

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;
Suedeem G. Kelly, Marc Spitzer,
Philip D. Moeller, and Jon Wellinghoff.

Trunkline LNG Company, LLC

Docket Nos. CP06-102-000 and
CP06-102-001

ORDER GRANTING AUTHORIZATION UNDER SECTION 3 OF
THE NATURAL GAS ACT

(Issued December 26, 2006)

1. On March 31, 2006, Trunkline LNG Company, LLC (Trunkline LNG) filed an application pursuant to section 3(a) of the Natural Gas Act (NGA) and Part 157 of the Commission's regulations for authority to construct and operate Ambient Air Vaporization facilities and natural gas liquids processing facilities at its existing liquefied natural gas (LNG) import terminal in Calcasieu Parish, Louisiana (the Infrastructure Enhancement Project, or IEP).¹ On July 18, 2006, in Docket No. CP06-102-001, Trunkline LNG filed an amendment to its pending application for authority to construct and operate the IEP to revise certain cost and revenue data underlying the initial recourse rates proposed in the March 31, 2006 filing for the terminal services using the new facilities.

¹ Although Trunkline LNG states in its application that it is requesting authorization under section 3(a) of the NGA and Part 157 of the Commission's regulations, its application also seeks Commission issuance of a certificate of public convenience and necessity under section 7 of the NGA. While Trunkline LNG's facilities were originally authorized under section 7 of the NGA, the grant of a certificate of public convenience and necessity pursuant to section 7 to expand or modify its LNG facilities is unnecessary. Pursuant to section 3(c)(1) of the NGA, the Commission has the exclusive authority to approve or deny an application for construction, expansion, or operation of an LNG terminal. Because Trunkline LNG's application proposes no pipeline facilities to transport natural gas in interstate commerce, no section 7 certificate authorization is needed. *See, e.g., Southern LNG, Inc.*, 101 FERC ¶ 61,187 P 3 (2002).

2. In this order, the Commission finds that the requested authorizations are consistent with the public interest, and grants Trunkline LNG's requested authorization under section 3 of the NGA to construct and operate the proposed facilities, subject to the conditions discussed herein.

I. Background

3. In 1977, the Commission authorized CMS Trunkline LNG Company, LLC (CMS Trunkline; Trunkline LNG's predecessor) to construct and operate the Calcasieu Parish, Louisiana LNG terminal and to sell imported regasified LNG to Trunkline Gas Company.² Deliveries of the imported LNG began in 1982, but were suspended in 1983. In 1989, the Commission authorized CMS Trunkline to provide LNG terminalling services for Duke Energy LNG Sales, Inc. (Duke Energy LNG) under Rate Schedule FTS.³

4. In 2002, in Docket No. CP02-60-000, the Commission granted CMS Trunkline's request for authorization under NGA section 3 to construct and operate expansion facilities at its LNG terminal (the Original Expansion Project).⁴ The Original Expansion Project, as amended,⁵ added a fourth storage tank and other appurtenant facilities to increase the total terminal storage capacity from 6.3 Bcf to 9.0 Bcf, and increase the sustainable and peak sendout to 1.2 Bcf per day and 1.3 Bcf per day, respectively. Trunkline LNG entered into contracts with BG LNG Services (BG LNG) entitling BG LNG to all of the expansion capacity, as well as the terminal's uncommitted vaporization and storage capacity and all of the capacity then-committed to Duke Energy LNG under a contract set to expire in August 2005. The Commission authorized Trunkline LNG to provide the expanded terminal services under Rate Schedules FTS-2 and ITS-2.

5. Subsequently, Trunkline LNG has sought, and the Commission has granted, authorization for a number of further modifications and enhancements of the Original Expansion Project. On September 17, 2004, in Docket No. CP02-60-004, the

² 58 FPC 726 (Opinion No. 796), *order on reh'g*, 58 FPC 2935 (1977) (Opinion No. 796-A).

³ 49 FERC ¶ 61,199 (1989), *order clarifying and amending certificate*, 69 FERC ¶ 61,129 (1997).

⁴ 100 FERC ¶ 61,217 (2002).

⁵ 105 FERC ¶ 61,137 (2003).

Commission amended Trunkline's section 3 authority to permit the installation of unloading facilities, vaporizers, and second stage pumps to provide additional firm vaporization service and to increase the sustained sendout capability from 1.2 Bcf per day to 1.8 Bcf per day and the peak sendout capability from 1.3 Bcf per day to 2.1 Bcf per day (the Modified Expansion Project). On July 26, 2005, in Docket Nos. CP02-60-005 and CP02-60-006, the Commission granted Trunkline LNG amended section 3 authority to allow the commencement of interim vaporization services from a portion of the expansion facilities that had been completed.⁶ In addition, on February 16, 2006, in Docket No. CP02-60-007, the Commission further amended Trunkline LNG's section 3 authority to allow Trunkline LNG to increase the peaking vaporization capacity from 1.3 Bcf per day to 1.5 Bcf per day for an interim period until the Modified Expansion Project is completed, to reflect the existing regasification capacity that was available from the operating vaporizers.⁷

6. With the instant application for section 3 authority to construct and operate the Infrastructure Enhancement Project, Trunkline LNG is proposing further modifications to its LNG terminalling facilities that will, rather than expand the storage capacities and sendout capabilities of the LNG terminal, augment the existing vaporation facilities with an alternative vaporization process and add natural gas liquids processing.

II. Proposal

7. Trunkline LNG's proposed Infrastructure Enhancement Project consists of the facilities for the alternative Ambient Air Vaporization (AAV) process and for the processing of natural gas liquids (NGL). Trunkline LNG states that all facilities will be constructed within the existing terminal site property, and that the proposed facilities will not increase the currently authorized sustained sendout capacity of the terminal of 1.8 Bcf per day or the peak sendout capacity of 2.1 Bcf per day. Trunkline LNG estimates that the total capital cost of constructing the IEP facilities will be approximately \$243.9 million, excluding AFUDC. The total capital cost with AFUDC will be approximately \$273.8 million.⁸

⁶ 112 FERC ¶ 61,140 (2005).

⁷ 114 FERC ¶ 61,147 (2006).

⁸ While Trunkline LNG's facilities and services have been authorized under NGA section 3, Trunkline LNG provides its terminalling services on a cost-based basis.

A. AAV Facilities

8. The AAV facilities will allow Trunkline LNG to use ambient air to warm LNG to a temperature that allows it to transition from a liquid to a gas. Trunkline LNG states that the use of the surrounding air temperature to regasify LNG will reduce the amount of fuel that would typically be used by the existing Submerged Combustion Vaporizer (SCV) facilities. Trunkline LNG states that it currently uses approximately 1.6 percent of the sendout as fuel for the existing SCV facilities. It states that when AAV is used instead, much of this fuel gas will be saved, resulting in lower operating costs for Trunkline LNG's customer, BG LNG. Trunkline LNG proposes to install the AAV alternative for the entire sendout capacity of the facility.

9. Trunkline LNG explains that the AAV facilities will be installed in parallel with the existing SCV units. Trunkline LNG states that the alternative vaporization will use the Mustang Engineering "LNG Smart" AAV process. The principal facilities of the AAV process that Trunkline LNG will install are: (1) Potassium Formate ("KF") Air Heaters (64 forced convection, three-fan air exchangers, 17.9 million Btu per hour (MMBtu per hour)); (2) Four KF-LNG Vaporizers (525 million standard cubic feet per day (MMScf per day)); (3) two electrical switchgear buildings; (4) one remote instrumentation building; and (5) Foam Building No. 4.

B. NGL Facilities

10. Trunkline LNG proposes to install NGL processing facilities that will permit it to extract ethane and other heavy hydrocarbons from the LNG stream for its customer, BG LNG. Trunkline LNG states that the NGL processing equipment will have the capability to extract these hydrocarbons from approximately one-half of the terminal's daily sendout volumes before the gas is sent to the pipeline for delivery to downstream markets. It further states that the NGL facilities will be designed so that a second NGL train could be added at a later date. Trunkline LNG asserts that the installation of this NGL processing equipment will permit BG LNG to import natural gas from more diverse supply sources, including gas with a higher BTU content. Trunkline states that the NGLs produced by the processing facilities will be owned by BG LNG, and that BG LNG will be responsible for the NGLs after they leave the Trunkline LNG facility.

11. Trunkline LNG proposes to construct the following jurisdictional NGL recovery facilities consisting of one train with a design inlet capacity of 1.184 Bcf per day and outlet capacity of 1.05 Bcf per day: (1) two propylene glycol heaters (150 MMBtu per hour each); (2) glycol storage and circulation system; (3) one NGL Recovery Unit (sized for a maximum capacity of 1,050 MMscf per day); and (4) two parallel 12-inch diameter ethane and propane product pipelines, approximately 1,160 feet each in length.

Trunkline LNG states that the NGL processing facilities will produce an ethane product and a heavy hydrocarbon (C3+) product, which will be segregated in the two 12-inch diameter liquids pipelines.

12. Nonjurisdictional facilities to be constructed include an NGL product meter station, an expansion of the existing electric substation, and two 16.4-mile-long takeaway NGL product pipelines consisting of a 12-inch diameter ethane pipeline and an 8-inch-diameter propane pipeline. Trunkline LNG explains that the NGL product meter station, located near the northwest corner of the terminal property, will be the delivery point into the BG LNG designated liquids pipeline facilities. Trunkline LNG also states that the NGL metering facilities required for custody transfer and measurement, and any facilities to be constructed and installed downstream of the NGL metering facilities, will not be operated by Trunkline LNG, but will be the responsibility of BG LNG or its designated delivery pipeline. British Gas (BG), which has contracted for the natural gas liquids supplied by the project, has retained PetroLogistics Olefins, L.L.C. (PetroLogistics) to construct and operate the meter station and the two takeaway NGL product pipelines extending from the meter station to PetroLogistics' storage facility in Sulfur, Louisiana.

C. Services, Market, and Rates

13. Trunkline LNG proposes to provide the alternate AAV form of vaporization service under new, open-access Rate Schedules FAV (firm alternate vaporization) and IAV (interruptible alternate vaporization). Trunkline LNG requests that the Commission approve the Rate Schedules FAV and IAV *pro forma* tariff sheets it has included as Appendix P of its application. Trunkline LNG explains that when a shipper makes its nomination for delivery of volumes under Rate Schedules FTS, FTS-2, ITS, and ITS-2, Trunkline LNG will use either the existing SCV facilities or the AAV facilities, based on operating conditions. Trunkline LNG states that service under Rate Schedule FAV will be provided without affecting existing firm contractual entitlements, and that service under Rate Schedule IAV will not impair or diminish the current service rights of any interruptible customer under Rate Schedules ITS or ITS-2.

14. As stated, *supra*, BG LNG has contracted for all of the existing and expansion capacity at the terminal.⁹ Trunkline LNG states that service under Rate Schedule FAV

⁹ The total storage capacity of the LNG terminal is 9.0 Bcf. Trunkline LNG states that in May 2001, it entered into a 22-year firm service agreement (base agreement) with BG LNG for the 6.3 MMDth then-existing storage capacity at the terminal. Trunkline LNG states that subsequently, in the expansion proceeding, BG LNG obtained the additional firm storage capacity of 2.7 MMDth until December 23, 2023 (expansion agreement). Trunkline's Application at 10.

will be fully contracted by BG LNG for a 20-year primary term commencing on the date Trunkline LNG places the IEP facilities into service, and that the primary term of the existing agreements under Rate Schedules FTS and FTS-2 will be extended from their current termination dates of December 31, 2023 to coincide with the firm service to be provided under Rate Schedule FAV.

15. On March 24, 2006, Trunkline LNG and BG LNG entered into a precedent agreement under which BG LNG agrees to execute a Rate Schedule FAV service agreement with Trunkline LNG for the total vaporization capacity of the IEP facilities of 1.8 Bcf per day after certain conditions precedent have been met. Trunkline LNG and BG LNG have also entered into a negotiated rate agreement, which provides for a 20-year term and a rate based upon the project's capital costs. Trunkline LNG indicates that it will file the negotiated rate agreement prior to commencing service under Rate Schedule FAV.

16. Trunkline LNG asserts that the initial recourse rates under Rate Schedules FAV and IAV for service utilizing the IEP facilities are traditional cost-based rates, based on the incremental costs associated with the IEP facilities and using the straight-fixed variable rate design methodology. In its July 18, 2006 amendment to its application, Trunkline LNG revised the depreciation term proposed in its application, from five percent over 20 years (based on the term of the precedent agreement) to 2.5 percent over 40 years to reflect the negotiated rate with BG LNG based on a 40-year depreciable life for the IEP facilities. As a result of the change to the depreciation term, Trunkline also proposes corresponding changes to certain portions of the original Exhibits N, O, and P, including *Pro Forma* Sheet No. 5 contained in Exhibit P. These revisions result in a decrease in the originally proposed recourse reservation rate for service under proposed Rate Schedule FAV of \$1.2616 per Dt to \$1.1378 per Dt. This recourse rate uses design units based on the sendout capacity associated with the IEP facilities. Further, in its application, Trunkline LNG states that it will be reimbursed in-kind for applicable fuel use and for lost and unaccounted for gas, and for the cost of electric power; therefore, it maintains the recourse usage rate will be zero.

III. Notice and Intervention

17. Public notice of Trunkline LNG's application was published in the *Federal Register* on April 17, 2006 (71 Fed. Reg. 19,719). In addition, public notice of Trunkline LNG's amended application was published in the *Federal Register* on July 31, 2006 (71 Fed. Reg. 43,144).¹⁰ BG LNG filed a motion to intervene out-of-time and comments

¹⁰ No motions to intervene or comments were filed in response to Trunkline LNG's amended application.

in support of the IEP on May 16, 2006. We will grant BG LNG's untimely motion to intervene, as we find that to do so will not delay, disrupt, or otherwise prejudice this proceeding or the parties to this proceeding.¹¹

18. In addition, U.S. Representative Charles W. Boustany, Jr., MD and U.S. Senator Mary L. Landrieu each filed letters expressing support for the IEP's proposed improvements to the LNG plant. Comments in support of the IEP were also filed, jointly, by the following members of the Louisiana House of Representatives and Senate: Representative Ronnie Johns, Representative Dan Morrish, Representative Chuck Kleckley, Representative Elcie Guillory, Representative Brett Geymann, Senator Jerry Theunissen, and Senator Willie Mount. No adverse comments or protests were filed.

III. Discussion

A. Section 3 Authorization

19. Because Trunkline LNG's proposal involves facilities that will be used to import gas from foreign countries, the construction and operation of the facilities and the location of the facilities require approval by the Commission under section 3 of the NGA.¹² 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."

20. NGA section 3(e)(3)(B) provides that, before January 1, 2015, the Commission shall not deny an application solely on the basis that the applicant proposes to use the LNG terminal exclusively or partially for gas that the applicant or an affiliate will supply to the facility or condition an order on: (1) a requirement that the LNG terminal offer

¹¹ 18 C.F.R. § 385.214(d) (2006).

¹² 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. DOE Delegation Order No. 00-004.00A, FERC Stats. & Regs. ¶ 9920 (2006). 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.

service to customers other than the applicant, or any affiliate; (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. Here, however, Trunkline LNG has specifically requested that the Commission grant it authority to provide its proposed enhanced services to unaffiliated third parties at cost-based rates under its open-access tariff. We do not read section 3(e)(3)(B) as precluding the Commission from issuing and enforcing such authorization when proposed by the applicant.

21. 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.¹³ The record in this case shows that the IEP will provide such additional supplies of natural gas to consumers. The proposed AAV facilities will reduce the fuel costs associated with the vaporization of LNG and we look favorably on energy-efficient facility configurations that reduce fuel costs. The installation of NGL processing facilities will improve access to new competitively priced supplies of LNG by allowing BG LNG to import natural gas from additional and diverse suppliers, and will provide a new source of NGL feedstock to the petrochemical market.

22. In addition, the proposed AAV service will be offered to Rate Schedules FTS, FTS-2, ITS, and ITS-2 customers, currently BG LNG, pursuant to a separate, incremental rate under new Rates Schedules FAV and IAV, ensuring that existing customers will not subsidize the new service. Further, the IEP will result in no degradation of service to Trunkline LNG's existing customers or undue discrimination against existing customers as to their terms and conditions of service. The proposed AAV service offered under Rate Schedule FAV simply provides an alternate method of LNG vaporization to shippers that have service under Rate Schedules FTS or FTS-2 and, therefore, will be provided without affecting existing firm contractual entitlements.¹⁴ Accordingly, we find that, subject to the conditions imposed in this order, the IEP is not inconsistent with the public interest, and grant authorization under NGA section 3 to construct and operate the proposed IEP facilities.

¹³ *Hackberry*, 101 FERC ¶ 61,294 at P 26 (2002).

¹⁴ Similarly, as Trunkline LNG has stated, interruptible service under Rate Schedule IAV will not impair or diminish the service rights of any interruptible customer under Rate Schedules ITS or ITS-2.

B. Rates**1. Recourse Rates**

23. As stated, *supra*, Trunkline LNG proposes traditional, cost-based, straight-fixed variable incremental recourse rates for Rate Schedules FAV and IAV service using its IEP facilities. Trunkline LNG designed the incremental recourse rates based on the estimated \$62,294,356 annual cost-of-service associated with the IEP facilities and system capacity of 657,000,000 Dth. The recourse rates are based on \$271,666,202 of gross plant investment, less \$6,791,655 for accumulated depreciation, and \$2,730,245 for accumulated deferred taxes, plus \$2,115,000 of working capital, for a total rate base of \$264,259,302. The recourse rates reflect: (1) a 12.31 percent rate of return on equity and 6.85 percent cost of debt based on a capital structure of 75 percent equity and 25 percent debt; (2) an overall rate of return of 10.94 percent; and (3) a 2.5 percent depreciation rate. The proposed maximum FAV reservation rate, using design units based on the send out capacity associated with the IEP facilities, is \$1.1378 per Dth. Trunkline LNG states there are no variable costs, so the proposed Rate Schedule FAV usage rate is \$0.00 per Dth. The proposed maximum Rate Schedule IAV rate is \$0.0948 per Dth.

24. The Commission has reviewed the proposed cost-of-service and proposed incremental recourse rates, and generally finds them reasonable, subject to the conditions imposed below. In addition, we find that the proposed straight-line method of depreciation conforms to the Commission's Uniform System of Accounts, and Trunkline LNG's proposed depreciation rate of 2.5 percent over the 40-year useful life of the IEP facilities is consistent with Commission precedent.¹⁵ Accordingly, we accept Trunkline LNG's proposal to amend its depreciation rate. Further, according to Trunkline LNG, the recourse rates reflect its actual capital structure of 75 percent equity and 25 percent debt, established by the settlement agreement approved by the Commission in Docket No. RP01-445-000.¹⁶ The Commission will approve the use of this capital structure in determining the rates in this proceeding.

¹⁵ See, e.g., *Empire State Pipeline and Empire Pipeline, Inc.*, 116 FERC ¶ 61,074 (2006); *Petal Gas Storage, L.L.C.*, 97 FERC ¶ 61,097 (2001).

¹⁶ 97 FERC ¶ 61,028 (2001).

25. Consistent with Commission policy,¹⁷ we will require Trunkline LNG to file a cost and revenue study at the end of its first three years of actual operation of the IEP facilities to justify its existing cost-based firm and interruptible rates. In its filing, Trunkline LNG's projected units of service should be no lower than those upon which Trunkline LNG'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 Commission's regulations to update cost-of-service data, including the cost of plant-in-service. After reviewing the data, we will determine whether we should exercise our authority under NGA section 5 to establish just and reasonable rates. In the alternative, in lieu of this filing, Trunkline LNG may make an NGA section 4 filing to propose alternative rates to be effective no later than three years after the in-service date of its proposed facilities.

2. Negotiated Rates

26. Trunkline LNG proposes to provide the new Rate Schedule FAV service to BG LNG under negotiated rate authority provided in Rate Schedule FAV.¹⁸ Pursuant to that negotiated rate authority, Trunkline LNG will set forth the negotiated rate in Exhibit A of the executed service agreement between Trunkline LNG and BG LNG, and on Trunkline LNG's currently effective Tariff Sheet No. 6. Trunkline LNG states that it will also keep separate and identifiable accounts, in sufficient detail necessary for identification in future section 4 or 5 rate proceedings, for any LNG quantities received and regasified, billing determinants, rate components, surcharges, and revenue associated with any negotiated rates.

27. The Commission's policy requires pipelines entering into negotiated rate agreements to provide cost-based recourse rates.¹⁹ In certificate proceedings, the

¹⁷ See e.g., *Horizon Pipeline Company, L.L.C.*, 92 FERC ¶ 61,205 (2000) at 61,687; *TransColorado Gas Transmission Company*, 53 FERC ¶ 61,421, at 62,490 (1990).

¹⁸ A negotiated rate provision is set forth in section 3.7 of the proposed Rate Schedule FAV.

¹⁹ *Alternatives to Traditional Cost-of-Service Ratemaking for Natural Gas Pipelines and Regulation of Negotiated Transportation Services of Natural Gas Pipelines (Alternative Rate Policy Statement)*, 74 FERC ¶ 61,076 (1996), *reh'g and clarification denied*, 75 FERC ¶ 61,024 (1996), *reh'g denied*, 75 FERC ¶ 61,066 (1996), *petition for review denied*, *Burlington Resources Oil & Gas Co. v. FERC*, 172 F.3d (D.C. Cir. 1998); and *Modification of Negotiated Rate Policy*, 104 FERC ¶ 61,134 (2003), *order on reh'g and clarification*, 114 FERC ¶ 61,042 (1996).

Commission establishes these initial recourse rates, but does not make determinations regarding specific negotiated rates for proposed services.²⁰ In order to comply with the *Alternative Rate Policy Statement* and our decision in *NorAm Gas Transmission Company*,²¹ Trunkline LNG is directed to file its negotiated rate contracts, or numbered tariff sheets, not less than 30 days or more than 60 days, prior to the commencement of service, stating for each shipper the negotiated rate, the applicable gas volume to be transported, and an affirmation that the affected service agreement do not deviate in any material respect from the form of service agreement in Trunkline LNG's *pro forma* tariff. Trunkline LNG must also disclose all consideration received that is associated with the agreement. Finally, as it has agreed, Trunkline LNG must also maintain separate and identifiable accounts in sufficient detail so that they can be identified in Statements G, I, and J in any future section 4 or 5 rate case for volumes transported, billing determinants, rate components, surcharges and revenues associated with its negotiated rates.

3. Pro Forma Tariff

28. According to Trunkline LNG, the *pro forma* tariff sheets included in Appendix P of its application to implement the alternate vaporization services under Rate Schedules FAV and IAV provide for unbundled, open-access, alternate vaporization service under non-discriminatory terms and conditions and include provisions for capacity release. The *pro forma* tariff sheets include new Rate Schedules FAV and IAV and respective Form of Service Agreements. Trunkline LNG also updated its table of contents, the currently effective rate sheet, the Form of Service Agreements for Rate Schedules FTS and ITS, and the following sections of the General Terms and Conditions: (1) definitions; (2) service request; (3) nomination and scheduling; (4) curtailment and interruption; (5) capacity release; (6) contract for unsubscribed capacity; (7) right of first refusal; (8) electronic communication; (9) statement & payment; (10) responsibility; (11) warranty & assignment; (12) fuel reimbursement adjustment; (13) electric power cost; and (14) revenue credit.

29. We find that Trunkline LNG's *pro forma* tariff sheets to implement its new firm and interruptible alternate vaporization service under Rate Schedules FAV and IAV

²⁰ See, e.g., *CenterPoint Energy – Mississippi River Transmission Corp.*, 109 FERC ¶ 61,007 at P 19 (2004); *ANR Pipeline Co.*, 108 FERC ¶ 61,028 at P 21 (2004); *Gulfstream Natural Gas System, LLC*, 105 FERC ¶ 61,052 at P 37 (2003); *Tennessee Gas Pipeline Co.*, 101 FERC ¶ 61,360 at n.19 (2002).

²¹ 77 FERC ¶ 61,011 (1996).

comply with Part 284 of the Commission's regulations.²² The Commission will require Trunkline LNG to file actual tariff sheets consistent with the directives in this order at least 30 days, but no more than 60 days, prior to the commencement of service under the new rate schedules.

C. Environmental Analysis

30. On May 19, 2006, the Commission's environmental staff issued a Notice of Intent to Prepare an Environmental Assessment for the Proposed Infrastructure Enhancement Project and Request for Comments on Environmental Issues (NOI). We received responses to the NOI from the Natural Resources Conservation Service (NRCS) and the U.S. Fish and Wildlife Service (USFWS). The NRCS advises that the proposed project does not interfere or conflict with any NRCS planning or design activities, and that it does not believe there would be an adverse effect on the surrounding environment, provided appropriate erosion control measures are taken during construction.

31. The USFWS's June 9, 2006 letter states that based on its records, there are no federally listed or endangered species located within or near the proposed project areas for the jurisdictional facilities, or the project areas for the proposed nonjurisdictional meter station and the existing nonjurisdictional electric substation. However, the USFWS raises the following concerns regarding the impact of the nonjurisdictional NGL pipelines on wildlife: (1) potential impacts to the endangered red-cockaded woodpecker (*Picoides borealis*) and bald eagle (*Haliaeetus leucocephalus*) that may occur in proximity to the proposed nonjurisdictional NGL pipelines; and (2) potential impacts to several wading bird rookeries which occur near or along the proposed NGL pipelines route and to any habitats suitable for colonial nesting waterbirds in which the NGL pipelines may be located. In addition, the USFWS recommends that for the nonjurisdictional NGL pipelines proposed to be constructed by PetroLogistics, the horizontal directional drilling method be used at all major stream and/or river crossing (including their adjacent floodplains) and that the construction right-of-way through such areas be minimized as much as practicable.

32. The environmental assessment (EA) prepared by the Commission's staff was issued for public comment on November 13, 2006 for public comment within 30 days. The EA addresses geology and soils, water resources, fisheries, and wetlands, vegetation and wildlife, endangered and threatened species, land use, socioeconomics, cultural resources, air and noise quality, reliability and safety, and alternatives. We received comments on the EA from the USFWS and Trunkline LNG.

²² 18 C.F.R. Part 284 (2005).

33. In its comments, the USFWS states that it concurs with the determination of PetroLogistics' consultant, Gremminger and Associates, Inc. (GAI), that the proposed nonjurisdictional project facilities are not likely to adversely affect the threatened bald eagle or the endangered red-cockaded woodpecker.²³ However, the USFWS states that because a wading bird rookery was observed in proximity to the proposed nonjurisdictional pipeline routes during field surveys of the proposed project areas, it recommended to GAI that all activities within 1,000 feet of a rookery be restricted to the non-nesting period (*i.e.*, September 1, through February 15, depending on the species present) for colonies containing nesting wading birds (*i.e.*, herons, egrets, night-herons, ibis, and roseate spoonbills), anhingas, and/or cormorants to minimize disturbance to those nesting birds. The USFWS asserts that no further Endangered Species Act or Migratory Bird Treaty Act coordination with the USFWS would be required for the proposed project unless there are changes in the scope or location of the project or the project has not been initiated within one year from the date of issuance of this order. If the scope or location of the proposed project is changed, the USFWS states that consultation should occur as soon as such changes are made.

34. The USFWS also asserts in its comments that, as found in the EA, the proposed IEP activities at the terminal site would not impact any jurisdictional wetlands. However, the USFWS maintains that the proposed nonjurisdictional facilities would impact approximately 26.3 acres of forested, scrub-shrub, and emergent wetlands, of which 12.65 acres would be permanently maintained as herbaceous wetlands and 0.14-acre of emergent wetlands would be filled due to the proposed road construction activities. The USFWS states that PetroLogistics and GAI are currently coordinating with the New Orleans District of the U.S. Army Corps of Engineers (USCOE) to complete the wetland delineation of those project areas. The USFWS further states that it looks forward to providing official comments on the USCOE's forthcoming public notice and participating in the development of a mitigation plan for unavoidable impacts to those resources.

35. With respect to the jurisdictional portion of Trunkline LNG's proposed IEP facilities, the EA concluded that the construction and operation of the jurisdictional IEP facilities would have no affect any federal or state-protected wildlife species,²⁴ nor would

²³ The USFWS' November 27, 2006 comments provide a summary of the comments it provided to GAI by letter dated November 6, 2006. The USFWS attaches a copy of its letter to GAI to its comments.

²⁴ EA at 22.

it impact any wetlands.²⁵ Further, the EA found that the jurisdictional IEP facilities would not adversely affect known or undiscovered cultural resources.²⁶

36. In the EA, our staff has reported on the environmental impacts of the nonjurisdictional NGL pipeline facilities, to the extent that information was available. The EA recommends that Trunkline LNG not provide service to BG and PetroLogistics until certain environmental reviews are completed by BG and PetroLogistics on threatened and endangered species and cultural resources.²⁷

37. In addition, the U.S. Army Corps of Engineers (USCOE) indicated it would be preparing a National Environmental Policy Act review of the nonjurisdictional NGL pipelines. The USCOE's review is pending.

38. In its comments, Trunkline LNG questions the need for the EA's Environmental Condition No. 6.d., requiring the environmental inspector to be a separate, full-time employee, due to the project's limited environmental impact within the terminal property. Trunkline states that it has one full-time employee currently assigned to the LNG terminal who oversees all environmental training of company employees and contractors, construction site environmental inspections, and security related to the terminal. Trunkline LNG submits that this individual is capable of performing the environmental inspector duties outlined in Environmental Condition Nos. 6.a. through 6.c. and 6.e. through 6.f. Therefore, Trunkline LNG requests that Environmental Condition No. 6.d. be eliminated. Trunkline LNG states, however, that in the event Trunkline LNG determines that an additional environmental inspector is needed to ensure that the environmental mitigation measures are implemented, it will employ an additional environmental inspector as needed during the course of construction. We find Trunkline LNG's request to be reasonable, and will eliminate subsection d. of Environmental Condition No. 6 requiring the environmental inspector to be a separate, full-time position.

39. In addition, Trunkline LNG requests that Environmental Condition No. 48 of the EA be modified. Environmental Condition No. 48 states: "[T]he final design shall specify that the hazardous area classification of the NGL recovery area, LNG and GL pump area and vaporizer LNG inlet and outlet piping areas are classified as Class 1, Group D, Division 1." Trunkline LNG contends that these areas could also qualify as

²⁵ *Id.* at 16.

²⁶ *Id.* at 26.

²⁷ *Id.* at 23 and 26.

Class 1, Group D, Division 2 hazardous area locations as defined in National Fire Protection Association (NFPA) Standard 70, NFPA Standard 59A, and American Petroleum Institute Recommended Practice 500. Therefore, Trunkline LNG requests the Commission to permit these areas to be classified in the final design as either Class 1, Group D, Division 1 or Class 1, Group D, Division 2 hazardous area locations. We agree with Trunkline LNG and have modified Environmental Condition No. 48 as requested.

40. A cryogenic design and technical review of the proposed terminal design and safety systems was completed and reported in the EA.²⁸ That review noted several areas of concern and, as a result, the EA recommends 44 environmental conditions requiring certain modifications to the terminal design. Information pertaining to these modifications, as revised above, is to be filed for review and approval by the Director of the Office of Energy Projects (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 EA 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.

41. Based on the discussion in the EA, we conclude that if constructed or operated in accordance with Trunkline LNG's application, as supplemented, approval of this proposal would not constitute a major federal action significantly affecting the quality of the human environment.

42. Any state or local permits issued with respect to the jurisdictional facilities authorized herein must be consistent with the conditions of this certificate. The Commission encourages cooperation between interstate pipelines and local authorities. However, this does not mean 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.²⁹ Trunkline LNG shall notify the Commission's environmental staff by telephone, e-mail, or facsimile of any environmental noncompliance identified by other federal, state, or local agencies on the same day that such agency notifies Trunkline LNG. Trunkline LNG shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

²⁸ *Id.* at 40.

²⁹ *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).

43. At a hearing held on December 21, 2006, the Commission on its own motion, received and made a part of the record all evidence, including the application, as supplemented, and exhibits thereto, submitted in this proceeding. Upon consideration of this record,

The Commission orders:

(A) Trunkline LNG is authorized under section 3 of the NGA to construct and operate Ambient Air Vaporization facilities and natural gas liquids processing facilities at its existing LNG import terminal in Calcasieu Parish, Louisiana, subject to conditions and as more fully described in this order and in its applications.

(B) Trunkline LNG's initial rates and proposed tariff are approved, as conditioned in the body of this order.

(C) Trunkline LNG must file actual tariff sheets consistent with the directions in the body of this order at least 30 days, but no more than 60 days, prior to placing the IEP facilities in service.

(D) Within three years after its in-service date, Trunkline LNG must submit a cost and revenue study to justify its Rate Schedule FAV and IAV incremental recourse rates. The cost and revenue study must be in the form specified in section 154.313 of the Commission's regulations to update cost-of-service data. In the alternative, Trunkline LNG may make an NGA section 4 filing to propose alternative recourse rates to be effective no later than three years after the in-service date of its proposed facilities.

(E) Trunkline LNG must execute a service agreement with BG LNG for the Rate Schedule FAV capacity prior to the commencement of construction.

(F) Construction of Trunkline LNG's facilities authorized herein must be completed with two years from the date of this order in accordance with section 157.20(b) of the Commission's regulations.

(G) The authorization in Ordering Paragraph (A) is conditioned upon Trunkline LNG's compliance with the environmental conditions listed in the appendix to this order.

(H) Trunkline LNG shall notify the Commission's environmental staff by telephone, e-mail, and/or facsimile of any environmental noncompliance identified by

other federal, state, or local agencies on the same day that such agency notifies Trunkline LNG. Trunkline LNG shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

By the Commission.

(S E A L)

Magalie R. Salas,
Secretary.

APPENDIX

Environmental Conditions

1. Trunkline LNG shall follow the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests) and as identified in the EA unless modified by the Order. Trunkline LNG must:
 - a. request any modification to these procedures, measures, or conditions in a filing with the 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 OEP before using that modification.

2. 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 the Order.

3. **Prior to any construction**, Trunkline LNG shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, environmental inspectors, and contractor personnel would be informed of the environmental inspector's authority and have been or would be trained on the implementation of the environmental mitigation measures appropriate to their jobs before becoming involved with construction and restoration activities.

4. Trunkline LNG shall file with the Secretary detailed maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all facility relocations, staging areas, 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, and 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.

5. **At least 60 days before the start of construction**, Trunkline LNG shall file an initial Implementation Plan with the Secretary for review and written approval by the Director of OEP describing how Trunkline LNG and Trunkline Gas would implement the mitigation measures required by the Order. Trunkline LNG must file revisions to the plan as schedules change. The plan shall identify:
 - a. how Trunkline LNG would 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 environmental inspectors assigned, and how the company would ensure that sufficient personnel are available to implement the environmental mitigation;
 - c. company personnel, including environmental inspectors and contractors, who would receive copies of the appropriate material;
 - d. the training and instructions Trunkline LNG would 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 Trunkline LNG's organization having responsibility for compliance;
 - f. the procedures (including use of contract penalties) Trunkline LNG would 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.
6. Trunkline LNG shall employ an environmental inspector. The environmental inspector(s) shall be:

- a. responsible for monitoring and ensuring compliance with all mitigation measures required by the 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 the Order, and any other authorizing document;
 - d. responsible for documenting compliance with the environmental conditions of the Order, as well as any environmental conditions/permit requirements imposed by other Federal, state, or local agencies; and
 - e. responsible for maintaining status reports.
7. Trunkline LNG shall file updated status reports prepared by the environmental inspector with the Secretary on **a bi-weekly basis until all construction 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;
 - b. a listing of all problems encountered and each instance of noncompliance observed by the environmental inspector(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; and
 - e. copies of any correspondence received by Trunkline LNG from other federal, state or local permitting agencies concerning instances of noncompliance, and Trunkline LNG's response.
8. Trunkline LNG must receive written authorization from the Director of OEP **before commencing service from the project**. Such authorization would only be granted following a determination that rehabilitation and restoration of the construction work areas are proceeding satisfactorily.
9. **Within 30 days of placing the certificated facilities in service**, Trunkline LNG shall file an affirmative statement 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 Trunkline LNG has complied with or will comply with. This statement shall also identify any areas affected by the project where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.
10. Trunkline LNG shall defer service to BG/PetroLogistics **until**: Trunkline LNG files with the Secretary the USFWS comments on the survey report, and the Director of OEP completes any required consultation and notifies Trunkline LNG in writing that it may proceed.
 11. Trunkline LNG shall defer service to BG/PetroLogistics NGL pipeline **until**: Trunkline completes required cultural resource surveys and files with the Secretary the Louisiana State Historic Preservation Office's comments; and the Director of OEP completes any required consultation and notifies Trunkline LNG in writing that it may proceed.
 12. Trunkline LNG shall file a noise survey with the Secretary **no later than 60 days after placing the IEP facilities in service**. If the noise attributable to the operation of the Trunkline LNG facility (the existing sources plus the proposed IEP sources) at full load exceeds an Ldn of 55 dBA at any nearby NSAs, Trunkline LNG shall install additional noise controls to meet that level **within 1 year of the in-service date**. Trunkline LNG shall confirm compliance with the Ldn of 55 dBA requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls.

The following measures (13 through 52) shall apply to the Project 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 condition. 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 Parts 388.12 and PL01-1. Information pertaining to items such as: off-site emergency response; procedures for public notification and evacuation; and construction and operating reporting requirements would be subject to public disclosure. This information shall be submitted a minimum of 30 days before

approval to proceed is required.

13. Complete plan drawings and a 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.
14. A technical review, providing the following information for the proposed facility, shall be filed **prior to initial site preparation**:
 - a. identification of all combustion/ventilation air intake equipment and the distances to any possible hydrocarbon release (LNG, flammable refrigerants, flammable liquids, and flammable gases);
 - b. a demonstration that these areas are adequately covered by hazard detection, including a description of how these devices would isolate or shutdown any combustion equipment whose continued operation could add to or sustain an emergency.
15. Complete plan drawings and a list of the fixed and wheeled dry-chemical, fire extinguishing, and other hazard control equipment shall be filed **prior to initial site preparation**. The 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.
16. Facility plans showing the proposed location of, and area covered by, each monitor, hydrant, deluge system, hose, and sprinkler, as well as piping and instrumentation diagrams, of the fire water system shall be filed **prior to initial site preparation**.
17. A complete equipment list of the process and utility equipment, with process data sheets and design specifications shall be filed **prior to initial site preparation**.
18. A copy of the hazard design review and list of recommendations that are to be incorporated in the final facility design shall be filed **prior to initial site preparation**.

19. A copy of the technical design review of the proposed vaporizer design and reasons for selection shall be filed **prior to initial site preparation**.
20. The **final design** of the fixed and wheeled dry-chemical, fire extinguishing hazard control equipment shall identify manufacturer and model.
21. The **final design** of the fire water system shall include remotely operated monitors for areas that may be inaccessible during fire, or spill conditions.
22. The **final design** shall include high pressure shutdown at the discharge of each LNG product pump.
23. The **final design** shall include a shutoff valve at the inlet to each high pressure LNG product pump.
24. The **final design** shall include a shutoff valve at the outlet of each high pressure LNG product pump.
25. The **final design** shall include provisions to continuously remove vapor from the LNG product pump vessels.
26. The **final design** shall include a pilot relief valve or operated vent valve sized for thermal relief at the discharge of the vaporizer.
27. The **final design** shall specify that the manual valve at TP 504, downstream of vaporizers A and B, be equipped as a shutoff valve.
28. The **final design** shall include a check valve in the discharge of each vaporizer.
29. The **final design** shall include layout provisions to install equipment that may be required to be installed to disperse fog generated by the proposed ambient vaporizers.
30. The **final design** shall specify that the vaporizer outlet headers, NG-5115 and NG-5637, are specified as "EL", as defined in the Index of Piping Classes shown on Drawing Number 10977-TLNG-PI-62-D25B Revision C, to at least 50 feet down stream of the vaporizer tie in points to the headers.
31. The **final design** shall specify that spiral wound gaskets for LNG, natural gas, or other hydrocarbon fluid service are to be equipped with inner and outer stainless steel retaining rings.

32. The **final design** shall specify that piping and equipment that may be cooled with liquid nitrogen is to be designed for liquid nitrogen temperatures, with regard to allowable movement and stresses.
33. The **final design** shall specify that bypass valves around control valves are not to be used. Bypass valves for inerting, pressurization and cool down shall be installed around isolation valves where required.
34. The **final design** shall include provisions to discharge the demethanizer vent to a location remote from the process area.
35. The **final design** shall include provisions to discharge the LNG product drum vent and the LNG product drum relief valves to a location remote from the process area.
36. The **final design** shall specify that the demethanizer bottom outlet piping system is designed for cryogenic service, which shall include stainless steel piping for NGL-5084 and NGL-5551/2.
37. The **final design** shall specify that the demethanizer reboiler and piping is to be designed for depressurized settle-out conditions in addition to process design conditions.
38. The **final design** shall include CSO isolation valves at the inlet to all LNG, hydrocarbon vapor, and hydrocarbon liquid relief valves.
39. The **final design** shall include a fire protection evaluation carried out in accordance with the requirements of NFPA 59A, 2001, chapter 9.1.2.
40. 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.
41. The **final design** shall include details of the shut down logic, including cause and effect matrices for alarms and shutdowns.
42. The **final design** shall include a review of the hazard detector locations, to verify appropriate coverage and clear line of sight.
43. The **final design** shall include details of the air gaps to be installed downstream of all seals or isolations installed at the interface between a flammable fluid system and an electrical conduit or wiring system. Each air gap shall vent to a safe location and be equipped with a leak detection

device that: shall continuously monitor for the presence of a flammable fluid; shall alarm the hazardous condition; and shall shutdown the appropriate systems.

44. The **final design** shall include a HAZOP review of the completed design. A copy of the review and a list of the recommendations shall be filed with the Secretary.
45. The **final design** shall provide up-to-date P&IDs including a description of the instrumentation and control philosophy, type of instrumentation (pneumatic, electronic), use of computer technology, and control room display and operation. Drawings and all information shall be clearly legible on 11" x 17" paper and the piping legend and symbology shall be in accordance with accepted practice. All drawings shall be filed in black and white. The following information shall be included on the P&IDs:
 - a. equipment tag number, name, size, duty, capacity and design conditions;
 - b. piping with line number, piping class spec, size and insulation;
 - c. LNG tank pipe penetration size or nozzle schedule;
 - d. piping spec breaks and insulation limits;
 - e. vent, drain, cooldown and recycle piping;
 - f. isolation flanges, blinds and insulating flanges;
 - g. valve type, in accordance with the piping legend symbol;
 - h. all control valves numbered;
 - i. all valve operator types and valve fail position;
 - j. instrumentation numbered;
 - k. control loops including software connections;
 - l. alarm and shutdown set points;
 - m. shutdown interlocks;
 - n. relief valves numbered, with set point;
 - o. relief valve inlet and outlet piping size;
 - p. car sealed valves and blinds;
 - q. equipment insulation;
 - r. drawing revision number and date;

- s. all manual valves numbered including check, vent, drain and car sealed valves; and
 - t. alarm and shutdown set points.
46. The **final design** shall include manufacturer's data submitted in response to process equipment design specifications.
47. The **final design** shall specify that all hazard detection equipment shall include redundancy, fault detection and fault alarm monitoring.
48. The **final design** shall specify that the hazardous area classification of the NGL recovery area, LNG and GL pump area and vaporizer LNG inlet and outlet piping areas is Class 1, Group D, Division 1 or Class 1, Group D, Division 2, in accordance with NFPA Standard 70 and NFPA Standard 59A.
49. All valves including drain, vent, main, and car sealed valves shall be tagged in the field during construction and **prior to commissioning**.
50. A tabulated list of the proposed hand-held fire extinguishers shall be filed **prior to commissioning**. The information shall include a list with the equipment number, type, size, number, and location. Plan drawings shall include the type, size, and number of all hand-held fire extinguishers.
51. Operation and Maintenance procedures and manuals, as well as safety procedure manuals, shall be filed **prior to commissioning**.
52. Progress on the construction of the Infrastructure Enhancement 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 FERC **within 24 hours**.

In addition, the following measures (53 through 56) shall apply throughout the life of the facility:

53. The facility shall be subject to regular Commission staff technical reviews and site inspections on at least an annual 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.

54. **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 FERC staff with early notice of anticipated future construction/maintenance projects at the LNG facility.
55. In the event the temperature of any region of any secondary 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.
56. 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 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 condition that could lead to a hazard and cause a 20 percent reduction in operating pressure or shutdown of operation of a pipeline or an LNG facility;
- 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 an on-site inspection by Commission staff, and the timing of an initial incident report (normally within 10 days) and follow-up reports.