UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;
Nora Mead Brownell, and Suedeen G. Kelly.

Port Arthur LNG, L.P.	Docket No. CP05-83-000
Port Arthur Pipeline, L.P.	Docket Nos. CP05-84-000 and 001 CP05-85-000 CP05-86-000

ORDER GRANTING AUTHORITY UNDER SECTION 3 OF THE NATURAL GAS ACT AND ISSUING CERTIFICATES

(Issued June 19, 2006)

1. On February 28, 2005, Port Arthur LNG, L.P. (Port Arthur LNG) filed in Docket No. CP05-83-000, an application under section 3 of the Natural Gas Act (NGA) requesting authority to site, construct and operate a liquefied natural gas (LNG) terminal near Port Arthur, Texas. Concurrently, in Docket No. CP05-84-000, Port Arthur Pipeline, L.P. (Port Arthur Pipeline) [1] filed an application under NGA section 7(c) and Part 157 of the Commission's regulations for authorization to construct and operate two natural gas pipelines consisting of a 70-mile, 36-inch diameter pipeline from the outlet of Port Arthur LNG's proposed LNG terminal to an interconnection with the interstate facilities of Transcontinental Gas Pipe Line Corporation (Transco) in Beauregard Parish, Louisiana, and a 3-mile, 36-inch diameter pipeline from the outlet of the proposed LNG terminal to an interconnection with the interstate facilities of Natural Gas Pipeline Company of America (NGPL) in Jefferson County, Texas.

[1] Port Arthur LNG and Port Arthur Pipeline are indirect subsidiaries of Sempra Energy (Sempra).

2. In Docket No. CP05-85-000, Port Arthur Pipeline requests a blanket certificate under Part 157 subpart F of the Commission's regulations to perform routine construction activities and operations. In Docket No. CP05-86-000, Port Arthur Pipeline requests a blanket certificate under Part 284 subpart G of the Commission's regulations to provide open-access transportation services for its customers.

3. On September 2, 2005, in Docket No. CP05-84-001, Port Arthur Pipeline filed an amendment to its pending proposal to reflect certain changes to its *pro forma* tariff in order to improve service to potential customers.

Proposals

A. Port Arthur LNG's Proposal

4. Port Arthur LNG proposes to construct and operate an LNG terminal near Port Arthur, Texas that will import, store and vaporize foreign source LNG. Port Arthur LNG's proposed LNG terminal will be located on 198 acres of a 540-acre site owned by Sempra on the western shore of the Port Arthur Ship Channel. The proposed facility is designed to vaporize and send out 1.5 billion cubic feet (Bcf) per day of vaporized LNG in Phase I, increasing to 3.0 Bcf per day in Phase II.[2] Port Arthur LNG seeks authority under section 3 of the NGA to site, construct and operate: (1) an LNG receiving terminal, (2) an LNG storage and vaporization facility; and (3) associated utilities, infrastructure and support systems. More specifically, Port Arthur LNG requests authority to site, construct and operate the following facilities:

LNG Marine Terminal and Transfer Lines:

(1) a new marine terminal basin connected to the Port Arthur Channel that would include a ship maneuvering area and two protected berths to unload up to 180 ships per year during Phase I and up to 360 ships per year during Phase II with a ship capacity ranging from 125,000 m^3 to 250,000 m^3 of LNG;

[2] At times it may be necessary for Port Arthur LNG to increase the send-out capacity of the LNG terminal, on a temporary basis, to 1.8 Bcfd during Phase I and 3.6 Bcfd during Phase II. This will occur only on occasion, in response to, *inter alia*, weather related disruption to LNG shipments and mechanical related disruptions in LNG production at the source.

(2) five 16-inch unloading arms per berth, three of which would be dedicated to LNG transfer from the berth facilities to the LNG storage tanks, one which would be dedicated to vapor return to the LNG ship and one hybrid arm which could be used for either LNG transfer or vapor return service; and

(3) other controls, safety devices, appurtenances and accessories.

LNG Storage Facilities:

(1) an LNG storage system consisting of a total of three full-containment LNG storage tanks each with a nominal working volume of approximately 160,000 m^3 (1,006,000 barrels) constructed during Phase I and 3 additional storage tanks constructed during Phase II;

(2) three in-tank pumps per LNG storage tank, each capable of discharging 2,976 gallons per minute (gpm); and

(3) eight send-out pumps (one being a spare) constructed during Phase I and eight additional pumps (one being a spare) during Phase II, each capable of discharging 1,964 gpm.

Vaporization and Gas Processing:

(1) six shell-and-tube vaporizers (one being a spare) constructed during Phase I and six additional vaporizers (one being a spare) constructed during Phase II. The heat source to the vaporizers would be heated water;

(2) a hot water system consisting of four gas-fired hot water heaters and three circulation pumps (one being a spare) constructed during Phase I and four additional hot water heaters and three additional circulation pumps (one being a spare) constructed during Phase II;

(3) a boil-off gas recovery system consisting of 3 reciprocating boil-off gas compressors, two return gas blowers, and one direct-contact recondenser constructed in Phase I and one additional boil-off gas compressor and two additional return gas blowers constructed in Phase II; and

Utilities, Infrastructure, Service Facilities and Support Systems:

(1) an emergency vent system; an LNG spill containment system; a fire water system; fuel gas, nitrogen, instrument/plant air and service water utility systems; various hazard detection, control, and prevention systems, cryogenic piping, electrical and instrumentation systems;
(2) utilities, buildings and support facilities;

(3) metering facilities, pig launchers and receivers and safety systems.

5. The LNG terminal will be located near Port Arthur, Texas. The construction and permanent operation of the LNG terminal will use approximately 198 acres of a 2,900-acre tract of land owned by Sempra. An additional 65 acres within the Sempra property will be used temporarily during construction.

B. Port Arthur Pipeline's Proposal

6. Port Arthur Pipeline proposes to construct and operate pipeline facilities to transport vaporized LNG from Port Arthur LNG's facility to interconnections with interstate pipeline companies. Port Arthur Pipeline proposes to construct and operate two 36-inch diameter natural gas pipelines, one extending 70 miles from the Port Arthur LNG terminal to an interconnection with Transco at its Compressor No. 45 in Beauregard Parish, Louisiana. Port Arthur Pipeline plans to construct this leg of the pipeline project during Phase I and place the facilities in-service during the winter heating season of 2008-2009. The second leg would extend 3 miles from the Port Arthur LNG terminal to an interconnection with NGPL in Jefferson County, Texas. Port Arthur Pipeline plans to construct this leg of the pipeline project during Phase II and place the facilities in service as early as 2010, but no later than 2015. Port Arthur Pipeline estimates that its proposed facilities will cost approximately $216,900,000.

7. Port Arthur Pipeline requests a Part 284, subpart G open-access blanket transportation certificate under which it proposes to offer cost-based firm transportation service under Rate Schedule FT and interruptible transportation service under Rate Schedule IT. Port Arthur Pipeline has proposed initial recourse rates and will also offer negotiated rates. Port Arthur Pipeline held an open season from February 18 to April 4, 2005 for its proposed pipeline. Port Arthur Pipeline states that ten out of the eleven respondents requested 20-year contract terms with start dates ranging from Fourth Quarter 2008 to Fourth Quarter 2009.

8. Port Arthur Pipeline also requests a Part 157, subpart F blanket certificate to perform routine activities in connection with the construction, maintenance, and operation of the proposed facilities.

Notice and Interventions

9. Notice of the applications in Docket No. CP05-83-000, *et al*., was published in the *Federal Register* on March 16, 2005 (70 *Fed. Reg*. 12,862). Cheniere LNG, Inc., Duke Energy Field Services, LP, ExxonMobil Gas & Power Marketing Company, Freeport LNG Development, L.P., KeySpan Delivery Companies, NGPL, TIN, Inc., and Transco filed timely motions to intervene. Timely, unopposed motions to intervene are granted by operation of Rule 214 of the Commission's Rules of Practice and Procedure.[3] BP Energy Company (BP Energy) filed an untimely motion to intervene. The Commission finds that granting the late-filed motion to intervene will not delay, disrupt, or otherwise prejudice this proceeding, or place an additional burden on existing parties. Therefore, for good cause shown, we will grant the late-filed motion to intervene.[4] No protests were filed. Notice of the application in Docket No. CP05-84-001, was published in the *Federal Register* on September 19, 2005 (70 *Fed. Reg.* 54,919). No further interventions or comments were filed.

Discussion

A. Port Arthur LNG's Proposed Terminal

10. Because the proposed LNG terminal facilities will be used to import gas from foreign countries, the construction and operation of the facilities and site of their location require approval by the Commission under NGA section 3.[5] The Commission's authority

[3] 18 C.F.R. § 385.214(a)(3) (2005).

[4] 18 C.F.R. § 385.214(d) (2005).

[5] The regulatory functions of section 3 were transferred to the Secretary of Energy in 1977 pursuant to section 301(b) of the Department of Energy Organization Act (Pub. L. No. 95-91, 42 U.S.C. §§ 7101 *et seq.*). In reference to regulating the imports or exports of natural gas, the Secretary subsequently delegated to the Commission the authority to approve or disapprove the construction and operation of particular facilities, the site at which facilities shall be located, and with respect to natural gas that involves the construction of new domestic facilities, the place of entry or exit for exports. DOE Delegation Order No. 00-044.00, 67 *Fed. Reg.* 8,946 (2002). However, applications for authority to import natural gas must be submitted to the Department of Energy. The Commission does not authorize importation of the commodity itself.

over facilities constructed and operated under section 3 includes the authority to apply terms and conditions as necessary and appropriate to ensure that the proposed construction and siting is in the public interest.[6] Section 3 provides that the Commission "shall issue such order on application…" if it finds that the proposal "will not be inconsistent with the public interest."

11. The Commission has chosen to exercise a less intrusive degree of regulation for new LNG import terminals, and does not require the applicant to offer open-access service or to maintain a tariff or rate schedules for its terminalling service.[7] On August 8, 2005, the Energy Policy Act of 2005 (EPAct 2005) was signed into law.[8] Section 311 of EPAct 2005 amends section 3 of the NGA regarding the Commission's authority over the siting, construction, expansion or operation of an LNG terminal.[9] As pertinent here, section 311(c) of EPAct 2005 adds a new NGA section 3(e)(3) providing that, before January 1, 2015, the Commission shall not condition an order approving an application to site, construct, expand or operate an LNG terminal: (1) on a requirement that the LNG terminal offer service to customers other than the applicant, or any affiliate of the applicant securing the order; (2) any regulation of the rates, charges, terms or conditions of service of the LNG terminal; or (3) a requirement to file schedules or contracts related to the rates, charges, terms or conditions of service of the LNG terminal. Our authorization here is consistent with new NGA section 3(e)(3).

12. The Commission recognizes the important role that LNG will play in meeting future demand for natural gas in the United States and has noted that the public interest is served through encouraging gas-on-gas competition by introducing new imported supplies.[10] The record in this case shows that Port Arthur LNG will be a source of such

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[6] *Distrigas Corporation v. FPC*, 495 F.2d 1057, 1063-64 (D.C. Cir. 1974), *cert. denied*, 419 U.S. 834 (1974); *Dynegy LNG Production Terminal, L.P.*, 97 FERC ¶ 61,231 (2001).

[7] *See Hackberry LNG Terminal, L.L.C.*, 101 FERC ¶ 61,294 (2002), *order issuing certificates and granting reh'g*, 104 FERC ¶ 61,269 (2003) (*Hackberry*).

[8] Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 594 (2005).

[9] Energy Policy Act of 2005, Pub. L. No. 109-58, § 311, 119 Stat. 594, 685 (2005).

[10] *Hackberry*, 101 FERC at P 26 (2002).

additional supplies of natural gas. Because the project is new, Port Arthur LNG has no existing customers who might be adversely affected by the costs or risk of recovery of the costs associated with the proposed LNG terminal. The economic risks will be borne by Port Arthur LNG. Further, the environmental conditions set forth in this order will ensure that the adverse environmental impacts will be limited. In view of these considerations, we find that the Port Arthur LNG terminal is not inconsistent with the public interest.

B. Port Arthur Pipeline's Proposed Facilities

13. Since the proposed pipeline facilities will be used to transport natural gas in interstate commerce subject to the jurisdiction of the Commission, the construction and operation of the facilities are subject to the requirements of subsections (c) and (e) of NGA section 7.

1. The Certificate Policy Statement

14. On September 15, 1999, the Commission issued a Policy Statement providing guidance as to how proposals for certificating new construction will be evaluated.[11] Specifically, the Policy Statement explains that the Commission, in deciding whether to authorize the construction of new pipeline facilities, balances the public benefits against the potential adverse consequences. Our goal is to give appropriate consideration to the enhancement of competitive transportation alternatives, the possibility of overbuilding, subsidization by existing customers, the applicant's responsibility for unsubscribed capacity, the avoidance of unnecessary disruptions of the environment and the unneeded exercise of eminent domain in evaluating new pipeline construction.

15. Under this policy the threshold requirement for existing pipelines proposing new projects is that the pipeline must be prepared to financially support the project without relying on subsidization from the existing customers. The next step is to determine whether the applicant has made efforts to eliminate or minimize any adverse effects the project might have on the applicant's existing customers, existing pipelines in the market and their captive customers, or landowners and communities affected by the route of a new pipeline. If residual adverse effects on these interest groups are identified after

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[11] *Certification of New Interstate Natural Gas Pipeline Facilities (*Policy Statement*)*, 88 FERC ¶ 61,227 (1999); *Order Clarifying Statement of Policy*, 90 FERC ¶ 61,128 (2000); *Order Further Clarifying Statement of Policy*, 92 FERC ¶ 61,094 (2000).

efforts have been made to minimize them, the Commission will evaluate the project by balancing the evidence of public benefits to be achieved against the residual adverse effects. This is essentially an economic test. Only when the benefits outweigh the adverse effects on economic interests will the Commission then proceed to complete the environmental analysis where other interests are considered.

16. Port Arthur Pipeline's proposal satisfies the threshold requirement that the pipeline must be prepared to financially support the project without relying on subsidization from its existing customers. Port Arthur Pipeline is a new pipeline and has no existing customers. Thus, there is no potential for subsidization by existing customers.

17. Port Arthur Pipeline also meets the remaining criteria for certification of new facilities set forth in the Policy Statement. There will be no adverse effect on existing services because Port Arthur Pipeline has no current customers. The new pipeline should also benefit interconnecting pipelines by providing new sources of gas for them to transport. No existing shippers or pipelines in the area have protested the filing. No landowner or community member objected to the proposed pipeline route.

18. The Port Arthur Pipeline project is being developed to provide access to new competitively priced LNG supplies to meet growing demand. Based on the benefits Port Arthur Pipeline will provide to the market and the lack of any identified adverse effect on existing customers, other pipelines, landowners, or communities, we find, consistent with the Policy Statement and NGA section 7, that the public convenience and necessity requires approval of Port Arthur Pipeline's proposal.

2. Rates and Tariff

a. Initial Rates

19. Port Arthur Pipeline proposes to offer cost-based firm (Rate Schedule FT) and interruptible (Rate Schedule IT) open-access transportation services on a non-discriminatory basis under Part 284 of the Commission's regulations, and will provide authorized overrun service (AOS).[12] Port Arthur Pipeline states that it may offer

[12] *See* Port Arthur Pipeline's FERC Gas Tariff, (*Pro Forma* Original Volume No. 1 (*pro forma* tariff). Note: Port Arthur Pipeline's filed tariff sheets are not paginated as *pro forma.*

negotiated rates as an option pursuant to section 27 of the General Terms and Conditions (GT&C) of its *pro forma* tariff.

20. Port Arthur Pipeline states that the proposed cost-based rates reflect a straight fixed variable (SFV) rate design and are calculated for the total 20-year life of the project. Port Arthur Pipeline states that the cost of service for each year of the 20-year project uses an annual straight line depreciation accrual rate of 5 percent. Port Arthur Pipeline states that there are no identifiable variable costs associated with the pipeline.

21. Port Arthur Pipeline requests Commission approval of two sets of initial rates to reflect the two phases of construction and operation. When Phase I is operational, Port Arthur Pipeline states that it will charge rates that reflect the cost of service associated only with Phase I facilities. Port Arthur Pipeline further states that after placing the Phase II leg into service, it is proposing to charge rates that reflect the costs of both phases, Phase I facilities at approximately $206.5 million and Phase II facilities at an additional $10.4 million on a rolled-in basis. Port Arthur Pipeline claims that this approach will decrease rates by over 50 percent to Port Arthur Pipeline's then-existing recourse-rate customers.

22. Port Arthur Pipeline's proposed Phase I firm transportation (FT) rates are derived using $51,548,441 annual cost of service[13] and annual reservation billing determinants of 18,000,000 Dth (1,500,000 Dth per day times 12). Port Arthur Pipeline states that these reservation billing determinants represent the maximum capacity of the single 36-inch diameter pipeline from the outlet of Port Arthur LNG's proposed LNG terminal to an interconnection with the interstate facilities of Transco in Beauregard Parish, Louisiana. The proposed annual FT usage determinants total 547,500,000 Dth. Port Arthur Pipeline's computed Phase I maximum cost-based FT reservation rate is $2.86 per Dth/month, and the proposed usage rate is $0 per Dth.

[13] Port Arthur Pipeline's proposed year 1 cost of service consists of $1,378,200 operation and maintenance expenses, $1,869,467 of administrative and general expenses, $10,326,180 of depreciation expenses (at a 5 percent annual depreciation accrual rate), $14,095,235 of return allowance (at 14 percent rate of return on equity based on a capital structure of 50 percent debt and 50 percent equity, and 7.76 percent cost of debt), $9,977,314 of federal and state income taxes (a consolidated federal and state income tax rate of 40.20 percent, calculated at a tax rate of 35 percent for federal taxes and 8 percent for Louisiana state tax), and $6,089,257 of taxes other than income taxes for a total cost of service of $51,548,441.

23. Port Arthur Pipeline's proposed FT rates for Phase II are derived using $49,806,636 annual cost of service and annual reservation billing determinants of 36,000,000 Dth (3,000,000 Dth per day times 12).[14] The proposed annual FT usage determinants total to 1,095,000,000 Dth. Port Arthur Pipeline's computed Phase II maximum cost-based FT reservation rate is $1.38 per Dth/month, and the proposed usage rate is $0 per Dth.

24. The interruptible transportation (IT) rate is derived at a 100 percent load factor of the FT rates. Port Arthur Pipeline has not identified any usage determinants associated with the proposed IT service. During Phase I the proposed maximum IT rate is $0.0942 per Dth/day. During Phase II the proposed maximum IT rate is $0.0455 per Dth/day. Port Arthur Pipeline does not propose to allocate costs to the IT service. Furthermore, Port Arthur Pipeline is proposing a 0.2 percent retainage for fuel and lost and unaccounted for gas for both its firm and interruptible services.

25. Port Arthur Pipeline states that its Phase I pipeline has been designed to transport approximately 1.5 Bcf per day of regasified LNG (this leg will have a maximum mainline design capacity of approximately 1.7 Bcf per day) on a firm basis by the winter heating season of 2008-09. The Phase II pipeline will transport an additional 1.5 Bcf per day, as early as 2010.

26. Port Arthur Pipeline states that it held its open season between February 18 and April 4, 2005. Port Arthur Pipeline states that it has received eleven responses for a total of 9.5 Bcf per day with ten of the respondents requesting 20-year terms with start dates for service ranging from the fourth quarter in 2008, to the fourth quarter in 2009.

27. The Commission has reviewed the proposed cost of service and proposed initial rates, and generally finds them reasonable for a new pipeline entity, such as Port Arthur Pipeline, subject to the modifications and conditions imposed below.

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[14] Port Arthur Pipeline's proposed year 3 cost of service consists of $1,462,132 of operation and maintenance expenses, $1,983,318 of administrative and general expenses, $10,844,153 of depreciation and amortization expenses (at 5 percent annual depreciation accrual rate), $13,177,356 of return allowance (at a 14 percent rate of return on equity based on a capital structure of 50 percent debt and 50 percent equity, and 7.76 percent cost of debt), $9,247,120 of federal and state income taxes (a consolidated federal and state income tax rate of 40.20 percent, calculated at a tax rate of 35 percent for federal taxes and 8 percent for Louisiana state tax) and $6,063,938 of taxes other than income taxes for a total cost of service of $49,806,636.

b. Rate Changes and Rate Review

28. If Port Arthur Pipeline desires to make any other changes not specifically authorized by this order prior to placing its facilities into service, it will need to file an application under NGA section 7(c) to amend its certificate authorization. In that filing, Port Arthur Pipeline will need to provide cost data and the required exhibits supporting any revised rates. After the facilities are constructed and placed in service, Port Arthur Pipeline must make an NGA section 4 filing in order to change its rates to reflect revised construction and operating costs.

i. ROE and Capital Structure

29. Port Arthur Pipeline states that arrangements have not been finalized to fund the construction of the proposed project. Port Arthur Pipeline states that it will consider project financing during construction. Port Arthur Pipeline anticipates that the project will be financed during the construction and the initial years of operations with equity provided by its parent company. Port Arthur Pipeline states that for the rates determined in the application Port Arthur Pipeline used a target capital structure for the project that assumes 50 percent equity, consistent with the parent company's debt equity structure.

30. Port Arthur Pipeline proposes a 7.76 percent interest rate for debt based on anticipated capital market conditions.[15] It also proposes a 14 percent rate of return on equity (ROE) and an overall after-tax rate of return of 10.88 percent. In determining the appropriate ROE, Port Arthur Pipeline states that it also considered the return on equity rates approved for other recent pipeline projects that are designed to serve LNG import terminals when it proposed a 14 percent return on equity.[16] In addition, Port Arthur Pipeline states that the Commission should encourage Port Arthur Pipeline's investment since it is a new project that is needed in the Gulf to serve LNG terminal development. Port Arthur Pipeline adds that several LNG terminals are under development in the Gulf and, although the Gulf has many pipelines systems, it currently lacks sufficient pipeline capacity to link development LNG projects to liquid downstream markets. Port Arthur Pipeline argues that the Commission should offer a 14 percent return on equity to

[15] Port Arthur Pipeline states that debt ratio is determined by using the Global Insight December 2004 forecast of 30-year US Treasury bond yields in 2009 of 6.61 percent plus an estimated credit spread for Sempra Energy (an investment-grade entity with a BBB+ credit rating) of 1.15 percent.

[16] *See, e.g., Cheniere Sabine Pass Pipeline Company*, 109 FERC ¶ 61,324 (2004).

encourage Port Arthur Pipeline to build to accommodate other developing LNG projects, thereby minimizing impacts and costs to shippers and consumers. Further, Port Arthur Pipeline claims that the LNG supply chain involves significant risks and Port Arthur Pipeline is subject to those risks and its success may depend on a single LNG import terminal's ability to compete for and secure foreign sources of supply. Furthermore, Port Arthur Pipeline states that even if it ultimately serves more than one import terminal, Port Arthur Pipeline is subject to the competitive risks associated with the global gas market.

31. The Commission has approved ROEs for new pipelines up to 14 percent. Accordingly, the Commission will approve Port Arthur Pipeline's proposed 14 percent ROE. This finding is consistent with our ROE determinations for recently approved greenfield pipelines related to new LNG projects.[17]

ii. Three-Year Filing Requirement

32. Consistent with Commission precedent, the Commission will require Port Arthur Pipeline to file a cost and revenue study at the end of its first three years of actual operation to justify its existing cost-based firm and interruptible recourse rates.[18] In its filing, the projected units of service should be no lower than those upon which Port Arthur Pipeline's approved initial rates are based. The filing must include a cost and revenue study in the form specified in section 154.313 of the regulations to update cost-of-service data. After reviewing the data, we will determine whether to exercise our authority under NGA section 5 to establish just and reasonable rates. In the alternative, in lieu of that future filing, Port Arthur Pipeline may make an NGA section 4 filing to propose alternative rates to be effective no later than three years after the in-service date for its proposed facilities.

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[17] *See, e.g., Corpus Christi LNG, L.P.*, 111 FERC ¶ 61,081 at P 33 (2005) (approving 14 percent ROE based on 50 percent debt and 50 percent equity ratios). *See also San Patricio Pipeline, LLC*, 112 FERC ¶ 61,101 (2005) (requiring the pipeline to design its cost-based rates using a capital structure comprising at least 50 percent debt).

[18] *See, e.g., Trunkline LNG Co.*, 82 FERC ¶ 61,198, at 61,780 (1998), *aff'd sub nom, Trunkline LNG Co., v.* FERC, 194 F.3d 68 (D.C. Cir. 1999); *Horizon Pipeline Co., L.L.C.*, 92 FERC ¶ 61,205, at 61,687 (2000); *Vector Pipeline Co.*, 85 FERC ¶ 61,083 (1998).

iii. *Pro Forma* Tariff Issues

33. Port Arthur Pipeline proposes to offer firm and interruptible transportation services on an open-access basis under the terms and conditions set forth in the *pro forma* tariff attached as Exhibit P to the application and amended by its September 2, 2005 filing. We find Port Arthur Pipeline's proposed tariff, as amended, generally complies with Part 284 of the Commission's regulations,[19] with the exceptions discussed below. The Commission will require Port Arthur Pipeline to file actual tariff sheets consistent with the directives in this order at least 30 days and no more than 60 days prior to the commencement of service. In addition, Port Arthur Pipeline must file a redline-strikeout version of the revised tariff sheets to identify the changes made to comply with this order.

iv. Interruptible Services Revenue Crediting

34. The Commission's policy regarding new interruptible services requires either a 100 percent credit of the interruptible revenues, net of variable costs, to firm and interruptible customers or an allocation of costs and volumes to these services.[20] Instead of allocating costs to interruptible services, Port Arthur Pipeline proposes in section 26 on sheet number 154 to credit 90 percent of revenues from IT and AOS services to firm shippers. Port Arthur Pipeline requests that the Commission grant a deviation to its tariff policies with respect to revenue crediting so that Port Arthur Pipeline may credit to firm shippers only 90 percent of any IT/AOS revenues.

35. Port Arthur Pipeline claims that it has no expectation of selling IT service. Port Arthur Pipeline argues that its pipeline is designed to serve LNG supplies, which require unique arrangements. Port Arthur Pipeline states that LNG suppliers must enter into firm arrangements given their enormous upstream financial commitments. Port Arthur Pipeline further states that before shipping LNG from foreign locations, LNG suppliers require assurances that sufficient firm pipeline capacity exists to transport that LNG. Furthermore, Port Arthur Pipeline states that given LNG shippers' lack of interest in IT service, Port Arthur Pipeline cannot risk allocating costs to IT service. Finally, Port Arthur Pipeline avers the Commission should thus allow Port Arthur Pipeline at a least a small incentive to seek potential IT customers over time. Thus, Port Arthur Pipeline

[19] 18 C.F.R. Part 284 (2005).

[20] *See, e.g., Tractebel Calypso Pipeline, LLC*, 106 FERC ¶ 61,273 (2004).

argues that, by allowing Port Arthur Pipeline to credit only 90 percent of IT revenues to firm shippers, the Commission will afford Port Arthur Pipeline such an incentive should an opportunity to sell IT service present itself in the future.

36. The Commission's policy requires pipelines to credit 100 percent of the IT and AOS revenues, net of variable costs, to firm and interruptible shippers. Port Arthur Pipeline's argument that its pipeline will solely carry LNG fails to convince us to change our policy regarding the crediting of 100 percent of IT and AOS revenues. Based on Commission precedent, we will require Port Arthur Pipeline to revise its tariff to provide for a mechanism to credit 100 percent of the IT and AOS revenues, net of variable costs, to its firm and interruptible shippers.[21]

v. Gross Negligence

37. Port Arthur Pipeline, on tariff sheet numbers 69, 102, 143, 149, and 163 uses the term "gross negligence." The Commission has consistently held that a simple negligence standard is appropriate for the liability and indemnification provisions of open access tariffs on the ground that all parties, including the pipeline, should be liable for their negligent acts.[22] Port Arthur Pipeline must remove all occurrences of the word "gross" from the expression "gross negligence" and change it to read "negligence." This will prevent Port Arthur Pipeline from being insulated from loss or damages attributable to its own simple or ordinary negligence.

vi. Disposition of Penalties

38. Order No. 637 requires that pipelines must credit to shippers all revenues from all penalties net of cost.[23] Port Arthur Pipeline's provision in Sections 7.10 on sheet number 88, Section 9.3 on sheet number 95 and Section 10.4 (c) on sheet number 98, respectively, provide that "… In the event there are no Non-Offending Shippers, as set forth in GT&C's section 25, in a given month, 50% of such overrun and underdeliveries

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[21] *East Tennessee Natural Gas LLC.*, 114 FERC ¶ 61,122 (2006), *Entrega Gas Pipeline, Inc.*, 112 FERC ¶ 61,177 (2005), *Golden Pass Pipeline LP.*, 112 FERC ¶ 61,041 (2005), *Vista del Sol LNG Terminal LP*, 111 FERC ¶ 61,432 (2005).

[22] *See, e.g., Gulf South Pipeline Co.*, 98 FERC ¶ 61,278 at 62,182 & n.56 (2002); *Williams Pipe Line Co.*, 88 FERC ¶ 61,014 at 61,040 & n.31 (1999); *Natural Gas Pipeline Co.*, 39 FERC ¶ 61,153 at 61,599 (1987).

[23] Order No. 637-A, at 31,609-11.

penalties shall be donated to a charity that is located in a parish or county in which Pipeline is located, and the remaining 50% of such overrun and underdeliveries penalties shall be carried forward to the next month." The Commission finds that Port Arthur Pipeline's *pro forma* sections 7.10 and 9.3 and section 10.4 (c), concerning penalty revenue crediting, do not fully comply with Order No. 637, which relies on the principle that a pipeline must credit to shippers all revenues from all penalties net of costs. The Commission directs Port Arthur Pipeline to revise sections 7.10, 9.3 and 10.4 (c) to read, "In the event that there are no Non-Offending Shippers in a given Month, 100% of such overrun and underdeliveries penalties shall be carried forward to the next month."

vii. Creditworthiness, Suspension or Termination of Services

39. Section 2.5 of the General Terms and Conditions (GT&C) provides that Port Arthur Pipeline is not required to initiate service to shippers who fail to meet creditworthiness standards, or to continue service for shippers who have become insolvent or who, at Port Arthur Pipeline's request fail "within a reasonable period" to demonstrate creditworthiness pursuant to Port Arthur Pipeline's standards.

40. Section 2.6 provides that if a shipper fails to establish creditworthiness, the shipper may still receive interruptible service for a maximum period of up to three months, or firm service as a capacity release for a maximum period of up to three months if it provides to Port Arthur Pipeline one of the following: (i) an advance deposit; (ii) an irrevocable standby letter of credit; (iii) a security interest; or (iv) a guarantee, acceptable to Port Arthur Pipeline, by another person or entity which satisfies credit appraisal criteria.

41. The tariff does not state when Port Arthur Pipeline will communicate to a potential shipper the results of its creditworthiness determination under section 2.5, nor does it provide for Port Arthur Pipeline to communicate to the shipper the justification for any denial of creditworthiness. In *Natural*, we held that if a service provider finds a shipper not to be creditworthy, it must communicate that finding in writing, and state the reasons for its finding. We also required that the communication be made within 10 days of the pipeline's determination, and that the shipper be provided recourse to challenge the finding.[24] Port Arthur Pipeline is directed to revise its tariff accordingly.

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[24] *Natural Gas Pipeline Co. of America (Natural)*, 106 FERC ¶ 61,175 at P 80 (2004); *Tennessee Gas Pipeline Co.*, 103 FERC ¶ 61,175 at P 45 (2003).

42. Although section 2.5 states that Port Arthur Pipeline is not required to continue service for a shipper that has become insolvent or non-creditworthy, and section 2.6 enables a shipper to still receive service upon meeting Port Arthur Pipeline's requirements for financial assurance, it is unclear whether Port Arthur Pipeline intends to use suspension of service as an intermediate step to termination under section 2.5. In addition, section 2.6 does not include a timeline within which a non-creditworthy shipper must provide security to Port Arthur Pipeline in order to maintain continuous service. The Commission stated in previous orders that a non-creditworthy shipper must be given a reasonable amount of time to provide security assurances, particularly because the shipper may also have to meet the security requirements of other pipelines.[25]

43. Accordingly, we direct Port Arthur Pipeline to propose and justify a specific period of time within which a non-creditworthy shipper must comply with the requirements of section 2.6 after having received notice from Port Arthur Pipeline that it is no longer deemed creditworthy. In the alternative, consistent with prior orders,[26] Port Arthur Pipeline may adopt the following approach, which the Commission has found establishes a reasonable balance between a service provider's legitimate need to obtain security and the shipper's need for adequate time to arrange for such security. Depending on the approach it chooses, Port Arthur Pipeline should revise its tariff accordingly.

44. Under the alternative approach, when a shipper loses its creditworthiness status, the shipper must, within five business days, pay for one month of service in advance to continue service. This procedure will allow the shipper to have at least thirty days to provide the next three months of security for service in accordance with the requirements of section 2.6. If shipper fails to provide the required security within these time periods, Port Arthur Pipeline may suspend service immediately. Further, Port Arthur Pipeline may provide simultaneous written notice that it will terminate service in thirty days if the shipper fails to provide security. Port Arthur Pipeline is also required to notify the Commission in writing at least thirty days prior to terminating a shipper's service, as required by section 154.602 of the Commission's regulations.[27]

45. Port Arthur Pipeline's provision in section 2.6 on sheet number 62 of the Amendment states that "if Pipeline suspends service for lack of creditworthiness, Shipper

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[25] *Gulf South Pipeline System, L.P*. 103 FERC ¶ 61,129 at P 49 (2003), *reh'g denied*, 107 FERC ¶ 61,273 at P 20 (2004).

[26] *See Tennessee Gas Pipeline Company*, 102 FERC ¶ 61,075 at P 18 (2003).

[27] 18 C.F.R. § 154.602 (2005).

will remain obligated to pay reservation charges to the extent authorized by Commission policy or Commission order at that time."

46. The Commission has required other pipelines to revise their tariffs to provide that shippers are not responsible for payment of reservation charges when a pipeline suspends a shipper's service.[28] Even though the proposed provision states that the Commission will decide at the time of suspension, Port Arthur Pipeline's tariff is not clear if it intends to collect reservation charges when it suspends service to that shipper. The Commission believes the proposed tariff provision is not in compliance with the Commission's decisions in the recent orders. Thus, consistent with our ruling in *Gulf South, Tennessee, and San Patricio,* we direct Port Arthur Pipeline to revise its tariff to clarify that shippers are not responsible for reservation charges after service is suspended.[29]

47. Port Arthur Pipeline's section 2, Service Requests, Contracting For Service and Credit Requirement, on sheet number 62, first paragraph, states that "…If Shipper is unable to maintain credit approval, the executed Service Agreement shall terminate as of the first day of the Month following written notice to Shipper." However, Port Arthur Pipeline is silent as to informing the Commission of the termination. Port Arthur Pipeline is directed to clarify its intention. If this is an inadvertent error, Port Arthur Pipeline is directed to file revised tariff sheets informing the Commission of the termination of any service agreement as explained in detail in the above paragraphs.

viii. NAESB Standards

48. Port Arthur Pipeline states that its tariff proposal is consistent with Version 1.7 of the North American Energy Standards Board (NAESB) Standards, and the recommendations of NAESB's Wholesale Gas Quadrant (WGQ) adopted by the Commission in Order No. 587-S.[30] Version 1.7 includes standards regarding

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[28] *See Gulf South*, 103 FERC ¶ 61,129 at P 56 (2003); *Tennessee*, 102 FERC ¶ 61,075 at P 32 (2003). *See also San Patricio Pipeline, LLC* 112 FERC ¶ 61,101 at P 48.

[29] *Id*.

[30] *Standards for Business Practices of Interstate Natural Gas Pipelines*, Order No. 587-S, FERC Stats. & Regs. ¶ 31,179 (2005).

implementation of Order No. 2004 and gas quality reporting standards.[31] Therefore, when Port Arthur Pipeline files actual tariff sheets in this proceeding, it must revise its tariff to conform to the standards adopted in Order No. 587-S, as modified by any future NAESB requirements in effect at the time of filing. The filing must include a cross-reference showing each NAESB standard number, the tariff section containing the standard, and whether Port Arthur Pipeline incorporated the standard verbatim or by reference. Port Arthur Pipeline must file any information it believes relevant to its compliance with the NAESB Standards.

49. In section 37.1 of the GT&C, General and Nomination Related Standards (sheet number 164), NAESB Standards in 0.3.2, 1.1.15, 1.1.18, 1.2.6, 1.2.12, 1.3.3 through 1.3.6, 1.3.8, 1.3.9, 1.3.13 through 1.3.16, 1.3.18 and 1.3.19 should be incorporated by reference or verbatim, but not both, into its tariff and Standard 1.3.78 incorporated by reference should be deleted.

50. In section 37.2 of the GT&C, Flowing Gas Related Standards (sheet number 164); the reference to "flow" should be changed to "flowing." Furthermore, NAESB Standards 2.1.4 and 2.2.1 should be incorporated by reference or verbatim, but not both, into its tariff.

51. In section 37.3 of the GT&C, Invoicing Related Standards (sheet number 164), the reference to "involving" should be changed to "invoicing," NAESB Standards 3.1.1 and 3.1.2 should be incorporated by reference or verbatim, but not both, into its tariff and Standard 4.3.77 incorporated by reference should be deleted.

52. In section 37.4 of the GT&C, Electronic Delivery Mechanism Related Standards (sheet number 164), NAESB Standards 4.3.89 through 4.3.92 should be incorporated by reference or verbatim, but not both, into its tariff. Furthermore, Port Arthur Pipeline should file revised tariff sheets reflecting the appropriate reference to Recommendation R03035A, 2004 Annual Plan Item 2 and 2005 Annual Plan Item 8 (May 3, 2005) (Affiliate Order standards). Moreover, the currently effective tariff reflects WGQ

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[31] *Standards of Conduct for Transmission Providers*, Order No. 2004, FERC Stats. & Regs. Vol. III, Regs. Preambles ¶ 31,155 (2003), 68 Fed. Reg. 69134 (Dec. 11, 2003); Order No. 2004-A, FERC Stats & Regs., Regs. Preambles ¶ 31,161 (2004), 69 Fed. Reg. 23562 (Apr. 29, 2004); Order No. 2004-B, FERC Stats. & Regs., Regs. Preambles ¶ 31,166 (2004), 69 Fed. Reg. 48371 (Aug.10, 2004); Order No. 2004-C, FERC Stats. & Regs., Regs. Preambles ¶ 31,172 (2005), 70 *Fed. Reg.* 284 (Jan. 4, 2005); Order No. 2004-D, 110 FERC ¶ 61,320 (2005).

Standard 4.3.4. Order No. 587-S required that this standard be deleted from the pipeline's tariff. Any reference to Standard 4.3.4 should be deleted from section 37.4 of the GT&C. The Commission has not adopted Standard 4.3.4, which concerns data retention for trading partners. Therefore, this standard should not be included in Port Arthur Pipeline's tariff.

53. In section 37.5 of the GT&C, Capacity Release Related Standards (sheet number 164), NAESB Standards 5.3.44 through 5.3.47, 5.3.49 through 5.3.54, and 5.3.56 through 5.3.58 should be incorporated by reference or verbatim, but not both, into its tariff and Standard 5.3.6 incorporated by reference should be deleted.

54. Port Arthur Pipeline should file revised tariff sheets which delete Recommendations R02002 and R02002-2. At the time Order No. 587-R was issued, the partial day recall standards were referred to by their number and Recommendation R02002 and/or Recommendation R02002-2. Any references to these recommendation numbers should be replaced with a reference to Version 1.7.

55. Port Arthur Pipeline should include the following paragraph at the bottom of the sheet on all the sheets containing NAESB standards: "Filed to comply with Order No. 587-S of the Federal Energy Regulatory Commission, Docket No. RM96-1-026, issued on May 9, 2005, 111 FERC ¶ 61,203."

3. Accounting

a. Book Depreciation Rate

56. For financial accounting purposes, Port Arthur Pipeline proposes a straight-line depreciation rate of five-percent (5%) per annum based upon a 20-year life. Port Arthur Pipeline's use of straight-line depreciation is consistent with the Commission's Uniform System of Accounts (USofA), because it is a systematic and rational depreciation method. Therefore, the Commission approves the use of five percent (5%) depreciation rate for Port Arthur Pipeline.

b. Allowance for Funds Used during Construction (AFUDC)

57. An allowance for funds used during construction (AFUDC) is a component part of the cost of constructing Port Arthur Pipeline's facilities. Gas Plant Instruction 3(17) prescribes a formula for determining the maximum amount of AFUDC that may be

capitalized as a component for construction cost. [32] That formula, however, uses prior year book balances and cost rates of borrowed funds and other capital. In cases of newly created entities, such as Port Arthur Pipeline, prior year book balances do not exist; therefore, using the formula contained in Gas Plant Instruction 3(17) could produce inappropriate amounts of AFUDC. Therefore, to ensure that appropriate amounts of AFUDC are capitalized in this project, we will require Port Arthur Pipeline to capitalize the actual cost of borrowed and other funds and for construction purposes not to exceed the amount of debt and equity AFUDC that would be capitalized based on the overall rate of return approved herein.[33]

C. Part 157, Subpart F Blanket Construction Certificate

58. Port Arthur Pipeline also has applied in Docket No. CP05-85-000 for a Part 157, Subpart F blanket construction certificate. Part 157, Subpart F blanket certificates accord natural gas pipelines certain automatic NGA section 7 facility and service authorizations and allows them to make several types of simplified prior notice requests for certain minimal section 7 facility and service authorizations. Because Port Arthur Pipeline will become an interstate pipeline with the issuance of a certificate to construct and operate pipeline facilities, we will also issue the requested Part 157, Subpart F, blanket certificate to Port Arthur Pipeline.

D. Part 284, Subpart G Blanket Transportation Certificate

59. Port Arthur Pipeline has applied in Docket No. CP05-86-000 for a Part 284, Subpart G blanket transportation certificate, which would provide Port Arthur Pipeline certain automatic NGA section 7 natural gas transportation authorizations for individual customers under the terms of its contracts and tariff. Because Port Arthur Pipeline will become an interstate pipeline with the issuance of a certificate to construct and operate the proposed facilities, and because a Part 284, Subpart G blanket certificate is required for Port Arthur Pipeline to offer transportation services, the Commission will issue the requested Part 284 certificate authority.

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[32] 18 C.F.R. Part 201 (2005).

[33] *See, e.g., Gulfstream Natural Gas System, L.L.C.*, 91 FERC ¶ 61,119 (2000); and *Buccaneer Gas Pipeline Company L.L.C.*, 91 FERC ¶ 61,117 (2000).

E. Environmental Analysis

1. Coordination and Public Involvement

60. The Commission issued a draft EIS addressing Port Arthur LNG's and Port Arthur Pipeline's proposals (collectively, Port Arthur LNG Project) on September 2, 2005. The Commission issued the final EIS on April 28, 2006. The United States Environmental Protection Agency (EPA) issued a Notice of Availability of the Final Environmental Impact Statement for the Proposed Port Arthur LNG Project on May 5, 2006. The draft and final EIS were mailed to federal, state, and local agencies, elected officials, Native American tribes, newspapers, public libraries, interveners to The Commission proceeding, and other interested parties (*i.e.*, landowners, other individuals, and environmental groups who provided scoping comments). Approximately 475 copies of the final EIS were mailed to agencies, groups, and individuals on the mailing list. The United States (U.S.) Army Corps of Engineers (USACE), U.S. Department of the Interior, Fish and Wildlife Service (FWS), the U.S. Coast Guard, and the National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries) were cooperating agencies in the preparation of the final EIS.

61. We have consulted with the U.S. Department of Defense (DOD) as required by the Energy Policy Act of 2005 and section 3 of the NGA to determine if any training or activities on any military installations would be affected by the project. No comments or concerns were received from any branch of the military or any military installation in reply to the staff's scoping notice issued on December 15, 2004. Further, no comments were received from any DOD branch in response to the draft EIS published on August 26, 2005.

62. In addition, in letters dated January 6, 2006, to the Army, Navy, and Air Force at the Pentagon our staff requested any information on effects on military installations. Since no effects have been identified, we conclude that there is no effect on military installations from this project. And therefore no concurrence from the Secretary of Defense is required, under the Energy Policy Act. By letter dated May 5, 2005 Commission staff notified the DOD of this conclusion to confirm it.

63. The Energy Policy Act of 2005 gave the agency designated by the governor of any state in which an LNG facility proposal was pending as of the date of enactment, August 8, 2005, 30 days to provide us with an advisory report on state and local safety considerations. We would have had to respond to the issues in any such report. The state of Texas did not avail itself of this opportunity to file such a report on the Port Arthur LNG Terminal Project.

64. The final EIS addresses the issues and concerns raised in response to the draft EIS. The final EIS also addresses: marine resources; geologic resources and hazards; soils and sediments; water resources; fishery resources, benthic communities, and wildlife; vegetation communities; endangered and threatened species; land use, recreation, and visual resources; cultural resources; socioeconomics; air quality and noise; reliability and safety; cumulative impacts; and alternatives to the proposed facilities.

65. A total of 96 letters were received as the result of the issuance of the draft EIS. The letters came from federal agencies (5), state agencies and state representatives (7), local government officials (8), groups and individuals (75), and the applicant (1). No public meeting was held because of the damage caused by Hurricane Rita. Of the 96 comment letters, 88 indicated either support or no comment. All letters from elected officials and individuals supported the project. Letters containing comments were received from: NOAA Fisheries (2), U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, Louisiana Department of Wildlife and Fisheries, Texas Parks and Wildlife, Southwestern Law School, and the applicant. The agency (state and federal) commenters' primary concerns related to wetland impacts and mitigation for permanent wetland losses, impacts on threatened and endangered species. The area of most concern was the marsh north of Sabine Lake. We have added additional requirements, an alternate route and construction methods and a third-party monitor during construction to mitigate the impacts in this area. The Southwestern Law School comments indicated that the draft EIS was in general inadequate. The final EIS includes additional discussion where necessary.

66. The Commission staff included an Essential Fish Habitat (EFH) Assessment in the final EIS that described how the proposed Port Arthur Project could affect EFH. In a May 23, 2006 letter, the National Marine Fisheries Service of the National Oceanic and Atmospheric Administration (NOAA Fisheries) indicated that the applicants' wetland mitigation plan contained in the final EIS had been revised. We recognize that the wetland mitigation plan is an evolving document therefore we are requiring that a final Aquatic Resources Mitigation Plan, which includes the wetland mitigation plan, developed in consultation with the relevant agencies (including NOAA Fisheries and the Army Corps of Engineers) be filed prior to the start of any construction..

67. Based on information provided by Port Arthur LNG and Port Arthur Pipeline and further developed by field investigations, literature research, alternative and route variation analyses, and contacts with federal, state, and local agencies and individual members of the public, the final EIS determined that construction and operation of the Port Arthur Project would result in limited adverse environmental impact.

2. Wetlands, Habitat, Dredging and Special Species

68. As discussed in the final EIS, about 390.8 acres of wetland would be affected by construction of the project. About 82.5 of these acres would be permanently affected by the construction and operation of the LNG terminal, and about 13.1 acres of forested wetlands would be permanently converted to herbaceous wetlands or lost by construction and operation of aboveground facilities and use of new permanent access roads along the proposed pipeline. To compensate for permanent wetland impacts, Port Arthur LNG and Port Arthur Pipeline are working with the USACE, FWS, NOAA Fisheries, Texas Parks and Wildlife Department (TPWD), and Louisiana Department of Wildlife and Fisheries (LADWF) to finalize its Aquatic Resources Mitigation Plan. The Draft Wetland Mitigation Plan (March 6, 2006) was provided in appendix G of the final EIS. As previously indicated, further consultation with these federal and state agencies is needed to finalize the Aquatic Resources Mitigation Plan. The final version of the plan will be part of the USACE's pending section 404 permit for the project.

69. Proposed mitigation for permanent impacts to coastal emergent marsh, herbaceous wetlands, and transitional herbaceous wetlands includes the beneficial placement of dredged material in at least 140 acres of open water within the J.D. Murphree Wildlife Management Area (WMA) to help re-establish the coastal marsh in areas that have been eroded. Port Arthur Pipeline would acquire 37 equivalent units of mitigation at an approved wetland mitigation bank to compensate for impacts from the construction and operation of the pipeline to forested and scrub-shrub wetlands.

70. The final EIS concludes that the project is not likely to adversely affect federally listed threatened or endangered species. The U.S. FWS and NOAA Fisheries have concurred with our conclusion. The final EIS also recommends that because of the length of time between consultation and construction the applicants may not begin until it is determined that additional consultation with the FWS and NOAA Fisheries is not required. We concur with this recommendation.

71. Project construction is not expected to have a significant impact on essential fish habitat (EFH). About 6.3 acres of coastal emergent wetlands along the pipeline route have been identified as EFH. No EHF was identified at the LNG terminal site. NOAA Fisheries concurs with these conclusions. NOAA Fisheries is consulting with the applicants and federal and state agencies in the development of the Aquatic Resources Mitigation Plan for the project. The plan will incorporate comments from NOAA Fisheries regarding pre- and post-construction surveys to ensure that wetlands which function as EFH are returned to pre-construction contours and elevations. It will also include mitigation for wetlands temporarily and permanently affected by the project. If the project is constructed and operated in compliance with the requirements of the final

Aquatic Resources Mitigation Plan and the recommendations in the final EIS impacts to EFH will be minimized. The applicants will not begin construction until the Aquatic Resources Mitigation Plan has been finalized.

3. Air Emissions

72. On April 28, 2006, we issued a Final General Conformity Determination in the final EIS since the project will be constructed within a non-attainment zone for ozone. We received one comment from the U.S. EPA on our Draft General Conformity which was included in the draft EIS. The U.S. EPA indicated that thus far the general conformity requirements have been met for the project; however any change in project emission may warrant additional analysis. In an August 2, 2005 letter, the Texas Commission on Environmental Quality (TCEQ) provided a conditional finding of general conformity for the project. Based on a review of the project and commitments made by Port Arthur LNG, TCEQ found that the total of direct and indirect emissions from the action for the future years does not increase emissions with respect to the future baseline emissions. We will not allow construction to start until Port Arthur LNG has indicated that it will comply with all the commitments that it has made to TCEQ.

4. Commission Safety Review and Coast Guard Coordination

73. The FEIS evaluated the safety of both the proposed Port Arthur LNG Project and the related LNG vessel transit through the Sabine-Neches Waterway. The analysis identified the principal properties and hazards associated with LNG, presented a summary of the design and technical review of the cryogenic aspects of the LNG terminal, discussed the types of storage and retention systems, analyzed the thermal radiation and flammable vapor cloud hazards resulting from credible LNG spills, analyzed the safety aspects of LNG transportation by ship, and reviewed issues related to security and terrorism. Requirements for safety of the terminal are in the Coast Guard regulations in 33 CFR Part 127 and for maintaining security are in 33 CFR Part 105 and will be approved by the Captain of the Port.

74. With respect to the onshore facility, a cryogenic design and technical review of the proposed terminal design and safety systems was completed and reported in the FEIS. That review noted several areas of concern, and as a result, the FEIS recommends 34 Environmental Conditions to make certain modifications to the terminal design. Information pertaining to these modifications is to be filed for review and approval by the Director of OEP prior to initial site preparation, prior to construction of final design, prior to commissioning, or prior to commencement of service as indicated by each specific recommendation. The FEIS also evaluated the thermal radiation and flammable vapor

dispersion exclusion zones of the proposed LNG terminal. The analysis found that no excluded uses are within these areas.

75. In addition, the FEIS discussed the Department of Energy's (DOE) study by Sandia National Laboratories entitled, Guidance on Risk Analysis and Safety Implications of a Large Liquefied Natural Gas (LNG) Spill Over Water (Sandia Report) December 2004. The report evaluated an LNG cargo tank breach using modern finite element modeling and explosive shock physics modeling to estimate a range of breach sizes for credible accidental and intentional LNG spill events. Based on the Sandia Report breach sizes, thermal radiation and flammable vapor hazard distances were calculated in the FEIS for an accident or an attack on an LNG vessel. For the nominal intentional breach scenarios (5- to 7-square-meter holes in an LNG cargo tank), the estimated distances ranged from: 4,182 to 4,652 feet for a thermal radiation of 1,600 Btu/ft2-hr, the level which is hazardous for persons located outdoors and unprotected; 3,232 to 3,591 feet for 3,000 Btu/ft2-hr, an acceptable level for wooden structures; and 1,934 to 2,143 feet for 10,000 Btu/ft2-hr, a level sufficient to damage process equipment, for these size holes respectively.

76. Based on the extensive operational experience of LNG shipping, the structural design of an LNG vessel, and the operational controls imposed by the Coast Guard and the local pilots, a cargo containment failure and subsequent LNG spill from a vessel casualty – collision, grounding, or allision – is highly unlikely. For similar reasons, an accident involving the onshore LNG import terminal is unlikely to affect the public. As a result, the FEIS determined that the risk to the public from accidental causes is negligible.

77. Unlike accidental causes, historical experience provides little guidance in estimating the probability of a terrorist attack on an LNG vessel or onshore storage facility. For a new LNG import terminal proposal having a large volume of energy transported and stored near populated areas, the perceived threat of a terrorist attack is a serious concern of the local population and requires that resources be directed to mitigate possible attack paths. If the Coast Guard issues a Letter of Recommendation finding the waterway suitable for LNG marine traffic, the operational restrictions that would be imposed by the Sabine Pilots on LNG vessel movements through this area, as well as the requirements that the Coast Guard would impose, would minimize the possibility of a hazardous event occurring along the vessel transit area. While the risks associated with the transportation of any hazardous cargo can never be entirely eliminated, we are confident that they can be reduced to minimal levels and that the public will be well protected from harm.

78. The final EIS evaluated potential congestion impacts from additional LNG ship traffic. The operation of LNG vessels should have a similar impact as other large vessels

currently using the Sabine Neches Waterway (SNWW) and should cause no more disruption than the vessel traffic increases planned by other SNWW users. The final EIS recommended several mitigation measures to address ship travel including submitting annual updates of the waterway suitability assessment to the Captain of the Port/Federal Maritime Security Coordinator. In accordance with 33 CFR Part 127, Port Arthur submitted a Letter of Intent to the Coast Guard on December 10, 2004, conveying its intention to build an LNG terminal at the proposed site and to transport by ship LNG to the terminal. Upon completion of its review, the Coast Guard would issue a Letter of Recommendation to address the suitability of the SNWW for the proposed LNG transport. That action is pending.

79. The final EIS included an analysis of public safety issues associated with the Port Arthur LNG Project. The analysis identified the principal properties affected and hazards associated with LNG, presented a summary of the design and technical review of the cryogenic aspects of the LNG terminal, discussed the types of storage and retention systems, analyzed the thermal radiation and flammable vapor cloud hazards resulting from credible land-based LNG spills, analyzed the safety aspects of LNG transportation by ship, and reviewed issues related to security and terrorism. Requirements for safety of the terminal are in the Coast Guard regulations in 33 CFR Part 127 and for maintaining security are in 33 CFR Part 105 and will be approved by the Captain of the Port. The cryogenic analysis resulted in Environmental Conditions 36 through 56. These conditions require Port Arthur to make certain modifications to its facility design prior to construction.

80. The final EIS discussed alternatives, including no action or postponed action; system alternatives; offshore LNG terminals; alternative onshore LNG plant sites; pipeline route alternatives; and route variations. The final EIS recommends the use of a route variation to reduce impacts to the marsh north of Sabine Lake. We will require the use of the Pearl Crossing route variation.

81. We have reviewed the information and analysis contained in the final EIS regarding the potential environmental effect of the project. Based on our consideration of this information, we agree with the conclusions presented in the final EIS and find that Port Arthur's project is environmentally acceptable, if the project is constructed and operated in accordance with the recommended environmental mitigation measures in the appendix to this order. Thus, we are including the environmental mitigation measures recommended in the final EIS as conditions to the authorizations issued to Port Arthur in this order. Further, we are ensuring that the LNG facilities will be subject to Commission staff technical review and site inspections on at least an annual basis.

82. The Coast Guard cooperated in the preparation of the EIS and plays an important role with regard to maritime issues. With regard to vessel transit to and from the Port Arthur LNG terminal, the Coast Guard has identified no constraints. Further, at this time no outstanding safety and security issues have been identified.

83. On June 14, 2005, the Coast Guard issued a Navigation and Vessel Inspection Circular – Guidance on Assessing the Suitability of a Waterway for Liquefied Natural Gas (LNG) Marine Traffic (NVIC). The purpose of this NVIC is to provide Coast Guard Captains of the Port (COTP)/Federal Maritime Security Coordinators (FMSC), members of the LNG industry, and port stakeholders with guidance on assessing the suitability and security of a waterway for LNG marine traffic. It provides specific guidance on the timing and scope of the waterway suitability assessment (WSA), which will address both safety and security of the port, the facility, and the vessels transporting the LNG. Preparation of this guidance was referenced in the Coast Guard's March 18, 2005 Report to Congress on Liquefied Natural Gas Terminals.

84. The WSA process addresses the transportation of LNG from an LNG tanker's entrance into U.S. territorial waters, through its transit to and from the LNG receiving facility, and includes operations at the vessel/facility interface. In addition, the WSA addresses the navigational safety issues and port security issues introduced by the proposed LNG operations. The Coast Guard's report on the WSA identifies the relevant safety and security issues from the broad viewpoint of impact on the entire port, as well as provides a detailed review of specific points of concern along the LNG tanker's proposed transit route. The WSA will be reviewed on an annual basis and updated as needed until the facility is placed in service.

85. In December 2005, Port Arthur LNG submitted a WSA to the Captain of the Port. The Coast Guard, with input from various stakeholders, which included the marine pilots, towing industry representatives, and members of the Port Arthur Area Harbor Safety Committee and Area Maritime Security Committee, has completed a review of Port Arthur LNG's WSA in accordance with the guidance in NVIC 05-05. The WSA review focused on the navigation safety and maritime security risks posed by LNG marine traffic, and the measures needed to responsibly manage these security risks.

86. On March 20, 2006, the Coast Guard sent a letter to the Commission, based on the above WSA review, providing input on the capability of the port community to implement the risk management measures necessary to responsibly manage the risks of LNG marine traffic in the port. As described in this document, the Coast Guard has preliminarily determined that the Sabine Neches Waterway to the proposed LNG terminal in Port Arthur, Texas, may be suitable for accommodating the type and frequency of LNG vessels being proposed by the applicant. This determination,

however, is preliminary because the required NEPA analysis has not yet been completed. This determination is also contingent upon the Coast Guard and other participating agencies having the appropriate resources to implement all of the measures necessary to responsibly manage the safety and security risks of LNG marine traffic in this area. Once these plans are finalized and the resources required to implement them have been identified, Port Arthur LNG will be able to more specifically discuss the funding of such resources. In order to better define how the potential burden on local communities would be addressed, the final EIS recommended that Port Arthur LNG provide a plan that identifies the mechanisms for funding project-specific security/emergency management costs that would be imposed on state agencies and local communities. We agree with that recommendation.

87. The Coast Guard's letter to the Commission discusses the relevant safety and security issues from the broad viewpoint of impact on the entire port, as well as provides a detailed review of specific points of concern along the LNG tanker's proposed transit route. A detailed supplemental letter, also based on the WSA review, describing the conceptual prevention/mitigation strategies, along with resource needs, has also been sent from the Coast Guard to the Commission, on March 20, 2006. If the Coast Guard issues a Letter of Recommendation finding the waterway suitable for LNG marine traffic, the security measures outlined in the letters to the Commission will be further developed into a detailed Liquefied Natural Gas Vessel Management and Emergency Plan, which would become the basis for appropriate security measures for each Maritime Security threat level. This plan would clearly spell out roles, responsibilities and specific procedures for an LNG vessel transiting the Sabine Neches Waterway up to the proposed Port Arthur LNG terminal, as well as for all agencies involved in implementing security and safety during the operation. It would be required that, prior to the LNG vessel being granted permission to enter the Sabine Neches Waterway, both the vessel and facility must be in full compliance with the appropriate requirements of the Maritime Transportation Security Act and International Ship and Port Facility Security Code, and the security protocols to be established by the COTP in the Liquefied Natural Gas Vessel Management and Emergency Plan. The plan may include security measures such as: Coast Guard and other law enforcement agency vessels to enforce safety and security zones around the LNG vessels while in transit and moored at the terminal; shoreside surveillance and monitoring along designated sections of the transit route; and other prevention/mitigation strategies.

88. The Liquefied Natural Gas Vessel Management and Emergency Plan would be a dynamic document that would be prepared well before import operations would commence, and the port's overall security picture may change over that time period. New port activities may commence, infrastructure may be added, or population density may change. Improvements in technology to detect, deter and defend against intentional

acts may also develop. Therefore, the final EIS recommended that Port Arthur LNG annually review its waterway suitability assessment relating to LNG vessel traffic for the project; update the assessment to reflect changing conditions which may impact the suitability of the waterway for LNG marine traffic; provide the updated assessment to the cognizant COTP/Federal Maritime Security Coordinator (COTP/FMSC) for review and validation and if appropriate, further action by the COTP/FMSC relating to LNG vessel traffic; and provide a copy to Commission staff. We concur with this recommendation.

5. Conclusions on Environmental Issues

89. The Commission has reviewed the information and analysis contained in the final EIS regarding the potential environmental effect of the project. Based on our consideration of this information, we agree with the conclusions presented in the final EIS and find that the Port Arthur LNG Project is environmentally acceptable, if the project is constructed and operated in accordance with the conditions discussed above and the EIS' other recommended environmental mitigation measures in Appendix A to this order. Thus, we are including the environmental mitigation measures recommended in the final EIS as conditions to the authorizations granted by this order for the Port Arthur LNG Project.

90. Any state or local permits issued with respect to the jurisdictional facilities authorized herein must be consistent with the conditions of this certificate. We encourage cooperation between interstate pipelines and local authorities. This does not mean, however, that state and local agencies, through application of state or local laws, may prohibit or unreasonably delay the construction or operation of facilities approved by this Commission. [34]

91. Port Arthur LNG and Port Arthur Pipeline shall notify the Commission's environmental staff by telephone or facsimile of any environmental noncompliance identified by other federal, state, or local agencies on the same day that such agency notifies Port Arthur LNG or Port Arthur Pipeline. They shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

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[34] *See, e.g., Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293 (1988); *National Fuel Gas Supply v. Public Service Commission,* 894 F.2d 571 (2d Cir. 1990); and *Iroquois Gas Transmission System, L.P.*, 52 FERC ¶ 61,091 (1990) and 59 FERC ¶ 61,094 (1992).

Conclusion

92. For the reasons set forth herein, and subject to the conditions set forth below, we find that granting authorization under section 3 of the NGA for Port Arthur LNG's proposed import terminal is in the public interest. We further find, also subject to the conditions below, that the public convenience and necessity require issuance of a certificate under section 7(c) of the NGA for Port Arthur Pipeline's proposed pipeline facilities. Thus, we grant the requested authorizations to Port Arthur LNG and Port Arthur Pipeline.

93. At a hearing held on June 15, 2006, the Commission on its own motion received and made a part of the record in this proceeding all evidence, including the application and exhibits thereto, submitted in support of the authorizations sought herein, and upon consideration of the record.

The Commission orders:

(A) In Docket No. CP05-83-000, Port Arthur LNG is authorized to site, construct and operate its LNG terminal in Port Arthur, Texas, as more fully described in this order and in the application.

(B) The authorization in Ordering paragraph (A) is conditioned upon Port Arthur LNG's compliance with the environmental conditions set forth in Appendix A to this order.

(C) In Docket No. CP05-84-000, a certificate of public convenience and necessity is issued to Port Arthur Pipeline to construct and operate a 70-mile, 36-inch diameter pipeline from the outlet of Port Arthur LNG's terminal to an interconnection with the interstate facilities of Transco in Beauregard Parish, Louisiana and a 3-mile, 36-inch diameter pipeline from the LNG terminal to an interconnection with the interstate facilities of NGPL in Jefferson County, Texas, as more fully described in this order and in the application.

(D) The authorization in Ordering paragraph (C) is conditioned upon Port Arthur Pipeline's compliance with the environmental conditions set forth in Appendix A to this order and with the tariff conditions set forth in Appendix B to this order.

(E) Construction of Phase I facilities shall be completed and made available for service within three years from the date of this order and construction of Phase II facilities shall be completed and made available for service within five years from the date of this order in accordance with section 157.20(b) of the Commission's regulations.

(F) The authorization in Ordering paragraph (C) is conditioned upon Port Arthur Pipeline's compliance with all applicable regulations under the NGA, including but not limited to, Parts 154 and 284, and paragraphs (a), (c), (e) and (f) of the Commission's regulations.

(G) The new tariff and initial rates proposed by Port Arthur Pipeline are approved, as conditioned and modified herein.

(H) Port Arthur Pipeline must make a tariff filing, no later than 60 days prior to commencement of service, to place the initial rates, as approved, modified and conditioned herein, into effect, including redlined tariff sheets reflecting how its actual tariff filing differs from its *pro forma* filing. When Port Arthur Pipeline files actual tariff sheets in this proceeding, it must revise its tariff to conform to the standards adopted in Order No. 587-S, as modified by any future NAESB requirements in effect at the time of filing. The filing must include a cross-reference showing each NAESB standard number, the tariff section containing the standard, and whether Port Arthur Pipeline incorporated the standard verbatim or by reference. Port Arthur Pipeline must file any information it believes relevant to its compliance with the NAESB Standards.

(I) Within three years after the in-service date of its Phase I facilities, as discussed herein, Port Arthur Pipeline must make a filing to justify its existing cost-based firm and interruptible recourse rates. In its filing, the projected units of service should be no lower than those upon which Port Arthur Pipeline's approved initial rates are based. The cost and revenue study must be in the form specified in section 154.313 of the regulations to update cost-of-service data. In the alternative, in lieu of this filing, Port Arthur Pipeline may make an NGA section 4 filing to propose alternative rates to be effective no later than three years after the in-service date for its proposed facilities.

(J) Port Arthur Pipeline shall adhere to the accounting requirements set forth in the body of this order.

(K) In Docket No. CP05-85-000, a blanket construction certificate is issued to Port Arthur Pipeline under Part 157 subpart F of the Commission's regulations.

(L) In Docket No. CP05-86-000, a blanket transportation certificate is issued to Port Arthur Pipeline under Part 284 subpart G of the Commission's regulations.

(M) Port Arthur LNG and Port Arthur Pipeline shall notify the Commission's environmental staff by telephone or facsimile of any environmental noncompliance identified by other federal, state, or local agencies on the same day that such agency

notifies either Port Arthur LNG or Port Arthur Pipeline, and file written confirmation of such notification with the Secretary of the Commission within 24 hours.

(N) BP Energy's motion to intervene out-of-time is granted.

By the Commission.

(S E A L)

Magalie R. Salas,
Secretary.

Appendix A

Environmental Conditions

1. Port Arthur LNG and Port Arthur Pipeline shall follow the construction procedures and mitigation measures described in their applications and supplements (including responses to staff data requests), and as identified in the EIS, unless modified by this order. In addition, unless superceded by this order. Port Arthur LNG and Port Arthur Pipeline must:

    a. request any modification to these procedures, measures, or conditions in a filing with the Secretary of the Commission (Secretary);
    b. justify each modification relative to site-specific conditions;
    c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and
    d. receive approval in writing from the Director of the Office of Energy Projects (OEP) before using that modification.

2. For the LNG facilities, the Director of OEP has delegated authority to take all steps necessary to ensure the protection of life, health, property, and the environment during construction and operation of the project. This authority shall include:

    a. stop-work authority and authority to cease operation; and
    b. the design and implementation of any additional measures deemed necessary to assure continued compliance with the intent of the conditions of this order.

3. For the pipeline facilities, the Director of OEP has delegation authority to take whatever steps are necessary to ensure the protection of all environmental resources during construction and operation of the Project. This authority shall include:

    a. the modification of conditions of this Order; and
    b. the design and implementation of any additional measures deemed necessary (including stop work authority) to assure continued compliance with the intent of the environmental conditions as well as the avoidance or mitigation of adverse environmental impact resulting from Project construction and operation.

4. Prior to any construction, Port Arthur LNG and Port Arthur Pipeline shall file affirmative statements with the Secretary, certified by a senior company official, that all company personnel, EIs, and contractor personnel will be informed of the EI's authority and have been or will be trained on the implementation of the environmental mitigation measures appropriate to their jobs before becoming involved with construction and restoration activities.

5. The authorized facility locations shall be as shown in the EIS, as supplemented by filed alignment sheets, and shall include the staff's recommended facility locations. As soon as they are available, and before the start of construction, Port Arthur LNG and Port Arthur Pipeline shall file with the Secretary revised detailed survey alignment maps/sheets at a scale not smaller than 1:6,000 with station positions for all facilities approved by this Order. All requests for modifications of environmental conditions of this Order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.

   Port Arthur LNG's and Port Arthur Pipeline's exercise of eminent domain authority granted under NGA section 7(h) in any condemnation proceedings related to the Order for the pipeline must be consistent with these authorized facilities and locations. Port Arthur LNG's and Port Arthur Pipeline's rights of eminent domain granted under NGA section 7(h) does not authorize them to increase the size of natural gas pipelines to accommodate future needs or to acquire a right-of-way for a pipeline to transport a commodity other than natural gas.

6. Port Arthur LNG and Port Arthur Pipeline shall file with the Secretary detailed alignment maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all route realignments or facility relocations, and staging areas, pipe storage yards, new access roads, and other areas that would be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/sheets/aerial photographs. Each area must be approved in writing by the Director of OEP before construction in or near that area.

   This requirement does not apply to extra workspace allowed by the Upland Erosion Control, Revegetation, and Maintenance Plan or minor field realignments

per landowner needs and requirements that do not affect other landowners or sensitive environmental areas such as wetlands.

Examples of alterations requiring approval include all route realignments and facility location changes resulting from:

a. implementation of cultural resources mitigation measures;
b. implementation of endangered, threatened, or special concern species mitigation measures;
c. recommendations by state regulatory authorities; and
d. agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.

7. At least 60 days before construction begins, Port Arthur LNG and Port Arthur Pipeline shall file Implementation Plans with the Secretary for the review and written approval by the Director of OEP describing how they will implement the mitigation measures required by this Order. Port Arthur LNG and Port Arthur Pipeline must file revisions to the plans as schedules change. The plans shall identify:

a. how Port Arthur LNG and Port Arthur Pipeline will incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to onsite construction and inspection personnel;
b. the number of EIs assigned per spread, and how the company will ensure that sufficient personnel are available to implement the environmental mitigation;
c. company personnel, including EIs and contractors, who will receive copies of the appropriate material;
d. what training and instructions Port Arthur LNG and Port Arthur Pipeline will give to all personnel involved with construction and restoration (initial and refresher training as the Project progresses and personnel change), with the opportunity for OEP staff to participate in the training session(s);
e. the company personnel (if known) and specific portion of Port Arthur LNG's and Port Arthur Pipeline's organization having responsibility for compliance;
f. the procedures (including use of contract penalties) Port Arthur LNG and Port Arthur Pipeline will follow if noncompliance occurs; and
g. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:

(1) the completion of all required surveys and reports;
(2) the mitigation training of onsite personnel;
(3) the start of construction; and
(4) the start and completion of restoration.

8. Port Arthur LNG and Port Arthur Pipeline shall develop and implement an environmental complaint resolution procedure. The procedure shall provide landowners with clear and simple directions for identifying and resolving their environmental mitigation problems/concerns during construction of the Project and restoration of the right-of-way. Prior to construction, Port Arthur LNG and Port Arthur Pipeline shall mail the complaint procedures to each landowner whose property would be crossed by the Project.

a. In their letters to affected landowners, Port Arthur LNG and Port Arthur Pipeline shall:

(1) provide a local contact that the landowners should call first with their concerns; the letter should indicate how soon a landowner should expect a response;
(2) instruct the landowners that, if they are not satisfied with the response, they should call Port Arthur LNG's or Port Arthur Pipeline's Hotline; the letter should indicate how soon to expect a response; and
(3) instruct the landowners that, if they are still not satisfied with the response from the Hotlines, they should contact the Commission's Enforcement Hotline at (888) 889-8030.

b. In addition, Port Arthur LNG and Port Arthur Pipeline shall include in their weekly status reports a copy of a table that contains the following information for each problem/concern:

(1) the date of the call;
(2) the identification number from the certificated alignment sheets of the affected property;
(3) the description of the problem/concern; and
(4) an explanation of how and when the problem was resolved, will be resolved, or why it has not been resolved.

9. Port Arthur LNG and Port Arthur Pipeline shall employ teams of EIs (at least two per construction spread) with one available at the LNG terminal as appropriate during site preparation. The EI(s) shall be:

a. responsible for monitoring and ensuring compliance with all mitigation measures required by this Order and other grants, permits, certificates, or other authorizing documents;
b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract (see condition 6 above) and any other authorizing document;
c. empowered to order correction of acts that violate the environmental conditions of this Order, and any other authorizing document;
d. a full-time position, separate from all other activity inspectors;
e. responsible for documenting compliance with the environmental conditions of this Order, as well as any environmental conditions/permit requirements imposed by other federal, state, or local agencies; and
f. responsible for maintaining status reports.

10. Port Arthur LNG and Port Arthur Pipeline shall file updated status reports prepared by the EI with the Secretary on a weekly basis until all construction and restoration activities are complete. On request, these status reports will also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:

a. the current construction status of the Project, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally sensitive areas;
b. a listing of all problems encountered and each instance of noncompliance observed by the EI(s) during the reporting period (both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other federal, state, or local agencies);
c. corrective actions implemented in response to all instances of noncompliance, and their cost;
d. the effectiveness of all corrective actions implemented;
e. a description of any landowner/resident complaints which may relate to compliance with the requirements of this Order, and the measures taken to satisfy their concerns; and
f. copies of any correspondence received by Port Arthur LNG and Port Arthur Pipeline from other federal, state or local permitting agencies concerning instances of noncompliance, and Port Arthur LNG’s and Port Arthur Pipeline's response.

11. Port Arthur LNG and Port Arthur Pipeline must receive written authorization from the Director of OEP before commencing service from the LNG terminal and other components of the project. Such authorization will only be granted following a

determination that the LNG facility has been constructed in accordance with Commission approval and applicable standards, can be expected to operate safely as designed, and that rehabilitation and restoration of the right-of-way is proceeding satisfactorily.

12. Within 30 days of placing the authorized facilities in service, Port Arthur LNG and Port Arthur Pipeline shall file affirmative statements with the Secretary, certified by a senior company official:

    a. that the facilities have been constructed in compliance with all applicable conditions, and that continuing activities will be consistent with all applicable conditions; or
    b. identifying which of the certificate conditions Port Arthur LNG and Port Arthur Pipeline have complied with or will comply with. This statement shall also identify any areas along the right-of-way where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.

13. Port Arthur LNG shall file the comments of the Texas SHPO and FWS on Entergy's planned electric transmission lines with the Secretary prior to its construction. Port Arthur LNG shall defer obtaining service from the planned electric transmission lines until the comments have been filed with the Secretary.

14. Port Arthur Pipeline shall incorporate the Pearl Crossing Route Variation, including the construction methods and right-of-way widths into its proposed route and construction plans.

15. Port Arthur Pipeline shall develop a plan for construction in the vicinity of the known abandoned wells on the terminal site. This plan shall include a discussion of maintaining the integrity of the plugs. In addition, Port Arthur Pipeline shall develop a plan of action if any unidentified wells are discovered during construction. Both of these plans shall be filed with the Secretary for review and written approval by the Director of OEP before construction of the terminal.

16. Port Arthur Pipeline shall file with the Secretary detailed construction plans for the crossing of Keith Lake Cut. This shall be a site-specific plan that includes scaled drawings identifying all areas that would be disturbed by construction. The Director of OEP must review and approve this plan in writing before construction of the 3-Mile-Long Pipeline.

17. Port Arthur Pipeline shall file with the Secretary detailed construction plans for the crossing of Keith Lake. This shall be a site-specific plan that includes scaled drawings identifying all areas that would be disturbed by construction. The Director of OEP must review and approve this plan in writing before construction of the 3-Mile-Long Pipeline.

18. Port Arthur Pipeline shall file with the Secretary a plan for the crossing of each waterbody proposed as a HDD crossing in the event that the HDD is unsuccessful. These shall be site-specific plans that include scaled drawings identifying all areas that would be disturbed by construction. Port Arthur Pipeline shall file these plans along with the COE permit when it is obtained. The Director of OEP must review and approve these plans in writing before construction of the crossings.

19. Port Arthur Pipeline shall submit a Directional Drill Contingency Plan for each waterbody crossed by directional drilling. Each Directional Drill Contingency Plan shall address how Port Arthur Pipeline:

    a. will handle any in inadvertent release of drilling mud into the waterbody or areas adjacent to the waterbody, including specific procedures to contain inadvertent releases;
    b. will seal the abandoned drill hole; and
    c. will clean up any inadvertent releases.

    Port Arthur Pipeline shall file each plan with the Secretary for review and written approval by the Director of OEP before construction of each HDD.

20. If Port Arthur Pipeline is unable to construct the pipeline between MPs 18 and 28.1 using the Pearl Crossing Route Variation because another pipeline has been authorized in that location, Port Arthur Pipeline shall use its proposed route with the following modification. Port Arthur Pipeline shall cross the north bank of Sabine Lake using a horizontal directional drill. In addition Port Arthur Pipeline shall relocate the mainline valve proposed for MP 19.2 to a location onshore north of the levee, near MP 19.9.

21. Port Arthur Pipeline shall revise its alignment sheets for the 3-Mile-Long and 70-Mile-Long Pipelines where they would be in the same temporary construction right-of-way (MP 0.0 to MP 1.0) to show a maximum width of 110 feet with respect to the construction right-of-way in wetlands. The revised construction plans and alignment sheets shall be filed with the Secretary for review and written approval by the Director of OEP before construction of the pipelines.

22. Port Arthur Pipeline shall limit its construction right-of-way to 100 feet in wetland areas where the two proposed pipelines would not be within the same right-of-way (between MPs 1.0 and 1.2 and MPs 19.2 and 35.4) and where the push method can be used. If additional right-of-way is required, Port Arthur Pipeline shall file with the Secretary for review and written approval by the Director of OEP a site-specific construction plan and written justification before use of any additional right-of-way width.

23. Prior to construction, Port Arthur LNG and Port Arthur Pipeline shall file with the Secretary finalized Aquatic Resources Mitigation Plans (including a finalized Wetland Mitigation Plan) developed in consultation with, and approved by, the COE, NOAA Fisheries, FWS, TCEQ, LADNR, EPA, and LADWF. In addition to the information currently provided in the Revised Draft Wetland Mitigation Plan, as ultimately approved by the agencies, the finalized Aquatic Resources Mitigation Plan (including a finalized Wetland Mitigation Plan) also shall include EFH impacts and agency-approved mitigation for those impacts.

24. Port Arthur Pipeline shall hire and fund a third-party contractor to work under the direction of the Commission staff for the sole purpose of monitoring compliance with the environmental conditions provided in the EIS and all mitigation measures proposed by Port Arthur Pipeline. Port Arthur Pipeline shall develop a draft monitoring program and obtain proposals from potential contractors to provide monitoring services, and file the program and proposals with the Secretary for review and approval by the Director of OEP at least 60 days before the anticipated start of pipeline construction. The monitoring program shall include:

    a. the employment by the contractor of one to two full-time on-site monitors per construction spread;
    b. the employment by the contractor of a full-time compliance manager to direct and coordinate with the monitors, manage the reporting system, and provide technical support to the Commission staff;
    c. a systematic strategy for the review and approval by the contract compliance manager and monitors of variances to certain construction activities as may be required by Port Arthur Pipeline based on site-specific conditions;
    d. the development of an internet website for posting daily or weekly inspection reports submitted by both the third-party monitors and Port Arthur Pipeline's environmental inspectors; and
    e. a discussion of how the monitoring program can incorporate and/or be coordinated with the monitoring or reporting that may be required by other federal and state agencies.

25. Port Arthur Pipeline shall consult with NOAA Fisheries and address its concerns regarding restoration of shell reefs in Sabine Lake, monitoring of wetlands along the pipelines for a period of no less than 3 years and the development of appropriate mitigation ratios (and timing for development of mitigation areas) for EFH impacts and for long-term (over 3 years) impacts to tidally influenced wetlands along the pipelines. Documentation of these consultations should be filed with the Secretary before construction of any facilities.

26. Port Arthur LNG shall implement the mitigation measures contained in the Vessel Strike Avoidance and Injured/Dead Protected Species Reporting Policy found in appendix L of the final environmental impact statement for the Port Arthur LNG Project in its Terminal Use Agreement.

27. Port Arthur LNG shall provide, prior to construction of the terminal, a lighting design plan and operational procedures to minimize impact on the bird population. This plan shall be developed in consultation with FWS and appropriate state agencies.

28. If construction of the LNG terminal or pipeline system has not begun within 1 year from the date of Commission approval of the Project, Port Arthur LNG and Port Arthur Pipeline shall consult with the appropriate offices of the FWS and NOAA Fisheries to update the species lists and to verify previous consultations and the need for additional surveys and survey reports (if required). The FWS and NOAA Fisheries comments and conclusions on the surveys and survey reports, if any are required, shall be filed with the Secretary before construction.

29. Port Arthur LNG and Port Arthur Pipeline shall not begin construction of any facilities associated with the Port Arthur LNG Project until they file with the Secretary a copy of the CZMP consistency determinations issued by the Railroad Commission of Texas and the LADNR.

30. Port Arthur LNG and Port Arthur Pipeline shall defer implementation of any treatment plans/measures (including archeological data recovery); construction of facilities, and the use of all staging, storage, temporary work areas, and new or to-be-improved access roads until:

    a. Port Arthur LNG and Port Arthur Pipeline file with the Secretary, all cultural resources survey reports, any required treatment plans, and the SHPO's comments; and
    b. The Director of OEP reviews and approves all cultural resources survey reports and plans, and notifies Port Arthur LNG and Port Arthur Pipeline in

writing that treatment plans/measures may be implemented or that construction may proceed.

All material filed with the Commission containing location, character, and ownership information about cultural resources must have the cover and any relevant pages therein clearly labeled in bold lettering: "CONTAINS PRIVILEGED INFORMATION—DO NOT RELEASE."

31. Port Arthur LNG and Port Arthur Pipeline shall not begin construction of the Project until the Commission has issued its final conformity certification and Port Arthur LNG and Port Arthur Pipeline have received written approval by the Director of OEP of their filings stating that they would comply with all requirements of the General Conformity Determination.

32. Port Arthur Pipeline shall develop a noise mitigation plan to reduce noise associated with pile-driving activities. This plan shall include an evaluation of potential mitigation measures including the use of vibratory hammers, augered piles, and/or a noise sleeve installed over the pile column to reduce pile driving noise levels. The plan shall identify which mitigation measures would be used, the hours and days of the week that pile driving activities would occur, and what standards would be used to determine when the use of noise mitigation would be required. The final plan shall be filed with the Secretary, for review and written approval by the Director of OEP, prior to the initiation of any construction activities.

33. Port Arthur LNG shall make all reasonable efforts to ensure its predicted noise levels from the Port Arthur LNG Terminal are not exceeded at nearby NSAs and file noise surveys showing this with the Secretary no later than 60 days after placing the Port Arthur LNG Terminal in service. However, if the noise attributable to the operation of the Port Arthur LNG Terminal exceeds an Ldn of 55 dBA at any nearby NSAs, Port Arthur LNG shall file a report on what changes are needed and shall install additional noise controls to meet the level within 1 year of the in-service date. Port Arthur LNG shall confirm compliance with this requirement by filing a second noise survey with the Secretary no later than 60 days after it installs the additional noise controls.

34. For areas where the Port Arthur LNG Project would be co-located with one or more planned pipeline(s) adjacent to an existing right-of-way, the first pipeline to be constructed shall be constructed closest to the existing right-of-way. The Port Arthur pipeline shall be constructed with a 25-foot offset from the nearest existing pipeline. For the Port Arthur LNG Project, these areas include:

MILEPOST	CO-LOCATING PROJECT
53.5 to 70.0	Liberty Storage Project
53.5 to 70.0	Cameron LNG Project
69.1 to 69.4	Creole Trail LNG Project

Prior to construction, Port Arthur Pipeline shall file alignment sheets and environmental information to support the new alignment with the Secretary for review and written approval by the Director of OEP.

35. Prior to accepting ships greater than 140,000 cubic meters in capacity, Port Arthur LNG shall provide the necessary information to demonstrate that the transient hazard areas identified in the final EIS are applicable. Port Arthur LNG shall file this information with the Secretary for review and written approval of the Director of OEP. This information shall also be provided to the Coast Guard.

    The following measures shall apply to the LNG terminal design and construction details. Information pertaining to these specific recommendations shall be filed with the Secretary for review and approval by the Director of OEP either: prior to initial site preparation; prior to construction of final design; prior to commissioning; or prior to commencement of service as indicated by each specific recommendation. Items relating to Resource Report 13-Engineering and Design Material and security shall be submitted as critical energy infrastructure information (CEII) pursuant to 18 CFR § 388.112 and PL01-1. Information pertaining to items such as: offsite emergency response; procedures for public notification and evacuation; and construction and operating reporting requirements would be subject to public disclosure. All information shall be submitted a minimum of 30 days before approval to proceed is required.

36. A complete plan and list of the hazard detection equipment shall be filed prior to initial site preparation. The information shall include a list with the instrument tag number, type and location, alarm locations, and shutdown functions of the proposed hazard detection equipment. Plan drawings shall clearly show the location of all detection equipment, HD-5.

37. The location of flammable gas detectors used to shut down fired equipment shall be evaluated prior to initial site preparation.

The evaluation shall include:

a. Identifying all combustion/ventilation air intake equipment and the distance(s) to any possible hydrocarbon release (LNG, flammable refrigerants, flammable liquids, and flammable gases).
b. Demonstrating that these areas are adequately covered by hazard detection devices and indicating how these devices would isolate or shutdown any combustion equipment whose continued operation could add to, or sustain an emergency.

38. A complete plan and list of the fixed and wheeled dry-chemical, fire extinguishing, high expansion foam, hazard control equipment shall be filed prior to initial site preparation. The information shall include a list with 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.

39. Facility plans shall be provided showing the proposed location of, and area covered by, each monitor, hydrant, deluge system, hose and sprinkler. Details of the design shall be filed prior to initial site preparation and shall include P&IDs of the proposed fire water system.

40. A detailed plan and section drawings of the troughs, containment and segments used to calculate vapor dispersion shall be provided prior to initial site preparation.

41. Port Arthur LNG shall examine provisions to retain any vapor produced along the transfer line trenches and other areas serving to direct LNG spills to associated impoundments. Measures to be considered may include, but are not limited to: vapor fencing; intermediate sump locations; or trench surface area reduction. Port Arthur LNG shall file final drawings and specifications for these measures with the Secretary 30 days prior to initial site preparation for review and approval by the Director of OEP.

42. Port Arthur LNG shall develop an Emergency Response Plan (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;
d. evacuation routes/methods for residents of Sabine, Sabine Pass, Pleasure Island and other public use areas that are within any transient hazard areas;
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 Emergency Response Plan shall be filed with the Secretary for review and written approval by the Director of OEP prior to initial site preparation. Port Arthur LNG shall notify Commission staff of all planning meetings in advance and shall report progress on the development of its Emergency Response Plan at 3-month intervals.

43. The Emergency Response Plan shall include a Cost-Sharing Plan identifying the mechanisms for funding all project-specific security/emergency management costs that would be imposed on state and local agencies. In addition to the funding of direct transit-related security/emergency management costs, this comprehensive plan shall include funding mechanisms for the capital costs associated with any necessary security/emergency management equipment and personnel base. The Cost-Sharing Plan shall be filed with the Secretary for review and written approval by the Director of OEP prior to initial site preparation.

44. The final design of the hazard detection equipment shall identify manufacturer and model.

45. The final design shall specify that open path detectors shall be calibrated to detect the presence of flammable gas and alarm at the lowest reliable set point, in addition to the required 25 percent LEL set point.

46. The final design shall include provisions for all flammable gas and UV/IR hazard detectors to be equipped with local instrument status indication as an additional safety feature.

47. The final design of the hazard detection equipment shall include redundancy and fault detection and fault alarm monitoring in all potentially hazardous areas and enclosures.

48. The final design of the fixed and wheeled dry-chemical, fire extinguishing, and high expansion foam hazard control equipment shall identify manufacturer and model.

49. The final design shall include details of the LNG tank tilt settlement and differential settlement limits between each LNG tank and piping and procedures to be implemented in the event that limits are exceeded.

50. The final design shall include drawings and specifications of the spill protection system to be applied to the LNG tank roofs.

51. The final design shall include details of the boiloff gas flow measurement system provided for each tank.

52. The final design shall include provisions to ensure that hot water circulation is operable at all times when LNG is present in the LNG booster pump discharge piping or when the temperature in the LNG inlet channel to any vaporizer is below 35°F.

53. The final design shall include a fire protection evaluation carried out in accordance with the requirements of NFPA 59A, chapter 9.1.2.

54. The final design shall include details of the shut down logic and cause and effect matrices for alarms and shutdowns.

55. The final design shall include emergency shutdown of equipment and systems activated by hazard detection devices for flammable gas, fire, and cryogenic spills, when applicable.

56. The final design shall include details of the instrumentation for detecting leaks through pass through seals. The instrumentation shall be designed to continuously monitor, alarm and shut down associated equipment.

57. Security personnel requirements for prior to and during LNG vessel unloading shall be filed prior to commissioning.

58. Operation and Maintenance procedures and manuals, as well as safety procedure manuals, shall be filed prior to commissioning.

59. Copies of the Coast Guard security plan and vessel operation plan shall be provided to the Commission staff prior to commissioning.

60. The contingency plan for failure of the LNG tank outer containment shall be filed prior to commissioning.

61. A copy of the criteria for horizontal and rotational movement of the inner vessel for use during and after cool down shall be filed prior to commissioning.

62. Prior to commissioning, Port Arthur LNG shall coordinate, as needed, with the Coast Guard to define the responsibilities of Port Arthur LNG's security staff in supplementing other security personnel and in protecting the LNG ships and terminal.

63. The Commission staff shall be notified of any proposed revisions to the security plan and physical security of the facility prior to commencement of service.

64. Progress on the proposed construction project shall be reported in monthly reports filed with the Secretary. Details shall include a summary of activities, projected schedule for completion, problems encountered and remedial actions taken. Problems of significant magnitude shall be reported to the Commission within 24 hours.

In addition, we recommend that the following inspecting and reporting measures be applied throughout the life of the facility:

65. The facility shall be subject to regular Commission staff technical reviews and site inspections on at least a biennial basis or more frequently as circumstances indicate. Prior to each Commission staff technical review and site inspection, the Company shall respond to a specific data request including information relating to possible design and operating conditions that may have been imposed by other agencies or organizations. Up-to-date detailed piping and instrumentation diagrams reflecting facility modifications and provision of other pertinent information not included in the semi-annual reports described below, including facility events that have taken place since the previously submitted annual report, shall be submitted.

66. Semi-annual operational reports shall be filed with the Secretary to identify changes in facility design and operating conditions, abnormal operating experiences, activities (including ship arrivals, quantity and composition of imported LNG, vaporization quantities, boil-off/flash gas, etc.), plant modifications including future plans and progress thereof. Abnormalities shall include, but not be limited to: unloading/shipping problems, potential hazardous conditions from offsite vessels, storage tank stratification or rollover, geysering,

storage tank pressure excursions, cold spots on the storage tanks, storage tank vibrations and/or vibrations in associated cryogenic piping, storage tank settlement, significant equipment or instrumentation malfunctions or failures, non-scheduled maintenance or repair (and reasons therefore), relative movement of storage tank inner vessels, vapor or liquid releases, fires involving natural gas and/or from other sources, negative pressure (vacuum) within a storage tank and higher than predicted boiloff rates. Adverse weather conditions and the effect on the facility also shall be reported. Reports shall be submitted within 45 days after each period ending June 30 and December 31. In addition to the above items, a section entitled "Significant plant modifications proposed for the next 12 months (dates)" also shall be included in the semi-annual operational reports. Such information would provide the Commission staff with early notice of anticipated future construction/maintenance projects at the LNG facility.

67. In the event the temperature of any region of the outer containment, including imbedded pipe supports, becomes less than the minimum specified operating temperature for the material the Commission shall be notified within 24 hours and procedures for corrective action shall be specified.

68. Significant non-scheduled events, including safety-related incidents (*i.e*., LNG or natural gas releases, fires, explosions, mechanical failures, unusual over pressurization, and major injuries) and security related incidents (*i.e.*, attempts to enter site, suspicious activities) shall be reported to Commission staff. In the event an abnormality is of significant magnitude to threaten public or employee safety, cause significant property damage, or interrupt service, notification shall be made immediately, without unduly interfering with any necessary or appropriate emergency repair, alarm, or other emergency procedure. In all instances, notification shall be made to Commission staff within 24 hours. This notification practice shall be incorporated into the LNG facility's emergency plan. Examples of reportable LNG-related incidents include:

a. fire;
b. explosion;
c. estimated property damage of $50,000 or more;
d. death or personal injury necessitating in-patient hospitalization;
e. free flow of LNG for five minutes or more that results in pooling;
f. unintended movement or abnormal loading by environmental causes, such as an earthquake, landslide, or flood, that impairs the serviceability, structural integrity, or reliability of an LNG facility that contains, controls, or processes gas or LNG;

g. any crack or other material defect that impairs the structural integrity or reliability of an LNG facility that contains, controls, or processes gas or LNG;
h. any malfunction or operating error that causes the pressure of a pipeline or LNG facility that contains or processes gas or LNG to rise above its maximum allowable operating pressure (or working pressure for LNG facilities) plus the build-up allowed for operation of pressure limiting or control devices;
i. a leak in an LNG facility that contains or processes gas or LNG that constitutes an emergency;
j. inner tank leakage, ineffective insulation, or frost heave that impairs the structural integrity of an LNG storage tank;
k. any safety-related condition that could lead to an imminent hazard and cause (either directly or indirectly by remedial action of the operator), for purposes other than abandonment, a 20 percent reduction in operating pressure or shutdown of operation of a pipeline or an LNG facility that contains or processes gas or LNG;
l. safety-related incidents to LNG vessels occurring at or en route to and from the LNG facility; or
m. an event that is significant in the judgment of the operator and/or management even though it did not meet the above criteria or the guidelines set forth in an LNG facility's incident management plan.

In the event of an incident, the Director of OEP has delegated authority to take whatever steps are necessary to ensure operational reliability and to protect human life, health, property or the environment, including authority to direct the LNG facility to cease operations. Following the initial company notification, Commission staff would determine the need for a separate follow-up report or follow-up in the upcoming semi-annual operational report. All company follow-up reports shall include investigation results and recommendations to minimize a reoccurrence of the incident.

69. Port Arthur LNG shall annually review its waterway suitability assessment relating to LNG vessel traffic for the project; update the assessment to reflect changing conditions which may impact the suitability of the waterway for LNG marine traffic; provide the updated assessment to the cognizant Captain of the Port/Federal Maritime Security Coordinator (COTP/FMSC) for review and validation if appropriate, further action by the COTP/FMSC relating to LNG vessel traffic; and provide a copy to the Commission staff.

Appendix B

Port Arthur Pipeline is directed to make the following tariff revisions when it files actual tariff sheets:

In section 2.7, Service Requests, Contracting for Service and Credit Requirements (sheet number 62), the term "twenty" should be placed in front of the number "(20)," and the reference to "2.7" should be changed to "2.8."

In section 11.6 (a)(2) of the GT&C-Obligations of Pipeline (sheet number 113), the reference to "notce" should be changed to "notice."

There is a reference to sheet number 7 on sheet number 22 in section 3.2. The sheet numbers 7 to 13 are reserved as indicated by sheet number 7. Port Arthur Pipeline should correct this reference.

Port Arthur Pipeline's sheet number 125 in section 12.7(c)(1) references Index Price. This section does not have any reference to an index price. However, on sheet number 124, Port Arthur Pipeline references "the Applicable Price." Port Arthur Pipeline either should correct this error or clarify its intention.

Port Arthur Pipeline's sheet number 54 misspells GT&C on line 13 under section 1, Definitions.

Section 10.2(b) of Port Arthur Pipeline's sheet number 97, references sub section "c." The reference should be "b."

The word "notce" on Port Arthur Pipeline's sheet number 113 in section 11.6(a)(2) should be changed to "notice."

Port Arthur Pipeline's sheet number 131 in section 14.3(a) references to section 14.5. This reference should be changed to 14.

Port Arthur Pipeline should correct the following typographical errors: on sheet number 248 a) from "has been has been" to "has been," in section 2.2, line 4 and b) from "Conditoins" to "Conditions" in subtitle "ARTICLE III…"

Section 11.3(b) of the Timely Cycle and Evening Cycle (sheet number 109) and section 11.3(c) of the Intraday 1 and Intraday 2 Cycles (sheet number 110) should make reference to "on a business day."

In section 36 of Incorporation in Rate Schedule and Gas Service Agreements (sheet number 163) Port Arthur Pipeline is directed to delete one of the sentences which start with "These GT&C are incorporated…" This sentence is repeated.

In section 12.7(d) of the Resolution of Monthly Transportation Imbalances and Cashout (sheet number 126), the paragraph should read "the sum of the Index Prices."

In section 1.2 (sheet number 201) the word "quantities" after Percentage on line 6 should be deleted.