll oyster restoration project.

AES1-4-25b The dredging activity will be conducted at a distance and downstream from Bear Creek, and the foregoing demonstrates that no redeposit activity should be anticipated to occur in the vicinity of Bear Creek. AES requests that the FEIS include this clarification.

4-26. Section 4.3.2.5; Page 4-53; Paragraph 2: “In researching a related matter, AES conducted modeling related to the re-suspension of sediments and the dispersion and

AES1-4-24 Comment noted. Please see response to comment AES1-3-8.

AES1-4-25 See revised section 4.3.2.5.

AES1-4-25a FERC has reviewed and analyzed the information provided in data responses to the MDNR filed with the FERC. See revised section 4.6.2.2.

AES1-4-25b Comment noted.

settling of sediments related to the use of tugs at the LNG terminal (*Sparrows Point LNG Terminal – Propeller Wash Sediment Impact Study, October 2006*).”

AES1-4-26 AES Comment: AES requests that FERC Staff provide additional detail in the FEIS relative to the modeling performed in order to put the conclusions stated in a clearer context. As shown in Figure 4.3.2.5-1, the location of simulated prop-wash was placed in the upper reaches of the facility turning basin. In addition, the simulation utilized relatively high erosion rates under a full power tug operation at this location. The combination of these factors allowed a very conservative evaluation of the potential effect of suspended sediment into Bear Creek. Therefore, the conclusions stated in the DEIS about the relatively limited impacts that may result evolved from conservative factors utilized in the model. A reasonable extension of the conclusions stated would be that actual impacts likely to result should be less than those simulated by the model. AES requests that the FEIS include this conclusion.

AES1-4-26 Comment noted.

AES1-4-26a

AES1-4-26a Comment noted.

4-27. Section 4.3.2.5; Page 4-53; Paragraph 6: “Approximately 7,613 CY of material would be produced daily and continue for about 24 months, with a dredging season of approximately 243 working days in a dredging year. Scows and containers used to collect dredge spoils would be of solid hull construction and would be completely sealed and watertight to avoid releases of spoils. See section 4.6.3 for additional discussion of different dredges relative to turbidity. Dewatering of dredge spoils would occur at the DMRF located on 5 acres of the upland portion of the terminal facility. The raw dredged materials would be transformed into PDM and transported to the 30-acre temporary PDM storage area, south of the LNG Terminal site. The total capacity of the storage area is 870,000 CY, based on material stockpiling with 3:1 side slopes to a height of 20 feet. AES proposes to ship PDM offsite at an average rate of approximately 5000 CY per day, 365 days per year. In the event the PDM cannot be removed at this rate, a contingency plan would be implemented whereby additional upland storage adjacent to the DMRF may be utilized, the rate of dredging may be modified, the haul away capacity may be modified, or other measures specific to the facility design and/or location of upland disposition would be implemented which would be determined at the time of final design and construction. The DMRF and the temporary PDM area would be paved with stormwater management controls linked to existing facilities.”

AES Comment: To provide a more accurate description, AES requests that this paragraph be amended in the FEIS as follows:

AES1-4-27 Approximately 10,000 ~~7,613~~ CY of material would be produced daily and continue for about 24 months, with a dredging season of approximately 243 working days in a dredging year. Scows and containers used to collect dredge spoils would be of solid hull construction and would be completely sealed and watertight to avoid releases of spoils. See section 4.6.3 for additional discussion of different dredges relative to turbidity. **The DMRF will occupy approximately five acres of the 15 acres of upland property located immediately to the south of the Terminal Site (see Figures 1-5 and 1-6). The DMRF will consist of two systems processing in parallel, each of which will include hoppers, conveyors, pugmills for mixing additives, and stacking**

AES1-4-27 The approximate amount of dredge material produced on a daily basis has been updated from 7,613 to 10,000 CY.

AES1-4-27a

AES1-4-27a The description of the DMRF in section 4.3.2.5 has been updated to that described by the applicant.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

equipment. Dewatering of dredge spoils would occur at the DMRF located on 5 acres of the upland portion of the terminal facility. The proposed dewatering process would involve dewatering of loaded barges at the dredging site or the DMRF. Loaded scows would be allowed to settle so that the free-liquid portion would be visibly free of suspended sediments prior to pumping the decant water to the cargo area of a dedicated dewatering barge. After settling, the decant water will be discharged within the area of dredging after testing for suspended solids or as required by permits. Alternately, after the initial barge settling period, portable pumps will be utilized to pump the water to land based tanks (i.e. frac tanks) for additional settling. All decant water from dewatered dredged material at the DMRF will pass through a settling tank system and filter prior to discharge back to the harbor. The raw dredged materials would be transformed into PDM and existing site roadways will be used to transport the PDM from the pugmill processing system to the temporary PDM storage area. The temporary PDM storage area will consist of an approximately 10-acre area (within the 15-acre upland area) covered by bituminous paving, or lined with a 10-mil high density polyethylene ("HDPE") liner covered by 6- to 12 inches of existing site soil or imported soil. An additional area, approximately 20 acres in size, is available for use as a contractor yard for LNG Terminal construction or to support the DMRF facility, as needed for PDM or equipment storage. transported to the 30-acre temporary PDM storage area, south of the LNG Terminal site. The total capacity of the storage area is 870,000 CY, based on material stockpiling with 3:1 side slopes to a height of 20 feet. The storage area at the DMRF (graving dock location) will be capable of storing up to 192,000 CY of processed dredged material. The additional storage area will be capable of storing up to 640,000 CY of processed dredged material, based on 3:1 side slopes to a height of 20-feet. AES proposes to ship PDM offsite at an average rate of approximately 5000 CY per day, over a 36-month period to estimate the expected truck volumes and emissions associated with those trucks over this period of time. In the event the PDM cannot be removed at this rate, a contingency plan would be implemented whereby additional upland storage adjacent to the DMRF may be utilized, the rate of dredging may be modified, the haul away capacity may be modified, or other measures specific to the facility design and/or location of upland disposition would be implemented which would be determined at the time of final design and construction. The DMRF and the temporary PDM area would be paved with stormwater management controls linked to existing facilities. The AES Consolidated Dredge Plan addresses contingencies in the event PDM cannot be removed at this rate.

AES submits that all of these amendments are appropriate in order to reflect the content of both AES' originally filed Resource Report information on the dredge management process, information subsequently filed in response to Data Requests on dredge management, and information sought in the DEIS to aggregate all of this information in one Consolidated Dredge Plan.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

4-28. Section 4.3.2.5; Page 4-55; Paragraph 7 to Page 4-56; Paragraph 1: "AES indicates that their dredging actions would increase oxygen levels in the area by increasing water circulation through widening and deepening the existing channel of the old Bethlehem Shipyard and connecting it with the deeper channels of the Patapsco River and the downstream Chesapeake Bay. Although the FERC staff does not necessarily agree that this would be the outcome, the additional channelization would probably result in a similar habitat and water chemistry as that of adjoining channels such as the Brewerton Channel. If the Brewerton Channel has periods of low dissolved oxygen, then the proposed approach channel and turning basin would probably experience these same periodic depressed dissolved oxygen levels."

AES1-4-28 AES Comment: AES submits that the FERC Staff's analysis does not take into consideration considerable water quality data that have been collected within the Baltimore Harbor and Patapsco River and actual experience with dredging operations in the area. As to the latter, the DEIS correctly notes at Pages 4-52 to 4-53 that "Previous dredging operations conducted in the area by COE indicated that dredging would not cause a decrease in dissolved oxygen." As to the former, existing conditions within Baltimore Harbor and Patapsco River have warranted a low Index of Biological Integrity ("IBI") rating. Very low dissolved oxygen ("DO") levels have been attributed to weak circulation patterns and the presence of pollutants from upland sources (e.g., phosphorous and nitrogen), and chemical contaminants within the upper surface layers of the sediments from a variety of potential sources, including wastewater discharges and nutrient loadings. Low DO levels are most pronounced during summer months and within deep water areas.

AES1-4-28a AES has posited that the proposed dredging will *temporarily* disturb sediment-bound contaminants. As noted above, testing indicates that the re-suspension will not produce acute or chronic impacts in biotic species in the area. The re-suspension will, however, temporarily increase the mass of sediment-bound chemical contaminants in contact with surface water thereby potentially reducing DO levels temporarily. These sediment-bound contaminants (e.g., phosphorus and nitrogen from upland sources and compounds such as PAHs detected in sampling performed for the proposed dredging project), that are documented in data supplied by AES to FERC, the ACOE and MDE, and in historical studies conducted in other parts of the Patapsco River and Baltimore Harbor, have a propensity to combine with oxygen, thus removing the oxygen from the water. Further, contaminant concentrations in sediment have been demonstrated to be higher in shallower sediments and, with very limited exceptions, intermediate and deep samples approach background concentrations for the Patapsco River (DEIS Section 4.3.2.4). Therefore as dredging progresses deeper the potential for chemical oxygen demand as a result of re-suspension during dredging should decrease and contaminants in shallow sediments that contribute to low DO over the long-term will have been removed within the dredged area. In other words, decreased DO levels will be temporary and limited in scope to the areas in the immediate vicinity of the dredge activity; the long-term benefit of removing contaminants so that they do not remain available for potential depression of dissolved oxygen outweigh these short term impacts.

AES1-4-28b

As AES explained in Resource Report 2, *Water Use and Quality* (Section 2.4.8.2), dredging will create bathymetry that will be better suited to a consistent (rather than interrupted) water

AES1-4-28 Comment noted.

AES1-4-28a Comment noted.

AES1-4-28b Comment noted.

AES1-4-28c

circulation flow pattern. This pattern, and removal of contaminated sediment (which generates chemical oxygen demand), will improve conditions for deep water DO levels to be maintained at or above the designated criteria for the Patapsco River. AES concurs that the area may still be subject to seasonally depressed DO concentrations; however, the net impact of the proposed dredge program will improve conditions over their current state.

AES1-4-28c Comment noted.

AES1-4-28d

Finally, Baltimore Harbor already has deep-draft channels that are tuned to specific cargos and terminals. For example, channels that serve vessels and marine terminals handling sugar, gypsum, salt, containers, roll-on roll-off farm machinery and construction equipment, and vehicles are between 35 and 42 feet in depth. The deepest access channels are those that serve bulk cargo carriers and marine terminals handling petroleum, coal, and iron ore. These channels are 49 or 50 feet deep, pass the Sparrows Point Peninsula, and extend into the Fairfield and Canton areas of the Inner Harbor. The southern end of the Sparrows Point Peninsula is served by an access channel that regularly receives bulk carriers arriving and departing carrying coal, coal coke, iron ore, limestone, and other aggregates. Rukert Terminals, a private terminal just east of Lazaretto Point in the Inner Harbor, is now constructing a new wharf and dredging a 45-foot berth to accommodate bulk ships. The private CNX coal pier east of Rukert Terminals regularly handles coal ships drawing 47 feet of water. Also, the Maryland Port Administration's ("MPA") most recent strategic plan places great emphasis on the growth of cargo business in the POB. MPA recognizes that modernization of facilities, including efforts to improve channels and terminals to accommodate larger, deeper draft vessels, is a key component to survival and growth in a competitive market. It is clear from these examples that even were dredging to result in permanent low DO levels (as would be the case with Inner Harbor dredging where circulation patterns are not improved as with the proposed AES dredging), public and commercial benefits may be seen to outweigh any negative impacts.

AES1-4-28d Commented noted. See revised section 4.9.4.2.

AES respectfully requests that this additional information and analysis be reflected in this section of the FEIS.

4-29. Section 4.3.2.5; Page 4-56; Paragraph 8: "Since the bulk chemistry analyses of sediments exceeded the EPA PEL of 0.696 μ g/kg for mercury at 4 of the 9 surface samples (0-2 ft depth) analyzed and at 1 of the 4 intermediate samples (2 - 10 ft depth), there is some potential for mobilizing mercury into the water column, at least temporarily, during dredging. AES was instructed by the COE in August of 2007 to perform additional sampling and analysis of contaminants for the areas to be dredged in order to provide a more complete picture of the concentrations and distribution of contaminants, including mercury. AES has provided these additional samples and we have reviewed the analytical results and have commented on the results in this EIS."

AES1-4-29 Comment noted.

AES1-4-29

AES Comment: The FEIS should specifically note in this section that AES performed the additional sampling requested by the ACOE in August 2007. Mercury was detected at the shallow interval samples at core locations HA-116 and HA-117 at concentrations of 0.6 and 1.3 g/kg, respectively. Only the sample from HA-117 exceeds the EPA PEL of 0.696 g/kg for mercury. It is assumed that the remainder of the areas where mercury was previously detected correlate to the area that was dredged by BWI under their existing permit in January 2007 (such that the mercury previously found in the surface sample has been removed). As such any

20080619-0108 FERC PDF (Unofficial) 06/16/2008

temporary impacts related to re-suspension of mercury impacted sediments have been greatly reduced.

4-30. Section 4.3.2.6; Page 4-58; Paragraph 5: "In accordance with Coastal Zone Management Areas regulations, the redirection of the process area stormwater runoff would result an approximate 50% reduction of stormwater discharged to the Patapsco River."

AES1-4-30

AES Comment: AES requests that this section of the FEIS be expanded to include the following additional information. The State of Maryland Coastal Zone Management Area regulations require a 10 percent net reduction in stormwater runoff for re-development within an Intensely Developed Area. AES has made significant effort to exceed the requirements of the Coastal Zone Management regulations by designing the LNG Terminal to result in a net reduction of 50 percent of stormwater runoff generated at the Terminal Site.

AES1-4-30 Comment noted.

4-31. Section 4.3.2.6; Page 4-58; Paragraph 6: "Impacts from intake of boiler cooling and fire water would be similar to those described previously for ballast and ship boiler cooling water intake."

AES1-4-31

AES Comment: AES does not propose an intake for boiler water cooling at the Terminal Site. The FEIS should be corrected for this point.

AES1-4-31 See revised section 4.3.2.6.

4-32. Section 4.3.2.8; Page 4-62; Paragraph 6: "Additionally, surface water withdrawal would be coordinated with the Susquehanna River Basin Commission (SRBC), and AES and/or Mid-Atlantic would obtain a Permit to Appropriate and Use Waters of the State from the MDE. AES is evaluating an alternate water supply from the Baltimore County POTW or another public water supply; potential sources of hydrostatic test waters, including alternatives, would be evaluated upon completion of the final design."

AES1-4-32

AES Comment: During the DEIS comment period, AES has further consulted with the SRBC (Mr. Damian Zampogna), and provided the SRBC with information about the Project that was taken from its filings with the FERC, specifically including: the planned Pipeline Route across the Susquehanna River; Pipeline mapping across the basin area under SRBC jurisdiction; the hydrostatic test plan included in AES's filing with the FERC; and Project construction schedule information. Based on this consultation, SRBC has advised AES that it intends to review the Project relative to SRBC jurisdictional elements (withdrawal, consumptive use, diversion) and make final determinations of permit needs, but, based on the information provided to the SRBC, it is not requiring further consultation at this time. The SRBC has recommended that the Project re-contact the SRBC approximately 12 months prior to the construction and need for water from the Susquehanna River for hydrotesting in order to allow adequate time to complete the review and potential applications that may be required. AES was advised that the actual time needed for processing of the Project requirements by the SRBC may range from 6 to 12 months, but AES understands that the SRBC intends to communicate to the FERC Staff that 12 months prior to construction of the Pipeline should be used in order to be conservative. The FEIS should include the results of this additional consultation.

AES1-4-32 Section 4.3.2.5 subsection Pipeline Hydrotesting has been updated to reflect information provided AES during its consultation efforts.

4-33. Section 4.4.2.2; Page 4-71 to 4-72; Paragraph 7 to Paragraph 1: "If the LNG were to contact any wetland plants along the transit route, those species above the water line could be impacted by the extremely low temperatures."

AES Comment: The data response submitted by AES to FERC on April 5, 2007 indicated the various wetlands along the LNG vessel transit route. The nearest wetlands with species above the water line are approximately 2,576 feet from the expected ship track line, and approximately 1,288 feet from the edge of the main navigation channel. The Sandia Report indicates that the maximum credible release of LNG that did not immediately ignite as a result of the force that caused the breach would create a pool of LNG adjacent to the vessel. The maximum credible size of the LNG pool is estimated at 512 meters in diameter or approximately 840 feet from the side of the ship. Because the maximum pool size is less than the distance from the nearest point that the ship could approach the shore (and any wetlands), no wetland plants above the waterline would be affected. AES respectfully requests that all of this additional information and analysis be included in this section of the FEIS.

AES1-4-33

AES1-4-33 Section 4.4.2.2 has been updated based on additional information provided by the applicant in data response submittals.

4-34. Section 4.5.1; Page 4-76; Paragraph 3: "If an unignited marine LNG spill were to result in a pool that contacted any vegetation along the Chesapeake Bay and Patapsco River shorelines, plants (or portions of plants) could be killed by the extremely cold temperature."

AES Comment: See Comment 4-33 [Section 4.4.2.2; Page 4-71 to 4-72; Paragraph 7 to Paragraph 1] above.

AES1-4-34

AES1-4-34 Please see response to comment AES1-4-33.

4-35. Section 4.6.1.2; Page 4-83; Paragraph 3: "Operation of low- and high-pressure flares associated with operation of the proposed LNG terminal could pose a threat to birds that utilize tall structures as perches as well as to migrating birds that may inadvertently flythrough the plume of superheated gases. However, the risk of the flares to birds would be minimal and temporary since use of the flare would be limited to emergency situations. The risk can be reduced by installing perch guards on the flares to discourage or eliminate perching.

AES Comment: There are no flares at the proposed LNG Terminal; accordingly, the recommendation to install perch guards is not appropriate, and this language should therefore be omitted in the FEIS. This comment also applies to Item b of the Recommended Mitigations at the end of this section.

AES1-4-35

AES1-4-35 We have updated section 4.6.1.2 to reflect this information.

4-36. Section 4.6.3.2; Page 4-101; Paragraph 6: "Turbidity may also be increased during and after construction of the LNG terminal due to run-off after rain events."

AES Comment: AES has demonstrated that stormwater runoff would be *reduced* as a result of construction of the LNG Terminal. The LNG Terminal will occupy approximately 45 acres of upland area. Approximately 50 percent of the Terminal Site will be categorized as process area in which the associated storm water runoff will be collected and treated on site prior to discharge to the publicly-owned treatment works. The redirection of the process area storm water runoff will result in an approximately 50 percent *reduction* in storm water currently being discharged to the

AES1-4-36

AES1-4-36 See revised section 4.6.3.2.

Patapsco River; thereby greatly exceeding the requirement set forth in Maryland's Critical Area laws that there be a 10 percent net reduction in stormwater runoff re-development within an Intensely Developed Area. AES respectfully requests that this additional information and analysis be incorporated in this section of the FEIS.

4-37. Section 4.7.1.1; Page 4-111; Table 4.7-1 – Federally Listed Endangered and Threatened Species Potentially Occurring in the Project Area

AES1-4-37 AES Comment: The Genus name for the Fin Whale is misspelled (typo) it should be corrected in the FEIS to read *Balaenoptera physalus*.

4-38. Section 4.7.1.1 Page 4-112; Table 4.7-1 – Federally Listed Endangered and Threatened Species Potentially Occurring in the Project Area

AES1-4-38 AES Comment: The Species name for the Kemp's Riley Sea Turtle is misspelled (it should have 2 's) – *Lepidochelys kempi*. This correction should be made in the FEIS.

4-39. Section 4.7.1.1; Page 4-114; Table 4.7-2 – State Listed Endangered and Threatened Species Potentially Occurring in the Project Area

AES1-4-39 AES Comment: The Table should be edited in the FEIS to reflect the following changes in scheduled survey dates:

- Eastern blue-eyed grass - Yes/Spring 2008
- Ellisia - Yes/Spring 2008
- Hitchcock's Sedge - Yes/July 2007
- Umbrella Magnolia - Yes/Spring 2008
- Clammyweed - Yes/Summer 2008

4-40. Section 4.7.1.1; Page 4-119; Paragraph 11: "Whales that happen to be near an LNG spill may be unable to escape by submerging or swimming away and thus could be exposed to dangers associated with the "Zones of Concern" 1 and 2 (described in Section 4.12.5.3) such as a temperature drop from an LNG spill, fire, or vapor clouds."

AES1-4-40 AES Comment: AES submits that there is no scientific or other evidence in this record to support the assertion that whales could not submerge and swim away from any potential LNG spill. The draft of the LNG ships requires them to transit in deep water (see generally Comment 4-57 [Section 4.8.5.2; Page 4-163; Paragraph 4] that describes the transit of LNG ships through the main shipping channel in the Chesapeake Bay) where whales would have no difficulty going below the water surface. Accordingly, this preliminary conclusion should not be included in the FEIS.

4-41. Section 4.7.1.1; Page 4-120; Paragraph 5: "Kemp's Ridley Seat Turtle (*Lepidochelys kempi*)"

AES1-4-37 We have modified the table to reflect this.

AES1-4-38 We have modified the table to reflect this.

AES1-4-39 Table 4.7-2 has been updated to reflect this information with the exception of Umbrella Magnolia. Based on information provided by the applicant, a site visit was conducted for Umbrella Magnolia in August 2007 in the area identified by PDCNR. It was determined that Umbrella Magnolia was not present due to the lack of habitat and extensive disturbance. (November 14, 2008 Status Update, Accession No. 20081114-5112).

AES1-4-40 While whales certainly could submerge and swim away from a spill, some may be unable to do so. Therefore, we stand by our statement, but have modified the language to describe the possibilities more explicitly.

AES1-4-41 AES Comment: The Species name for the Kemp’s Riley Sea Turtle is misspelled (it should have 2 i’s) – *Lepidochelys kempi*. This correction should be made in the FEIS.

4-42. Section 4.7.1.1; Page 4-122; Paragraph 7: “All vessels associated with the construction project shall operate at “no wake/idle” speeds at all times when in the construction area and wile in water depths where the draft...”

AES1-4-42 AES Comment: There is a typographical error: “wile” should be “while.” This correction should be made in the FEIS.

4-43. Section 4.7.3.5; Page 4-133; Paragraph 4, First Sentence: “Seneca snakeroot (*Polygala senega*), a Maryland-listed threatened species, is known to occur near the proposed pipeline route crossing of Wildcat Branch within Gunpowder Falls State Park in Harford County (approximate MP 23.39) (MDNR, 2007a).”

AES1-4-43 AES Comment: The location note in the DEIS (“approximate MP 23.39”) appears to occur in a subdivision and *not* within the State park. AES is currently consulting with MDNR to determine if this is an error, or if the location should be between MP 22.2 and 22.3 (crossing of Gunpowder River and associated wetland habitat). The results will be provided to FERC when they become available. The last sentence of this section (Page 4-136) indicates that Mid-Atlantic Express is committed to conducting these surveys. AES initiated these surveys during Summer 2007 and expects them to be completed by Fall 2008 as indicated in Table 4.7-2. This updated status should be reflected in the FEIS.

4-44. Section 4.7.3.5; Page 4-134; Paragraph 3: “Two Maryland-listed rare plant species — Ostrich fern (*Matteucia struthiopteris*) and mossy-cup oak (*Quercus macrocarpa*) — are reported by the MDNR to be located within the vicinity of the proposed pipeline.”

AES1-4-44 AES Comment: The Genus name is misspelled (it should have 2 c’s), Ostrich fern (*Matteucia struthiopteris*). The FEIS should be corrected to note this.

4-45. Section 4.7.3.5; Page 4-135; Paragraph 7: “The minimization of direct impacts to listed plant species could be accomplished by avoidance.”

AES1-4-45 AES Comment: The sentence should be corrected in the FEIS to read as follows: “Direct impacts to listed plants could be accomplished by avoidance.” Avoidance and minimization of impacts are considered separate mitigation techniques. Additionally, the paragraph should indicate that surveys for listed plants have been initiated, and make reference to Table 4.7-2.

4-46. Section 4.7.3.5; Page 4-136; Paragraph 5: “Mid-Atlantic Express has committed to perform surveys for state listed endangered, threatened, and special concern species. Many surveys were scheduled for 2007 (see table 4.7-2). However, survey results and agency consultations have not yet been filed with the Commission.”

AES1-4-46 AES Comment: Mid- and late-summer RTE plant surveys have been conducted and the results summarized in a report submitted to MDE and PA DNR on August 19, 2007. The results of

AES1-4-41 The text has been updated to correct for the misspelling.

AES1-4-42 We have modified the text to correct for the typographical error.

AES1-4-43 See section 4.7.2.

AES1-4-44 The text has been updated to correct for the misspelling.

AES1-4-45 Section 4.7.2 has been updated to include this information.

AES1-4-46 Comment noted.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

these surveys will be submitted to FERC under separate cover and should be incorporated into the FEIS. Spring plant surveys are currently underway, and the final reports will be submitted when complete.

4-47. Section 4.8.1.1; Page 4-137; Paragraph 2: "The waterway considered in this analysis is the area of the Chesapeake Bay within the vessel transit route impact area, which is approximately 4.4 miles wide."

AES1-4-47

AES Comment: AES has provided information regarding land use for the entire ship transit route along the Chesapeake Bay. In order to provide a complete description of potential impacts, AES submits that the FEIS should consider a wider area of analysis (using the information previously provided by AES), or should explain why such consideration is not appropriate.

AES1-4-47 The entire Expanded Waterway for LNG vessel transport has been included in the FEIS analysis.

4-48. Section 4.8.1.1; Page 4-137; Paragraph 1: "Aquatic areas that would be affected by the construction of the LNG terminal include the 35 acres of open water and an additional 119 acres comprised of the marine approach channel, the turning basin, and near-shore areas around the berths. The shoreline adjacent to the open water would be impacted by the construction of the bulkhead and the 119-acre area would be dredged for LNG ship transit and maneuvering and the barge routes of transit between the dredge locations and the DMRF."

AES1-4-48

AES Comment: The two sentences in this paragraph refer twice to "119" acres of open water area. To maintain consistency in the data references, the acreage should be modified to 118 acres (previously referenced in Section 2.3.1.3 Dredging and Dredged Material Disposal on page 2-22).

AES1-4-48 We have modified the text to reflect this.

4-49. Section 4.8.1.2; Page 4-137; Paragraph 4: "Additional uses in the waterway include commercial and recreational crabbing, fishing and boating"

AES1-4-49

AES Comment: AES assumes this paragraph/sentence is only missing punctuation at the end, which should be added. If the sentence is not complete and there are other "uses" to which reference is being made, AES requests an opportunity to review the complete statement prior to publication of the FEIS.

AES1-4-49 A punctuation mark has been added to the end of the sentence.

4-50. Section 4.8.1.2; Page 4-139; Paragraph 1: "The proposed pipeline would be constructed within or adjacent to various existing rights-of-way for approximately 74.3 miles or 84.8 percent of the route. Mid-Atlantic Express proposes to construct the pipeline parallel to I-695 for about 4 miles, BGE's overhead power lines for about 21.7 miles, and an existing Columbia pipeline for approximately 45.8 miles. The remaining 13.3 miles (15.2 percent) would be constructed on newly created rights-of-way."

AES1-4-50

AES Comment: Given the summary of information presented in this section and to maintain consistency such that the total distance of the Pipeline is accounted for in this summary, it should be noted the approximately 2.8 miles (the "leftover" after summing the 71.5 miles associated with I-695, BGE and Columbia mileage) follow other existing roadway or utility rights-of-way.

AES1-4-50 We have modified the text to reflect this (see section 4.8.1).

20080619-0108 FERC PDF (Unofficial) 06/16/2008

4-51. Section 4.8.1.2; Page 4-139; Paragraph 4: "Pipeline construction would require about 27 pipe yards, contractor yards (including temporary parking for the pipeline construction crews) and staging areas located along the proposed right-of-way (see Appendix B for the locations of these proposed pipe yards/contractor yards, and Appendix C, table C-2, for a description of existing land use at each yard)."

AES1-4-51 AES Comment: The FEIS should clarify that the Pipeline construction will require the use of 25 pipe yards. The LNG Terminal will utilize the other two yards, as shown on table C-2 of Appendix C, and which are summarized in Section 4.8.1.1 of the DEIS.

4-52. Section 4.8.1.2; Page 4-139; Paragraph 4: "An unnamed tributary of Deer Creek would be crossed at MP 36.5 and an unnamed tributary of Marsh Creek Lake would be crossed at MP 84.65. Both of these crossings are at existing road crossings and would be limited to a width of 25 feet."

AES1-4-52 AES Comment: Based on access road information in Table C-3 (Appendix C) and Figure B-14 (Appendix B) the access road reference for crossing of the unnamed tributary of Deer Creek should be MP 37.66.

4-53. Section 4.4.2.1; Page 4-140; Paragraph 6: "The land option agreement between Ecron and Barletta Willis Inc was extended until October 2007 to provide time for Ecron to secure financing for the project. At the writing of this document, there was no additional information available on the Ecron option."

AES Comment: AES has been informed by Barletta Willis, Inc. ("BWI"), the owner of the site where Ecron, S.P. proposed to locate their corn-based ethanol facility, that the Ecron option was not renewed by BWI, and that a letter terminating the lease option agreement was delivered. Accordingly, the corn-based ethanol facility proposed by Ecron should not be considered a planned development in the area of the Terminal Site. With this information now available, AES suggests that this reference be deleted or modified. Other references to Ecron occur at pages 4-214, 4-266, 4-267, 4-268, 4-276, 4-277, 4-278, and 5-16 should likewise be deleted or modified in the FEIS to reflect the fact that the facility is no longer viable.

AES1-4-53

As a point of information, AES notes that the Ecron corn-based ethanol facility was mentioned 13 separate times in the State of Maryland Advisory Report dated February 7, 2007 (nine in the main body). AES suggests that FERC's comments on the Advisory Report, which seemed to place great emphasis on a now non-existent facility, should be modified in the FEIS.

AES1-4-53a

4-54. Section 4.8.2.3; Page 4-141; Paragraph 8: "We believe that for each residence located within 25 feet or less of the construction right-of-way, Mid-Atlantic Express should provide site-specific plans."

AES Comment: It is not possible to provide final site-specific plans for each residence located within 25 feet or less of the construction right-of-way until the easement agreements with those landowners in such category are finalized. The easement agreement will contain the metes and bounds surveys that are necessary for completion of the site-specific plans. The FERC Staff is

AES1-4-54

AES1-4-51 We have modified the text to reflect this (see section 4.8.1).

AES1-4-52 We have modified the text to reflect this (see section 4.8.1).

AES1-4-53 As appropriate, the text of the FEIS, including section 4.8.1.1 has been updated to reflect the status of the Ecron S.P. Corp. land lease option (i.e. It was not renewed by Barletta Willis Inc. and that a letter terminating the lease option agreement was delivered to Ecron.).

AES1-4-53a Comment noted. See response to comment AES1-4-53.

AES1-4-54 FERC understands that Mid-Atlantic Express is in the preliminary design stage and recognizes that Mid-Atlantic Express provided each residence located within 25 feet or less of the construction right-of-way with a preliminary site-specific plan. Mid-Atlantic Express shall provide individual site-specific residential plans to the owner of each residence located within 50 feet of construction work areas and provide the owner one month to review and comment on these plans. See section 4.8.1.1.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

requested to modify this requirement in the FEIS. Note that AES has, contemporaneously with this filing, provided *preliminary* site-specific plans in accordance with Recommendation 62 (e).

4-55. Section 4.8.3.1; Page 4-145; Paragraph 5: "Concurrence that the AES Sparrows Point LNG and Mid-Atlantic Express Pipeline projects are consistent with the CZMA must be received prior to any issuance of a Notice to Proceed with construction from the Secretary of the FERC."

AES1-4-55 AES Comment: The DEIS correctly notes that the "Secretary of Commerce has not issued a decision on this appeal process." The Secretary's decision is due June 30, 2008. AES will inform the Commission of the Secretary's decision immediately upon its issuance.

4-56. Section 4.8.5.2; Page 4-162; Paragraph 3: "Access for deeper draft boats on Bear Creek may be limited during the construction period as the depth of Bear Creek in the vicinity of the construction may not accommodate rerouting of these boats."

AES1-4-56 AES Comment: AES respectfully requests that the following additional information and analysis be reflected in this section of the FEIS. The dredging operations proposed by AES, including the proposed buffer distances between the dredge and other work vessels, will not prohibit even deeper draft boats from entering or exiting Bear Creek at any time. Confirmation of this statement is provided in information contained in the July 31, 2007 data response filed with the Commission. The dashed line spacings shown in Attachment DR2 LURA26, Chart A & Chart B, indicate the outer limits of the zone that is 100 yards (300 feet) from the side of the LNG ship as it transits the approach channel. Assuming that the beam of the LNG ships is 150 feet and the width of the approach channel is 400 feet, the dredge operations would be limited to the approximate area within the dashed lines (actually about 25 feet outside of the dashed lines). Placement of a 200-foot buffer around the dredge vessel would allow complete and unrestricted access to Bear Creek during all dredge activities, except those performed at the turning basin. Even those dredge activities at the turning basin would allow almost complete access to Bear Creek and would not, in any event, require any rerouting that might restrict access for deeper draft boats.

4-57. Section 4.8.5.2; Page 4-163; Paragraph 4: "Therefore, recreational vessels drifting or anchored in the path of an oncoming moving safety/security zone would be required to leave their location and remain outside the moving safety/security zone while the zone passes. These fishermen or boaters could relocate to the edge of the existing shipping channel or to nearby waters outside the main shipping channel."

AES Comment: AES respectfully requests that the following additional information and analysis be reflected in this section of the FEIS. For clarification, the LNG ships will transit the Chesapeake Bay for approximately 145 miles to the William Preston Lane, Jr. Memorial Bridge ("Bay Bridge"). Note that the Cove Point LNG terminal is located at approximately Mile 120. The ships will then enter the Craighill Channel, proceed through the Craighill Angle to the Cut-off Angle, then enter into the Brewerton Channel. The distance from the Bay Bridge to the Brewerton Channel is approximately ten miles. The ships would then proceed through the Brewerton Angle to the Marine Channel. The distance from the Brewerton Channel to the

AES1-4-55 FERC is in receipt of the Secretary of Commerce's Decision and Findings on the AES consistency appeal. Section 4.8.2.1 has been updated to reflect the Secretary of Commerce's Decision and Findings.

AES1-4-56 Because all of the equipment that will be required for the dredging operation has not yet been determined, the Coast Guard and FERC do not agree that deeper draft and/or recreational boaters would not be impacted or that there would only be limited impact. Mariners would be advised to use caution when transiting the area because of the dredging operations. See section 4.8.4.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

Marine Channel is about four miles. A chart showing the approximate speed of the LNG ships at and the approximate time to transit between various points in the transit route is provided below.

Track Leg	Distance (mi)	Speed (knots)	Time (min)
Bay entrance to South of Bay Bridge	145	15-18	460
South of Bridge to Craighill Channel	3	10	45
Craighill Channel to Cut-off Angle	10	10	60
Cut-off Angle to Brewerton Channel	1	4-6	10
Brewerton Channel to Brewerton Angle	4	3-5	50
Brewerton Angle to Dock	1	1-3	45

AES1-4-57

AES1-4-57 FERC notes that actual vessel speeds would be determined by the Pilots and the Coast Guard in accordance with the TMP.

At its narrowest point, the main shipping channel in the Chesapeake Bay is 700 feet wide. This active marine channel is well-marked with buoys on both sides that are placed approximately 50 to 75 feet outside of the channel. Assuming that the beam of the LNG ships is 150 feet, the buoys would delineate a distance more than 100 yards (300 feet) from the side of the LNG ships (the importance of this distance is described in the following paragraph). AES has been advised that some commercial and recreational fishermen find the edge of the shipping channel to be attractive fishing grounds at certain times of the year; however, fishing within the active marine channel is not a frequent occurrence for reasons of common sense, safety, and regulation. Specifically, the passage of large commercial vessels in the main shipping channel creates significant disturbances both on the surface of the water and under the water. These disturbances can disrupt the activities of fishermen using drift nets and chum lines; accordingly, the practice is not widespread or frequent. Further, Rule 9 (c) of the Inland Navigation rules states that "A vessel engaged in fishing shall not impede the passage of any other vessel navigating within a narrow channel or fairway." Similarly, recreational boaters do not drift or anchor within the active channel for the same reasons of common sense, safety, and regulation. For recreational boaters, there is ample water outside of the main shipping channel in which to operate.

AES1-4-57a

AES1-4-57a The Coast Guard disagrees with AES's statement that fishing vessels do not operate in the shipping channel. It is Coast Guard's experience that fishing vessels routinely operate in the shipping channel.

In accordance with provisions set forth in the WSR, the Baltimore COTP will allow for vessels to come to within 100 yards of the LNG ships provided they are traveling at the minimum speed necessary to navigate safely, i.e., moving as slowly as possible while maintaining steerageway. Thus, commercial fishing boats, sport fisherman, and recreational boaters will be allowed to proceed to within 100 yards of a transiting LNG vessel if they are trolling or chumming. They will also be able to maintain position, i.e., continue drifting or stay at anchor, as long as that position is 100 yards or more away from the oncoming LNG ship. In these circumstances, recreational and charter fishermen will be able to maintain trolling patterns, chum lines, and drift nets so long as they are further away than 100 yards from the LNG vessel. In other words, unless the fishermen or boaters are within the active marine channel at its narrowest point, or are in the direct path of an inbound LNG ship in the wider parts of the channel, they will not be affected.

AES1-4-57b

AES1-4-57b The provisions in 33, CFR, §165.503 which may allow vessels traveling at minimum safe navigation speeds to approach within 500 yards of an LNG carrier are applicable within the COTP Hampton Roads Zone. Although, similar provisions are not currently contained in the safety/security zone regulations specified in 33, CFR, §165.500 for the COTP Baltimore Zone, the COTP Sector Baltimore has stated their intention would be to also establish a similar Regulated Navigation Area under 33, CFR, §165.500. As stated in the WSR, authorization from the COTP would be required to enter the safety/security zone around any LNG carrier transiting to the proposed LNG terminal.

Assuming that fishermen or recreational boaters wished to pursue activities within the main marine channel that serves the Port of Baltimore, the amount of time they would have to leave their location and remain outside the moving security zone as the LNG ship passed depends on the speed of the LNG ship at that particular point in the Bay. The table below identifies the various scenarios based on a 1,000 foot ship and the 500-yard security zone established by the

USCG fore and aft of the vessel. This can be envisioned as a 4,000 foot long bubble. As can be seen from the table, the total impact time is in the range of a few minutes. It is important to note that any such restriction would apply only to loaded inbound LNG vessels; there would be no security zone restrictions for the outbound LNG ships as described below.

AES1-4-57c

Speed (knots)	Security Zone (yards)	Impact Time (minutes)
20	500 fore and aft	1.97
15	500 fore and aft	2.63
10	500 fore and aft	3.95
5	500 fore and aft	7.90

Vessel speeds south of the Bay Bridge average about 18 knots. Thus, the total impact for boaters within the security zone would be about 2 minutes 2 to 3 times a week (as explained in Comments 4-64 [Section 4.8.5.2; Page 4-164; Paragraph 2] and 4-109 [Section 4.12.5.5; Page 4-255 to 256; Paragraph 19 to Paragraph 1], the security zone will apply only to inbound LNG vessels). Vessel speeds north of the Bay Bridge average between 10 and 12 knots. Thus, the total impact for boaters within the security zone would be less than 4 minutes, and then only 2 to 3 times a week.

AES1-4-57d

As explained above, AES is required to develop a VTMP prior to commissioning of the LNG Terminal. As a part of the VTMP, AES will address boater notification applicable to those infrequent occurrences where fishermen are drifting or are at anchor in the main shipping channel. The notification may be by means of Broadcast Notices to Mariners, direct communications with escort boats, or other procedures that will be part of the VTMP.

4-58. Section 4.8.5.2; Page 4-163; Paragraph 4: "An exception to this rule is that vessels may approach to within 100 yards if the vessel is traveling at minimum speeds to navigate safely."

AES1-4-58

AES Comment: AES respectfully requests that the following additional information and analysis be reflected in this section of the FEIS. In accordance with provisions set forth in the WSR, the Baltimore COTP will allow for vessels to come to within 100 yards of an LNG vessel provided they are moving as slowly as possible while maintaining steerageway. This provision is consistent with the rules established for the Cove Point LNG facility in Calvert County, Maryland by the Hampton Roads COTP, and makes for consistent application of security zone enforcement throughout the Chesapeake Bay. As noted above, this requirement means that commercial fishing boats, sport fisherman, and recreational boaters will be allowed to proceed to within 100 yards of a transiting LNG vessel if they are proceeding at the minimum speed necessary to maintain navigation, are drifting, or are at anchor.

4-59. Section 4.8.5.2; Page 4-163; Paragraph 5: "While this is a relatively minor numerical increase, the traffic from LNG ships has the potential to have a more substantial impact than typical commercial marine traffic on boating and fishing activities."

AES1-4-59

AES Comment: The potential for a "more substantial" impact on boating and fishing activities will be minimized through development of a consistent LNG security zone in the Chesapeake

AES1-4-57c Section 4.8.4.1 has been updated to clarify that the security zone restrictions would only apply to loaded LNG vessels. The Coast Guard disagrees with AES's impact time analysis. The Coast Guard routinely ensures that other vessels are outside of the security zone well in advance of an LNG vessel to ensure the clear passage of the LNG vessel. At the present time, the Coast Guard does not make exceptions for any vessel to be within the security zone when an LNG vessel is traveling to Cove Point. Additionally, we note that the actual vessel speeds would be determined by the Pilots and the Coast Guard in accordance with the TMP. As a result, AES's impact times are not accurate.

AES1-4-57d Section 4.8.4.1 has been updated to include a reference to the TMP and boater notification.

AES1-4-58 See response to comment AES1-4-57b.

AES1-4-59 Comment noted.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

Bay that allows small vessels, proceeding at minimum speed, to approach to within 100 yards of a transiting LNG vessel. In addition, the proactive scheduling of LNG vessels per provisions that will be set forth in the VTMP will minimize the potential impact of LNG vessel transits on scheduled fishing/boating events. Finally, AES notes that the "more substantial" impact would also apply to cruise ships (both inbound and outbound as compared to LNG ships where the "more substantial" impacts only apply to inbound ships) and any other ships carrying cargo categorized as Certain Dangerous Cargo. See Comment 4-77 [Section 4.9.4.2: Page 4-179; Paragraph 6].

4-60. Section 4.8.5.2; Page 4-163; Paragraph 6: "The moving safety/security zone around the LNG ships would affect recreational boats as follows:"

AES1-4-60 AES Comment: The DEIS here distinguishes impacts on recreational boaters based on the draft of the boat. However, the distinction in impacts is only relevant in the area immediately offshore of the Terminal Site and in proximity to Bear Creek. Outside of the area immediately offshore of the Terminal Site, where water depths adjacent to the main shipping channel are significantly deeper than within Bear Creek, the 500/100 yard restrictions will apply to *all* vessels. Those minor impacts are described in Comment 4-58. [Section 4.8.5.2; Page 4-163; Paragraph 4]. The FEIS should be clarified accordingly.

Information provided by AES to FERC in its response to the Commission Staff's July 11, 2007 Data Request No. 27, under the heading of Land Use, Recreation, and Aesthetics, supports this modification. The response provided by AES to LURA-27 dealt with potential "impacts to deeper draft boats *on Bear Creek*." (emphasis supplied). As noted in the conclusion to LURA-27, there are expected to be little or no impacts on boaters entering or leaving Bear Creek when LNG ships are transiting to or from the LNG Terminal in the areas immediately offshore of the Terminal Site.

4-61. Section 4.8.5.2; Page 4-163; Paragraph 6 (and bullet 1): "The moving safety/security zone around the LNG ships would affect recreational boats as follows;

- **Boats that have drafts between 5 feet and 8 feet (larger sailboats and larger cabin cruisers regularly moored at Bear Creek Marinas) would be able to pass incoming LNG vessels outside of the safety/security zone and if they get permission to slow their speed in order to get within 100 yards of the LNG vessel;"**

AES Comment: See the general comment above on the applicability of the security zones to all vessels, and the potential impacts to boaters entering or leaving Bear Creek at the same time and along the same track as the LNG vessels approach the Terminal Site.

AES1-4-61 There are no restrictions on vessels outside of 500 yards. Between 100 yards and 500 yards, the COTP may allow vessels to come within 100 yards, i.e., 100 yards away from the LNG ship, provided they are proceeding at the minimum speed necessary to maintain navigation, are drifting, or are at anchor. In these circumstances, recreational and charter fishermen will be able to maintain trolling patterns, chum lines, and drift nets so long as they are further away than 100 yards from the LNG vessel. Where small vessels might wish to approach closer than 500 yards

AES1-4-60 Section 4.8.4.1 has been revised to clarify that the distinction in impacts to recreational boaters based on draft refers to the area in proximity to Bear Creek.

AES1-4-61 The Coast Guard concurs with AES on this comment.

of the LNG vessel on their own accord, the "permission" will almost certainly entail a reduction in speed, but, depending on the circumstance, need not do so. The decision regarding both permission in general and conditions attached to that permission will be left to the Escort Commander or the COTP. To be clear, boaters do not need permission to slow their speed, they need permission to travel closer than 500 yards from the LNG vessel.

AES expects that enforcement of the security zones relative to small vessels trolling, chumming, drift netting, or at anchor in the area where the LNG ship has yet to pass, will be accomplished by individual checks on each such vessel by the security escort.

AES1-4-61a

Permission may also be obtained to come inside of 100 yards of the LNG vessel. If a special circumstance were to arise that required a vessel to encroach into the 100-yard security zone, radio concurrence from the Escort Commander of the boat(s) assigned to enforce the zone or the COTP could be obtained to enable such an approach. A security zone does not mean "no access," it simply means limited and controlled access as directed by the Escort Commander or the COTP.

AES respectfully requests that all of this additional information and analysis be reflected in this section of the FEIS.

4-62. Section 4.8.5.2; Page 4-163 to 4-164; Paragraph 6 (and bullet 3): "The moving safety/security zone around the LNG ships would affect recreational boats as follows;

- **Larger recreational boats with drafts greater than 8 feet and, as discussed further in Section 4.9.4.2, commercial fishing boats in the safety/security zone, would need to move when LNG transit vessels pass through."**

AES1-4-62

AES Comment: As noted in Comment 2-4 [Section 2.7.1.6; Page 2-38; Paragraph 2] above, 33 CFR 165.503 requires that "all vessels", regardless of draft, abide by the restrictions imposed by the USCG. Additional potential impacts may be associated with larger recreational boats, should they elect to enter or leave Bear Creek during the approximately 15 minutes that it takes an LNG vessel to complete its final maneuvering in the turning basin, or the approximately 45 minutes that it takes an LNG vessel to transit from the Brewerton Channel to the dock at the Terminal Site. As noted in the conclusion to LURA-27, which was submitted to FERC on July 31, 2007, there are expected to be very minor impacts on deeper draft boats entering or leaving Bear Creek when LNG ships are transiting to or from the LNG Terminal in the areas immediately offshore of the Terminal Site.

AES is required to develop a VTMP prior to commissioning of the LNG Terminal. AES will work with the USCG and Area Maritime Security Committee in developing security zone notification and enforcement procedures within the VTMP.

AES respectfully requests that this additional information and analysis be included in this section of the FEIS.

AES1-4-61a Comment noted. See response to comment AES1-4-57b.

AES1-4-62 The Coast Guard concurs with AES that the security zone would apply to all vessels.

0080619-0108 FERC PDF (Unofficial) 06/16/2008

4-63. Section 4.8.5.2; Page 4-164; Paragraph 2: "For the larger boats that must leave the moving safety and security zone, leaving and then returning to the zone would entail weighing anchor, moving to the edge of the zone, waiting for the moving safety and security zone to pass, returning the boat to the original location, and resetting the anchor.

AES1-4-63

AES Comment: As noted above in Comment 2-4 [Section 2.7.1.6; Page 2-38; Paragraph 2], the security zone will apply to all fishing and recreational vessels regardless of draft. As explained above in Comment 4-58 [Section 4.8.5.2; Page 4-163; Paragraph 4], there will be very few situations where fishing or recreational vessels of any size are required to weigh anchor, move to the edge of the zone, then wait for the zone to pass. Finally, even were there to arise a situation where the fishing or recreational boaters were to move as a result of expected LNG traffic, the time of impact would be on the order of 2 to 4 minutes except for those areas immediately offshore of the Sparrows Point peninsula. See id.

AES respectfully requests that this additional information and analysis be reflected in this section of the FEIS.

4-64. Section 4.8.5.2; Page 4-164; Paragraph 2: "Although this is a temporary impact — from an estimated 40 minutes to possibly two hours per occurrence, and between 4-6 times per week — it may cause an impact on typical fishing and boating routines in the channel or near-channel areas of the Bay."

AES1-4-64

AES Comment: This statement appears to be based on an assumption that there will be no difference between inbound and outbound LNG ships. If so, this assumption is incorrect. The USCG has confirmed that only loaded (inbound) LNG vessels would have security zones. Because the ships would not be carrying cargo on their outbound voyage (other than a very small amount of heel), the security zones would not apply and the ships would be treated as any other of the thousands of commercial vessels that currently call in the Port of Baltimore. Also, there are no "typical" fishing routines shown in this record in the areas immediately offshore of the Terminal Site that will be impacted by the LNG vessels or the security zones associated therewith. The areas immediately offshore of the Terminal Site have neither submerged aquatic vegetation that might make for good fishing locations, nor are there bathymetric or other features that would tend to attract fishing interest. The routines that could possibly be affected relate only to transit of small vessels into or out of Bear Creek at the exact time that an LNG vessel transits inbound through the Marine Channel.

For these reasons, AES requests that the FEIS state as follows: "Although this is a temporary impact in the areas generally offshore of the Sparrows Point peninsula from an estimated 45 minutes, and between 2 to 3 times per week it may cause a minor impact on fishing and boating routines in that offshore area." The reference to "areas immediately offshore of the Sparrows Point peninsula" reflects the comments made in Comment 4-62 [Section 4.8.5.2; Page 4-163 to 4-164; Paragraph 6 (and bullet 3)]. The reference to 45 minutes is based on the real time simulations performed by Maryland Pilots at the Maritime Institute of Technology and Graduate Studies ("MITAGS") in Linthicum Heights, Maryland. Those simulations showed that the total time of transit from the Brewerton Channel to the dock at the Terminal Site was 45 minutes, and that the maneuvering time in the turning basin was about one-third of that total.

AES1-4-63 The FERC and Coast Guard do not concur with AES's comment. See responses to comments AES1-4-57b and AES1-4-57c.

AES1-4-64 Section 4.8.4.1 has been updated to clarify that the security zone restrictions would only apply to loaded LNG vessels.

4-65. Section 4.8.5.2; Page 4-164; Paragraph 3: “[W]ith this DEIS we are soliciting additional public comment on specific boating and fishing impacts.”

AES1-4-65

AES Comment: AES’s comments on specific boating and fishing impacts is set forth in this document at Comments ES-2, ES-3, ES-4, 1-3, 1-4, 2-3, 2-4, 4-47, 4-49, 4-56, 4-57, 4-58, 4-59, 4-60, 4-61, 4-62, 4-63, 4-64, 4-65, 4-66, 4-67, 4-68, 4-69, 4-71, 4-77, 4-78, 4-107, 4-108, 4-109, 4-110, 4-116, 4-117, 4-122, and 5-8.

AES1-4-65 Comment noted.

4-66. Section 4.8.5.2; Page 4-164; Paragraph 5: “Several speakers indicated it is not always as easy as weighing anchor and moving out of the way.”

AES1-4-66

AES Comment: As noted above in Comment 4-58 [Section 4.8.5.2; Page 4-163; Paragraph 4], AES does not believe that it will be necessary for commercial and recreational boaters to weigh anchor and move out of the way in any set of usual circumstances. For those unusual circumstances where the fishermen or boaters are drifting or are at anchor in the main shipping channel, where the distance from their position to the LNG vessel is less than 500 yards, and where they cannot get permission from the Escort Commander or the COTP to continue with their activities at a point to within 100 yards of the LNG vessel, the time that it takes the LNG ship, including the moving security zones, to pass a given point generally will vary between only two and four minutes. Thus, even in these highly unusual circumstances, the potential impacts will be extremely minor.

AES1-4-66 See responses to comments AES1-4-57b and AES1-4-57c.

Also, Rule 9 (c) of the Inland Rules of the Road requires that, “A vessel engaged in fishing shall not impede the passage of any other vessel navigating within a narrow channel or fairway.” The term “vessel engaged in fishing” means any vessel fishing with nets, lines, trawls, or other fishing apparatus which restricts maneuverability, but does not include a vessel fishing with trolling lines or other fishing apparatus which do not restrict maneuverability.

Finally, the proactive scheduling of LNG vessels that will be part of the VTMP will minimize the potential impact of LNG vessel transits on scheduled fishing/boating events.

AES respectfully requests that all of this additional information and analysis be reflected in this section of the FEIS.

4-67. Section 4.8.5.2; Page 4-164; Paragraph 5: “Another concern was the Coast Guard was too aggressive in their enforcement of the 500 yard moving security zone around LNG vessels arriving at Cove Point (another LNG terminal) which required fishing vessels to leave the area long before the LNG vessel was expected to pass through.”

AES1-4-67

AES Comment: AES requests clarification or modification of the phrase “long before”. Using the table provided in Comment 4-58 [Section 4.8.5.2; Page 4-163; Paragraph 4] above, which indicates the time of impact for passing LNG ships, including the fore and aft security zones, even if one were to double the “bubble” from 4,000 feet to 8,000 feet, which might correspond to a forward security zone of over one mile, the total time of impact would increase from about 2

AES1-4-67 See response to comment AES1-4-57c. Section 4.8.4.1 has been updated to reflect development of security zone notification and enforcement procedures as part of the TMP.

minutes to only about 4 minutes for LNG ships traveling at 20 knots and would increase from about 4 minutes to only about 8 minutes for LNG ships traveling at 10 knots.

In addition, as noted above, AES is required to develop the VTMP prior to commissioning of the LNG Terminal. AES will work with the USCG and Area Maritime Security Committee in developing security zone notification and enforcement procedures within the VTMP, so as to further enhance the effectiveness of the notification and enforcement procedures. For these reasons, the reference to "long before" should be modified or omitted.

4-68. Section 4.8.5.2; Page 4-164; Paragraph 7: "Due to the nature of the concerns expressed in the WSA, we are recommending in section 4.9.4.2 that AES continue to discuss these concerns with local fishing interests and develop specific operational and communication guidelines for LNG vessels to address Project impacts to shipping and fishing interests along the transit route and within the Port of Baltimore, and to file these guidelines with the Secretary prior to construction."

AES1-4-68 AES Comment: AES has worked and will continue to work with local fishing interests to address concerns they may have with the LNG shipping traffic proposed by AES. Notably, on May 30, 2008, AES delivered a letter to John Polek, President of the Marine Trades of Baltimore County, requesting a meeting to discuss the Project and its potential impacts on boaters.

AES expects that many of the specific operational and communications guidelines will be incorporated into the VTMP, which is required prior to commissioning of the facility. To the extent that the information provided is not considered Sensitive Security Information, it will be shared as appropriate with local fishing interests. AES requests that these existing outreach efforts be recorded in the FEIS.

4-69. Section 4.8.5.2; Page 4-165; Paragraph 6: "We anticipate that all practical attempts would be made to coordinate the transit of LNG carriers so that they would not conflict with known recreational boating events."

AES1-4-69 AES Comment: AES will ensure that all practical attempts will be made to coordinate the transit of LNG carriers so that they will not conflict with known recreational boating events. The procedures by which AES will take affirmative steps to avoid conflict with known recreational boating events will be set forth in the VTMP that is required to be finalized prior to commissioning of the facility. Incorporation of this assurance by AES in the VTMP should be reflected in the FEIS.

4-70. Section 4.8.6.1; Page 1-166; Paragraph 4 (and bullets 4 and 5): "The characteristics and visual management objectives for these areas include:

- **Modification - areas not noted for their distinct qualities and are often considered to be of average visual quality. Project activity may attract attention and dominate the existing visual resource; and**

AES1-4-68 Section 1.4 has been updated to include a statement regarding AES's public outreach efforts.

AES1-4-69 Section 4.8.4.1 has been updated to reflect the fact that the TMP would contain steps to avoid conflict with known recreational boating events and that the TMP would be developed in accordance with the WSR.

- **Rehabilitation** - areas noted for their minimal visual quality and are often considered blighted areas. Project activity should alter the existing undesirable visual resources.

Based on the characteristics of these management classes, the proposed LNG terminal site would be included in the "modification" class."

AES1-4-70

AES Comment: The shipyard site where AES proposes to locate the LNG Terminal has, and at times still does, serve as a scrapyard. Portions of the shipyard site have also been used to store wood and other hard debris. The clean lines that come with construction of new equipment, buildings, and storm berms will be a significant improvement over the existing undesirable visual landscape. AES respectfully requests that the LNG Terminal be dual-classified in the FEIS as "Modification/Rehabilitation."

4-71. Section 4.8.6.1; Page 4-167; Paragraph 6: "The average distance from view points along the shore to the vessel transit route would be two miles near the Port of Baltimore and would increase to approximately four miles from the shore further to the south."

AES Comment: The Chesapeake Bay is about 200 miles long, stretching from Havre de Grace, Maryland to Norfolk, Virginia. The Bay's width ranges from 3.4 miles near Aberdeen, Maryland (north of the Terminal Site) to 35 miles near the mouth of the Potomac River. The main shipping channel is in the approximate center of the Bay.

AES1-4-71

As noted in Comment 4-47 [Section 4.8.1.1; Page 4-137; Paragraph 2], AES provided information on the entire vessel transit route, and believes that information should be reflected in the FEIS. However, AES does not believe the inclusion of that additional information will have any effect on the conclusion reached, i.e., that "the addition of LNG vessel traffic to the waterway would have minor to no overall visual impact," due to the fact that while the average distance from view points along the shore to the vessel transit route would be much greater (over ten miles in some places) at locations further south in the Bay. This more inclusive conclusion should be incorporated into the FEIS.

4-72. Section 4.8.6.2; Page 4-167; Paragraph 7: "Of the 88 miles of the proposed pipeline, approximately 91 percent would be constructed within or adjacent to various existing rights-of-way."

AES1-4-72

AES Comment: The FEIS should note that AES applied several screening criteria to identify its proposed route. Principal among its route screening criteria were the desire to maximize use of existing right-of-way in order to avoid or to minimize to the maximum extent possible construction-related impacts to the environment, landowners, and other stakeholders, taking into consideration the technical and economic feasibility of constructing the Pipeline. Although not the only criterion to be used in route selection, the preference towards the use of existing corridors is an industry standard and consistent with 18 CFR §380.15, which concerns siting and maintenance requirements for pipeline construction. Furthermore, this criterion is consistent with the objectives of regulatory agencies. Variations outside of existing rights-of-way are made

AES1-4-70 Section 4.8.5.1 has been modified to reflect this comment.

AES1-4-71 Please see response to comment AES1-4-47.

AES1-4-72 Section 4.8.5.2 has been modified to reflect this comment.

in instances where houses or other infrastructure have encroached upon those rights-of-way too closely to allow for co-location.

The FEIS should also note that no agreements with landowners along the Pipeline Route have been reached to date other than access and survey permission.

4-73. Section 4.9.1; Page 4-172; Paragraph 1: "Annual payroll would contribute to the local economy, but the employment of 75 people is still small relative to the local workforce."

AES1-4-73 AES Comment: AES believes this language should be modified in the FEIS to reflect the Direct Effect Multiplier in Table 4.9.1-4. Suggested language is as follows:

Annual payroll would contribute to the local economy both directly (\$5,866,000) and indirectly (\$58,660,000). Because the indirect contribution to the economy would be met primarily through use of existing local business and employees, the additional employment of up to 75 people is small relative to the local workforce.

4-74. Section 4.9.3; Page 4-174; Paragraph 3: "In those cases where AES' plans would be integrated with the existing local emergency response organization plans, AES would fund the associated incremental costs."

AES1-4-74 AES Comment: The sentence should be modified in the FEIS to reflect that AES "expects" to fund the associated incremental costs.

4-75. Section 4.9.4.1; Page 4-174; Vehicle Traffic

AES1-4-75 AES Comment: This section appears to be written based on an assumption that AES has made a final decision to construct the Power Plant. While this is appropriate for purposes of quantifying the maximum impact expected from vehicle traffic, it should be noted here (as it is elsewhere in the DEIS) that a final decision has not yet been made by AES.

4-76. Section 4.9.4.1; Page 4-175; Paragraph 5: "During peak construction of the LNG Terminal, the traffic load entering and leaving the worksite, including the 220 daily truck loads to transport the PDM off the property, combined with existing Mittal Steel traffic may present considerable opportunity for traffic problems in entering and exiting Sparrows Point industrial area."

AES1-4-76 AES Comment: For purposes of perspective, AES requests the FEIS should note in this section that the Sparrows Point peninsula was once the workplace for over 30,000 persons. The roadways were sufficient to handle both the employee traffic and all other operational traffic. To state that there might be "considerable opportunity for traffic problems" (emphasis supplied) does not take actual experience into account. Nonetheless, as set forth in our response to DEIS Section 5.2, Recommended Mitigation Item Number 80 submitted June 16, 2008, AES provided to all employers on the peninsula a traffic plan that is intended to avoid any potential for traffic problems. This should be noted in the FEIS.

AES1-4-73 Section 4.9.1 has been revised to reflect this data.

AES1-4-74 Section 4.9.3 has been revised to reflect this comment.

AES1-4-75 Section 4.9.4.1 of the FEIS includes a statement indicating that a final decision has not yet been made by AES regarding the construction and operation of the power plant.

AES1-4-76 Section 4.9.4.1 has been updated to include discussions on the Sparrows Point historic workforce and the draft Traffic Management Plan.

4-77. Section 4.9.4.2; Page 4-179; Paragraph 6: "A 500-yard security zone has been established for cruise ships, as well as LNG ships."

AES Comment: The DEIS correctly notes that a 500-yard security zone has been established for cruise ships and LNG ships. AES respectfully requests that the following additional information and analysis be reflected in this section of the FEIS. The Maryland Port Administration ("MPA") website identifies 28 cruise calls for the 2008 season. Twenty-eight calls over 195 days is about one ship every week. Cruise ships with the same security zone that is applicable for both inbound and outbound vessels traverse the same route and travel further into the Baltimore Harbor, traveling under the Key Bridge, passing Fort McHenry, and docking at South Locust Point in the Middle Branch of the Inner Harbor. Cruise vessels would typically encounter more recreational traffic than LNG ships because (i) there are more recreational boats and marinas in the Inner Harbor than near the Terminal Site, and (ii) many cruise sailings occur on weekends, a high use day for recreational boaters. All research conducted by AES indicates that cruise activities have not seemed to disrupt recreational boating and fishing, even in the warmer months when there is increased activity (both cruise and recreational boating) on the Bay, and official press releases both laud the activity and express hope for more cruise traffic. See generally MPA website at <http://www.cruisemaryland.com/>.

It should also be noted that the same security zone also applies to every other ship carrying *certain dangerous cargo or CDC*, which is defined as any of the numerous materials listed in 33 CFR § 160.204, including such materials as ethanol, anti-freeze, cashew nut shell oil, camphor oil, etc.

4-78. Section 4.9.4.2; Page 4-179; Paragraph 8: "Impacts from LNG vessel traffic are not anticipated to result in significant impacts to existing marine shipping traffic along the transit route. However, AES has not completed its consultations with the Port of Baltimore or other maritime shipping interests along the transit route."

AES Comment: AES respectfully requests that this section of the FEIS be updated to reflect the results of the following additional consultation and outreach efforts. AES has had extensive consultations with the Association of Maryland Pilots, the Maryland Maritime Association ("MMA"), the Baltimore Maritime Exchange, and other maritime shipping interests along the transit route. As noted in the DEIS, the commercial shipping industry expects the additional marine traffic attributed to the LNG Terminal to be compatible with existing shipping traffic. Indeed, in response to a request to submit comments in a Field Hearing sponsored by Rep. Elijah E. Cummings (D-MD) on April 23, 2007 concerning the topic of "Safety and Security of Liquefied Natural Gas and the Impact on Port Operations," the local maritime industry went so far as to write letters outlining the expected lack of interference and the expected benefits. See Attachment D. For example, the MMA wrote as follows:

Under these circumstances, the MMA has concluded that with the cooperation of the Association of Maryland Pilots the likelihood of serious or continuous delay to ship operations for the remainder of the port's users would be minimal. . . In conclusion, the MMA takes the view that the proposed Liquid Natural Gas (LNG)

AES1-4-77

AES1-4-78

AES1-4-77 Section 4.9.4.2 has been modified to address this comment.

AES1-4-78 Section 4.9.4.2 has been modified to address this comment.

terminal at Sparrows Point will not be an impediment to the operation of vessels currently using the Port of Baltimore; rather it would be a benefit to the port and the maritime industry in Maryland.

The Maryland Pilots echoed the belief that any potential disruption associated with the passage of LNG ships in the Port of Baltimore can be effectively managed by means of appropriate scheduling and spacing between ships. The Maryland Pilots stated as follows:

Pilots have a unique ability to control a variety of factors that mitigate congestion in the navigational channels serving the Port. Among them are departure times, vessel speed underway, coordination of passing opportunities, and the ability of the on-board pilot to know the real-time position of other vessels. Based on these factors, and subject to the U.S. Coast Guard's recommendations on Sparrows Point LNG traffic, the Association of Maryland Pilots is confident that vessel transits for LNG and non-LNG traffic, and especially for schedule-sensitive cargoes such as container vessels, can be effectively managed to avoid potential disruption.

4-79. Section 4.9.5; Page 4-180; Paragraph 4: "The proposed LNG terminal site would be located within the expansive Sparrows Point Industrial complex, adjacent to Mittal Steel, and on an industrial waterfront near the Francis Scott Key Bridge."

AES Comment: AES submits that the reference to the terminal site being "near" the Francis Scott Key Bridge could be misleading. The FEIS should either use the phrase "in the vicinity of" or, preferably, specify the actual distance. In that regard, if the distance is specified, the point from which the distance is measured should be identified. If the distance is measured from the center of the site, the sentence should read "... and on an industrial waterfront approximately 1.2 miles from the Francis Scott Key Bridge, as measured from the center of the site." If the distance is measured from the northern boundary of the site, the sentence should read "... and on an industrial waterfront approximately one mile from the Francis Scott Key Bridge, as measured from the northern boundary of the site." Incorporating this in the FEIS modification will help avoid any erroneous conclusions being drawn.

4-80. Section 4.9.5; Page 4-180; Paragraph 4: "The nearest residence would be approximately 1.1 miles from the site."

AES Comment: To avoid any misunderstandings or incorrect conclusions, AES again suggests that the FEIS specify the point from which the distance is measured. If the distance is measured from the center of the site, the sentence should read "The nearest residence would be approximately 1.3 miles from the center of the site." If the distance is measured from the northern boundary of the site, the sentence should read "The nearest residence would be approximately 1.1 miles from the northern boundary of the site."

4-81. Section 4.9.5; Page 4-181; Paragraph 3: "However, the Cove Point facility was an existing LNG receiving terminal, and so its expansion project is not fully comparable to the

AES1-4-79 Section 4.9.5 has been modified to reflect this comment.

AES1-4-80 Section 4.9.5 has been modified to address this comment.

AES project. Therefore behavior of property markets in the vicinity of Cove Point are not directly applicable to the Sparrows Point Project.”

AES Comment: AES respectfully submits that this conclusion does not entirely reflect the record in this proceeding or the history of the Cove Point LNG terminal. The conclusion reached in the Carson report, i.e., that property values in the immediate vicinity of the Cove Point LNG facility were not depressed relative to property values at distances away from the Cove Point LNG facility during the permitting of its expansion, can be extrapolated to both new and existing facilities. Clearly, the Carson report is directly relevant once the facility is built and operating. AES submits that its proposed location of the Project in a heavy industrial area with current uses that include a steel mill, a liquid oxygen facility, dredge operations, reprocessing operations, three industrial landfills, and various other heavy industries, and that is located more than one-mile away from the nearest residence, permits a comparison with the Cove Point expansion since the AES development and construction, like the Cove Point expansion, are in an industrial area. The Cove Point expansion at an existing industrial site, i.e., the existing LNG terminal, and the AES Project development at an existing industrial site, i.e., the heavy industrialized Sparrows Point Peninsula, are comparable.

To avoid any inference that because this is a new facility there *could* (in contrast to Cove Point) be a depressing effect on property values, AES suggests that the language cited above either be revised to reflect the correlation described above or modified as follows: “However, because the Cove Point facility was an existing LNG receiving terminal, the comparison offered by Carson would be instructive only once the AES project was built and operating. Any conclusion to be drawn during the development or construction phase of the AES Project would require some extrapolation that is beyond the scope of the Commission’s review.”

4-82. Section 4.9.5; Page 4-182; Paragraph 3: “The impact that a natural gas project may have on the value of any land parcel depends on many factors, including the size of the parcel, the parcel’s current value, land use, and the value of other nearby properties.”

AES Comment: As AES has previously demonstrated, for example in Resource Report 10, *Alternatives*, AES made extensive effort to locate the Pipeline in or adjacent to existing rights-of-way. AES respectfully requests that this effort be recognized in this section of the FEIS that addresses property values, by revising the language cited above as follows: “. . . including the size of the parcel, the parcel’s current value, land use, *proximity of the parcel to or location on the parcel of existing utilities or rights-of-way*, and the value of other nearby properties.” (emphasis on revised language).

4-83. Section 4.9.7; Page 4-184; Paragraph 2: “The open-houses hosted by AES and Mid-Atlantic Express included two meetings in Dundalk, and single meetings in White Marsh, Pasadena, and Bel Air, Maryland and meetings in Oxford and Downingtown, Pennsylvania.”

AES Comment: This section correctly notes that AES held open-houses as required by the FERC pre-filing requirements. However, this discussion does not make reference to the additional, extensive outreach performed by AES that went far beyond the FERC requirements in

AES1-4-81 Section 4.9.5 has been modified to address this comment.

AES1-4-82 Section 4.9.5 has been modified to address this comment.

AES1-4-83 Section 4.9.7 has been updated to include a statement regarding AES and Mid-Atlantic Express's public outreach efforts.

18 C.F.R. §157.6(d). The extensive outreach is detailed in the materials provided by AES in its application at Table 1.8-2 of Resource Report 1, *General Project Description*. AES requests that this additional effort also be noted in this section of the FEIS.

4-84. Section 4.9.7; Page 4-184; Paragraph 2: “Letters were sent to landowners within one-half mile of the proposed terminal site (note there are no residences within one mile of the terminal site) and landowners on and abutting the proposed primary and alternative pipeline route segments.

AES1-4-84

AES Comment: According to the data submitted in Resource Report 5, *Socioeconomics*, Section 5.5.3, Page 42, and Resource Report 1 – General Project Description, Section 1.9, page 52, “AES has exceeded this FERC requirement by mailing letters to landowners within *one mile* of the Terminal Site have been notified by letter), and letters have been sent to landowners on and abutting the proposed primary and alternative Pipeline Route segments.” AES requests that the FEIS correct this quoted statement accordingly.

AES1-4-84 Section 4.9.7 has been updated to reflect all landowners that were sent written notification.

4-85. Section 4.9.7; Page 4-187; Paragraph 5: “The proposed terminal was selected based on requirements for port access.”

AES1-4-85

AES Comment: The requirement for port access was an important factor in AES’s selection of the proposed Terminal Site. Other factors considered, all of which are listed in Resource Report 10, *Alternatives*, included: (i) geographic location in the Mid-Atlantic Region; (ii) separation distance of one mile or more from residential areas; (iii) land use compatibility, i.e., zoning and development designation; (iv) technical and economic feasibility; (v) safety and security; (vi) site acquisition; and (vii) environmental impact.

AES1-4-85 Text in section 4.9.7 has been updated to include all factors for site selection.

AES respectfully requests that this additional information and analysis be reflected in this section of the FEIS.

4-86. Section 4.10.1; Page 4-189; Paragraph 4: “It was constructed in 1889 by the Maryland Steel Company (later BSC) and was the site of ship construction from 1891 to the early 1990s. Current operations consist solely of ship dismantling and scrapping.”

AES1-4-86

AES Comment: AES suggests for clarification that “BSC” be defined Bethlehem Steel Company.

AES1-4-86 “BSC” has been defined in the table of acronyms.

Section 4.10.1; Page 4-193; Paragraph 4: “The results of the investigation are documented in four reports – two covering Maryland that are to be submitted to the MD-SHPO (Locking et al. 2006a, Locking and Eldridge 2007a) and two covering Pennsylvania that are to be submitted to the PA-SHPO (Locking et al. 2006b, Locking and Eldridge 2007b).”

AES1-4-86a

AES Comment: The sentence should be modified to reflect the fact that the subject reports “have been submitted.”

AES1-4-86a Section 4.10.1 has been updated to reflect the change in status.

4-87. Section 4.10.2; Page 4-197; Table 4.10.1-4 – Previously Recorded Terrestrial Archaeological Sites Within Pipeyard/Staging Area:

AES1-4-87 AES Comment: Table 4.10.1-4 is not placed correctly. It should be placed above Section 4.10.2 – Native American and Agency Consultation.

4-88. General comments regarding cultural resources:

AES1-4-88 AES Comment: The MD and PA SHPOs have reviewed all reports and concurred with all recommendations. AES requests that Table 4.10.1-1 in the FEIS reflect that information. In addition, AES submits that the generally accepted language is “eligible or potentially eligible for listing in the NRHP” not *on*. AES recommends that this reference be consistent throughout the document.

4-89. Section 4.11.1.1; Page 4-199; Table 4.11.1-1 – Ambient Air Quality Standards

AES1-4-89 AES Comment: The AAQS listing does not reference the most recent revision of the ozone standards (April, 08). The FEIS should be updated accordingly.

4-90. Section 4.11.1.1; Page 4-200; Paragraphs 1-6 (Bulleted List): "Following is a list of AQCRs evaluated for the project:

- Metropolitan Baltimore Intrastate (AQCR 115) – Baltimore and Harford Counties, Maryland;
- Eastern Shore Intrastate (AQCR 114) – Cecil County, Maryland;
- South Central Pennsylvania Intrastate (AQCR 196) – Lancaster County, Pennsylvania;
- Metropolitan Philadelphia Interstate (AQCR 045) – Chester County, Pennsylvania;
- Hampton Roads Intrastate (AQCR 223) – Norfolk, Virginia Beach, and Newport News, Virginia;
- and
- Southern Maryland Intrastate (AQCR 116) – Calvert County, MD.

AES1-4-90 AES Comment: The bulleted list omits several of the affected AQCRs (Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE Interstate AQCR for 8-hr O₃ in Cecil County, MD and Chester County, Pennsylvania; and Philadelphia-Wilmington, PA-NJ-DE Interstate AQCR for PM_{2.5} in Chester Co., Pennsylvania). In addition, due to refined information on the LNG ship transit route and on new processed dredge material (PDM) haul truck routes to disposal sites in VA, additional AQCRs will be potentially impacted by indirect emissions from these activities. In addition to the corrections to AQCRs listed above, the following AQCRs should be added and other corrections should be made to the bulleted list:

- Anne Arundel County should be added to AQCR 115 (due to addition of PDM haul truck routes);
- AQCR 116 – Calvert County should be removed and St. Mary’s County should be added (due to refined information on LNG ship transit routes);
- Eastern Shore Interstate AQCR 114 – Talbot, Dorchester and Somerset Counties, MD (LNG ship transit route);

AES1-4-87 We have moved the table to the correct section.

AES1-4-88 Comment noted.

AES1-4-89 Table 4.11.1-1 in section 4.11.1.1 has been updated to reflect the most recent AAQS listings.

AES1-4-90 Section 4.11.1 has been updated to include the additional counties.

- Kent and Queen Anne's Counties AQCR – Queen Anne's County (LNG ship transit route);
- Washington, D.C.-MD-VA AQCR 047 - Prince George's, MD; Washington, D.C.; Fairfax and Prince William Counties, VA (PDM haul truck routes);
- Northeastern Virginia Intrastate AQCR 224 – Northampton and Accomack Counties, VA (LNG ship transit route);
- Hampton Roads Intrastate AQCR 223 – cities and counties affected by the LNG ship route should be changed to Virginia Beach City, Poquoson and York County.

The FEIS should be supplemented accordingly.

4-91. Section 4.11.1.2; Page 4-200, Paragraph 4: "With respect to O3, the project counties are all designated as nonattainment, with the exception of Lancaster County. All of the nonattainment counties are classified as Subpart 2/Moderate for the 8-hour NAAQS. Lancaster County was previously classified as Subpart 1/Marginal nonattainment for the 8-hour NAAQS. On July 6, 2007, Lancaster County was redesignated to attainment for the 8-hour NAAQS under an EPA approved maintenance plan. The EPA has issued anti-backsliding measures to facilitate the transition from the 1-hour NAAQS to the 8-hour NAAQS. Attainment with the 8-hour NAAQS for the Subpart 1/Marginal nonattainment areas was required by June 2007 and for the Subpart 2/Moderate nonattainment areas is required by June 2010. There are no Subpart 1/Marginal nonattainment areas impacted by the project."

AES Comment: This section of the FEIS should be supplemented to include a discussion of the recent ozone maintenance area designations of Hampton Roads, Virginia AQCR and the Kent and Queen Anne's AQCR in Maryland. In addition, the FEIS should identify the areas classified as attainment with respect to the ozone standard along the LNG transit routes, including St. Mary's County, Maryland in the Southern MD Intrastate AQCR 116; Talbot, Dorchester and Somerset Counties, Maryland in the Eastern Shore Intrastate AQCR 114; and Northampton and Accomack Counties, Virginia in the Northeastern Virginia Intrastate AQCR 224.

This paragraph should also include a revision with a discussion of the 2008 revised ozone standards and the expected implementation timeline.

4-92. Section 4.11.1.2; Page 4-200, Paragraph 5: "With respect to PM_{2.5}..."

AES Comment: The discussion of PM_{2.5}, nonattainment classifications of Project Areas should also identify Prince George's County, Maryland; Washington, D.C.; and Fairfax and Prince William Counties, Virginia in the Washington, D.C.-MD-VA AQCR 047 as nonattainment for PM_{2.5}. PDM haul truck routes are expected to travel through these counties on the way to PDM disposal sites in Virginia.

The FEIS should be supplemented accordingly.

4-93. Section 4.11.1.3; Page 4-203, Paragraph 3: "Major source and significant emission thresholds have not yet been established for PM_{2.5}..."

AES1-4-91

AES1-4-91 Section 4.11.1 has been updated to reflect the changes to ozone maintenance and attainment counties.

AES1-4-92

AES1-4-92 Section 4.11.1 has been updated to reflect the additional counties.

AES1-4-93 AES Comment: The discussion in this paragraph regarding the status of FPA proposed major source thresholds and significant emission rates for PM_{2.5} should be updated to address the May 8, 2008 EPA "Final Rule on the Implementation of the New Source Review Provisions for Particulate Matter Less than 2.5 Micrometers" and the PM_{2.5} major source threshold (100 TPY) and significant emission rates (10 TPY of direct PM_{2.5} and 40 TPY of precursors) should be added to the information in paragraph 2 on page 4-203 and paragraphs 4 and 5 on page 4-204. In PSD delegated states, such as Maryland, the rule will apply immediately upon its effective date.

The FEIS should be supplemented accordingly.

4-94. Section 4.11.1.3; Page 4-203, Paragraph 4: "Table 4.11.1-4 represents the annual maximum potential emissions from the proposed LNG terminal and the optional power plant and relevant PSD threshold criteria."

AES1-4-94 AES Comment: This paragraph incorrectly references Table 4.11.1-4, which summarizes direct and indirect emissions from construction of the terminal and pipeline, rather than operation of the terminal and power plant. The correct reference is to Table 4.11.1-5 on page 4-212, which presents the potential operating emissions in comparison to PSD thresholds. The first paragraph on page 4-205 should also reference Table 4.11.1-5 instead of 4.11.1-4.

The corrections should be addressed in the FEIS.

4-95. Section 4.11.1.3; Page 4-204, Table 4.11.1-4: "Estimated Emissions from LNG Terminal and Pipeline Interconnect Construction"

AES1-4-95 AES Comment: There does not appear to be any relevant reference to this table summarizing construction emissions within a section of the DEIS that addresses NSR requirements applicable to stationary sources. It would more appropriately be placed within Section 4.11.1.4, after it is referenced on page 4-210 "Construction Air Pollutant Emissions." Also, the emissions in Table 4.11.1-4 need to be updated to reflect the updated construction schedule, mitigation measures and other refinements in assumptions and procedures used to develop the revised emissions. This information is included in the revised Draft General Conformity Analysis, in Section 5.0 and in Appendix A to that document.

The FEIS should be supplemented accordingly.

4-96. Section 4.11.1.3; Page 4-206, paragraph 5: reference to industrial, commercial, and institutional boilers and process heaters (Subpart DDDDD).

AES1-4-96 AES Comment: Reference to Subpart DDDDD should be deleted or it should be indicated that this rule has been vacated by the courts.

4-97. Section 4.11.1.3; Page 4-208, paragraphs 2 and 3 re: General Conformity: "Also, VOC emissions from the proposed construction activities in Maryland during 2009 would be greater than 50 TPY. Last, marine traffic emissions of NO_x would be greater than 100

AES1-4-93 Section 4.11.1 has been updated to reflect the new ruling on PM_{2.5}.

AES1-4-94 Section 4.11.1 has been updated to make reference to the correct table.

AES1-4-95 Table 4.11.1-4 has been updated and moved to section 4.11.1.4.

AES1-4-96 Reference to Subpart DDDD in section 4.11.1.3 has been deleted.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

TPY in Maryland and Virginia waters. The Virginia waters are also located in O₃ maintenance areas.”

AES1-4-97 AES Comment: As noted in AES’s response to DEIS Recommended Mitigation Item Numbers 85 and 87 and in the updated Draft General Conformity Analysis, revised emissions have been developed reflecting the updated schedule for the Project, mitigation measures, and other refinements in assumptions and calculation procedures. This information is included in the revised Draft General Conformity Analysis, in Section 5.0 and in Appendix A to that document. Based on the updated emissions estimates, General Conformity requirements are no longer estimated to be triggered for ozone precursor VOC emissions or PM_{2.5} precursor SO₂ emissions at any Project-affected areas. In addition, based on refined information on the LNG ship transit route in Virginia waters, a General Conformity determination for the State of Virginia no longer is required for the project. The only remaining project emissions subject to General Conformity are ozone and PM_{2.5} precursor NO_x emissions in Maryland AQCR 115 during both the construction and operating phases, ozone precursor NO_x emissions in the Philadelphia-Wilmington-Atlantic City AQCR (Cecil Co., Maryland and Chester Co., Pennsylvania) and PM_{2.5} precursor NO_x emissions in Chester Co., Pennsylvania in the Philadelphia-Wilmington, PA-NJ-DE Interstate AQCR. Accordingly, the following edits should be made to the sentences in paragraphs 3 and 4 on page 4-208:

Paragraph 3:

~~“Also, VOC emissions from the proposed construction activities in Maryland during 2009 would be greater than 50 TPY. Last, marine traffic emissions of NO_x would be greater than 100 TPY in Maryland and Virginia waters. The Virginia waters are also located in O₃ maintenance areas.”~~

Paragraph 4:

~~In contrast, SO₂ emissions from marine traffic activities during project operations would be greater than 100 TPY in Maryland. Based on these emissions, the project would be subject to general conformity determinations in Maryland; and Pennsylvania and Virginia.~~

The FEIS should reflect these changes and information supplemented as necessary.

4-98. Section 4.11.1.4; Page 4-210; Paragraph 2: “The proposed LNG terminal site construction would require a workforce between 400 and 600 over a period of 36 months.”

AES1-4-98 AES Comment: The FEIS should be revised to read “approximately” 36 months.

4-99. Section 4.11.1.4; Page 4-210; Paragraph 4: “Nevertheless, emissions from the construction activities are discussed above to assist in assessing the environmental issues associated with the Project. Estimates were based on EPA emission factors for stationary engines (for construction equipment and commuter vehicle tailpipe emissions), EPA estimation methods for vehicle travel on paved roads (for dust generated by on-site truck and vehicle traffic and worker commuting trips), and EPA estimation methods for concrete batch plants.”

AES1-4-97 Section 4.11.1.3 has been updated based on the draft General Conformity determination.

AES1-4-98 Section 4.11.1.4 has been updated to read "approximately" 36 months.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

AES1-4-99 AES Comment: This section inaccurately states that AES evaluated fugitive dust from vehicle travel on paved roads (e.g., worker commuting vehicles). AES only estimated tailpipe emissions from mobile sources. The updated emissions requested in Staff's proposed Recommended Mitigation No. 85, which requests fugitive PM from onsite construction activities (assumed all unpaved roads - along the Pipeline construction route and at LNG Terminal), and will be submitted.

4-100. Section 4.11.1.4; Page 4-214; Paragraph 8: "One source, Ecron Ethanol was identified and cumulative impacts from the LNG terminal and proposed ethanol plant were evaluated."

AES1-4-100 AES Comment: As noted in Comment 4-53 [Section 4.4.2.1; Page 4-140; Paragraph 6], the corn-based Ecron ethanol facility is no longer a viable development project due to the termination of its lease option agreement with the site owner in October 2007. The FEIS should be revised to reflect this (non)development. However, because inclusion of the Ecron facility in the Project's cumulative impacts study provides a more conservative demonstration of overall impacts than would be the case if the Ecron facility were not included, and, even in addition to background conditions, those overall impacts were found in the DEIS to comply with NAAQS, AES does not object to continued inclusion of the analysis in the impacts study.

4-101. Section 4.11.1.4; Page 4-210; Paragraph 4: "SO2 emission factors were based on appropriate chapters of EPA's AP-42. AP-42 assumes that diesel fuel contains approximately 0.3 to 0.5 percent sulfur by weight."

AES1-4-101 AES Comment: AES previously updated its SO2 emission factors to address the more stringent diesel sulfur limits (0.05%) that are currently in effect. This should be reflected in the FEIS.

4-102. Section 4.11.2.3; Page 4-224; Paragraph 1: "Other noise sources are unsheltered equipment such as natural gas send-out equipment, a booster air compressor, and a nitrogen compressor."

AES1-4-102 AES Comment: The LNG Terminal design does not include any unsheltered "booster" air compressor or nitrogen compressor. AES will use instrument air compressors, which are located inside the Fabrication Building, and a nitrogen system that does not rely on a compressor. It is possible that the combustion turbine associated with the Power Plant might need such equipment, but these would be located inside the Fabrication Building, not "unsheltered" as stated herein. Finally, it should be noted that it is possible that portable air compressors would be used on site for maintenance activities. This discussion should be corrected and supplemented in the FEIS accordingly.

4-103. Section 4.12.4; Page 4-239; Paragraph 2: "The 1,600 Btu/ft2-hr incident flux level for the LNG storage tank impoundment fire produced a longer distance at a wind speed of 15 mph compared to that of 18 mph. The resulting distances would be 394 feet for the 10,000 Btu/ft2-hr; 775 feet for the 3,000 Btu/ft2-hr zone; and 949 feet for the 1,600 Btu/ft2-hr zone."

AES1-4-99 Section 4.11.1.4 has been updated to correct fugitive emissions from vehicle traffic.

AES1-4-100 Ecron Ethanol is still included in the analysis, however, the permit expiration date has been included in the text of section 4.11.1.4.

AES1-4-101 Section 4.11.1.4 has been revised to reflect the more stringent diesel sulfur limit of 0.05%.

AES1-4-102 Section 4.11.2.3 has been updated.

AES1-4-103 AES Comment: AES's thermal radiation calculation, which was submitted with Resource Report 11, *Reliability and Safety*, showed that the distance to the 3,000 Btu/hr-ft² flux was 737 feet, not 775 feet as stated above, and should be corrected in the FEIS. AES notes that Figure 4.12.4-1 and Table 4.12.4-2 in the DEIS correctly show this dimension as 737 feet.

4-104. Section 4.12.4; Page 4-240; Figure 4.12.4-1: Thermal Exclusion Zones

AES1-4-104 AES Comment: The figure depicts the LNG storage tanks as oval in shape. AES intends to use circular tanks. AES requests that the figures be revised in the FEIS.

4-105. Section 4.12.4; Page 2-241; Paragraphs 4 and 5: "AES used DEGATEC, a Microsoft Windows version of DEGADIS that includes the SOURCE model, in their vapor dispersion modeling of the full flow from a guillotine rupture of the 32-inch diameter unloading line at a rate of 55,040 gpm. This 10-minute spill volume of 550,400 gallons would result in a distance of 262 feet to the ½ LFL which would remain on the terminal site.

FERC staff did not agree with this calculation performed by AES. Therefore, we modeled a spill from the LNG tank header for 2 low pressure operating pumps each rated at 7,000 gpm (14,000 gpm). A 10-minute spill produces a distance of 361 feet to the ½ LFL which would remain on the terminal site. Figure 4.12.4-1 illustrates the calculated vapor dispersion exclusion zone."

AES1-4-105 AES Comment: In its July 31, 2007 response to the FERC Staff Data Request dated July 11, 2007, AES revised and re-submitted the flammable vapor dispersion calculation. In this revision, AES used a spill of 210,000 gallons, equivalent to three in-tank pumps operating at rated capacity for 10 minutes. (Three pumps were assumed to ensure the design was acceptable for a possible future expansion to 2.25 bscfd send-out.) This revised calculation concluded that the ½ LFL distance would be 394 feet, which would remain on the Terminal Site. This corrected information should be included in the FEIS.

4-106. Section 4.12.5.2; Page 2-245; Paragraph 3: "All LNG vessels as well as other cargo vessels 300 gross tons and larger."

AES1-4-106 AES Comment: This reference should be corrected in the FEIS to 500 gross tons and larger. See Paragraph 3 of Part A of the International Ship and Port Facility Security ("ISPS") Code.

4-107. Section 4.12.5.4; Page 4-251; Paragraph 5: "Under Title 33, CFR § 165.500 and 165.503, the Coast Guard currently has established a 500-yard radius safety and/or security zone around existing LNG marine traffic in the Chesapeake Bay. These regulations would apply to LNG vessels calling on the Sparrow's Point LNG facility as well unless and until changes to the CFR are made. Entry into or movement within 500 yards around the vessels would be prohibited unless authorized by the Coast Guard."

AES1-4-107 AES Comment: The relevant portion of 33 CFR 165.503 states as follows: "No vessel may approach within 500 yards of a passenger vessel or vessel carrying a [Certain Dangerous Cargo,

AES1-4-103 Section 4.12.4 has been revised to correct the 3,000 Btu/ft²-hr zone to 737 ft to coincide with table 4.12.4-2.

AES1-4-104 The oval storage tanks depicted in figure 4.12.4-1 of the DEIS were due to a printing error. The figure has been corrected.

AES1-4-105 The flammable vapor dispersion zone calculations are based on the maximum design send-out rate of 1.595 bscfd as proposed in the application, with two in-tank pumps operating and one spare. If AES should decide to install additional pump(s) for a future expansion, a separate application would need to be filed with the Commission for review and approval.

AES1-4-106 Section 4.12.5.2 has been updated.

AES1-4-107 The provisions in 33, CFR, §165.503 which may allow vessels traveling at minimum safe navigation speeds to approach within 500 yards of an LNG carrier are applicable within the COTP Hampton Roads Zone. Although, similar provisions are not currently contained in the safety/security zone regulations specified in 33, CFR, §165.500 for the COTP Baltimore Zone, the COTP Sector Baltimore has stated their intention would be to also establish a similar Regulated Navigation Area under 33, CFR, §165.500. As stated in the WSR, authorization from the COTP would be required to enter the safety/security zone around any LNG carrier transiting to the proposed LNG terminal.

i.e., a material defined as CDC in 33 CFR 160.204] . . . unless traveling at the minimum speed necessary to navigate safely . . . [and] no vessel or person may approach within 100 yards of a passenger vessel or vessel carrying a CDC.” Thus, the exception allowed for vessels traveling at the minimum speed necessary to navigate safely does not require permission from the COTP; it is only vessels that might wish to approach within 100 yards of the LNG ship that require permission. These provisions of 33 CFR 165.503 will be applied to all LNG vessels transiting the Chesapeake Bay. AES requests that this discussion be amended in the FEIS to reflect the language of the USCG regulations.

4-108. Section 4.12.5.5; Page 4-254; Paragraph 9: “This preliminary determination was contingent upon the availability of additional measures necessary to responsibly manage the maritime safety and security risks.”

AES1-4-108 AES Comment: See Comment ES-3 [Page ES-5; Paragraph 5]

4-109. Section 4.12.5.5; Page 4-255; Paragraph 2: “Application of the safety/security zone requirements of 33 CFR § 165.500 and § 165.503 to LNG vessels transiting the Chesapeake Bay to the proposed terminal”

AES1-4-109 AES Comment: AES notes that the WSR states that “The security zone of 33 CFR 165.503 and the safety/security zone of 33 CFR 165.500 apply to LNG vessels operating on the Chesapeake Bay. No vessel may enter the safety and/or security zone without first obtaining permission from the cognizant Captain of the Port (COTP).” The relevant portion of 33 CFR 165.503 states as follows: “No vessel may approach within 500 yards of a passenger vessel or vessel carrying a [Certain Dangerous Cargo, i.e., a material defined as CDC in 33 CFR 160.204] . . . unless traveling at the minimum speed necessary to navigate safely . . . [and] no vessel or person may approach within 100 yards of a passenger vessel or vessel carrying a CDC.” The cited language ensures that there is a single set of consistent regulations for the entire Chesapeake Bay.

AES expects that enforcement of the security zones relative to small vessels trolling, chumming, drift netting, or at anchor, i.e., “traveling at the minimum speed necessary to navigate safely,” in the area where the LNG ship has yet to pass, will be accomplished by individual checks on each such vessel by the security escort.

4-110. Section 4.12.6; Page 4-257; Paragraph 5: “On several LNG import terminal proposals, a number of organizations and individuals have expressed concern that the local community would have to bear some of the cost of ensuring the security and emergency management of the LNG facility and the LNG vessels while in transit and unloading at the berth.”

AES1-4-110 AES Comment: AES has publicly stated on numerous occasions that it would make the appropriate arrangements to pay for any additional resources needed to satisfy the USCG’s recommendations to assure safe and smooth LNG ship transits within the Chesapeake Bay. AES respectfully requests that this AES commitment be reflected in this FEIS reference.

AES1-4-108 Please see updated section 4.12.5.5.

AES1-4-109 See response to AES1-4-107.

AES1-4-110 Section 4.12.6 has been updated to include AES's commitment to make arrangements to pay for any additional resources needed to satisfy the Coast Guard's recommendations to assure safe LNG carrier transit within the Chesapeake Bay.

4-111. Section 4.13; Page 4-266; Paragraph 2: “. . . proposed Ecron ethanol plant at Sparrows Point.”

AES1-4-111

AES Comment: As noted in Comment 4-53 [Section 4.4.2.1; Page 4-140; Paragraph 6], the corn-based Ecron ethanol facility is no longer a viable development project due to the termination of its lease option agreement with the site owner in October 2007. The FEIS should therefore be revised to reflect this (non)development. The sentence should be ended after the phrase “. . . and marine transportation activities.”

AES1-4-111 See revised section 4.13.

4-112. Section 4.13; Page 4-267; Table 4.13-1: “Ecron Ethanol Plant”

AES1-4-112

AES Comment: See Comment 4-53 [Section 4.4.2.1; Page 4-140; Paragraph 6] above. The reference to the Ecron facility in Table 4.13-1 should be deleted in the FEIS.

AES1-4-112 Please see response to comment AES1-4-111.

4-113. Section 4.13.2; Page 4-268; Paragraph 3: “None of the lands proposed for the AES and Ecron construction are under active cultivation, and no prime farmland would be converted as a result of the projects.”

AES1-4-113

AES Comment: See Comment 4-53 [Section 4.4.2.1; Page 4-140; Paragraph 6] above. The sentence should be modified in the FEIS to delete the phrase “and Ecron” and the word “projects” should be changed to the singular.

AES1-4-113 Please see response to comment AES1-4-111.

4-114. Section 4.13.5; Page 4-273; Paragraph 3: “Operation of the Project would impact about 544.6 acres of currently undeveloped lands, of which, 276.1 acres are agricultural; 147.3 acres are forested; and 13.2 acres herbaceous vegetation/open land.”

AES1-4-114

AES Comment: It is unclear how this statement relates to the remainder of the paragraph, specifically the first sentence. AES requests that the FEIS clarify whether “operation impacts” are in addition to “construction impacts,” or are a subset of them.

AES1-4-114 This sentence has been revised for clarification purposes.

4-115. Section 4.13.5; Page 4-273; Paragraph 4: “About 45.8 miles (85 percent) of the proposed pipeline route is collocated.”

AES1-4-115

AES Comment: Based on the current projected length of the Pipeline, 45.8 miles is approximately 51 percent of the overall pipeline length, not 85 percent as stated. AES requests that this be corrected in the FEIS.

AES1-4-115 We have modified the text to reflect this.

4-116. Section 4.13.8; Page 4-275; Paragraph 3: “The security zone would cause vessels to stay out of the channel during the passage of an LNG vessel, and would possibly cause some vessels anchored within the security zone, to move out of the zone during the 45 minute to 1 hour passage of the vessel.”

AES1-4-116

AES Comment: For the reasons set forth in Comment 4-58 [Section 4.8.5.2; Page 4-163; Paragraph 4], AES does not believe that it will be necessary for commercial and recreational boaters to weigh anchor and move out of the way in any set of usual circumstances. For those unusual circumstances where the fishermen or boaters are drifting or at anchor in the main

AES1-4-116 Please see response to comment AES1-4-57b.

shipping channel, and arc at a location in the Chesapeake Bay where the main shipping channel is so narrow as to not allow for a space of 100 yards between the LNG ship and the position of the anchored vessel, and cannot obtain permission from the Escort Commander of the COTP to remain in position, the time that it takes the LNG ships, including the moving security zones, to pass a given point in the main shipping channel generally vary between two and four minutes depending on the speed of the LNG vessel. This is a negligible impact.

AES1-4-116a

For maneuvering and docking within the Marine Channel, which is the shipping channel dedicated for use of the Sparrows Point Shipyard, the total time in that vicinity will be about 45 minutes at a speed of between 1 and 3 knots. Boaters within the security zone in that area may be required to move out of the zone as the LNG vessels pass, but will be allowed to move back in once the LNG ships, including the security have passed. The total time of potential impact for LNG vessels, including the moving security zone, maneuvering into and in the Marine Channel at 2.5 knots is about 30 minutes. Again, this is a negligible impact, especially when one considers that this specific area is adjacent to the highly industrialized Sparrows Point Peninsula.

AES1-4-116a Comment noted.

AES1-4-116b

As noted above, AES is required to develop the VTMP prior to commissioning of the LNG Terminal. A part of the VTMP will address boater notification to address those infrequent occurrences where fishermen are drifting or at anchor in the main shipping channel.

AES1-4-116b Comment noted.

4-117. Section 4.13.8; Page 4-275; Paragraph 5: "Thus the siting of the LNG ships for 45 minutes to an hour, 4 to 6 times per week (two to three vessel round trips per week) from any point along the vessel transit should not be a significant contributor to changes in the viewshed along the vessel route."

AES1-4-117

AES Comment: The DEIS correctly notes that large, deep draft vessels are common in the viewshed of the Chesapeake Bay, and therefore LNG vessels will not be a significant, additional contributor to changes in the viewshed. It should be noted that the time that a ship will be in the viewshed depends on the speed of the ship and, of course, the vantage point from which one is viewing the ship. Assuming a ship speed of 18 knots and a view of the ship from 3 miles, which accounts for the vast majority of the transit route, the total time that the ship will be seen is about 18 minutes as the ship comes into view, passes a particular point, then passes out of view. As the ship passes the Bay Bridge and slows speed, the time that the ship will be in view will increase. The longest period of time that a ship will be visible from a given vantage point will be as it moves through the Brewerton Channel then maneuvers in the Marine Channel and docks at the LNG Terminal, which will be slightly over one hour. AES respectfully requests that this additional information and analysis be reflected in this section of the FEIS.

AES1-4-117 Comment noted. Also see response to comment AES1-4-57.

4-118. Section 4.13.11; Page 4-277; Paragraph 5: "One foreseeable project, the ECRON ethanol production facility, would also be located on the Sparrow's Point peninsula. Therefore, MDE requested a cumulative modeling analysis of operational emissions from the LNG terminal and ethanol plant. The modeling developed by the applicant, at the direction of MDE and the FERC, includes seven scenarios for the LNG terminal (with and without the power plant) as well as a scenario including all Ecron sources."

AES1-4-118

AES Comment: As noted in Comment 4-53 [Section 4.4.2.1; Page 4-140; Paragraph 6], the com-based Ecron ethanol facility is no longer a viable development project due to the termination of its lease option agreement with the site owner in October 2007. The document should be revised to reflect this (non)development. Because inclusion of the Ecron facility in the Project's cumulative impacts study provides a more conservative demonstration of overall impacts than were the Ecron facility not included in the cumulative impacts study, and even in addition to background conditions, those overall impacts were found in the DEIS to comply with NAAQS; accordingly, AES does not object to continued inclusion of the analysis in the impacts study.

AES1-4-118 See revised section 4.13.

AES1-4-119

4-119. Section 4.13.11; Page 4-278; Paragraph 1: "In April 2007, MDE issued an air quality permit for the Ecron ethanol plant."

AES Comment: See Comment 4-53 [Section 4.4.2.1; Page 4-140; Paragraph 6]. The FEIS should be revised to reflect this (non)development.

AES1-4-119 See revised section 4.13.

AES1-4-120

4-120. Section 4.13.11; Page 4-278; Paragraph 1: "Due to the proximity of the proposed ethanol plant to the proposed LNG terminal, construction schedules were reviewed to assess the potential for cumulative air impacts due to construction activities."

AES Comment: See Comment 4-53 [Section 4.4.2.1; Page 4-140; Paragraph 6]. The FEIS should be revised to reflect this (non)development.

AES1-4-120 See revised section 4.13.

AES1-4-121

4-121. Section 4.13.11; Page 4-278; Paragraph 1: "Based on discussions with MDE, a commence construction date for the ethanol plant is unknown at this time due to financing issues. Cumulative air quality impacts due to construction activities would be reviewed once schedules for the LNG terminal and ethanol plant are better known."

AES Comment: See Comment 4-53 [Section 4.4.2.1; Page 4-140; Paragraph 6]. The FEIS should be revised to reflect this (non)development.

AES1-4-121 See revised section 4.13.

AES1-4-122

4-122. Section 4.13.12; Page 4-279; Paragraph 2: "Thus, AES must achieve these additional RMMs, including identifying port and agencies with support infrastructure to implement these RMMs."

AES Comment: See Comment ES-3 [Page ES-5; Paragraph 5].

Page 4-241; Section 4.12.4; Paragraph 1: "Therefore, we believe that any funding for HUD projects would not be impacted by the Project."

AES Comment: The referenced HUD regulation has nothing to do with the siting of LNG facilities; nor does it have anything to do with continued funding of existing HUD projects. Importantly, given the type of facility proposed by AES, the regulations would not prohibit a HUD housing development to be located near the AES project should additional HUD-assisted housing be desired in the area that currently has the highest concentration of such housing in all of Baltimore County. The regulation allows for the construction of HUD housing in such

AES1-4-122 Please see updated section 4.12.5.5.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

circumstances if measures are implemented to mitigate any potential danger. Such measures are clearly evident in the engineering and design plans presented by AES in Resource Report 13, *Engineering and Design Material*, and other parts of its filings.

Further, none of the factors required by the regulation to be considered in determining the appropriateness of the location of new HUD housing would prohibit the siting of new HUD housing near the proposed LNG facility. Given the measures AES proposes to implement to mitigate any potential danger (including use of un-pressurized full-containment storage tanks (see next paragraph) and remote siting as confirmed by the calculations included in the DEIS, i.e., 394 feet and 1,364 feet for the 10,000 Btu/ft²-hr and 450 Btu/ft²-hr flux levels, respectively), existence of the LNG Terminal would not enter into the consideration of siting new HUD projects in any way should such new housing projects be desired in the area.

AES1-4-122a It must be emphasized that the HUD regulation at issue applies to *pressurized* containers and is often overstated by a factor of ten. The latter fact is confirmed in a report sponsored by the U.S. Department of Commerce and written by the National Institute of Standards and Technology ("NIST") in 2000 that specifically addressed the single formula used in the HUD guidelines for a wide variety of flammable liquids and gasses. After reviewing the HUD guidelines, NIST concluded as follows:

In the quarter century since these reports were released, the field of fire science has grown rapidly, leading to improved methods of measurement and prediction of fire behavior. A review by the Building and Fire Research Laboratory at the National Institute of Standards and Technology (NIST) of the 1975 HUD guidelines for thermal radiation flux has revealed that for certain fire scenarios the methodology can produce estimates of radiation flux [heat] that are up to an order of magnitude larger than those actually measured in field experiments.

AES1-4-122b On May 30, 2008, HUD wrote a letter to FERC that made reference to standards for heat flux and the calculation of an Acceptable Separation Distance ("ASD") per HUD regulations. While the HUD letter concluded that HUD permits exceptions to this standard when outdoor areas are shielded from above ground storage tanks by existing intervening buildings, a conclusion with which AES would agree were the standard to be applicable, and/or terrain and the HUD projects identified in the letter would fall within this exception due to the many intervening buildings, AES believes that the FEIS should reflect the comments made above by AES regarding the inapplicability of the standards in the first instance. AES believes that the FEIS should specifically state the applicability of the LNG Fire 3 model in determining heat flux calculations as it relates to LNG storage tanks.

SECTION 5 – CONCLUSIONS AND RECOMMENDATIONS

5-1. Section 5.1; Page 5-1; Paragraph 1: "The conclusions and recommendations presented in this section are those of the FERC environmental staff based on information provided by AES and Mid-Atlantic Express; information developed through data requests, field investigations by the Commission staff; literature review; alternatives analyses;

AES1-4-122a Section 4.12.4 has been updated.

AES1-4-122b Section 4.12.4 has been updated.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

comments from federal, state and local agencies; and input from public groups and individual citizens. While our conclusions and recommendations were developed with input from the COE, EPA, Coast Guard, and Pennsylvania Department of Conservation and Natural Resources, each of these agencies will present its own conclusions and recommendations when each has completed its review of the Project.”

AES1-5-1 AES Comment: AES responded to extensive data requests submitted to it by MDF and PPRP. Responses to those extensive data requests were provided to FERC and other agencies. AES respectfully requests that recognition of the extensive information provided to those agencies also be reflected in the FEIS.

5-2. Section 5.1.3; Page 5-3; Paragraph 10: “At the LNG terminal site, the construction of the facilities would impact water quality of the Patapsco River during the following activities: . . . processing of dredged material at the DMRF.”

AES1-5-2 AES Comment: AES respectfully submits that this conclusion is at odds with the extensive information that has been provided by AES to FERC. This includes information that was included in Resource Report 2, *Water Use and Quality*, and in responses to subsequent data requests, which shows that negative impact to water quality in the Patapsco River will be avoided during dredge operations.

To summarize from the Resource Report and the data request responses, the initial step in processing dredged materials is the reduction of the water content of the dredged sediments. Excess water will be removed from the raw dredged material prior to entering the receiving hopper. Dewatering of the loaded scows will occur at the dredging site. At the dredging site, portable pumps will be utilized to remove decant water from the loaded scows. This water will be placed into a primary holding scow and allowed to settle for a period of 24 hours. The water will then be pumped off of the primary holding scow to a secondary holding scow. Again, the decant water will be allowed to settle for a period of 24 hours, or until the total suspended solids content of the water is below a level of 75 PPM. The water will then be discharged from the holding scow back to the water at the dredging site. This aspect of dredging activity is reviewed by the ACOE through issuance of a Section 10 permit (Rivers & Harbors Act) for dredging operation and a Clean Water Act Section 404 permit for the discharge of the clarified supernatant water to surface waters. Therefore, the release of supernatant discharge waters is exempted from NPDES regulation; the release is also reviewed under a Clean Water Act Section 401 Water Quality Certification, which may be issued by the State of Maryland.

Should dewatering of a loaded scow be required at the DMRF itself, a dewatering system will be available. Loaded scows would be allowed to settle so that the free-liquid portion would be visibly free of suspended sediments prior to pumping the decant water to the cargo area of a dedicated dewatering barge. After settling, the decant water from dewatered dredged material at the DMRF will pass through an onshore settling tank system consisting of 4 tanks with a capacity of 21,000 gallons each (i.e., portable frac tanks), and will be filtered prior to discharge back to the Patapsco River. Chemical and physical analyses will be conducted on the decant water in accordance with a MDF Water Management Program Individual Permit for Industrial Water Discharge that will be issued for the DMRF. Threshold values for discharge will be set forth in that permit.

AES1-5-1 We recognize that AES has corresponded extensively with other agencies besides the FERC. We have utilized this information as appropriate in this FEIS. We also recognize that these agencies may interact with AES and send comments to AES, separately, within state permit processing reviews.

AES1-5-2 Comment noted.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

If necessary, the 21,000 gallon holding tanks can be pumped off into tanker trucks for transport and delivery to an offsite facility capable of treating wastewater that cannot be discharged under permit at the DMRF. If needed for such contingency reasons, two such facilities are within reasonable haul distance of the project site, and were noted in AES' filings with the FERC. Those two sites are listed below:

Clean Harbors, Inc.
1910 Russell Street
Baltimore, MD 21230

AEG Environmental
P.O. Box 286
Westminster, MD 21158

Also as already noted in the DEIS, elutriate testing has been completed on the sediments proposed to be dredged by AES. The results of these analyses are presented in Resource Report 2, *Water Use and Quality*. The elutriate analyses are representative of the expected chemical characteristics of the dredged material decant water. The results indicate that the dredge materials decant water from scows or the DMRF is not expected to have an adverse impact on water quality.

Regarding monitoring of the decant water, the operation proposed by AES involves settling of the decant water in a dedicated dewatering scow(s) for a period of not less than 24 hours, or until the total suspended solids content is demonstrated to be less than 75 mg/L. As noted in AES' filings for comparison purposes to other DMRFs, this method has been employed by dredgers under the regulatory oversight of the New Jersey Department of Environmental Protection ("NJDEP") and the New York State Department of Environmental Conservation ("NYSDEC") for over seven years. When the NJDEP or NYSDEC issues a federal consistency determination or water quality certificate for dredging activities in the New York/New Jersey Harbor area that includes scow dewatering prior to upland processing of raw dredged material, the following conditions are typically included in the permit:

- *"All decant water holding scows shall be water tight and of solid hull construction and shall be moored at the (dredging project location)."*
- *"All decant water shall be held in the decant holding scow a minimum of 24 hours after the last addition of water to the decant holding scow prior to discharge to the (waters at the dredging project location)."*
- *"Should the (project sponsor), or its contractor, wish to reduce the required holding time, it must be demonstrated that the reduced holding time is sufficient to meet a total suspended solids (TSS) action level of 75mg/L. The total suspended solids shall be determined through gravimetric analysis. No discharge shall be permitted from the decant holding scow until the results of the gravimetric analysis have confirmed that the 75 mg/L action level has been achieved. No additional water shall be added to the decant holding scow between the time of sample acquisition and discharge. Upon*

successful demonstration that the reduced holding time is sufficient to meet the TSS action level of 75 mg/L, the monitoring of TSS may be suspended and the demonstrated settling time shall replace the 24 hour minimum. A successful demonstration of the reduced holding time efficiency shall be determined once three consecutive TSS analyses have confirmed that the 75 mg/L action level has been achieved by the reduced holding time, all records including time of last addition of decant water into the scow, time of TSS sampling and the results of TSS sampling shall be submitted to the (state regulatory agency) as soon as they become available, together with a request for a reduced holding time."

AES proposes an identical approach to monitoring decant water prior to discharge. If testing results indicate that the decant water exhibits a TSS concentration less than 75 mg/L in a time period less than 24 hours on a consistent basis, AES may propose to reduce the required holding time for decant water prior to discharge.

AES1-5-2a

In summary, substantial attention has been given to this subject by AES in order to provide water management associated with the dredging operations that is intended to avoid negative impact to water quality in the Patapsco River. AES therefore respectfully requests that this information and analysis be incorporated fully into this section of the FEIS.

5-3. Section 5.1.3; Page 5-3; Paragraph 10: "At the LNG terminal site, the construction of the facilities would impact water quality of the Patapsco River during the following activities: . . . hauling off the PDM to placement or reuse sites."

AES Comment: As noted in Resource Report 2, *Water Use and Quality*, following processing into one or more useful products, the PDM will be transported via on-site conveyors to the designated temporary PDM stockpile/staging area. The 10-acre PDM storage area at the DMRF (graving dock location) will be capable of storing up to approximately 192,000 CY of processed dredged material. The additional 20-acre PDM storage area will be capable of storing up to approximately 640,000 CY of processed dredged material. The PDM will be moved as required in this area using hydraulic excavators, bulldozers and vibratory compactors into large stockpiles for temporary storage in inventory until the material is sold for beneficial use. The transport of the PDM to placement and reuse sites will follow standard protocols for dust control and is not anticipated to have any impact on the water quality of the Patapsco River. AES requests that this information be reflected in the FEIS.

AES1-5-3

5-4. Section 5.1.3; Page 5-3; Paragraph 10: "Impacts to water quality during operation of the LNG facility would primarily result from site stormwater runoff."

AES Comment: This statement should be amplified in the FEIS based on the following. AES's design for the LNG Terminal includes appropriate stormwater controls, and will collect and direct all stormwater on the property through appropriate treatment as needed to meet the stringent criteria applied and enforced by the State of Maryland for discharge under the Maryland General Permit for Stormwater Discharge Associated with Industrial Activity. Any stormwater that comes in contact with industrial process areas will be routed separately, treated prior to discharge, and discharged with process wastewater routed to the Baltimore County

AES1-5-4

AES1-5-2a See revised section 4.3.2.5.

AES1-5-3 Section 5.1.3 has been updated to include the information provided by the applicant.

AES1-5-4 The FEIS has been updated based on information provided by AES.

<p>Publicly Owned Treatment Works ("POTW"). Discharges to the POTW will be permitted, monitored, and treated to meet the pre-treatment standards required by the Baltimore County POTW. The LNG Terminal will occupy approximately 45 acres of upland area. Approximately 50 percent of the Terminal Site will be categorized as process area in which the associated storm water runoff will be collected and treated on site prior to discharge to the POTW. The redirection of the process area storm water runoff will result an approximately 50 percent reduction in storm water being discharged to the Patapsco River; thereby greatly exceeding the requirement set forth in Maryland Critical Area laws that there be a 10 percent net reduction in stormwater runoff for re-development within an Intensely Developed Areas. The FEIS should therefore reflect this improvement to water quality that will result during operation of the LNG Terminal.</p>	<p>AES1-5-4a Please see response to comment AES1-5-4.</p>
<p>5-5. Section 5.1.3; Page 5-3; Paragraph 10: "Impacts to water quality during operation of the LNG facility would primarily result from site stormwater runoff."</p> <p><u>AES Comment:</u> See Comment 5-4 [Section 5.1.3; Page 5-3; Paragraph 10]. The FEIS should be clarified to quantify the improvement to water quality that will result during operation of the LNG Terminal vis-à-vis the standards required under existing Maryland law.</p>	<p>AES1-5-5 Comment noted.</p>
<p>5-6. Section 5.1.8; Page 5-12; Paragraph 2: "We are recommending that prior to construction, AES and Mid-Atlantic Express receive concurrence from the MDE that the Project is consistent with the state's Coastal Zone Management Program."</p> <p><u>AES Comment:</u> The DFIS correctly summarizes the history of the Coastal Zone Management Act consistency determination relative to the Project. In other sections of the DEIS, it appears that there is recognition that the decision on whether the Project is consistent with Maryland's Coastal Management Program is no longer in the hands of MDE; rather, it rests with the Secretary of the Department of Commerce. Importantly, Recommendation 67 states: "Prior to construction, AES and Mid-Atlantic Express shall file with the Secretary documentation that the Project is consistent with the Coastal Zone Management Act." The cited language should be modified to reflect this.</p>	<p>AES1-5-6 FERC is in receipt of the Secretary of Commerce's Decision and Findings on the AES consistency appeal. Section 5.1.8 has been updated to reflect the Secretary of Commerce's Decision and Findings.</p>
<p>5-7. Section 5.2; Page 5-18; "FERC STAFF'S RECOMMENDED MITIGATION"</p> <p><u>AES Comment:</u> AES believes that it has addressed all of the Staff's Recommended Mitigation Measures that call for information or actions to be undertaken "Prior to the end of the DEIS comment period." The required information is provided in the AES Response to DEIS Recommended Mitigation filed with the Secretary on June 16, 2008. Some of the information will be provided post comment period per agreement with FERC. Accordingly, AES submits that such Recommended Mitigation Measures need not carry over to the FEIS.</p> <p>In addition, AES provides the following comments on the remaining FERC Staff Recommended Mitigation Measures. AES's comments are numbered to correspond with the numbering of the individual mitigation measure.</p>	<p>AES1-5-7 Comment noted.</p>

0080619-0108 FERC PDF (Unofficial) 06/16/2008

5-8. Section 5.2: Page 5-33; Item 93; AES shall develop an Emergency ERP (including evacuation) and coordinate procedures with the Coast Guard; state, county, and local emergency planning groups; fire departments; state and local law enforcement; and appropriate federal agencies. This plan shall include at a minimum:

- a. designated contacts with state and local emergency response agencies;
- b. scalable procedures for the prompt notification of appropriate local officials and emergency response agencies based on the level and severity of potential incidents;
- c. procedures for notifying residents and recreational users within areas of potential hazard along the transit route;
- d. evacuation routes/methods for residents and other public use areas that are within any transient hazard areas along the transit route of the LNG marine traffic;
- e. locations of permanent sirens and other warning devices; and
- f. an "emergency coordinator" on each LNG vessel to activate sirens and other warning devices.

The ERP shall be filed with the Secretary for review and written approval by the Director of OEP prior to initial site preparation. AES shall notify FERC staff of all planning meetings in advance and should report progress on the development of its ERP at 3-month intervals. (section 4.12.6).

AES anticipates that it will develop three (or possibly four) separate ERPs: one for Pennsylvania (Pipeline); one for Harford and Cecil Counties in Maryland (Pipeline); and one for Baltimore County (Pipeline and LNG Terminal). The ERP for Baltimore County may be divided in two separate ERPs or kept as one ERP with separate sections for the Pipeline and the LNG Terminal. AES does not expect to coordinate with the USCG on development of ERPs for the in-land portion of the Pipeline. As for coordinating with "state, county, and local emergency planning groups; fire departments; state and local law enforcement; and appropriate federal agencies," AES will make all reasonable attempts to do so; however, participation by all the named entities may not be possible should one or more entities elect not to meet with AES or its representative. In such circumstances, AES will incorporate standard procedures, including procedures for contact, notification, evacuation (using accessible information), placement of warning devices, etc. The ERP(s) will then be delivered to the Commission for approval by the Director of OEP prior to initial site preparation

Designation of an "emergency coordinator" on each LNG vessel will be a part of the Vessel Management Transit Plan. The LNG Terminal ERP will reference this person only to the extent that warning devices need be activated.

Also, note that the term "Emergency ERP" is redundant in that "ERP" is the acronym for "Emergency Response Plan."

5-9. Section 5.2: Page 5-33; Item 95: Complete plan drawings and a list of the hazard detection equipment shall be filed prior to initial site preparation. The list shall include the instrument tag number, type and location, alarm locations, and shutdown functions of the

AES1-5-8

AES1-5-8a

AES1-5-8 This recommendation is in accordance with Section 311 of the Energy Policy Act of 2005, which states that in any Order authorizing an LNG terminal, the Commission shall require the LNG terminal operator to develop an emergency response plan. As defined by that section, LNG terminals do not include any pipelines subject to the jurisdiction of the Commission under Section 7 of the NGA. Emergency plans for the pipeline are subject to DOT regulations under 49 CFR 192.

AES1-5-8a Text has been updated.

proposed hazard detection equipment. Plan drawings shall clearly show the location of all detection equipment. (section 4.12.2)

AES1-5-9 AES provided drawings and a list of hazard detectors in its January 2007 application. See Appendix U.7 and U.9, respectively.

Due to the timing and sequencing of a typical construction project, these drawings are typically not developed until three to four months after mobilization and initial site preparation. AES intends to update these drawings and list, and will submit them at the time of final design, rather than prior to initial site preparation. AES requests the FERC Staff reconsider and revise this recommendation accordingly.

5-10. Section 5.2: Page 5-33; Item 96: AES shall provide a technical review of its proposed facility that:

a. identifies all combustion/ventilation air intake equipment and the distances to any possible hydrocarbon release (LNG, flammable refrigerants, flammable liquids and flammable gases); and

AES1-5-10 AES provided drawing 06903-DG-660-420 in Appendix U.8.3 to its January 2007 application. This drawing showed all combustion/ventilation air intake equipment locations and the locations of possible hydrocarbon release points.

Due to the timing and sequencing of a typical construction project, these drawings are typically not developed until three to four months after mobilization and initial site preparation. AES intends to update this drawing and requests that it be permitted to submit it at the time of final design, rather than prior to initial site preparation. AES requests the FERC Staff reconsider and revise this recommendation accordingly.

5-11. Section 5.2: Page 5-33; Item 96: AES shall provide a technical review of its proposed facility that:

b. demonstrates that these areas are adequately covered by hazard detection devices and indicates how these devices would isolate or shutdown any combustion equipment whose continued operation could add to or sustain an emergency.

AES1-5-11 AES provided drawing 06903-DG-660-420 in Appendix U.8.3 to its January 2007 application. This drawing shows the presence of gas detectors in the appropriate air intakes and the actions taken when gas is detected to isolate or shutdown combustion equipment. Also, AES provided drawings and a list of hazard detectors in the January 2007 filing. See Appendix U.7 and U.9, respectively.

Due to the timing and sequencing of a typical construction project, these drawings are typically not developed until three to four months after mobilization and initial site preparation. AES intends to update this information and requests approval to submit it at the time of final design, rather than prior to initial site preparation. AES requests the FERC Staff reconsider and revise this recommendation accordingly.

AES1-5-9 If the Commission authorizes the proposed project, this may be addressed in the Implementation Plan requested under recommendation number 6. In the event that the submitted designs require no revision, there would be no need to resubmit the requested information. However, should design changes required by other FERC staff recommendations affect the previously provided information, revisions to design drawings or equipment would need to be filed in accordance with recommendation number 1.

AES1-5-10 Please see response to comment AES1-5-9.

AES1-5-11 Please see response to comment AES1-5-9.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

5-12. Section 5.2: Page 5-33; Item 97: Complete plan drawings and a list of the fixed and wheeled dry-chemical, fire extinguishing, and other hazard control equipment shall be filed prior to initial site preparation. The list shall include the equipment tag number, type, size, equipment covered, and automatic and manual remote signals initiating discharge of the units. Plan drawings shall clearly show the planned location of all fixed and wheeled extinguishers. (section 4.12.2)

AES1-5-12 AES provided drawings and a list of fixed and wheeled dry-chemical, fire extinguishing, and other hazard control equipment in its January 2007 application. See Appendix U.8.1, U.8.2 and U.9, respectively.

Due to the timing and sequencing of a typical construction project, these drawings are typically not developed until three to four months after mobilization and initial site preparation. AES intends to update this information and requests approval to submit it at the time of final design, rather than prior to initial site preparation. AES requests the FERC Staff reconsider and revise this recommendation accordingly.

5-13. Section 5.2: Page 5-33; Item 98: Facility plans showing the proposed location of, and area covered by, each monitor, hydrant, deluge system, hose, and sprinkler, as well as piping and instrumentation diagrams, of the fire water system shall be filed prior to initial site preparation. (section 4.12.2)

AES1-5-13 AES provided facility plans showing the proposed location of, and area covered by, each monitor, hydrant, deluge system, hose, and sprinkler, as well as piping and instrumentation diagrams, of the fire water system in its January 2007 application. See Appendix U.8.1 and U.8.2 for location and coverage drawings, and U.6.3 for fire water piping and instrumentation diagrams.

Due to the timing and sequencing of a typical construction project, these drawings are typically not developed until three to four months after mobilization and initial site preparation. AES intends to update this information and requests approval to submit it at the time of final design, rather than prior to initial site preparation. AES requests the FERC Staff reconsider and revise this recommendation accordingly.

5-14. Section 5.2: Page 5-34; Item 99: A copy of the hazard design review and list of recommendations that are to be incorporated in the final facility design shall be filed prior to initial site preparation. (section 4.12.2)

AES1-5-14 AES provided a report of the facility hazard identification study, and a report of the hazard and operability study of Sparrows Point, in Appendix G of the January 2007 application.

AES notes that the Resource Report 13 Draft Preferred Submittal Format Guidance published by FERC in April 2006 states in Appendix G that applicants are to provide "the final HAZOP review prior to finalizing the design as Issued For Construction." In accordance with that guidance, AES submits it is appropriate to submit the associated report documentation prior to

AES1-5-12 Please see response to comment AES1-5-9.

AES1-5-13 Please see response to comment AES1-5-9.

AES1-5-14 Please see response to comment AES1-5-9.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

the time that drawings are issued for construction, rather than prior to initial site preparation. AES requests the FERC Staff reconsider and revise this recommendation accordingly.

5-15. Section 5.2: Page 5-34; Item 102: AES shall provide information/revisions related to the 31 responses to the April 23, 2007 Engineering Information Request which stated that corrections or modifications would be made to the design. The final design shall specifically address response numbers 3, 12, 13, 25, 26, 36, 38, 42, 50, 51, 52, 58, 60, 67, 70, 72, 73, 79, 80, 81, 83, 88, 91, 92, 94, 96, 97, 102, 103, 104, and 108 using management of change procedures. (section 4.12.2)

AES1-5-15 As a clarification, the Engineering Information Request was dated April 3, 2007. AES provided the responses in question on April 23, 2007.

AES offers the following updates and clarifications to the responses submitted on April 23, 2007:

Update of Commitments Made in Response to FERC Staff's April 3, 2007 Data Request

Note: FERC's comments were provided in a data request dated April 3, 2007. AES's commitments listed in the Table below were made in the response submitted on April 23, 2007.

FERC Comment (April 3, 2007)	AES Commitment Made (April 23, 2007)	CH-IV Update
3. Describe the considerations given to providing dedicated closed, manifolded systems for LNG recovery from the LNG removal and relief systems that would return LNG to the storage tanks.	Procedures will be prepared, prior to operation, and implemented to remove these non-volatile heavy hydrocarbons using the low point drain valve on the Low Point Drain Drum.	This is still an acceptable commitment.

AES1-5-15a

AES1-5-15 Section 5.2 has been updated to reflect the correct date.

AES1-5-15a Comment noted.

	FERC Comment (April 3, 2007)	AES Commitment Made (April 23, 2007)	CH-IV Update
AES1-5-15b	12. The proposed design of the elevated concrete unloading platform above the pier shown in Figure 6 Unloading Platform Section appears to create a partially enclosed cavern when two LNG carriers are berthed at the same time. Explain if consideration has been given to the risk to personnel being possibly exposed within a cascading cloud of cold vapor in the event of a spill on the platform above.	AES will produce operating and safety procedures that define certain operating scenarios and actions to be taken or not taken. For example, where cargo transfer is temporarily suspended during the period that a second vessel is berthing and the mooring hookup is being performed (so that mooring crews can travel back and forth under the loading platform out to the outer dolphins without incurring exposure to the spill risk). Also, if instrumentation indicates a leak is present or a leak is suspected, no person will be allowed to enter the area between the two vessels without self contained breathing apparatus that will be kept available near the pier control room.	This is still an acceptable commitment.
AES1-5-15c	13. Explain the emergency evacuation route for personnel from the unloading area in the event of a major spill that results in cold vapor falling onto the pier from the elevated platform and LNG spillway.	A permanent ladder down to the water level will be provided so personnel can board a tug boat or other egress craft in order to safely evacuate from the pier.	This is still an acceptable commitment.
AES1-5-15d	25. Explain how the low point drain drum, D-211, would handle excess liquid and what would prevent LNG from backing up into the BOG drum.	(Same as Item 3)	This is still an acceptable commitment.
AES1-5-15e	26. The low point drain drum, D-211, is shown as located in vaporizer area spill containment sump, S-606. This containment is shown as 18 feet deep. Explain how this would provide a safe and operable location for personnel and how residual liquid would be removed.	Although not anticipated to be necessary, the drain at the bottom of the vessel could be connected to an electrically heated unit that could vaporize LNG.	The idea of installing a heater was to show that there are options short of pumping out condensed heavies. The decision to install this heater is still under review at this time.

AES1-5-15b Comment noted.

AES1-5-15c Comment noted.

AES1-5-15d Comment noted.

AES1-5-15e Comment noted.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

	FERC Comment (April 3, 2007)	AES Commitment Made (April 23, 2007)	CH-IV Update
AES1-5-15f	36. Has consideration been given to specifying the HP pump minimum flow recycle line from the flow control valve to and including the CSO isolation valve, in line LNG-322A/B/C-18, as 15SS, 1500# class?	It is anticipated that the final design would include logic that would shutdown the HP pumps in a sequenced manner where only for the briefest time would all HP pumps remain running and recycling flow at the design flow rate.	This is still an acceptable commitment.
AES1-5-15g	38. Has consideration been given to providing flow measurement and flow balancing provisions in the HTF piping to the top and bottom of the vaporizer? If not, provide justification. Refer to drawing 06903-PI-300-127-01.	Provisions for flow balancing are not provided in the front end engineering design as the need will be determined following selection of vaporizer vendor during EPC.	This is still an acceptable commitment.
AES1-5-15h	42. Describe the provisions and procedures proposed to prevent freezing conditions occurring in idle vaporizers during normal shutdown, emergency shutdown, and extended power failure.	The potential for freezing in an ESD or power failure situation will be addressed following selection of vaporizer vendor during EPC.	This is still an acceptable commitment.
AES1-5-15i	50. Explain why LNG drains and LNG relief valve discharge lines are not provided with dedicated header systems and piped to storage.	(Same as Item 3)	This is still an acceptable commitment.
AES1-5-15j	51. Provide at what stage in the design process specification and data sheets for the meter station would be available.	The meter station will be specified as part of the final design of the LNG Terminal.	This is still an acceptable commitment.
AES1-5-15k	52. Provide the LNG tank specification applicable to the proposed design.	None. (The requested specification was provided as an attachment to AES's response. There is no additional commitment.)	This is still an acceptable commitment.

AES1-5-15f Comment noted.

AES1-5-15g Comment noted.

AES1-5-15h Comment noted.

AES1-5-15i Comment noted.

AES1-5-15j Comment noted.

AES1-5-15k Comment noted.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

	FERC Comment (April 3, 2007)	AES Commitment Made (April 23, 2007)	CH-IV Update
AES1-5-15l	58. Explain why the tank nozzle and penetration schedules shown on drawings 06903-DG-200-201/222/236 are inconsistent.	All three drawings are preliminary and subject to final design.	This is still an acceptable commitment. These drawings will be re-issued by the EPC as part of final design.
AES1-5-15m	60. In addition to the one line drawings 06903-DG-200-252/253, provide a general arrangement layout of the proposed undertank heating element layout and temperature element location	None. The requested drawing had been provided as part of the January 2007 application.	Because the drawing has been submitted, AES requests that No. 60 be removed from this list.
AES1-5-15n	67. Resolve the differences between the maximum LNG design densities given on the process data sheets and the vendor data sheets for the IP and IIP LNG pumps.	During EPC, AES will carefully monitor specifications and vendor information to ensure full compliance by the vendor prior to awarding contracts.	This is still an acceptable commitment.
AES1-5-15o	70. Provide, if available, the instrumentation specification addressing redundancy to ensure reliability of servers, I/O controllers, fiber optic systems and communication devices as described in communications systems.	ISA 84.00.01-2003 shall be used by the EPC Contractor and SIS/PES suppliers as the guiding document to establish the design requirements including redundancy and separation of basic process controls. In addition, redundancy for the system shall be based on a failure modes and effects analysis. The failure modes and effects analysis shall be performed by EPC contractor. During the EPC phase, detailed analysis of the safety interlocks shall be carried out to establish SIL requirements and to finalize safety system design. The EPC contractor will prepare a Safety Instrumented System philosophy.	This is still an acceptable commitment.

AES1-5-15l Comment noted.

AES1-5-15m The FEIS has been updated to remove number 60.

AES1-5-15n Comment noted.

AES1-5-15o Comment noted.

	FERC Comment (April 3, 2007)	AES Commitment Made (April 23, 2007)	CH-IV Update
AES1-5-15p	72. Explain why all ESD valves are not equipped with position indicators, connected to the DCS.	All ESD valves include valve position indication. This may take the form of open/closed switches (ZSO/ZSC), valve positioners (0-100%) or both.	This is an acceptable commitment.
AES1-5-15q	73. Explain the philosophy and provide the specification for the use of soft connections in the SIS.	All SIS inputs and outputs will be hardwired from the field devices to the Main Control Room SIS cabinet or remote I/O panel. The SIS will be connected to the plant distributed control system (DCS) through redundant communications and watchdog monitoring.	This is still an acceptable commitment.
AES1-5-15r	79. Explain the safe discharge location for the fuel gas heater, E-313A/B, shell side bursting discs. These are shown as discharging to grade.	Determination of the safe discharge location for the fuel gas heater, F-313A/B, shell side bursting discs cannot be determined until detailed engineering of the surrounding civil structure has been completed during the EPC phase.	This is still an acceptable commitment.
AES1-5-15s	80. Explain if consideration has been given to locating the spill ducts, integrated with the pipe racks, farther from the piping and cabling. If not, provide justification.	Final design will address possible ways to enhance pipe rack protection.	This is still an acceptable commitment.
AES1-5-15t	81. In view of the proximity of the spill containment sump to the piperacks and cabling, explain if consideration has been given to the potential effect of a fire in the impoundment sump and to providing a thermal protection barrier between the spill impoundment S-606 and the pipe rack.	Final design will address possible ways to enhance piperack protection through sump compartmentalization and/or other passive means. Electrical and instrumentation cables will be run underground in the area of the S-606 Spill Containment Sump.	This is still an acceptable commitment.

AES1-5-15p Comment noted.

AES1-5-15q Comment noted.

AES1-5-15r Comment noted.

AES1-5-15s Comment noted.

AES1-5-15t Comment noted.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

	FERC Comment (April 3, 2007)	AES Commitment Made (April 23, 2007)	CH-IV Update
AES1-5-15u	83. Indicate whether audible and visible alarms for alerting personnel to the presence of flammable gas in buildings, would be installed at all entrances to enclosed buildings. Refer to drawings 06903-DG-600-410-01/06.	It is the clear intent to include these audible and visible alarms as required by NFPA 59A-2001 Section 9.3.2 during the detailed design phase.	This is still an acceptable commitment.
AES1-5-15v	88. Has consideration been given to providing a second firewater jockey pump and what is the justification for the 10 gpm capacity? If not, provide an explanation.	AES is considering adding a second jockey pump or carrying an on site spare to allow immediate replacement. This issue will be addressed in detailed design.	AES will include redundant installed jockey pumps.
AES1-5-15w	91. Explain to what extent outside contractors would be utilized for site security.	It is anticipated that AES will hire a full time security lead that will be at the LNG Terminal, but will organizationally work for/with the in-house AES security team based in Arlington Virginia. On a daily and task basis, that individual will report to the LNG Terminal manager. That individual will hire and monitor all outside security contractors. All security for the LNG Terminal with the exception of the individual described above will be outsourced, including both land based and marine operations.	This is still an acceptable commitment.
AES1-5-15x	92. Provide a site plan showing the location of cameras used for monitoring process and hazard detection. It is noted that security cameras would be provided and details of cameras and locations are to be contained within the security documentation.	It is the clear intent to include these cameras during the detailed design phase once civil structures and building have been designed.	This is still an acceptable commitment.

AES1-5-15u Comment noted.

AES1-5-15v Comment noted.

AES1-5-15w Comment noted.

AES1-5-15x Comment noted.

	FERC Comment (April 3, 2007)	AES Commitment Made (April 23, 2007)	CH-IV Update
AES1-5-15y	94. Provide the sections of the major pipe racks showing the proposed location of the power and instrumentation cabling.	(same as item 80)	This is still an acceptable commitment.
AES1-5-15z	96. Has consideration been given to specifying that all LNG and cryogenic piping less than 2 inches should be schedule 160? If not, provide justification.	The design intent is that each application of 2-inch and smaller pipe size for cryogenic service shall be considered with regard to stresses and potential physical damage to which it may be exposed. The need for schedule 160 wall thickness on all small bore pipes will be determined when pipe stress calculations are performed as part of the detailed engineering design.	This is still an acceptable commitment.
AES1-5-15aa	97. Has consideration been given to limiting the use of schedule 10S pipe to low pressure vapor systems? If not, provide justification.	Pipe stress calculations performed during detailed engineering will be used to identify any components that might exceed allowable stresses.	This is still an acceptable commitment.
AES1-5-15bb	102. Would the next HAZID/HAZOP review would include review of conditions that could be caused as a result of inappropriate operating and maintenance procedures, in addition to malfunction of control devices? If not, provide an explanation.	The next HAZOP is scheduled to be performed during the preparation of detailed engineering. The HAZOP will include a review of conditions that could be caused as a result of inappropriate operating and maintenance procedures, in addition to the malfunction of control devices.	This is still an acceptable commitment.

AES1-5-15y Comment noted.

AES1-5-15z Comment noted.

AES1-5-15aa Comment noted.

AES1-5-15bb Comment noted.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

AES1-5-15cc

FERC Comment (April 3, 2007)	AES Commitment Made (April 23, 2007)	CH-IV Update
103. Explain how the intank pump discharge piping was evaluated to insure that controlled cooldown would be achieved.	The front end engineering design provided for the LNG flow paths that would be used to trickle cool the individual 18" pump discharges following maintenance. Detailed engineering during the EPC phase will take into account the trickle cooling in terms of pipe stresses and movement and procedures will be developed and implemented prior to receipt of LNG to minimize stresses and ensure a controlled cooldown is achieved.	This is still an acceptable commitment.
104. Explain how the high pressure drop anti-cavitation HP pump recycle valve would prevent overpressure of the downstream piping and why the piping was not evaluated for reclassification to high pressure, at least to include the isolation valve downstream of the minimum flow control valve (refer to Item 8.08).	See response to Data Request Item No. 36. The downstream isolation valve referenced is a car seal open valve closed only for double block and bleed isolation for pump maintenance and would not serve as a pipe spec break.	This is still an acceptable commitment.
108. Provide the proposed vendor's LNG tank specification.	See response to Data Request Item No. 52.	This is still an acceptable commitment.

AES1-5-15dd

AES1-5-15ee

AES1-5-15cc Comment noted.

AES1-5-15dd Comment noted.

AES1-5-15ee Comment noted.

5-16. Section 5.2: Page 5-34; Item 105: The final design shall specify that the design pressure of sendout equipment containing LNG in low pressure service shall be not less than the design pressure of the piping system. (section 4.12.2)

AES1-5-16

The In-Tank pump dead head discharge pressure is approximately 80 psig, which is well below the 100 psig relief valve setting on the HP Pump Drum. Accordingly, there is no need to design the drum for piping system design pressure (270 psig). Similarly, the in-tank pump columns need not be designed for piping design pressure. All other sendout equipment in low pressure LNG service is designed for piping design pressure. In light of this explanation, AES respectfully requests that the FERC Staff eliminate Recommended Mitigation Measure No. 105.

5-17. Section 5.2: Page 5-34; Item 106: The final design shall specify that LNG relief valves and LNG drains shall not discharge into the vapor system. (section 4.12.2)

AES1-5-16 Specifying that the equipment for low pressure service should not be less than the design pressure of the piping system ensures that the equipment will not be subjected to unsafe loads or pressures during tightness testing of the connecting piping.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

In the final design, all offshore LNG relief valves and drains will be routed to the Platform Drum. All onshore LNG drains are routed to the Low Point Drain Drum in the current design.

AES1-5-17 All LNG relief valves, if not already, will be routed to the Low Point Drain Drum in final design. Accordingly, AES requests that the FERC Staff reconsider and revise this Recommended Mitigation Measure.

5-18. Section 5.2: Page 5-34; Item 107: The final design shall specify that LNG from relief valves and drains is to be returned to storage. (section 4.12.2)

In the current design, the ultimate end-point for all LNG relief valves and drains is the LNG storage tank vapor space. LNG from relief valve discharges and drains will enter the Low Point Drain Drum and vaporize, and the generated vapor will flow into the BOG header which is common to the vapor spaces of all tanks.

AES1-5-18 AES does not plan to install provisions for directly transferring liquid from the Low Point Drain Drum into the tanks. Based on experience at other LNG terminals, AES expects that following extended periods of operation small volumes of butane and/or heavier hydrocarbons may collect in the bottom of the Low Point Drain Drum. If this liquid were to be pumped into the storage tanks, the liquid would gel and plug the transfer lines, or solidify in the tanks and potentially clog the in-tank pumps.

AES will prepare procedures, prior to operation, for safely removing these non-volatile heavy hydrocarbons using the low point drain valve on the Low Point Drain Drum. AES requests the FERC Staff review and revise this Recommended Mitigation Measure as appropriate based on this response.

5-19. Section 5.2: Page 5-34; Item 109: The final design shall specify that the vapor inlet piping to the BOG drum shall be designed to insure that all LNG, from the desuperheater and LNG piping discharging to the drum, cannot back flow to the vapor return piping. (section 4.12.2)

This Recommended Mitigation Measure requires clarification. The BOG Drum is not connected to the vapor return piping; accordingly, there is no means for LNG that may be present in the BOG Drum to back flow into the vapor return piping.

AES1-5-19 It is the express intent of the design of all drums in vapor service that can have an LNG level to prevent LNG from entering the vapor system. Provisions made in the current design for the BOG Drum include a demister pad, level control which stops LNG flow to the desuperheater on IIIH liquid level, and two independent level control instruments which shut down the downstream rotating equipment on HH liquid level. AES therefore requests the FERC Staff review and revise this Recommended Mitigation Measure as appropriate based on this additional information.

5-20. Section 5.2: Page 5-34; Item 116: The final design shall include a shutoff valve at the suction and discharge of each IIP pump. (section 4.12.2)

AES1-5-17 The intent of the recommendation is to ensure that safety features would be in place to prevent LNG from inadvertently entering the vapor system. Past operational experience at LNG facilities have shown excessive liquid buildup in drain drums can overflow LNG into vapor systems.

AES1-5-18 We believe that provisions should be provided to drain liquid back to the storage tanks to ensure that the capacity of the low point drain drum would not be exceeded.

AES1-5-19 The low point drain drum would receive LNG from several sources. Although the system would have provisions to shut down the rotating equipment on high high liquid level in the BOG drum, no safety features have been provided to prevent LNG from flowing into the vapor system piping.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

AES1-5-20 In the current design, each HP and IP pump has a remotely operable shutoff valve on the discharge. The primary purpose of remotely operable shutoff valves on the pump suction lines is to limit the potential volume of LNG that may be released in the event of a significant incident. This protection is provided by HV-285, shown on P&ID 06903-PI-200-118, which can be shut remotely and closes on ESD2. Accordingly, AES believes that no other shutoff valves are needed on the pump suction lines, and therefore requests that the FERC Staff reconsider and eliminate this proposed Recommended Mitigation Measure.

5-21. Section 5.2: Page 5-35; Item 117: The final design shall specify that the minimum flow recycle line from the HP LNG pumps to downstream of the isolation valve to the LNG storage tanks shall be the same pressure and temperature rating as the piping at the discharge of the HP LNG pumps. (section 4.12.2)

AES1-5-21 The current design provides many features that prevent the pressure in this line from reaching the pump discharge pressure. These features include high pressure drop flow control valves for flow entering this line; plus the line is open to tank pressure, and oversized. Further, 100 percent redundant pressure indicating switches are provided on this recycle line which would shut down the pumps in the event of a pressure exceedance as sensed by either indicator. This protection is more stringent than HIPPS systems on U.S. LNG terminal sendout systems, which rely on 2-out-of-3 logic instead of fully redundant protection. Accordingly, AES plans to keep the line rating as currently specified, and therefore requests that the FERC Staff reconsider and eliminate this proposed Recommended Mitigation Measure.

5-22. Section 5.2: Page 5-35; Item 120: The final design shall include provisions to remove LNG from the inlet channel of the vaporizer. (section 4.12.2)

In the event of a vaporizer shutdown the small volume of LNG present in a vaporizer inlet channel will vaporize due to heat transfer from the HTF system or ambient surroundings. No other draining is required, since the small volume will evaporate quickly following a shutdown.

AES1-5-22 In the event that immediate draining of an HP vaporizer becomes required, the small LNG inventory could be discharged through valve HV-391, as shown on P&ID 06903-PI-300-127. Similarly, for the IP vaporizers, the LNG could be drained through valve HV-396, shown on P&ID 06903-PI-300-133. Based on this, AES believes that the current design addresses the identified concerns, and therefore requests that the FERC Staff reconsider and eliminate this proposed Recommended Mitigation Measure.

5-23. Section 5.2: Page 5-35; Item 121: The final design shall include a shutoff valve at the suction and discharge of each LNG vaporizer. (section 4.12.2)

AES1-5-23 AES requests that the FERC Staff clarify whether this valve is intended to be an emergency shutdown valve.

In the current design, each vaporizer inlet line is equipped with a remotely operable shutoff valve. This valve also serves as an emergency shutdown ("ESD") valve that stops LNG flow into the vaporizer upon initiation of an ESD-2 signal.

AES1-5-20 There are no provisions to isolate each individual pump from the suction header. The recommendation will remain in the FEIS, but can be reevaluated during the Implementation Plan (IP) review if the Project is approved.

AES1-5-21 This recommendation will remain in the FEIS, but can be reevaluated during the IP review if the Project is approved.

AES1-5-22 Please see response to comment AES1-5-21.

AES1-5-23 The recommendation is for a shutoff valve actuated through the shutdown system on the suction and discharge of the vaporizer.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

Regarding the provision of a shutoff valve on the discharge line of each vaporizer, it is not clear whether FERC is recommending installation of a valve that would automatically close during emergency shutdown conditions, or whether FERC is recommending installation of a non-ESD remotely operable shutoff valve.

If FERC is recommending installation of an ESD valve, AES believes that no ESD shutoff valve is needed for each vaporizer discharge, as the design intent is to stop LNG flow into the vaporizer under ESD conditions by shutting the inlet line ESD valve and to then allow the remaining LNG inventory in the vaporizer and associated piping to warm up and flow out of the vaporizer as natural gas, discharging to the sendout system. Provision of an ESD shutoff valve in the discharge line would lock in the volume of LNG during ESD-2 conditions, causing pressure to build in the system until the discharge line relief valve (set at 2800 psig in the current design) lifts on each vaporizer. This would occur each time there is an ESD-2 at the plant. The alternative, which is to not install an ESD shutoff valve in the discharge line, allows the inventory of LNG in the vaporizer to flow gradually into the larger volume sendout system, and avoids relief valve discharge that would be associated with a closed discharge line ESD valve during ESD-2 conditions.

If FERC is recommending installation of a non-ESD remotely operable shutoff valve, AES believes that manually operable block valves provided in each discharge line are sufficient to allow safe isolation of an individual vaporizer for maintenance. We do not see a benefit for installation of remotely operable valve actuators because we believe that this neither enhances the safety nor operability of the system. Therefore, AES submits that the current design addresses any potential concerns and requests that the FERC Staff reconsider and eliminate this proposed Recommended Mitigation Measure.

5-24. Section 5.2: Page 5-35; Item 124: The final design shall include a discretionary vent valve for each LNG tank, operable through the DCS. (section 4.12.2)

The current design includes a discretionary vent stack connected to the BOG Header, which communicates through car seal opened valves to the vapor space of each tank. The vent line between the BOG Header and the vent stack is equipped with a heater which increases the buoyancy of the vented gas to help the gas disperse safely.

AES1-5-24 AES respectfully submits that installation of a separate discretionary vent on each LNG tank is unwarranted, for the following reasons:

- Vapor discharged from the tank-mounted discretionary vent would not be heated; thus any gas vented would sink, rather than rise. Discretionary gas venting is more safely performed through the common discretionary vent stack (and associated heater), which discharges more-buoyant gas to a safe area away from personnel.
- Installation of a tank-mounted discretionary vent increases the chances of a gas release due to malfunction or operator error.
- AES queried tank vendor Whessoe on this subject. Whessoe recommended against installing discretionary vents on tanks due to the increased risk of gas release, increased

AES1-5-24 The intent of the recommendation is to be able to control tank pressure when the tank is isolated from the rest of the plant. This recommendation will remain in the FEIS, but can be reevaluated during the IP review if the Project is approved.

loading on the tank roof, and increased cost. Please see attached letter from Whessoe documenting their opinion. Separately, Whessoe indicated that they have not provided such a vent on tanks designed to date.

Therefore, AES submits that the design currently submitted provides adequate protection and is consistent with other facility designs, code requirements and manufacturer's requirements and respectfully requests that the FERC Staff reconsider and eliminate this Recommended Mitigation Measure.

5-25. Section 5.2: Page 5-35; Item 132: The final design shall specify that all drains from high pressure LNG systems are to be equipped with double isolation and bleed valves. (section 4.12.2)

AES1-5-25

The final design will include double isolation on all drains such that a double isolation and bleed can be established to maintain primary isolation to drain system. Accordingly, there is no need for the design to include permanent ambient bleeds in high pressure LNG service. AES therefore respectfully requests that the FERC Staff reconsider and eliminate this Recommended Mitigation Measure.

AES1-5-25 This recommendation will remain in the FEIS, but can be reassessed during the IP review if the Project is approved.

5-26. Section 5.2: Page 5-35; Item 133: The final design shall specify that for LNG and natural gas service, branch piping and piping nipples less than 50 mm (2 inches), are to be no less than schedule 160. (section 4.12.2)

AES1-5-26

The intent of the design is to provide adequate wall thickness in accordance with ASME B31.3 code rules (as required by NFPA 59A) and engineering judgment with regard to stresses and potential physical damage to which small bore lines may be exposed. AES proposes to use the code allowable wall thickness for all piping, which allows for use of larger bore pipe or thicker pipe schedules in small lines when stresses for a given penetration cannot be diminished by pipe hangers or pipe supports (see the Engineering Development Standard in Appendix C.1 of AES's January 2007 application.)

AES1-5-26 We believe that use of schedule 160 for small branch piping and nipples in LNG service greatly minimizes the potential physical damage to which small bore piping may be exposed to. This recommendation will remain in the FEIS, but can be reevaluated during the IP review if the Project is approved.

Increasing the schedule of all small bore lines less than 2-inches to schedule 160 needlessly increases costs and weight and reduces piping flexibility and flow area. This change is not warranted per code, nor is there any significant safety or operational advantage in doing so. AES therefore requests the FERC Staff to reconsider and eliminate this Recommended Mitigation Measure.

5-27. Section 5.2: Page 5-35; Item 134: The final design shall specify that all piping designed for LNG service shall be not less than schedule 40. (section 4.12.2)

AES1-5-27

The intent of the design is to provide adequate wall thickness in accordance with ASME B31.3 code rules (as required by NFPA 59A) and engineering judgment. AES proposes to use the code allowable wall thickness for all piping, which allows for use of thicker pipe schedules as needed based on stress analysis to be performed in final design.

AES1-5-27 This recommendation has been removed from the FEIS.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

Increasing the schedule of all LNG service lines to schedule 40 needlessly increases costs and weight, and reduces piping flexibility and flow area. This change is not warranted per code. AES therefore requests the FERC Staff reconsider and eliminate this Recommended Mitigation Measure.

5-28. Section 5.2: Page 5-36; Item 138: The final design shall include details of the air gaps to be installed downstream of all seals or isolations installed at the interface between a flammable fluid system and an electrical conduit or wiring system. Each air gap shall vent to a safe location and be equipped with a leak detection device that: shall continuously monitor for the presence of a flammable fluid; shall alarm the hazardous condition; and shall shutdown the appropriate systems. (section 4.12.2)

AES1-5-28 AES intends to comply with the provisions of NFPA 59A and the National Electric Code regarding detailed requirements for seals at interfaces between flammable fluid systems and electrical conduit or wiring.

AES notes that methods exist for monitoring for possible fluid leakage that do not require monitoring for the presence of flammable fluid. AES reserves the right to use methods such as pressure detection that meet the intent of the National Electric Code, but which may rely on means other than monitoring for presence of flammable fluid. AES therefore requests the FERC Staff to reconsider and eliminate this Recommended Mitigation Measure.

AES1-5-28 Comment noted.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

Attachment A

20080619-0108 FERC PDF (Unofficial) 06/16/2008

U.S. Department of
Homeland Security
United States
Coast Guard



Commander
U. S. Coast Guard
Sector Baltimore

2401 Hawkins Point Road
Baltimore, MD 21225-1791
Staff Symbol CMD
Phone: (410) 576-2561
Fax: (410) 576-2553

16611
16 May 2008

Mr. Christopher H. Diez
AES Sparrows Point LNG, LLC
140 Professional Parkway, Suite A
Lockport, New York 14094

Dear Mr. Diez:

The Coast Guard has received the follow up risk mitigation measures (RMMs) submitted in response to the Waterway Suitability Report Sector Baltimore issued February 25, 2008. Sector Baltimore sought comments from the Executive Steering Committee (ESC) of the Area Maritime Security Committee (AMSC). Based on my staff's review and the feedback from the ESC, I have determined the updated RMMs meet or exceed the levels of safety and/or security I required in the WSR, provided the following items are addressed:

1. I have concluded that additional waterside and shore side security capacity is required when two LNG ships are at berth simultaneously. AES must address the provision of additional security capacity for this circumstance.
2. AES must address whether a minimum of two tugs should be available prior to transiting under the Bay Bridge with one tug being tethered to the tanker. In particular, a single tug is inadequate to control the risk of a propulsion or steering failure unless tethered. I am, therefore, open to a measure requiring the tether of a single tug provided you can demonstrate this to be adequate to deflect an allision with the Bay Bridge. Alternately, two tugs (untethered) would be acceptable.
3. AES must assess the advisability of using a commercial tug for deflecting vessels intending to do harm away from the LNG tanker. With the information provided, I do not find this RMM to be viable given questions of authority, training, liability, resultant damages.
4. Based on the Committee's recommendation, I have concluded that the measures controlling vessel traffic above Kent Island would require a Regulated Navigation Area (RNA), and additionally that separation requirements for cruiseships and LNG ships may also be needed in that RNA. AES must address this proposed RNA as part of the Transit Management Plan (TMP).
5. AES must address additional measures to ensure adequate surveillance capabilities for detecting rogue vessels (inbound and outbound) which might impact loaded LNG ships inbound

20080619-0108 FERC PDF (Unofficial) 06/16/2008

RISK MITIGATION MEASURE FOLLOW UP

16611
16 May 2008

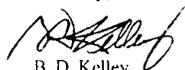
for the terminal. Additionally, AES must also include an "evasion" procedure should a rogue vessel be detected.

6. AES must specifically address how it will provide security from non-Coast Guard sources when the Coast Guard is unable to participate. In particular, AES must revise the RMMs addressing insider threats to increase the number of MARSEC ONE positive control measures and how non-Coast Guard teams would provide these measures.

Development of the TMP and issues related to authority, capability, competency, and partnership with other port players will still need to be addressed prior to the Coast Guard being able to find the waterway suitable for increased LNG traffic. I understand that AES continues to work with my Waterways Management Staff to address these issues. The Coast Guard does not anticipate issuing further formal correspondence with respect to the RMMs but will continue to work through the issues on an informal basis.

For further information, please contact the project officer at Sector Baltimore, Lieutenant Commander Amy Beach at (410) 576-2519, or email: Amy.M.Beach@uscg.mil.

Sincerely,



B. D. Kelley
Captain, U.S. Coast Guard
Captain of the Port
Baltimore, Maryland

Copy: CCGD5 (dp)
Sector Hampton Roads
Commandant (CG-5222)
Maryland Department of Natural Resources
AES Sparrows Point LNG, LLC
Virginia Department of Environmental Quality

20080619-0108 FERC PDF (Unofficial) 06/16/2008

Attachment B

20080619-0108 FERC PDF (Unofficial) 06/16/2008

ASSOCIATION OF



MARYLAND PILOTS

3720 DILLON STREET LI BALTIMORE, MARYLAND 21224-5239 T (410) 276-1337 U FAX: (410) 276-1364
PRESIDENT'S FAX: (410) 276-4197 I CABLES MARPILOT BALTIMORE II TELEX: 87-574

April 23, 2007

The Honorable Elijah E. Cummings
Chairman
Subcommittee on Coast Guard and Maritime Transportation
Committee on Transportation and Infrastructure U. S. House of
Representatives

Dear Chairman Cummings,

I am writing as President of the Association of Maryland Pilots and in that capacity as a participant in the U.S. Coast Guard's Waterway Suitability Analysis (WSA) process. The purpose of the WSA was to consider the affects of additional vessel traffic to and from the proposed LNG facility at Sparrows Point on other maritime activities in Maryland's Port of Baltimore.

Maryland pilots are responsible for the safe, efficient, and reliable transit of deep draft cargo vessels between Cape Henry and Baltimore Harbor. This responsibility includes the LNG vessels that arrive and depart the Cove Point LNG facility on the shore of Calvert County, Maryland.

The purpose of this letter is to clarify the Association's view that the proposed LNG facility and the related vessel traffic can be safely managed with respect to vessel security, and efficiently managed with respect to the affect on other maritime traffic to and from the Port of Baltimore. Pilots have a unique ability to control a variety of factors that mitigate congestion in the navigational channels serving the Port. Among them are departure times, vessel speed underway, coordination of passing opportunities, and the ability of the on-board pilot to know the real-time position of other vessels. Based on these factors, and subject to the U.S. Coast Guard's recommendations on Sparrows Point LNG traffic, the Association of Maryland Pilots is confident that vessel transits for LNG and non-LNG traffic, and especially for schedule-sensitive cargos such as container vessels, can be effectively managed to avoid potential disruption.



The Honorable Elijah E. Cummings
April 23, 2007 Page Two

Maryland pilots have participated in simulations and modeling exercises using the state-of-the-art facilities at the Maritime Institute of Technology and Graduate Studies (MITACS) located in Linthicum Heights, Maryland. The purpose of this effort was to evaluate a wide variety of traffic and environmental scenarios in which the proposed LNG traffic might arrive in Baltimore Harbor and to optimize the channel dimensions and turning radius necessary to ensure safety underway and while maneuvering to the berth.

During its approximately 90 minute transit from the Bay Bridge to the terminal access channel, the LNG vessel will be subject to a security zone as determined by the Coast Guard Captain of the Port. Security zones currently apply to other vessels carrying certain cargos as well as to cruise vessels. These existing security zones have not caused disruption to maritime, commercial, or recreational vessel traffic in the Harbor. It also should be noted that the security zone would only be in effect for inbound LNG vessels.

At the WSA meetings it was agreed the LNG vessels would be slowed in transit and held below the Bay Bridge if there is conflicting outbound traffic from Baltimore Harbor. In addition, tug/barge traffic would be minimally affected by the security zone around an inbound LNG vessel as the anticipated security zone around the LNG vessel would allow a tug/barge to navigate within the edge of the channels or, where appropriate, outside the channels. Thus, any disruptions to other commercial vessel traffic due to the security zone around the inbound LNG vessels should be minor.

I hope this information is useful to your consideration of the safety and security of LNG and the impact on Port operations. The Association of Maryland Pilots is available to address any questions the Subcommittee may have. Thank you for the opportunity to provide information on this important matter.



Captain Eric A. Nielsen
President

Very truly yours

20080619-0108 FERC PDF (Unofficial) 06/16/2008

Attachment C

20080619-0108 FERC PDF (Unofficial) 06/16/2008

NATIONAL OCEANIC and ATMOSPHERIC ADMINISTRATION

**Testimony Before
National Policy and Evaluation Division
Office of Ocean and Coastal Resource Management
September 10, 2007**

**Triennial Evaluation of the
Maryland Coastal Management Program**

Testimony of Vincent Dick, Senior Associate and Vice President, Haley & Aldrich, Inc.

My name is Vincent Dick, and I am a Vice President and Senior Associate with Haley & Aldrich, Inc., an environmental and geotechnical engineering consulting firm with local offices in McLean, Virginia. I am a Bachelor and Masters degree-prepared Environmental Geologist with over 24 years of experience working for both regulatory agencies and Haley & Aldrich, providing services evaluating environmental impact, mitigation and permitting, including energy facility permitting. Haley & Aldrich has been retained by the AES Corporation, a global power company headquartered in Arlington, Virginia, to assist in the development of a proposed liquefied natural gas import terminal in Baltimore County, Maryland.

Introduction

Maryland's Coastal Zone Management Program is intended to allow for responsible siting and development of the State's coastal zone with priority consideration for the national interest in planning for energy facilities that are of greater than local significance. This paper provides information regarding the Coastal Zone Management Program within the State of Maryland and the determination of acceptable coastal zone use within Baltimore County. More specifically, this paper presents one aspect of the required consideration described above to show that recent actions taken by the State of Maryland (briefly touched on below and described in much more detail by AES for these proceedings) are directly contrary with the goals of the Coastal Zone Management Act ("CZMA") and Maryland's approved program.

Haley & Aldrich has been assisting AES with its plans for reuse of a portion of the Sparrows Point peninsula industrial area, an area historically used for steel manufacturing and ship building. The proposed reuse by AES involves siting, construction, and operation of a liquefied natural gas ("LNG") marine import terminal and an associated natural gas transmission pipeline that would carry the natural gas (once converted from liquid to conventional vapor phase) from the LNG import terminal to connections with three existing interstate pipelines that currently supply the Mid-Atlantic region of the United States.

The proposed LNG import terminal is a coastal-dependant facility because the LNG is transported by marine vessels, and they must berth to unload the LNG to a terminal where it is stored and converted to vapor form for overland transport in the interstate pipeline network. From an industrial standpoint, LNG operations are very clean, and can be designed so as to generate no process wastewater (with the exception of limited boiler blow down that can be managed by municipal treatment facilities), limited air emissions, and no hazardous waste. Further, to be consistent with the goals of the CZMA, siting should favor the Coastal Zone Critical Area classified as Intensely Developed Area ("IDA"), areas that are zoned for industrial use (herein designated as "IND"), and areas that provide a reasonable distance from residentially zoned or used areas (herein designated as "RES"). Importantly, in order to comply with Maryland law, new maritime facilities must be located near existing port facilities.

0080619-0108 FERC PDF (Unofficial) 06/16/2008

Analysis of the Coastal Zone Area in Maryland Appropriate for LNG Siting

The information presented here summarizes an analysis of the intersection of these different types of land classification within the Coastal Zone Critical Area¹ of the State of Maryland. Haley & Aldrich was tasked with determining what portions of the Coastal Zone Critical Area within the entire State of Maryland are classified as IDA, are zoned IND, and are greater than 1-mile from residential land use. The objective of the evaluation was to determine how much land is available in the State of Maryland that fits all of these criteria, and to further determine the relative distribution of the locations that fit all criteria on a county-by-county basis, including Baltimore County. The results of this alternatives review provide a solid factual basis to evaluate the appropriateness of the proposed project location with the objectives of the CZMA vis-à-vis available alternatives. The results also highlight inappropriateness of a Baltimore County LNG zoning ban that was purportedly adopted by Maryland as part of its Coastal Management Program.

Methods: This evaluation was accomplished using a series of Geographic Information System ("GIS") overlays. GIS data is routinely compiled by governments and agencies to provide land use, natural resource, demographic, and other geospatial data for a variety of analysis and decision-making purposes. In this circumstance, Haley & Aldrich utilized data from various Maryland state and county sources summarized below.

Critical Area Land Use Data - This data is generally compiled by the Chesapeake Bay Critical Area Commission and provides data on location of the Critical Area and designation within the Critical Area relative to IDAs, the only areas within the Critical Area that would be compatible with an industrial use such as an LNG import terminal. Data was obtained from the Maryland Department of Natural Resources website (<http://dnrweb.dnr.state.md.us/>) for all Maryland counties except Calvert and Queens Anne's counties, which the Critical Area Commission does not appear to maintain. Queen Anne's County has a draft Critical Area Land Use map, which was obtained from the Queen Anne's County Department of Planning and Zoning directly. Calvert County Critical Area Land Use similarly is not available from the state; however, a draft Critical Area Limits was obtained directly from Calvert County Department of Technology Services.

Generalized Zoning Data - A statewide generalized zoning map has been created by Maryland Department of Planning, and we obtained this data from the Maryland Department of Planning website (<http://www.mdp.state.md.us/>). The data covers all Critical Area counties except Baltimore City. For Baltimore City, the Maryland Department of Planning Generalized Land Use map contained the data on industrial use. This data was used to determine areas zoned for IND land use.

Generalized Land Use Data - A statewide generalized land use map has been created by the Maryland Department of Planning. This data was obtained from the Maryland Department of Planning website (<http://www.mdp.state.md.us/>) and used to determine locations of RES land use.

Recent Shorelines Data - This data has been compiled and the GIS database created by the Maryland Department of Natural Resources. The data was obtained from the Maryland

¹ Note that the Critical Area, as defined, includes the "waters and land under the Chesapeake Bay and its tributaries" and "all land and water areas within 1000 feet beyond the landward boundaries of State or private wetlands ..." For purposes of this analysis, we focused on the 1000-foot band of land rimming the Chesapeake Bay and its tributaries. We did not consider the waters and land under the Chesapeake or its tributaries.

0080619-0108 FERC PDF (Unofficial) 06/16/2008

Department of Natural Resources website (<http://dnrweb.dnr.state.md.us/>). This data was used to help define the 1000-foot band of Critical Area around the perimeter of the Chesapeake Bay and its tributaries.

Combining Data - The specific process used to generate results of the overlay of data was as follows:

1. IDA data was extracted from the separate statewide, Queen Anne's County and Calvert County Critical Area Land Use layers and we combined these three layers in a single IDA data layer.¹
2. IND data was extracted from the separate statewide generalized zoning layer and Baltimore City industrial land use layer; these two layers were combined in a single IND data layer.²
3. RES data was extracted from the statewide generalized land use layer. To this data layer, a one mile "band" was added to provide a distance buffer to the RES land use areas.³
4. The geographic outlines of the Critical Area IDA Land Use layer were combined with the overlapping areas within the IND zoning layer, and then combined with the output from the overlapping areas of the one-mile buffered RES areas. The result of overlapping data layers was mapped relative to the State of Maryland, and is attached in the figure titled "Intensely Developed Critical Areas with Industrial Zoning Overlay." Four additional figures are also attached that depict each separate location that fits all the criteria and illustrating each locations current specific land use. Further discussion of the locations of land that fit all the criteria appears below.
5. The result of the mapping in Step 4 above was also combined with the shoreline data to determine length information for the shoreline segments that fit all criteria relative to the total amount of shoreline Critical Area and its distribution among Maryland counties that border the Chesapeake Bay and its tributaries. From this data, we were able to develop a table showing lengths of shoreline that fit the three criteria and determine distribution among the counties, including Baltimore County. Discussion of the results appears below. This table is attached and titled "Summary of Intensely Developed and Industrially Zoned Areas within the Chesapeake Bay Coastal Zone Critical Area Greater Than One-Mile from Residential Land Use"

Results of the Analysis

The attached figure titled "Intensely Developed Critical Areas with Industrial Zoning Overlay" depicts in red the locations of land that fit all three criteria of being (IDA, and IND, and located a mile from RES land use. As shown on the figure, there are only six locations out of the entire State of Maryland that fit all three criteria. From north to south, they are:

Harford County - One location is present on the shoreline of the Bush River within Harford County that fits all the criteria. A separate figure is attached (titled "Harford County") and

¹ Location of the proposed AES facility in the IDA zone is consistent with the goals of the CZMA and Maryland's coastal management program in that those programs encourage the location of necessary new coastal facilities in developed areas capable of accommodating additional development and to ensure the continued viability of Maryland's port areas. Certain Maryland counties, including Baltimore County, specifically designate underutilized or abandoned industrial properties as redevelopment opportunities.

² See note above.

³ The one-mile band is not a regulatory requirement; rather, it is a sensible set-back criterion when dealing with a flammable product and issues of public acceptance. This sensible criterion meshes well with the goals of the Maryland Coastal Management Program in that it accounts for public interest, safety, and human welfare.

0080619-0108 FERC PDF (Unofficial) 06/16/2008

shows that the location is currently used for an industrial purpose which, based on available aerial photography appears to be a wastewater treatment plant on the border of the Aberdeen Proving Ground.

Baltimore County, Baltimore City, and Anne Arundel counties – Three locations within Baltimore County and City, and immediately adjacent Anne Arundel County fit the evaluation criteria. The specific locations are shown on one figure titled “Baltimore City, Baltimore County and Anne Arundel County.”

- On the lower left (south) side of the Patapsco River and roughly flanking the Key Bridge is a series of properties that fit all three criteria. This location comprises multiple existing industrial land uses that appear to include, but not be limited to a landfill, a W.R. Grace chemical plant, and an apparent petroleum bulk storage plant.
- In the upper left (northwest) portion of the figure is one area that fits all three criteria and appears to be used as a marine terminal.
- In the right (eastern) portion of the figure is property on Sparrows Point that fits all three criteria, including the location proposed by AES for its LNG import terminal. The remaining area shown on Sparrows Point is owned and currently used by other parties, principally the existing steel plant.

Calvert County – One location is present on the shoreline of the Chesapeake Bay within Calvert County that fits all the criteria. A separate figure is attached (titled “Calvert County”) and shows that the location is currently used for an industrial purpose, i.e., the existing Calvert Cliffs nuclear power plant.

Prince George’s County – One location is present on the shoreline of the Patuxent River within Prince George’s County that fits all the criteria. A separate figure is attached (titled “Prince George’s County”) and shows that the location is currently used for an industrial purpose, what appears in the aerial photo to be an existing power plant.

Deep Water Access – The state overview figure also has a blue line showing the approximate location of deep water shipping channel (generally 50-foot channel depth) that allows commercial ship access from the Atlantic Ocean to ports located up the Chesapeake Bay. This information was added to illustrate that, of the six shoreline locations that are IDA, IND, and more than one-mile from RES usage, only the locations that flank the Patapsco River in Baltimore County, Baltimore City and Anne Arundel County have deep water channel access. Note also that deep water access is generally not available north of the intersection of the Patapsco River and Chesapeake Bay; the shipping channel in this area is dashed indicating channel depth is generally limited to less than 40-foot depth.³

Shoreline IDA/IND/RES Distribution – The table attached, “Summary of Intensely Developed and Industrially Zoned Areas within the Chesapeake Bay Coastal Zone Critical Area Greater Than One-Mile from Residential Land Use” provides shoreline lengths, broken down

³ AES has designed an innovative re-use program where it will recycle dredged material that is removed from the existing marine channel that currently serves the shipyard site where the project is proposed to be located. AES has shown that its dredging program will protect and provide for the improvement of the quality of the surrounding waters by safely removing a layer of contaminated sediment that currently exists in the upper portion of the Bay bottom offshore of the proposed terminal location. While these benefits further the goals of the CZMA and the Maryland coastal management program in that they serve to restore and enhance areas of Maryland’s coastal zone, they also minimize disturbance at this location by keeping a relatively short dredge length needed for this site that would likely not be available at other locations in the state; this also recognizes both practical and economic limitations to the amount of dredging that a single, privately-sponsored project may accommodate.

0080619-0108 FERC PDF (Unofficial) 06/16/2008

by county, of the areas that fit the criteria. As shown on the table, there is approximately 6,855 miles of shoreline comprising the Critical Area of the Chesapeake Bay and its tributaries.

When sorted according to how much of that shoreline length is classified as IDA there is approximately 348.6 miles of shoreline that is IDA. When further sorted for overlap with IND-zoned land, the length of shore that is IDA and IND drops to approximately 95.7 miles or 1.4% of the total Critical Area shoreline in the State of Maryland. Note that the vast majority of this resides within the combined area of Baltimore County and Baltimore City (approximately 71%).

Adding the remaining screen of how much IDA/IND land is also located at least one mile from RES land, the percentage of shoreline that fits all of these criteria drops to approximately 0.25% of the total Critical Area shoreline in the State of Maryland, and of this there is a clear aggregation of the areas flanking the Patapsco River in Baltimore County, Baltimore City and Anne Arundel County, collectively comprising 0.18% of the total 0.25% of shoreline that fits all criteria out of the total Critical Area shoreline in Maryland.

Summary and Discussion

In Maryland there is a total of approximately 6,855 miles of Critical Area shoreline that comprises the perimeter of the Chesapeake Bay and its tributaries. When sorted for the amount of this shoreline that is classified as IDA and zoned for IND use, and is located at least 1-mile from RES use, there are only six locations of shoreline that fit all three of these criteria in the State of Maryland. They are located in Harford County (one location), Prince George's County (one location), Calvert County (one location), and a cluster of three locations around the Patapsco River in Anne Arundel County, Baltimore County and Baltimore City. Of these locations, only the three locations around the Patapsco River have relative close proximity to existing deep water shipping channel access. These locations, however, are not available as they have existing industrial land uses as a marine terminal, a chemical facility, a petroleum bulk storage, and a landfill. The location on Sparrows Point that AES has proposed for its LNG terminal has historically been used as a shipbuilding facility adjacent to an existing steel manufacturing plant. Importantly, the Sparrows Point site is available in that AES has executed a long term lease option for the property. The proposed LNG terminal provides a clean, coastal dependant, industrial facility to reuse an existing heavy industry location in a manner consistent with the CZMA.

In February 2007, Baltimore County enacted a new zoning regulation that purports to prohibit LNG import and terminal siting within its Critical Area, and in June 2007 the zoning ban was adopted by the Maryland Critical Area Commission ("CAC") into the Maryland Coastal Zone Management Program without approval by NOAA, however legally questionable either act may be. In doing so, it appears that the County and CAC ignored or never considered existing, and clearly objective, criteria summarized here and in other materials presented to those entities that shows such a use at Sparrows Point would be entirely consistent with Coastal Zone Critical Area classification and management.⁴

⁴ AES presented significant volumes of scientific studies to both the County and the CAC during hearings sponsored by those entities that showed improvements to water quality, improvements to sediment quality, improvements to land use via Brownfield re-development, and benefits to air quality associated with the importation of additional supplies of clean-burning natural gas. The materials are in addition to the extensive engineering, scientific and other technical filings submitted by AES for this project to the Federal Energy Regulatory Commission and the state agencies that participate in the project review process. Copies of all these materials have been made available to Baltimore County as well.

0080619-0108 FERC PDF (Unofficial) 06/16/2008

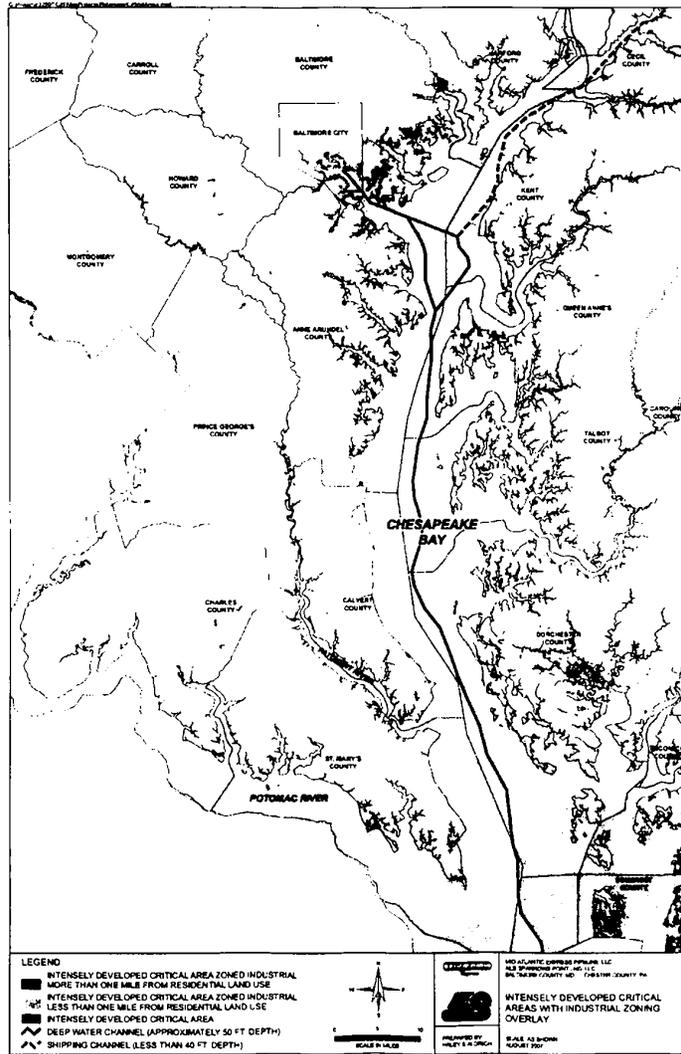
In its triennial review, I urge NOAA to consider this information and find that neither Baltimore County nor the CAC are managing the Maryland Coastal Zone within Baltimore County consistent with the CZMA. NOAA should use whatever means are at its disposal to cause the County and the CAC to void or otherwise disallow the zoning ban and the ban's purported adoption into the MCMP. NOAA should further direct the CAC and every local jurisdiction in the State to responsibly carry out their CZMA-mandated duties with respect to the siting process of coastal-dependant energy facilities. These directions should be considered "Necessary" actions in the results of your Triennial Review provided to Maryland.

Thank you for your time and consideration of this matter. I would be happy to answer any questions you may have.

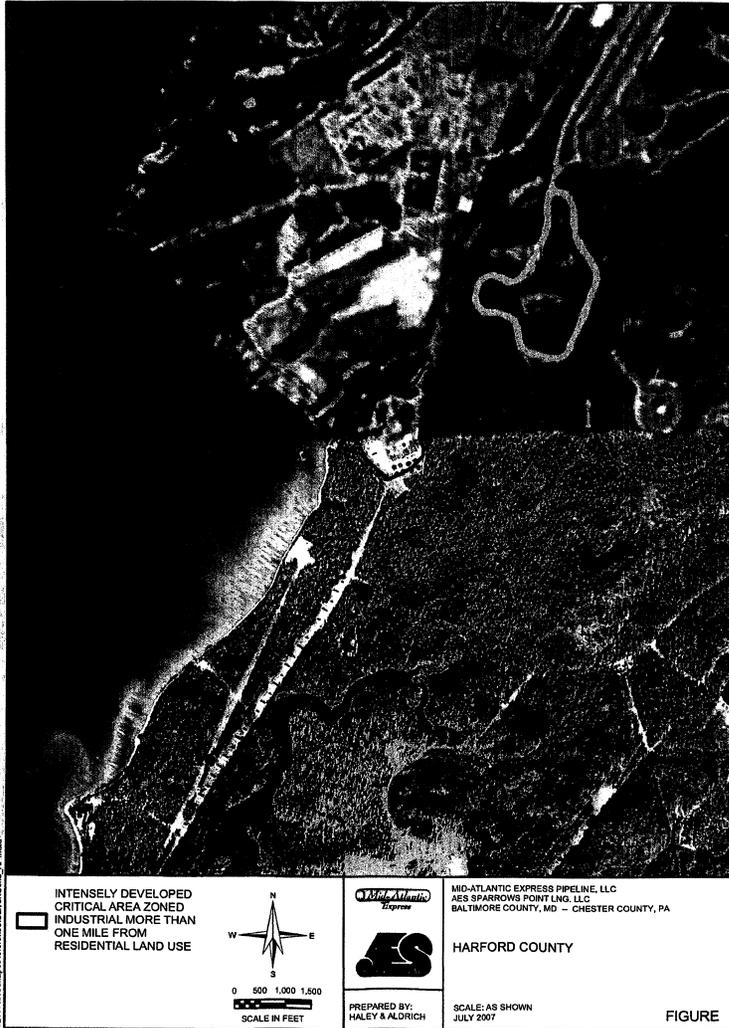
Attachments:

1. Figure - Intensely Developed Critical Areas with Industrial Zoning Overlay
2. Figure - Harford County
3. Figure - Baltimore County, Baltimore City, and Anne Arundel County
4. Figure - Calvert County
5. Figure - Prince George's County
6. Table - Summary of Intensely Developed and Industrially Zoned Areas within the Chesapeake Bay Coastal Zone Critical Area Greater Than One-Mile from Residential Land Use

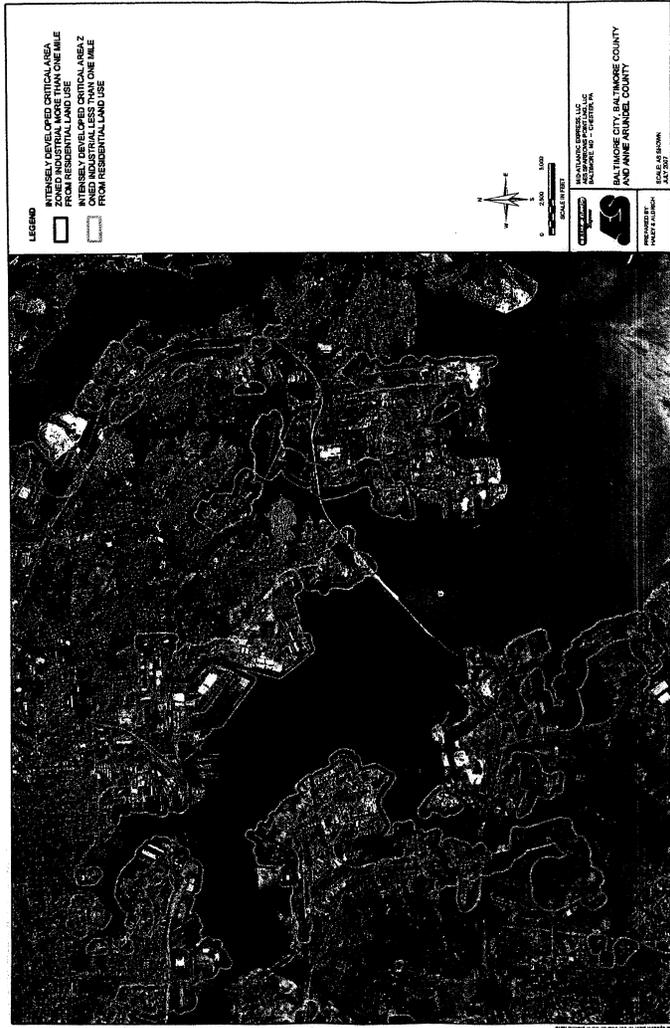
20080619-0108 FERC PDF (Unofficial) 06/16/2008



20080619-0108 FERC PDF (Unofficial) 06/16/2008



20080619-0108 FERC PDF (Unofficial) 06/16/2008



20080619-0108 FERC PDF (Unofficial) 06/16/2008



20080619-0108 FERC PDF (Unofficial) 06/16/2008

Summary of Intensely Developed and Industrially Zoned Areas within the Chesapeake Bay Coastal Zone Critical Area Greater Than One-Mile from Residential Land Use

County Name	Shore Length (miles)	Percent of Total Shore Length	IDA Length (miles)	IDA & IND Length (miles)	Percent IDA-IND of Total Shore	Breakout of Locations Over One Mile from Residential Land Use	Percent IDA-IND of Total Shore that is also > 1 mile from residential
Anne Arundel	434.29	7%	85.09	7.70	0.11%	1.04	0.02%
Baltimore	227.49	3%	69.84	27.40	0.40%	7.05	0.10%
Baltimore City	51.82	1%	56.27	49.46	0.59%	4.33	0.06%
Calvert	222.80	3%	3.72	3.72	0.05%	1.48	0.02%
Caroline	118.71	2%	3.86	0.00	0.00%	0.00	
Cecil	228.18	3%	12.63	0.53	0.01%	0.00	
Charles	295.95	4%	11.66	1.62	0.02%	0.00	
Dorchester	1487.50	22%	1.67	0.21	0.00%	0.00	
Harford	260.99	4%	22.71	2.72	0.04%	0.79	0.01%
Kent	335.03	5%	2.07	0.00	0.00%	0.00	
Prince George's	115.09	2%	7.18	3.59	0.05%	2.71	0.04%
Queen Anne's	407.43	6%	29.09	1.91	0.03%	0.00	
Somerset	1070.57	16%	16.08	1.34	0.02%	0.06	0.00%
St. Mary's	507.19	7%	16.91	2.61	0.04%	0.01	0.00%
Talbot	595.06	9%	1.34	0.65	0.01%	0.00	
Wicomico	352.83	5%	0.07	1.19	0.02%	0.00	
Worcester	80.10	1%	0.38	0.00	0.00%	0.00	
TOTAL	6666.84	100%	348.57	86.85	1.40%	17.47	0.25%

Notes:

- IDA = "Intensely Developed Area", portion of the Maryland coastal zone Critical Area
- IND = industrially zoned property along Critical Area coastal zone
- Base data from Maryland statewide geographic information system (GIS) with exception of Calvert County and Queen Anne's County, both of which were supplied directly by the counties.
- Counties with no IDA and not located on Chesapeake Bay or proximate tributary do not contribute substantively to the total and are not counted in this tally.

20080619-0108 FERC PDF (Unofficial) 06/16/2008

Attachment D

20080619-0108 FERC PDF (Unofficial) 06/16/2008

The Maryland Maritime Association
1201 Wallace Street
Baltimore MD 21230

Rupert Denney
tel - 410.347.7999
fax - 410.385.8650
rdenney@freestatemarine.com

Thursday, April 19, 2007 *by email*

The Honorable Elijah E. Cummings, Chairman
Subcommittee on Coast Guard and Maritime Transportation
Committee on Transportation and Infrastructure
U.S. House of Representatives

Re: Hearing on Safety and Security of Liquefied Natural Gas and the
Impact on Port Operations in Baltimore.

Dear Congressman Cummings

The Maryland Maritime Association (MMA) was established in 1987 and its purpose is to represent the interests of the 'customers' of the Port of Baltimore; the ship owners, ship operators and the ship agents. Almost all the vessels calling in Baltimore and the other two main ports on the Chesapeake Bay, Cove Point & Piney Point, are represented by members of the MMA.

We are writing today to express our views on the LNG Terminal at Sparrows Point in Baltimore County proposed by the AES Corporation.

Firstly people unfamiliar with maritime operations have made statements for the record that imply that maritime commerce through Baltimore will be adversely affected - this is not correct.

Secondly we are of the opinion that the development of this facility will precipitate longer-term benefits that will help sustain maritime commerce in an economic and environmentally responsible way.

The proposed LNG terminal will be situated just off the main entrance channel to the busiest part of the port which is west of the Francis Scott Key Bridge, and the MMA was initially concerned that a loaded LNG tanker maneuvering toward its own berth could temporarily restrict the ingress and egress of other vessels.

The MMA entered into discussions with the Association of Maryland Pilots (Pilots) and the United States Coast Guard (USCG) to share their concerns and to seek workable solutions. AES was involved in some, but not all, of those discussions.

Continued/....

Page 2

From these meetings is it was established that:

- AES forecast that on average only three (3) loaded tankers would arrive per week, so the vast majority of the commercial traffic to and from Baltimore would remain unaffected.
- The Pilots know the whereabouts of vessels on the Bay at all times and are able to control their speed through constant radio communication between the dispatchers in Baltimore and the pilots on the bridge of vessels in transit. By temporarily slowing the loaded LNG tankers, the pilots can ensure that 'outbound' vessels are able to leave Baltimore without delay and clear the constricted channels between the Francis Scott Key Bridge and William Preston Lane Memorial Bridge (Bay Bridge)
- Should the Coast Guard establish a moving Security Zone around loaded LNG tankers in transit, we would expect that potential impacts could be acceptably managed through careful coordination among the Pilots. Generally the width of the channels south of the Bay Bridge are wide enough to accommodate two-way vessel traffic, and in practice the Pilots generally avoid having two large vessels passing in the channels north of the Bay Bridge for safety reasons, regardless of the cargo being carried, so there would be little change in the operating procedures already well established.
- The Security Zone that the USCG is expected to establish around an LNG tanker while maneuvering into its berth at Sparrows Point might delay vessel transits in the Fort McHenry & Brewerton shipping channels, but as AES's intended site for the turning basin and import terminal is well to the east of these channels, any delay should be minimal.
- It is our expectation that a Security Zone would only apply to loaded LNG vessels. Outbound LNG vessels, both departing from the terminal site and in the deep-water channels as the vessels head south, would not be subject to a Security Zone.

Under these circumstances, the MMA has concluded that with the cooperation of the Association of Maryland Pilots the likelihood of serious or continuous delay to ship operations for the remainder of the port's users would be minimal.

The MMA also contemplated the **benefits** that the proposed LNG terminal would bring to the Port of Baltimore through the advent of another 150 'ship calls' per annum.

- **Momentum** - 150 new ship calls per annum must be considered a significant increase in maritime activity for any port. It would stimulate fresh investment in the port by vendors - both existing and new - that service vessels calling at Baltimore. This investment makes the port more competitive and that in turn stimulates new maritime business.
- **Infrastructure** - Due to the nature of the cargo being carried, AES and the LNG tanker owners will require powerful tugs with fire fighting capability to be continually available to attend to their vessels for both security escort and assisting in docking/undocking. This sort of equipment is currently not available in Baltimore and will be a major asset to all the port's users as it will be available to other ship owners and operators when its not being used to assist the LNG tankers.

Page 3

- Dredging - AES has stated its intention to develop a recycling program for the material that will need to be dredged from the Patapsco River to create the access channel and turning basin that will accommodate LNG vessels at the proposed terminal. With respect to managing dredged material, the private sector view is that any viable option - in addition to placement in traditional containment facilities - is essential to a successful long-term dredged material management program for the Port of Baltimore. Given the generally higher costs of initiating a dredged material recycling project, we see the AES proposal as an important opportunity to accelerate the introduction of recycling into the Port's dredged material management program for the long-term benefit of all stakeholders in Maryland's Seaport.

The 'Energy Port' - Maritime commerce in Maryland already plays an important role in meeting the region's energy needs. The addition of another LNG import terminal will bolster Maryland's importance as an energy port, feeding one of the most populous and influential regions in the whole country. This in itself is relevant as Maryland competes with other U.S. Seaports for its share of the diminishing U.S. Army Corps of Engineers civil works budget for construction of new dredged material management facilities, navigational improvement projects, and the ongoing and vital maintenance dredging of existing deep draft navigational channels serving the Port of Baltimore. We believe that serving an important national interest such as domestic energy supply should greatly elevate the priority level attributed by the Corps to Maryland when it comes to making disbursement recommendations to Congress regarding federal funding to pay for dredging.

In conclusion, the MMA takes the view that the proposed Liquid Natural Gas (LNG) terminal at Sparrows Point will not be an impediment to the operation of vessels currently using the Port of Baltimore; rather it would be a benefit to the port and the maritime industry in Maryland.

Sincerely
Rupert Denney
For The Maryland Maritime Association