20080320-3102 FERC PDF (Unofficial) 03/20/2008

122 FERC ¶ 61,255
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

Broadwater Energy LLC — Docket No. CP06-54-000

Broadwater Pipeline LLC — Docket Nos. CP06-55-000
CP06-56-000

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

(Issued March 20, 2008)

1. On January 30, 2006, in Docket No. CP06-54-000, Broadwater Energy LLC (Broadwater Energy) filed an application under section 3 of the Natural Gas Act (NGA) and Part 153 of the Commission's regulations to site, construct, and operate a liquefied natural gas (LNG) import terminal and associated facilities in Long Island Sound, approximately nine miles from the shore of Long Island, New York. Concurrently, in Docket No. CP06-55-000, Broadwater Pipeline LLC (Broadwater Pipeline), an affiliate of Broadwater LNG,[1] filed an application under section 7(c) of the NGA and Part 157 of the Commission's regulations for a certificate of public convenience and necessity to construct, own, and operate a 21.7-mile long, 30-inch diameter pipeline lateral from the outlet of the LNG terminal to a subsea interconnection with the Iroquois Gas Transmission System (Iroquois). The project, referred to as the Broadwater Project, has a daily design capacity of 1.0 billion cubic feet per day (Bcf/d) and a peak winter deliverability of 1.25 Bcf/d. In addition, in Docket No. CP06-56-000, Broadwater Pipeline requests a blanket certificate under subpart F of Part 157 of the Commission's regulations to perform certain routine construction activities and operations. Broadwater Pipeline also requests a waiver of the open-access requirements of Part 284 of the

[1] Broadwater Energy and Broadwater Pipeline will be collectively referred to herein as Broadwater.

20080320-3102 FERC PDF (Unofficial) 03/20/2008

Commission's regulations in order to permit the proposed pipeline to be operated on a proprietary basis.

2. There has been considerable opposition to the proposed project by state and local government agencies, public officials, non-governmental organizations, and members of the public. The primary concerns raised relate to whether there is a need for the project, public safety and security, and impacts to Long Island Sound. These concerns have been addressed at length in the final Environmental Impact Statement (EIS) issued on January 11, 2008. We have carefully reviewed the information and analysis contained in the final EIS and we agree with the conclusions presented in the final EIS that construction and operation of the Broadwater Project, with the adoption of the proposed mitigation measures, would result in only limited adverse environmental impacts. We also conclude that the project is needed to meet the projected energy needs for the New York City, Long Island and Connecticut markets. Therefore, we will grant the requested authorizations subject to the conditions described in this order.

I. Proposals

3. Broadwater states that the purpose of the Broadwater Project is to establish an LNG terminal capable of receiving, storing, and regasifying imported LNG to provide a new source of reliable, long-term, and competitively-priced natural gas to the Long Island, New York City, and Connecticut markets by connecting to the existing interstate pipeline system. Broadwater Energy and Broadwater Pipeline are limited liability companies formed to develop, construct, and own the LNG terminal and pipeline, respectively.

A. LNG Terminal Proposal in Docket No. CP06-54-000

4. Broadwater Energy seeks authorization under section 3 of the NGA to site, construct, and operate an LNG receiving terminal that will consist of a floating storage and regasification unit (FSRU) that is approximately 1,215 feet long and 200 feet wide and that rises approximately 80 feet above the water line to the trunk deck. Broadwater Energy states that the FSRU will consist of:

- a single berth capable of receiving and unloading LNG carriers with capacities ranging from 125,000 cubic meters (m^3) to 250,000 m^3;

- eight LNG storage tanks that will be able to store a net capacity of approximately 350,000 m^3 which is equivalent to 2.2 million barrels or 8 Bcf of regasified LNG;

20080320-3102 FERC PDF (Unofficial) 03/20/2008

- a regasification plant designed with a base vaporization capacity of 1.0 Bcf/d and a peak capacity of 1.25 Bcf/d of natural gas using a closed-loop shell-and-tube vaporization system;

- a yoke mooring system (YMS) that will be incorporated into the bow section of the FSRU that will moor the FSRU to a fixed tower (YMS tower) and allow the FSRU to pivot or weathervane around the tower and to withstand events exceeding a 100-year storm condition;[2]

- a nitrogen plant that will add nitrogen to the natural gas send-out to meet the Wobbe index[3] requirements of Iroquois' tariff;

- power generation; and

- an accommodation area to house crew members and provide space for telecommunications, electric machinery, stores, and other functions.

5. The proposed LNG import terminal will be located in Long Island Sound, in a water depth of approximately 90 feet, approximately 9 miles off the coast of Riverhead, Suffolk County, New York, in New York State waters. Broadwater Energy states that the nearest onshore point in Connecticut is approximately 10.2 miles from the proposed terminal location. Broadwater Energy anticipates that, based on the expected throughput of the project and the capacity of the LNG carriers, two or three carriers per week will arrive at the FSRU, with an anticipated average of 118 carriers per year. Broadwater Energy states that the entire capacity of the FSRU will be subscribed by Shell NA LNG (Shell).

6. Broadwater maintains that it has mitigated potential adverse environmental impacts by siting the project in the central portion of the Long Island Sound, away from sensitive shoreline and near-shore ecosystems. Broadwater also states that population density within 1-mile and 10-mile radii of the project site is non-existent or extremely low. Broadwater also notes that it has worked with users of the Long Island Sound,

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[2] A 100-year storm condition is one that statistically could be expected to occur once in 100 years. *See* section 3.2.1.2 of the final EIS (p. 3-39).

[3] The Wobbe index is a widely-accepted indicator of the interchangeability of fuel gases. The Wobbe index measures the heating potential, or potential Btu content, of the gas: the higher the Wobbe value, the higher the heat value.

20080320-3102 FERC PDF (Unofficial) 03/20/2008

government agencies, public officials, and other stakeholders to identify issues and respond to them.

7. Because it is a floating structure, the FSRU itself would not require any seabottom. However, the Coast Guard has identified the need for a safety and security zone around the FSRU and YMS tower. Specifically, the Coast Guard has proposed a combined safety and security zone encompassing the area within a 1,210-yard (0.7 mile) radius from the center of the YMS tower. Vessels not related to the project would not be permitted to enter this area, and the seafloor beneath the safety and security zone therefore would be converted to project use for the life of the project.

B. Pipeline Proposal in Docket No. CP06-55-000

1. Proposed Facilities

8. Broadwater Pipeline requests authority pursuant to section 7(c) of the NGA to construct, own, and operate a 21.7-mile long, 30-inch diameter subsea pipeline and related facilities that would deliver vaporized natural gas from the FSRU to an offshore connection with the existing Iroquois pipeline that extends across Long Island Sound. Broadwater Pipeline states that the pipeline facilities will be connected to the FSRU through a 30-inch diameter pipeline riser within the YMS tower that will be secured to the seafloor by four legs. The pipeline riser will interconnect with the subsea pipeline at the sea floor. In addition to supporting the pipeline riser, Broadwater Pipeline states that the tower will also house and support the system that will secure the FSRU and allow it to orient to the prevailing wind, wave, and current conditions around the tower.

9. Broadwater Pipeline proposes to connect its proposed 30-inch-diameter pipeline to the existing 24-inch-diameter Iroquois pipeline by installing a hot tap connection that would allow the connection without shutting down the Iroquois pipeline. Additional facilities include a permanent pig launcher to be installed as a part of the tower and facilities at the proposed subsea interconnect with Iroquois that would allow the attachment of a pig receiver.[4]

10. The daily design capacity of the pipeline facilities will be 1.0 Bcf/d, with a maximum capacity of 1.25 Bcf/d based on constraints provided by Iroquois at the

[4] A pipeline "pig" is a device used to clean or inspect the pipeline. A pig launcher or receiver is a facility where pigs are inserted into or retrieved from the pipeline.

20080320-3102 FERC PDF (Unofficial) 03/20/2008

interconnect point.[5] Broadwater Pipeline states that Shell will subscribe to the entire capacity of the pipeline, in addition to subscribing to the full capacity of the terminal. Broadwater Pipeline did not hold an open season because it is seeking to operate the pipeline on a proprietary basis.

11. As proposed, construction of the pipeline and the connection with the Iroquois pipeline would disturb about 197.3 acres and an additional 2,036 acres would be temporarily affected by anchor placement and anchor line sweep associated with movement of the lay barge. Approximately 78.9 acres of the total acres used for pipeline construction would be permanent pipeline right-of-way, and the remaining 2,156.6 acres would be allowed to revert to former use. However, Commission staff has recommended that Broadwater use mid-line buoys on all anchor cables during construction, or alternatively, use a dynamically positioned lay barge. Both alternatives would substantially reduce cable sweep impacts on the seafloor and we adopt these recommendations in this order.

2. Request for Waiver of the Commission's Open-Access Requirements

12. Broadwater Pipeline seeks authorization to permit the proposed pipeline to be operated as a single-use pipeline and requests waiver of the Commission's Part 284 open-access regulations. In support, Broadwater Pipeline states that it will only have one point of receipt (the FSRU) and one point of delivery (the subsea interconnection with Iroquois) and therefore asserts that the pipeline can only be used to transport gas from the FSRU to the interstate pipeline grid. Broadwater Pipeline states that the FSRU's entire capacity is subscribed by Shell and that Shell, or its affiliate, will retain title to the regasified LNG until, at a minimum, it enters Iroquois' pipeline. Broadwater Pipeline maintains that it has no ability to transport gas from anywhere other than the FSRU, that it will have no intermediate receipt points and no multiple delivery points, that it will not cross any state boundaries, and that it is essentially a tailgate facility necessary to connect the FSRU to Iroquois. Broadwater Pipeline asserts that the Commission has granted the waivers requested herein to other single-use pipelines that are operated exclusively to transport limited and discrete gas supplies.[6] Broadwater Pipeline states that it will accept

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[5] Exhibit G to Broadwater Pipeline's application.

[6] *Citing B-R Pipeline Co.*, 89 FERC ¶ 61,312 (1999), *reh'g denied*, 91 FERC ¶ 61,042 (2000); *USG Pipeline Co.*, 81 FERC ¶ 61,039 (1997), *order denying reh'g and reconsideration,* 82 FERC ¶ 61,117 (1998); *White Rock Pipeline, L.L.C.*, 98 FERC ¶ 61,220 (2002).

20080320-3102 FERC PDF (Unofficial) 03/20/2008

a condition that it be required to file a Part 284 open-access tariff if it receives a request to transport non-FSRU gas on the pipeline.

13. In addition to its Part 284 waiver request, Broadwater Pipeline also requests waiver of the following Commission regulations:

(a) the requirement in 18 C.F.R. § 157.6(b)(8) that Broadwater Pipeline provide the Commission with cost-of-service data and revenue responsibility for each rate schedule;

(b) the requirement that Broadwater Pipeline provide Exhibits H (Total Gas Supply), I (Market Data), K (Cost of Facilities), L (Financing), N (Revenues, Expenses, and Income), O (Depreciation and Depletion), and P (Tariff). 18 C.F. R. §§ 157.14(a)(10), (11), (13), (14), (16), (17) and (18), respectively;

(c) the accounting and reporting requirements pursuant to 18 C.F.R. Parts 201 (Uniform System of Accounts) and 250 (Approved Forms), and section 260.2 (Form No. 2-A, Annual Report), and

(d) all other regulations to the extent that such waivers may be necessary in order to grant each of the authorizations requested in the application including waiver of all obligations to file rates and tariffs (including maintaining an electronic bulletin board (EBB), filing contracts or contract amendments).

II. Procedural Matters

A. Notice, Interventions, Comments, and Protests

14. Notice of the Broadwater Energy and Broadwater Pipeline applications were published in the *Federal Register* on February 27, 2006 (71 Fed. Reg. 9,807). Timely, unopposed motions to intervene were filed by a number of parties and are granted by operation of Rule 214 of the Commission's Rules of Practice and Procedures.[7] The Connecticut Fund for the Environment/Save the Sound filed a timely motion to intervene, but, due to an error in serving its motion, filed a late motion to intervene four days after the intervention deadline. The Connecticut Fund for the Environment/Save the Sound is a party to this proceeding.

[7] 18 C.F.R. § 385.214 (2007).

20080320-3102 FERC PDF (Unofficial) 03/20/2008

15. On November 17, 2006, the Commission issued the notice of availability of the draft EIS. The draft EIS invited comments from the public and stated that intervention may be sought based on the draft EIS. The Town of East Hampton and Cross-Sound Cable Company, LLC filed requests to intervene, and they have been added as parties to the proceeding. All intervenors are listed in Appendix A to this order.

16. A number of the parties filed comments and protests on the Broadwater Project.[8] On April 3, 2007, Broadwater filed leave to answer and answer to the comments and protests. The Attorney General of Connecticut, County of Suffolk, the Town of Riverhead, and KeySpan Delivery Companies (KeySpan) filed answers to Broadwater's filing. Answers to protests and answers to answers are not allowed under our rules.[9] However, we may, for good cause shown, waive a rule.[10] We find good cause to do so in this instance since admitting the answers will not cause undue delay or unfairly prejudice any party and they provide information that has assisted us in our decision making.

17. The motions to intervene of Shell and Coral Energy Resources, L.P. included comments in support of the project. The Attorney General of Connecticut, the County of Suffolk, the Town of East Hampton, the Town of Brookhaven, the Town of Huntington, and the Towns of Riverhead and Southold, jointly (Riverhead and Southold), filed comments raising issues regarding land use, safety, and environmental impacts of the project. The Commission also received several hundred comments from interested public officials, individuals, and groups raising similar concerns. These issues are addressed in the environmental discussion in this order.

B. Requests for Evidentiary Hearing

18. Several parties request that the Commission hold an evidentiary hearing. The Commission has substantial discretion in deciding whether to hold a trial-type evidentiary hearing or to give interested parties an opportunity to participate through evidentiary submissions in written form. Trial-type evidentiary hearings are required only where there are material issues of fact that cannot be resolved on the basis of the written

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[8] On July 12, 2006, the Commission issued an order directing Broadwater to release non-public information requested by any party in the proceeding pursuant to a protective agreement. *Broadwater Energy LLC*, 116 FERC ¶ 61,032 (2006).

[9] 18 C.F.R. § 385.213(a)(2) (2007).

[10] *See* 18 C.F.R. § 385.101(e) (2007).

20080320-3102 FERC PDF (Unofficial) 03/20/2008

record.[11] The Commission invited written comments from all interested persons and has held public meetings in Smithtown and Shoreham, New York, and in New London and Bradford, Connecticut, for oral presentation of evidence. Commission staff also met with representatives of the Connecticut Long Island Sound Task Force on LNG to discuss the draft EIS. There are additional materials in the record from government agencies, scientists, and others addressing safety, security, and environmental issues. These materials and the issues raised by these materials are treated in considerable detail in the Commission's final EIS. All interested parties have been afforded a full and complete opportunity to present their views to the Commission through written submissions. We find that there is no material issue of fact regarding the safety, security, or environmental issues that we cannot resolve on the basis of the written environmental record in this proceeding. Therefore, we will deny the requests for a trial-type hearing.

C. Request to Consolidate Proceedings and Convene Technical Conference Regarding Gas Quality Issues

19. Expressing concern about the impact that regasified LNG from the Broadwater Project may have on its distribution system, KeySpan requests that at the time Iroquois files an application to connect with the Broadwater Pipeline, the Commission consolidate that Iroquois application with the Broadwater applications and convene a technical conference to address the interchangeability issues that might arise as a result of Broadwater's proposals. KeySpan also submits that the Commission should require Broadwater Pipeline to develop gas quality parameters that should be included in a filed tariff. While generally supporting the project, Consolidated Edison Company of New York, Inc. (Con Ed) filed comments stating that it has outstanding gas quality issues that it is working with Shell and Iroquois to resolve.

20. In response, Broadwater states that the gas it transports will be subject to the downstream pipeline's gas specifications and the downstream pipeline, Iroquois, may refuse interconnection with another pipeline when the interconnection would adversely affect its operations.[12] Accordingly, it maintains that there is no reason for the Commission to require Broadwater to develop gas quality or interchangeability specifications.

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[11] *See, e.g., Southern Union Gas Co. v. FERC*, 840 F.2d 964, 970 (D.C. Cir. 1988); *Cerro Wire & Cable Co. v. FERC*, 677 F.2d 124 (D.C. Cir. 1982); *Citizens for Allegan County, Inc. v. FPC*, 414 F.2d. 1125, 1128 (D.C. Cir. 1969).

[12] *Citing* P*anhandle Eastern Pipe Line Co.*, 91 FERC ¶ 61,037 (2000).

20080320-3102 FERC PDF (Unofficial) 03/20/2008

21. Subsequent to the filing of KeySpan's and Con Ed's comments in this proceeding, Iroquois filed revised tariff sheets in Docket No. RP07-443-000 proposing new tariff provisions regarding gas quality and interchangeability in light of anticipated changes in the source of natural gas supplies it will transport, including regasified LNG from the proposed Broadwater Project. On June 27, 2007, the Commission issued an order accepting and suspending the proposed tariff sheets, to be effective December 1, 2007, subject to conditions and to the outcome of a technical conference.[13] On September 10, 2007, a technical conference was held to address the issues raised by Iroquois' filing. On November 15, 2007, the Commission established a hearing to address certain contested issues.[14] These matters are currently pending before an administrative law judge.

22. The outcome of the Iroquois proceeding in Docket No. RP07-443-000 will dictate the gas standards that Broadwater Pipeline must meet to make deliveries to Iroquois. KeySpan and Con Ed are parties to that proceeding. Thus, the gas quality and interchangeability criteria established in the Iroquois proceeding should adequately address the concerns raised here. Accordingly, we do not find that it is necessary to convene a technical conference in these proceedings[15] or to require Broadwater Pipeline to have a tariff that addresses gas quality and interchangeability issues.[16]

III. Discussion

A. The Point of Demarcation between the NGA Section 3 Import Facilities and NGA Section 7 Interstate Pipeline

23. Under NGA section 7, the Commission has jurisdiction over the transportation or sale of natural gas in interstate commerce and the construction, acquisition, operation,

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[13] *Iroquois Gas Transmission System, Inc.*, 119 FERC ¶ 61,325 (2007). Subsequently, Iroquois agreed to defer the effective date of the tariff sheets until February 1, 2008. By delegated order issued on February 28, 2008, substitute tariff sheets filed by Iroquois were accepted effective February 1, 2008, subject to the outcome of the underlying proceeding.

[14] *Iroquois Gas Transmission System, Inc.*, 121 FERC ¶ 61,150 (2007).

[15] Iroquois does not plan to expand its system in order to take deliveries of regasified LNG from Broadwater Pipeline.

[16] As discussed infra, we are granting Broadwater Pipeline's request to operate the pipeline as a proprietary pipeline.

20080320-3102 FERC PDF (Unofficial) 03/20/2008

and abandonment of facilities to transport natural gas in interstate commerce. Under NGA section 3, the Commission has exclusive authority to approve or deny an application for the siting, construction, expansion, or operation of a LNG terminal. Section 311(b) of the Energy Policy Act of 2005 (EPAct 2005) amended section 2 of the NGA to add a definition of LNG terminal as follows:[17]

> (11) 'LNG terminal' includes all natural gas facilities located onshore or in State waters that are used to receive, unload, store, transport, gasify, liquefy, or process natural gas that is imported to the United States from a foreign country, exported to a foreign country from the United States, or transported in interstate commerce by waterborne vessel, but does not include:
>
> (A) waterborne vessels used to deliver natural gas to and from any such facility; or
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> (B) any pipeline or storage facility subject to the jurisdiction of the Commission under section 7.

24. The major differences between section 3 and section 7 authorizations relate to eminent domain rights and the Commission's conditioning authority over rates, terms, and conditions of service. Specifically, section 7(h) of the NGA grants federal eminent domain powers to NGA section 7(c) certificate holders. In contrast, construction authorized under section 3 of the NGA does not convey federal eminent domain powers. Additionally, for pipeline facilities authorized under section 7, the Commission has authority to set the rates, terms, and condition of service. NGA section 3(e)(3) provides that, before January 1, 2015, the Commission shall not condition an order approving an application to site, construct, expand, or operate an LNG terminal on, among other things, any regulation of the rates, charges, terms, or conditions of service of the LNG terminal; or a requirement to file schedules or contracts related to the rates charges, terms, or conditions of service of the LNG terminal.

25. It is not entirely clear where Broadwater proposes that section 3 authority ends and section 7 authority begins. In the transmittal letter for the section 3 application, Broadwater Energy seeks authority to construct and operate the FSRU, which it states includes the YMS. In the transmittal letter for the section 7 application, Broadwater Pipeline seeks authority to construct and operate the YMS mooring tower, pipeline riser, and 21.7-mile subsea pipeline, indicating that it views the demarcation point between the

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

20080320-3102 FERC PDF (Unofficial) 03/20/2008

proposed section 3 facilities and the proposed section 7 pipeline at some point where the YMS connects to the YMS tower which supports it.

26. Relying on the definition of "LNG terminal" in NGA section 2(11), Riverhead and Southold submit that the terminal ends, and any pipeline subject to certification under NGA section 7 begins, at the tailgate of the LNG terminal. As applied here, Riverhead and Southold submit that the tailgate is the point where the terminal facilities deliver revaporized gas to the pipeline at the seafloor at the base of the YMS tower.[18] In response to this argument, Broadwater contends that YMS and the tower that supports it "obviously have multiple functions," the "YMS and the facilities located on it all are appurtenant to the subsea horizontal pipeline and riser [and] all of them are subject to section 7 certification."[19]

27. As is the case here, we typically consider new section 3 import terminals in tandem with section 7 facilities that will attach to the import facilities. In such cases, we seek a specific physical point to serve as a logical divide between the facilities deemed to be section 3 import facilities and the downstream section 7 interstate facilities. Based on the facts in this proceeding, we find that the interstate transportation of gas pursuant to section 7 commences at the manifold deck (located on the YMS tower) where the 30-inch diameter pipeline riser commences. The pipeline riser is the same diameter as the subsea pipeline and is part of a fixed-continuous pipeline that transports gas from the terminal to the interconnection with Iroquois in interstate commerce. The YMS tower supports the pipeline riser and is configured to allow pipeline maintenance activities to occur (e.g., pig launching facilities are provided on the YMS tower). We find that commencing section 7 regulation at the manifold deck where gas enters the continuous 30-inch pipeline appropriately distinguishes foreign from interstate commerce under the NGA. Thus, facilities at or downstream of this point will be regulated under section 7 of the NGA. In addition to the pipeline riser, the section 7 facilities would include the pig launcher used for maintaining the 30-inch pipeline, the ESD valve, and the YMS tower from the manifold to the seafloor, in addition to the pipeline on the sea floor.

28. We will not accept Riverhead's proposed demarcation point at the seafloor because in our view the pipeline riser and YMS tower and associated facilities function to

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[18] *See* Comments and Supplemental Comments filed on January 19, 2007 and March 12, 2007, respectively.

[19] *See* Broadwater's February 26, 2007 Supplemental Comments on the Draft Environmental Impact Statement at 79-80.

20080320-3102 FERC PDF (Unofficial) 03/20/2008

transport gas from the import terminal in interstate commerce, as explained above.

B. The Proposed LNG Terminal

29. 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 section 3 of the NGA.[20] The Commission's authority 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.[21] 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."

30. In recent years, the Commission has chosen to exercise a less intrusive degree of economic regulation over LNG import terminals, and has not required applicants to offer open-access service or to maintain tariffs or rate schedules for their terminalling services.[22] 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.[23] As pertinent here, section 311(c) of EPAct 2005 adds a new NGA section

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[20] 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. The most recent delegation is in DOE Delegation Order No. 00-044.00A, effective May 16, 2006. Accordingly, 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.

[21] *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).

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

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

20080320-3102 FERC PDF (Unofficial) 03/20/2008

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).

31. The Commission recognizes the important role that LNG will play in meeting future demand for natural gas in the United States (U.S.) and has noted that the public interest is served through encouraging gas-on-gas competition by introducing new imported supplies.[24] Section 3 of the NGA provides that the importation of LNG shall be deemed to be consistent with the public interest. As discussed at length in section 1.1 of the final EIS, imported LNG will provide a needed diversification to current supplies. Approximately 85 percent of the gas currently consumed in the New York City, Long Island, and Connecticut regions is supplied by pipelines originating in the U.S. Gulf of Mexico and Canada. According to the Annual Energy Outlook (EIA 2008), domestic production of natural gas will remain relatively flat through 2025 and projected production will not match projected demand. The supply of Canadian natural gas to the U.S. is also expected to decrease substantially in coming years. LNG imports will play an important role in making up for the decrease in natural gas supply occasioned by declining domestic production and decreased imports of Canadian gas. The record in this case shows that the Broadwater LNG terminal will provide such additional supplies of natural gas to consumers. Because the project is new, Broadwater 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 project. The economic risks will be borne by Broadwater. Further, the environmental conditions set forth in this order will ensure that the adverse environmental impacts will be limited. Therefore, we find that, subject to the conditions imposed in this order, the Broadwater LNG terminal is not inconsistent with the public interest.

C. <u>The Proposed Pipeline</u>

32. 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 section 7 of the NGA.

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[24] *Hackberry*, 101 FERC ¶ 61,294 at P 26.

20080320-3102 FERC PDF (Unofficial) 03/20/2008

1. The Certificate Policy Statement

33. On September 15, 1999, the Commission issued a Policy Statement[25] providing guidance as to how proposals for certificating new construction will be evaluated. 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.

34. 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 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.

35. The threshold requirement is that the pipeline must be prepared to financially support the project without relying on subsidization from its existing customers. Broadwater Pipeline is a new pipeline and has no existing customers. Thus, there will be no subsidization. Therefore, we find that Broadwater Pipeline has satisfied the threshold requirement of the Policy Statement.

36. Broadwater 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 Broadwater Pipeline has no current customers. The new pipeline should also benefit interconnecting pipelines by providing new sources of gas for them to transport,

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[25] *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC & 61,227 (1999), *order clarifying policy*, 90 FERC & 61,128 (2000), *order clarifying policy*, 92 FERC & 61,094 (2000) (Policy Statement).

20080320-3102 FERC PDF (Unofficial) 03/20/2008

and consumers by giving them access to additional gas supplies. The total length of the pipeline is 21.7 miles, and to minimize impacts on the surrounding communities, the line will run in the central portion of the Long Island Sound, away from sensitive shoreline and near-shore ecosystems. For these reasons, we find that any adverse impacts on existing pipelines, landowners, and communities will be minimal.

37. The need for the Broadwater Pipeline is supported by historical and projected trends in gas demand and supply. Various national and industry organizations that monitor energy consumption trends forecast growing demand for natural gas. Traditional sources of domestically-produced gas, however, are in long-term decline. The data shows that forecasted domestic production will be unable to keep pace with demand and that the gap will only widen in the future. It is expected that imports, including LNG, will be necessary to make up the supply gap. The Broadwater Project is being developed to provide access to new, competitively priced LNG supplies to meet this growing public demand. We find that the benefits of Broadwater Pipeline proposal will outweigh any potential adverse effects, and that the proposed pipeline is required by the public convenience.

2. Broadwater Pipeline's request for Waiver of Part 284 of the Commission's Regulations

38. As discussed above, Broadwater Pipeline requests authority to operate the pipeline on a proprietary basis and waivers of various regulations related to open-access service under Part 284 and other general reporting requirements. Our open-access regulations require prospective project sponsors to plan for and accommodate the needs of other parties that may desire to contract for service on the new pipeline. Here, however, Broadwater Pipeline asserts that there will only be one use of the facility. Broadwater Pipeline explains that the pipeline will be dedicated solely to transportation of natural gas from the FSRU to the interconnection with Iroquois. Further, it maintains that the entire capacity of the FSRU is subscribed by Shell, and Shell or its affiliates will retain title to the regasified LNG until it enters the Iroquois pipeline. Broadwater Pipeline also explains that the pipeline's only interconnections are with the FSRU and Iroquois' submerged pipeline, making it unlikely that other shippers will request firm service over Broadwater's pipeline. The Commission has previously waived the requirement that a pipeline file a Part 284 tariff for a short pipeline where no other party was likely to request transportation service.[26] Similarly, allowing the proposed proprietary use of the

[26] *See, e.g., Freeport-McMoRan Energy LLC*, 115 FERC ¶ 61,201, at P 24 (2006) (*Freeport-McMoRan*); *Gulf LNG Energy, LLC*, 118 FERC ¶ 61,128, at P 27 (2007).

20080320-3102 FERC PDF (Unofficial) 03/20/2008

pipeline under these circumstances will relieve Broadwater Pipeline from the administrative and regulatory burden associated with the requirement to file a Part 284 tariff for a 21.7-mile underwater pipeline where no other party is likely to request transportation service.

39. Although the Commission generally requires new pipelines to operate on an open-access basis,[27] the Commission explained in *Hackberry* that a flexible regulatory approach is appropriate in assessing proposals for the introduction of much-needed supplies of LNG into the U.S. interstate pipeline system.[28] The Commission's goal is to provide incentives for developing additional energy infrastructure while, at the same time, ensuring competitive commodity prices and an open-access interstate pipeline grid. Under the particular circumstances of this proceeding, we believe that allowing Broadwater Pipeline to operate its proposed pipeline on a proprietary, single-use basis will not undermine the Commission's policy encouraging competition in the pipeline industry. To the contrary, we believe that this will actually encourage competition by facilitating the introduction of new, heretofore unavailable, sources of LNG into the pipeline grid.

40. In view of these considerations, we will not require Broadwater Pipeline to establish initial section 7 rates or file a Part 284 tariff at this time to comply with the Commission's open-access policies and regulations. However, consistent with our ruling in *Freeport-McMoRan*[29] and to ensure that our action here does not result in the frustration of our pro-competitive policies, we will condition the certificate issued herein to require that Broadwater apply for a Part 284 open-access blanket transportation certificate within 30 days of receiving a *bona fide* request for firm transportation service on its pipeline, if there is capacity available to provide the requested service.

41. As explained above, Broadwater Pipeline also requests waiver of a number of the Commission's regulations in addition to those in Part 284, relating to the accounting and reporting requirements for natural gas pipelines under Part 201, Uniform System of Accounts Prescribed for Natural Gas Companies Subject to the Provisions of the Natural gas Act; Part 250, Approved Forms; section 260.2, FERC Form No. 2-A, Annual Report

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[27] *See, e.g.*, *Trans-Union Interstate Pipeline, L.P.*, 92 FERC ¶ 61,066, at 61,219-21 (2000) (*Trans-Union)* (summarizing post-Order No. 636 policy on sole-use pipeline proposals), *order on clarification*, 93 FERC ¶ 61,115 (2000).

[28] *Hackberry*, 101 FERC ¶ 61,294 at P 23.

[29] *Freeport-McMoRon,* 115 FERC ¶ 61,201 at P 24.

20080320-3102 FERC PDF (Unofficial) 03/20/2008

for Nonmajor Natural Gas Companies; and section 157.6(b)(8) of the Commission's regulations (cost of service data and rate schedule revenue responsibility.) Broadwater Pipeline also seeks waiver of the requirement in section 157.14 to file certain exhibits with its application.

42. Since we grant Broadwater Pipeline's waiver of the open-access requirements of Part 284, there is no ongoing regulatory need to require the filing of rate information or to have cost-based financial statements prepared in accordance with the Commission's Uniform System of Accounts. Accordingly, we will grant Broadwater Pipeline's request to waive the requested filing requirements of Part 157, Part 250 (Forms), and the accounting requirements prescribed in Part 201 of the Commission's regulations. In addition, we will grant Broadwater Pipeline's request to waive the reporting requirements prescribed in Section 260.2 and Section 260.300, FERC Form No. 3-Q, Quarterly Financial Report of Electric Utilities, Licensees, and Natural Gas Companies, but note that such waivers do not extend to the Commission's annual charge assessment (ACA). Therefore, Broadwater Pipeline is required to file page 520 of Form 2-A, along with an officer certification of the filing, reporting gas volume information which is the basis for imposing an ACA.[30] Broadwater Pipeline is also required to follow any business practices (e.g., entering into Operational Balancing Agreements) and any applicable North American Energy Standards Board (NAESB) timelines that are required to enable interconnecting pipelines to comply with the NAESB standards.

43. Further, in the event that Broadwater Pipeline is required to apply for a Part 284 open-access blanket transportation certificate, the waivers of the accounting and reporting requirements in Part 201 and sections 260.2 and 260.300 shall be rescinded and Broadwater Pipeline will be required to comply with the Commission's accounting and reporting regulations. We will also require that Broadwater pipeline maintain records to identify separately the original cost and related depreciation on the section 7 facilities consistent with the Uniform system of Accounts, since any future calculation of rates for open-access transportation service pursuant to a request would require this cost-of-service accounting information.[31]

3. Issuance of a Part 157, Subpart F, Blanket Certificate

44. In addition to authority to construct and operate the Broadwater Pipeline and operate it on a proprietary basis, Broadwater Pipeline seeks a blanket certificate under

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[30] *Id.* at P 26.

[31] *Id.* at P 24.

20080320-3102 FERC PDF (Unofficial) 03/20/2008

Part 157, Subpart F. Pursuant to this blanket certificate, pipelines may construct and operate certain facilities without filing a case-specific application for a certificate under NGA section 7(c). A pipeline holding a blanket construction certificate may construct and operate certain facilities without notifying the Commission in advance or with prior notification, depending on the cost of the facilities. Broadwater Pipeline will become an interstate pipeline once it accepts the certificate to construct and operate the facilities issued in this order and it has stated in its application that it will comply with the provisions of Part 157, Subpart F. Therefore, we will issue a blanket construction certificate to Broadwater Pipeline.

D. Environmental Analysis

45. In November 2006, Commission staff issued a draft EIS that was mailed to agencies, individuals, and organizations. Commission staff established a comment period of 60 days, officially ending on January 23, 2007. Public comment meetings on the draft EIS were conducted in January 2007 at Smithtown and Shoreham, New York, and at New London and Branford, Connecticut. Commission staff also met with representatives of the Connecticut Long Island Sound Task Force on LNG to discuss the draft EIS. In addition to the written and verbal comments presented at the meetings, staff received separate written comments on the draft EIS from November 2006 through preparation of the final EIS, which was issued in January 2008. Commission staff's responses to comments were provided in Appendix N of the final EIS. Where appropriate, the text of the EIS was revised in response to comments and as a result of additional review of updated information following issuance of the draft EIS.

46. Commission staff prepared the final EIS with the assistance of the following cooperating agencies: the Department of Homeland Security, U.S. Coast Guard (Coast Guard); the U.S. Army Corps of Engineers (COE); the U.S. Environmental Protection Agency (EPA); the National Oceanographic and Atmospheric Administration, National Marine Fisheries Service (NMFS); and the New York State Department of State (NYSDOS). The scope of the EIS was developed based on input from many sources, including the Broadwater applications; the cooperating agencies; the New York State Department of Public Services (NYSDPS); the State of Connecticut Department of Environmental Protection; the State of New York Department of Environmental Conservation (NYSDEC); the New York State Office of Parks, Recreation and Historic Preservation; public open houses, scoping meetings, and comment meetings; letters received from the public; and from our own field inspections, research, and analyses.

47. The EPAct 2005 and section 3 of the NGA require that the Commission consult with the U.S. Department of Defense (DOD) to determine whether or not proposed projects would affect training or activities on military installations. In a letter to the DOD

20080320-3102 FERC PDF (Unofficial) 03/20/2008

dated January 18, 2006, we requested that DOD inform the Commission of "any defense or military establishments in the project area that you believe may be affected by the project." We did not receive a response to that letter. With the exception of correspondence with COE, we have not received any comments or concerns from any branch of the military or any military installation in reply to our scoping notice issued on August 11, 2005 (*see* section 1.4 of the final EIS). We did receive a letter from the U.S. Navy indicating that it is coordinating its review with the Coast Guard. Since the DOD has not identified any effects on training or activities on military installations due to project implementation, we conclude that the project would not have an effect on military installations.

48. Following issuance of the final EIS, we received a limited number of comment letters. Those that address specific issues regarding the final EIS are discussed below. The remaining letters contain general comments regarding environmental and safety concerns that were previously raised and fully addressed in the final EIS.

Safety and Security

49. Commission staff and the Coast Guard technical staff have shared review of the engineering, reliability, and safety aspects of the project based on an agreement between the two agencies. This joint review began in late 2004 when Broadwater initiated the Commission's pre-filing process. The Commission has the lead responsibility for review of the proposed subsea pipeline and LNG handling, storage, and regasification on the FSRU. The Coast Guard has the lead responsibility for assessing the safety and security of the FSRU as a marine facility and the LNG carrier operations while at berth and in transit to and from the FSRU in U.S. territorial waters. The evaluations, which have focused on the safety of the engineering design and the projected operational reliability, have resulted in recommended design changes and considerations to improve the safety, security, and reliability of the facility. In addition, the Coast Guard has indicated in its Waterway Suitability Report that additional risk mitigation measures are necessary to make the waterway suitable for LNG vessel traffic and the operation of the FSRU. Environmental Condition No. 86 requires Broadwater to ensure that the FSRU and associated LNG marine traffic comply with all requirements set forth by the Coast Guard so that necessary risk mitigation measures are in place during operation.

50. The Commission staff and Coast Guard staff have also recommended the use of a Certifying Entity for an independent review of the final design, fabrication, installation,

20080320-3102 FERC PDF (Unofficial) 03/20/2008

inspection, and maintenance of the FSRU and YMS.[32] Based on this review, the Certifying Entity would provide recommendations to the Commission and Coast Guard throughout continued oversight of the project development. Throughout the life of the facility, the FSRU would be subject to Commission annual inspections, Coast Guard inspections, and would be required to maintain classification using a member of the International Association of Classification Societies.[33]

51. The Coast Guard conducted an assessment of the project's effect on the safety and security of the project waterway and issued its findings in a Waterways Suitability Report (WSR). The WSR is based on a systematic assessment of potential risks to navigation safety and maritime security associated with the proposed project. The assessment of potential risks was evaluated in terms of the components of risk: threats, vulnerabilities, and consequences. The assessment led to the preliminary determination that additional measures would be necessary to make the project waterway suitable for LNG carrier traffic and identified additional measures that would provide for the safety and security of the proposed FSRU and LNG carriers.

52. The WSR concludes that there are currently no known, credible threats against the proposed Broadwater facility, although periodic threat assessments must be conducted to ensure that the security measures in place remain appropriate to address future threats. There are many significant safety and security benefits associated with the location of the FSRU, especially with respect to threat and consequence, since it would be remote from population centers. The Coast Guard has stated this remoteness would serve to reduce the attractiveness of the FSRU as a target, but the location would create some law enforcement challenges. Additional security resources would be needed to mitigate safety and security risks associated with the proposed project, particularly trained law enforcement personnel and small boats. Further, additional marine firefighting resources may be required to mitigate fire risks associated with the project.

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[32] For purposes of the environmental discussion and environmental conditions, YMS will refer to the yoke mooring system and/or the fixed mooring tower.

[33] The International Association of Classification Societies is an independent organization whose members develop worldwide technical standards for the design, construction, and inspection of ships and offshore structures. In order to maintain classification, a ship or structure must adhere to a periodic inspection program to ensure that structural strength and integrity, as well as reliability of the associated systems, are maintained to allow safe operation.

20080320-3102 FERC PDF (Unofficial) 03/20/2008

53. Although LNG carrier operations represent an increased risk to public health and safety, the Commission staff and the Coast Guard consider the potential risk to be very low. The anticipated carrier routes are at least 3 miles from the shoreline, with two exceptions: the closest shorelines to the route are Fishers Island (about 1.4 miles) and Plum Island (about 1.3 miles). LNG carriers would be subject to Coast Guard requirements, including the proposed establishment of a safety and security zone around each incoming and departing carrier, and Coast Guard inspection and enforcement practices.

Environmental Impacts

54. The potential environmental impacts of the proposed project would be largely limited to the immediate vicinity of the proposed FSRU and pipeline during construction, and the FSRU location during operation. Few impacts would be associated with use of the existing onshore office, warehouse, and industrial docking facilities, or along the LNG carrier transit routes that will traverse deep water areas. Thus, the proposed project, under normal operating conditions, would not be expected to impact sensitive onshore or nearshore resources such as wetlands, terrestrial wildlife and birds, freshwater fisheries, shellfish beds, eelgrass beds, residences, businesses, or county, state, or national parks. Broadwater developed the proposed siting and design, as well as the construction and operation methods and procedures, in an effort to reduce the potential impacts of the proposed project. In addition, staff has recommended measures to avoid or further minimize potential impacts to the environment.

Seafloor Impacts

55. During project construction, the primary impacts would be associated with installation of the 21.7-mile-long subsea pipeline, including physical disturbance of the seafloor/benthic habitat and temporary turbidity and sedimentation associated with the seafloor disturbance. As proposed by Broadwater, project construction would disturb a total of 2,235.2 acres; most disturbance would be caused by anchor cable sweep. Staff determined that, if mid-line buoys were used on all eight anchors of the construction barges, cable sweep impacts would be substantially reduced and the total seafloor impacts would be about 263.6 acres. Consequently, staff has recommended that Broadwater use mid-line buoys on all anchor cables during construction, or alternatively, use a dynamically-positioned lay barge that would have little or no effect on the seafloor.

Impacts to Recreational and Commercial Uses

56. The Coast Guard proposes to establish a fixed safety and security zone around the YMS and FSRU that would be a circle with a radius of 1,210 yards (0.7 mile) centered on

20080320-3102 FERC PDF (Unofficial) 03/20/2008

the YMS. All vessels not related to the project would be prohibited from entering the 950-acre (1.5-square-mile) area without special permission from the Coast Guard. This prohibition would not affect ferry traffic in the Sound because there are no established ferry routes through or near the proposed safety and security zone. In general, the use of carriers to ship LNG to the project would result in a minimal increase in overall commercial shipping in Long Island Sound (about 1 percent).

57. There are no established navigation channels in Long Island Sound and the vast majority of it has depths sufficient to support larger vessels, including LNG carriers. The Coast Guard plotted vessel track lines using a sampling of tracking data from 2005 (presented in Figure 3.7-2 of the final EIS) which indicate that commonly-used routes are present along the length of the Sound and across the Sound between major ports. Approximately 18 percent of the vessels transited within 2.3 miles of the proposed FSRU location. Consequently, some vessels would likely need to modify their courses slightly to the south to avoid the proposed safety and security zone.

58. Recreational watercraft are typically smaller vessels that navigate close to shore. As noted by the Coast Guard's WSR (Appendix C of the final EIS), recreational vessels generally use the areas of Long Island Sound within about 3.5 miles of the shoreline. Thus, they would typically not be expected to transit anywhere near the safety and security zone. Further, cross-Sound navigation routes generally do not include the proposed location for the FSRU.

59. Up to 12 fishermen trawl and up to 5 lobstermen set pots in the area that the Coast Guard has proposed to establish as the safety and security zone. These fishermen would be prohibited from using the area within the safety and security zone for the life of the project. Consequently, project operation could result in some long-term impact to the fishing efforts of the commercial fishermen. However, Broadwater has proposed to offset the economic impact to the trawl fishermen who use the lane by providing compensation. Staff has recommended that Broadwater file the final compensation agreement that they develop with lobster and trawl fishermen. Broadwater has also agreed to compensate fishermen for damaged gear, and staff is recommending that Broadwater file documentation of this process. Considering the limited number of affected parties, the small area affected, and a mechanism for compensation, the impact to fishermen would be minor.

60. In a comment letter dated January 30, 2008, the Southern New England Fishermen's & Lobstermen's Association in Stonington, Connecticut requested information on whether or not they would be included in the mitigation package and contact information for acquiring specifics on the compensation plan. Broadwater has established a Fisheries Advisory Committee in which participation is open to individuals

20080320-3102 FERC PDF (Unofficial) 03/20/2008

involved in local commercial fishing activities in the area of Long Island Sound where the FSRU would be located and along the LNG carrier routes, which will utilize existing shipping areas currently used by deep draft and bulk carriers transiting or making deliveries in Long Island Sound. The Committee provides a forum to exchange information, discuss concerns, and where applicable, develop mitigation strategies as well as develop a mutually agreeable process by which to formulate compensation packages for demonstrable loss.

61. Broadwater has committed to work with affected fishermen along the Block Island and Point Judith LNG carrier routes beyond the Race,[34] such as Montauk, and other areas on the eastern end of Long Island, provided that losses due to LNG carrier operations can be clearly demonstrated. Broadwater states that it is not aware of an ongoing issue with respect to transit of large vessels and loss or damage to fishing gear, but intends to work through the Fisheries Advisory Committee to determine the scope of the issue. The contact for discussions is the Broadwater Fisheries Outreach Coordinator located at the Broadwater office in Riverhead, New York.

62. Recreational boating and fishing could also be disrupted by passage of the LNG carriers and their proposed moving safety and security zones. Disruptions could occur along all portions of the routes. However, with the exception of the portion of the LNG carrier route that traverses an area referred to as the Race, the route does not pass through high-use areas and is surrounded by waters with unrestricted access. Further, marine vessels would be able to use the waters in front of, behind, and alongside the proposed moving safety and security zones.

63. The area of the Race between Race Rock Light and Valiant Rock Lighted Buoy is approximately 1.4 miles (2,400 yards) wide and includes the main shipping channel that the LNG carriers would use. Additional details of the configuration of the Race are provided in Section 3.7.1.3 of the final EIS and in Section 3.2 of the Coast Guard's WSR (Appendix C of the final EIS).

64. The Race is popular among recreational fishermen, who access the area from marinas and boat launching areas on eastern Long Island, Fishers Island, and Connecticut. In summer, particularly on weekends and holidays, dozens of recreational fishing boats may be in or near the Race at any one time. Our analysis indicated that

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[34] The eastern end of Long Island Sound connects with Block Island Sound through the Race. The Race occupies the area between Fishers Island and Gull Island, including Valiant Rock, near the easternmost end of Long Island Sound.

20080320-3102 FERC PDF (Unofficial) 03/20/2008

along most portions of the LNG carrier route, the impact to recreational fishing and boating would occur intermittently in conjunction with LNG carrier transits and, at most, would be minor because vessels would typically navigate through open waters.

65. In Section 3.7.1.4 of the final EIS, we addressed LNG carrier passage through the Race and it is also addressed in the Coast Guard's WSR. The moving safety and security zone would pass by a point within the Race in approximately 15 minutes. Adding time for vessels to leave their routes or locations then return to their path or location, some vessels could experience delays of up to about 30 minutes.

66. Although some commentors suggested that the Race would be shut down during LNG carrier transits, the Race would not be closed. Some vessels could transit the Race at the same time that an LNG carrier transits the Race, using available space that would be outside of the LNG carrier safety and security zone and within the main channel. The maximum width of the proposed moving safety and security zone around an LNG carrier would be approximately 1,560 yards (0.9 mile), including the width of the carrier. The width of the most constricted part of the Race is approximately 1.4 miles (2,400 yards). As a result, even within the most constricted portion of the Race, the total distance between the edges of the proposed moving safety and security zone and the edges of the channel would range from about 840 yards (0.5 mile) to 530 yards (0.3 mile), dependent on the angle of approach taken by the LNG carrier. There are also several other passages adjacent to the Race that recreational vessels could use as alternative routes to transit through the area while an LNG carrier is passing through the Race.

Water Use and Fisheries

67. Impacts to water resources would primarily be associated with the intake and discharge of seawater by the FSRU and LNG carriers. Most of the water taken in by the FSRU would be used for ballast when discharging vaporized LNG. When taking on LNG from the carriers, the ballast water in the FSRU would be returned to the Sound. LNG carriers would take on water primarily for use in cooling and for ballast when LNG is being unloaded. The cooling water would be returned to the Sound, and the carriers would depart Long Island Sound with ballast water that was taken on. LNG carriers would not be expected to discharge any ballast water in the project waterway.

68. Annually, the water intake of the FSRU would average approximately 5.5 million gallons per day (mgd). Assuming that an average of 118 LNG carriers would deliver LNG to the FSRU each year, the carriers' average daily water intake and discharge of water from the Sound would be approximately 22.7 mgd, including ballast and cooling water. The impact of this volume of water being taken up would be minor because Long Island Sound holds a volume of about 18 trillion gallons of water. In addition, the

20080320-3102 FERC PDF (Unofficial) 03/20/2008

majority of the 22.7 mgd of water would be discharged back into the Sound. Further, the volume used would be substantially less than the total daily seawater inflow to the Sound.

69. The primary impact to biological resources during operation would be the impingement/entrainment of ichthyoplankton (the eggs and larvae of fish drifting in the water column) due to the intake of water from the Sound. Based on recent ichthyoplankton surveys and the volume of water taken in by the FSRU and LNG carriers, the total potential impingement/entrainment of ichthyoplankton would be less than 0.1 percent of the estimated total stock in the central basin of the Sound. Based on the water depth of the FSRU intake structures, the actual impingement/entrainment would be considerably less than the average densities incorporated into our loss estimates. As a result, there would be a negligible long-term impact to ichthyoplankton and, therefore, on the general fisheries resources of the Sound.

70. NMFS has designated the seafloor and the water column of Long Island Sound as essential fish habitat (EFH) and has identified 19 fish species as EFH-managed species in the area of the proposed YMS, FSRU, and pipeline. Additionally, designated EFH occurs within the LNG carrier transit route for various lifestages of 30 species. Although EFH would be affected by seafloor disturbance and temporary turbidity during construction and by the limited sediment conversion of the seafloor from soft sediment to hard substrate, construction would not cause significant impacts to EFH resources.

71. During operation, the primary impact to EFH-designated fish species would be associated with impingement/entrainment during water intake. Less than 10 percent of the estimated impingement/entrainment would be composed of EFH-designated species based on field surveys. As a result, the impact to EFH-designated species would be negligible but long term.

72. On February 19, 2008, NMFS filed comments on the final EIS that included 19 EFH Conservation Recommendations. Commission staff's review of NMFS's recommendations indicates that the majority are either part of Broadwater's proposal, as described in the final EIS, or are specifically included as Commission staff's recommended mitigation measures in the final EIS. The outstanding elements not explicitly covered in Commission staff's recommendations include a requirement for the use of wedge wire screening on the FSRU water intakes and a requirement to minimize the use of biocides in the treatment of water used in operations. Both issues are discussed in the final EIS. In its review of wedge wire screening, the Commission staff determined that the screening would not provide a discernable advantage. However, we are coordinating with the COE on the development of its permit and understand that the COE may include the use of wedge wire screening as a condition of its permit. As discussed in the final EIS, the discharge of water treated with biocides into Long Island Sound would

20080320-3102 FERC PDF (Unofficial) 03/20/2008

be regulated by the NYSDEC and would be addressed in its permit. Finally, on February 29, 2008, Broadwater filed a response to the NMFS letter in which it agrees to adopt and implement all recommended mitigation measures adopted by NOAA/NMFS during project construction and operation.

Threatened and Endangered Species

73. Potential impacts to federally listed threatened and endangered species were assessed in coordination with the U.S. Fish and Wildlife Service (FWS) and NMFS, and primarily focused on potential increases in the risk of vessel collisions and noise. FWS stated its concurrence with the Commission staff's determination that the proposed marine terminal would not be likely to adversely affect federally listed avian species because the impacts would likely be insignificant or discountable.

74. NMFS identified seven federally listed threatened or endangered species that could occur in the vicinity of the proposed project in Long Island Sound, including four sea turtle species and three whale species. The primary potential impacts to these federally listed threatened and endangered species would be vessel strikes and noise. Broadwater has developed a Vessel Strike Avoidance and Reporting Plan in coordination with NMFS - Protected Resources Division. Staff has recommended that Broadwater continue consultation with NMFS - Protected Resources Division to finalize the vessel strike avoidance measures specific to the proposed project. In addition, Staff has recommended that Broadwater coordinate with NMFS to identify appropriate measures to minimize potential impacts of noise on biological resources during construction and operation. We are adopting the Commission staff's recommendations and find that the project would not be likely to adversely affect any federally or state-listed threatened or endangered species.

Air Quality

75. Air emissions from the FSRU would primarily be generated by burning natural gas to heat the LNG during the vaporization process. All emissions from construction and operation must be in compliance with air quality permits. Because most of the construction-related activities would take place at least four miles offshore, air pollutant emissions would not interfere with, or create a nuisance for, the general public. With implementation of the mitigation and offsets determined by NYSDEC, and adherence to the applicable permit requirements, impacts to air quality during FSRU operation would be negligible but long term, continuing for the life of the project.

76. Emissions would be produced by LNG carriers during transit to and from the FSRU, and by support vessel activity during routine operation of the FSRU. Vessels

20080320-3102 FERC PDF (Unofficial) 03/20/2008

used for routine operation of the FSRU include the LNG carriers, tugs, and supply vessels. Emissions of particulate matter emissions would be less than the applicable threshold. Oxides of nitrogen (NOx) emissions are expected to exceed the applicable threshold, and Broadwater may be required to develop measures to offset these emissions based on consultation with NYSDEC.

77. The Long Island Sound area has been categorized by EPA as "nonattainment" for ozone and particulate matter with a diameter of 2.5 micrometers (PM2.5) or less, which means that additional mitigation may be needed to reduce emissions and offset any impacts of future projects, such as the Broadwater Project. Section 176(c)(1) of the CAA (General Conformity) requires Federal agencies to assure that their actions conform to applicable State implementation plans (SIPs) for achieving and maintaining the National Ambient Air Quality Standards for criteria pollutants. For there to be conformity, a Federal action must not contribute to new violations of standards for ambient air quality, increase the frequency or severity of existing violations, or delay timely attainment of standards in the area of concern (e.g., a State or a smaller air quality region). Broadwater has initiated discussions with NYSDEC regarding General Conformity and the project's emissions that are subject to General Conformity. Project emission data have been submitted to NYSDEC and are being evaluated for incorporation into the SIP emission budget for the relevant ozone SIPs.

78. The General Conformity Analysis for the proposed project indicates that the project would be constructed and would operate in conformance with the New York SIP under the current 1-hour ozone standard, insofar as it applies in the future. Broadwater anticipates that measures undertaken in conformance with the 1-hour ozone SIP will similarly conform under the 8-hour SIP, currently being revised by the NYSDEC. Upon the determinations concerning the SIP budgets, Broadwater will continue to coordinate with the Commission, NYSDEC, and EPA to satisfy the applicable General Conformity requirements. Appendix K of the final EIS contains a preliminary General Conformity Analysis. The Commission will evaluate the magnitude and potential impact of the emissions and determine whether mitigation is necessary.

79. We received a comment letter from the EPA on February 19, 2008 commenting on the Final EIS. EPA stressed that the General Conformity Analysis should be completed and that a draft and final General Conformity Determination must be documented consistent with the requirements of 40 C.F.R. 93.155 and 93.156. The Commission agrees and will document the General Conformity Determination as specified under the rules. EPA noted that in a letter to the NYSDEC, the air modeling boundary was the outside edge of the proposed Coast Guard fixed safety and security zone around the YMS and FSRU and should not include tankers in transit. The modeling analysis to assess overall project impacts as outlined in the Final EIS did, in fact, use the outside edge of

20080320-3102 FERC PDF (Unofficial) 03/20/2008

the proposed Coast Guard fixed safety and security zone as the air modeling boundary and those portions of the emissions within the proposed safety and security zone. For the NYSDEC permit, however, only stationary sources, not mobile emissions, would be considered. Finally, the EPA has two comments regarding the PSD applicability and the State Construction Clean Air Act Permit for the FSRU. Both of these issues are regarding permits that would be issued by the NYSDEC.

80. On March 5, 2008, Mr. Roger D. Flood filed comments expressing concerns regarding the accuracy of maps in the final EIS that depicted state boundaries. Related to this, Mr. Flood questions whether air emissions calculations considered the true impacts on Rhode Island. At issue is not whether the anticipated LNG carrier transit route and moving safety and security zone would pass through Rhode Island state waters, but how often this would occur.[35] Mr. Flood inquires whether LNG carrier routes will be routinely instructed to deviate from the anticipated route in Rhode Island or whether the route should be changed. Alternatively, Mr. Flood suggests that a more formal involvement by the State of Rhode Island in the review process is necessary.

81. First, we believe that the mapping provided in the final EIS is accurate, but acknowledge that the scale of many of the figures may make it difficult to project some of the mapped features into other formats and other scales without losing some precision. The transit route for the LNG carriers was developed by the Coast Guard based on the best conditions for safely moving carriers from the open ocean into Long Island Sound. The transit line depicted on the figures in the final EIS is approximate and some variation would be expected.

82. We clarify that there was never an implied or overt attempt to have the transit route avoid Rhode Island state waters. Consequently, the final EIS specifically recognized the possibility that the carriers will occasionally transit through Rhode Island state waters (e.g., the Letter to the Parties, Project Description (p. 2-38), Land Use (p. 3-130), Transportation (section 3.7.1.1), and Appendix C (pp. 153 and 160)). The impacts of this possible outcome were considered in our review. Importantly, the impact assessment of the final EIS was not dependent on state boundaries.

83. Specifically, the air quality analysis contained within the final EIS was not constrained by state boundaries. As the lead federal agency, the Commission is required

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[35] Mr. Flood suggests that this omission occurred because the offshore limits of state jurisdiction for New York and Rhode Island are incorrectly shown on figures in the final EIS.

20080320-3102 FERC PDF (Unofficial) 03/20/2008

to complete a General Conformity Analysis to ensure that state air quality plans are not impacted by approval of a project. During our review of the project, we made a preliminary determination that LNG carrier transits through Rhode Island state waters would not trigger a General Conformity Analysis for that state. This determination was based on expected emissions rates and the short duration that LNG carriers may occupy the state's waters.

Visual Impacts

84. Based on a visual resource analysis conducted by Broadwater in accordance with NYSDEC's procedures, the project would result in a moderate, long-term impact to visual resources in a limited portion of Long Island Sound and along the associated shorelines. When viewed from the nearest shoreline, the FSRU and a berthed LNG carrier would appear as a small two-dimensional rectangle on the horizon about the size of a small paper clip held at arm's length. The primary visual difference between the FSRU and existing commercial traffic would be its lack of movement.

85. LNG carriers would appear similar to other large commercial vessels in Long Island Sound and would increase overall commercial vessel traffic in the Sound by about one percent. This impact is not expected to change the public value of the viewshed or alter the value of shorefront property or recreation.

86. In summary, the Commission staff determined that, with strict adherence to federal and state permit requirements and regulations, and with implementation of Broadwater's proposed mitigation measures and our recommendations, the proposed project would result in limited adverse impact to the environment.

87. 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 Broadwater Project is environmentally acceptable, if the project is constructed and operated in accordance with the recommended environmental mitigation measures in Appendix B 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 Broadwater Project.

88. Based on the benefits that the Broadwater Project will provide the market and the minimal adverse effects on existing customers, other pipelines and their captive customers, and landowners and surrounding communities, the Commission finds that the public benefits from the project outweigh any adverse effects and approval of the project is required by public convenience and necessity.

20080320-3102 FERC PDF (Unofficial) 03/20/2008

89. 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.[36]

90. At a hearing held on March 20, 2008, the Commission, on its own motion, received and made a part of the record all evidence, including the application and exhibits thereto, submitted in support of the authorization sought herein. Upon consideration of the record,

The Commission orders:

(A) In Docket No. CP06-54-000, Broadwater LNG is hereby authorized under section 3 of the NGA to site, construct, and operate its LNG terminal in Long Island Sound, New York, as more fully described in this order and in the application.

(B) In Docket No. CP06-55-000, a certificate of public convenience and necessity is issued to Broadwater Pipeline under section 7(c) of the NGA authorizing it to construct and operate a 21.7-mile long, 30-inch diameter pipeline and related facilities, as more fully described in the order and in the application.

(C) The certificate authorized in Ordering Paragraph (B) above is conditioned upon Broadwater Pipeline's compliance with all applicable Commission regulations, particularly paragraphs (a), (c), (e) and (f) of section 157.20 of the regulations.

(D) The construction of the proposed facilities shall be completed and made available for service within five years of the date of this order in accordance with section 157.20(b) of the Commission's regulations.

(E) In Docket No. CP06-56-000, a blanket construction certificate is issued to Broadwater Pipeline under Subpart F of Part 157.

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[36] *See, e.g., Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293 (1988); *National Fuel Gas Supply v. Public Service Comm.*, 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).

20080320-3102 FERC PDF (Unofficial) 03/20/2008

(F) Broadwater Pipeline, subject to the requirement in Ordering Paragraph G below, is granted waivers of the applicable portions of Parts 157, 201, 250, 260 and 284 of the Commission's regulations; however, the waiver does not extend to the Commission's annual charge assessment. Broadwater Pipeline is required to file page 520 of Form 2-A, as well as an officer certification of the filing, and to maintain records to separately identify the original cost and related depreciation on its gas pipeline consistent with the Commission's Uniform System of Accounts.

(G) In the event that Broadwater Pipeline receives a *bona fide* request from a shipper for firm open-access services as discussed in the order, it must file within 30 days with the Commission an application for a Part 284 blanket certificate authorizing it to transport natural gas under Part 284 of the Commission's regulations. Any request by Broadwater pipeline for Part 284 authorization must be filed with a pro forma tariff containing the terms and conditions of service and proposed rates.

(H) Broadwater shall comply with the environmental conditions contained in Appendix B to this order.

(I) Broadwater shall notify the Commission's environmental staff by telephone, email, or facsimile of any environmental noncompliance identified by other federal, state, or local agencies on the same day that such agency notifies Broadwater. Broadwater shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

By the Commission. Commissioner Moeller concurring with a separate statement attached.

(S E A L)

Kimberly D. Bose,
Secretary.

20080320-3102 FERC PDF (Unofficial) 03/20/2008

Appendix A

Interventions in Docket Nos. CP06-54-000, CP06-55-000, and CP06-56-000

American Gas Association
Attorney General, State of Connecticut
BP Energy Company
Connecticut Fund for the Environment/Save the Sound
Consolidated Edison Company of New York, Inc.
Coral Energy Resources, L.P.
County of Suffolk, State of New York
Cross-Sound Cable Company, LLC
Department of Environmental Protection, State of Connecticut
Dominion Cove Point LNG, LP
Iroquois Gas Transmission System, L.P.
KeySpan Delivery Companies[37]
Long Island Power Authority and its operating subsidiary, LIPA
Long Island Sound Liquefied Natural Gas Task Force, State of Connecticut
New York State Public Service Commission
PSEG Energy Resources & Trade, LLC
Shell NA LNG LLC
Town of Brookhaven, Long Island, State of New York
Town of East Hampton, State of New York
Town of Huntington, State of New York
Town of Southold, State of New York
Town of Riverhead, State of New York
Weaver's Cove Energy, LLC

Intervention in Docket No. CP06-54-00

New England Local Distribution Companies[38]

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[37] KeySpan Delivery Companies include Brooklyn Union Gas Company d/b/a KeySpan Energy Delivery NY, KeySpan Gas East Corporation d/b/a KeySpan Energy Delivery LI, Boston Gas Company, Colonial Gas Company, EnergyNorth Natural Gas, Inc., Essex Gas Company, KeySpan Energy NY, and KeySpan Energy LI.

[38] New England Local Distribution Companies include Bay State Gas Company, Connecticut Natural Gas Corporation, New England Gas Company, Northern Utilities,

(continued)

20080320-3102 FERC PDF (Unofficial) 03/20/2008

Appendix B

Environmental Conditions for the Broadwater Project

1. Broadwater shall follow the construction procedures and mitigation measures described in their applications, supplemental filings (including responses to staff data requests), and as identified in the EIS unless modified by the Commission's Order. Broadwater 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 the Office of Energy Projects (OEP) **before using that modification.**

2. For 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 allow:
   a. modification of conditions of the Commission's Order; and
   b. 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.

3. For 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. design and implementation of any additional measures deemed necessary to assure continued compliance with the intent of the conditions of the Order.

Inc., City of Norwich, Department of Public Utilities, NSTAR Gas Company, The Southern Connecticut Gas Company, and Yankee Gas Service Company.

20080320-3102 FERC PDF (Unofficial) 03/20/2008

4. **Prior to any construction**, Broadwater shall file an affirmative statement with the Secretary, certified by senior company officials, that all company personnel, environmental inspectors (EIs), and contractor personnel will be informed of the EI's authority and have been or will be trained on 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**, Broadwater 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 the Order. All requests for modifications of environmental conditions of the Order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.

6. Broadwater 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, and other areas that will 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 will 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 route variations recommended in this EIS or minor field realignments that do not affect sensitive environmental areas. 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; and
   c. recommendations by state regulatory authorities;

7. **At least 60 days before the start of construction of all project facilities**, Broadwater shall file initial Implementation Plans with the Secretary, for review and written approval by the Director of OEP, describing how the company will implement the mitigation measures required by the Order. Broadwater must file

20080320-3102 FERC PDF (Unofficial) 03/20/2008

revisions to their respective plans as schedules change. The plans shall identify:

a. how Broadwater shall 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, 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 Broadwater 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 Broadwater's organizations having responsibility for compliance;
f. the procedures (including use of contract penalties) Broadwater will follow if noncompliance occurs; and
g. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:
    i. completion of all required surveys and reports;
    ii. mitigation training of onsite personnel;
    iii. start of construction; and
    iv. start and completion of restoration.

8. Broadwater shall employ an environmental inspector (EI). The EI 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. a full-time position, separate from all other activity inspectors;
    e. 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
    f. responsible for maintaining status reports.

20080320-3102 FERC PDF (Unofficial) 03/20/2008

9. Broadwater 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 shall 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 work in 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 complaints that may relate to compliance with the requirements of the Order, and measures taken to satisfy its concerns; and
   f. copies of any correspondence received by Broadwater from other federal, state, or local permitting agencies concerning instances of noncompliance, and Broadwater's response.

10. Broadwater must receive written authorization from the Director of OEP **before commencing service** of the project. Such authorization will only be granted following a determination that restoration of the seafloor impacts is proceeding satisfactorily.

11. **Within 30 days of placing the authorized and certificated facilities in service**, Broadwater 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 authorization or certificate conditions Broadwater has complied with or will comply with. This statement shall also identify any areas where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.

12. **Prior to installation activities in Long Island Sound**, Broadwater shall conduct appropriate geotechnical investigations and analyses to determine the detailed foundation design requirements and the potential for seismic soil liquefaction

20080320-3102 FERC PDF (Unofficial) 03/20/2008

beneath the proposed YMS. Broadwater shall file with the Secretary of the Commission (Secretary), for review and written approval by the Director of OEP, the survey results quantifying the potential for liquefaction, and identify any mitigation measures/design features necessary to minimize or preclude the potential for damage to the proposed YMS.

13. **Prior to installation activities in Long Island Sound**, Broadwater shall file with the Secretary for review and written approval by the Director of OEP, revised construction plans that include the use of properly configured and maintained mid-line buoys on the anchor cables of all construction vessels that would use anchors during pipeline installation. The plans shall include either the use of mid-line buoys on all anchor cables, including the lay barge or alternatively the use of a dynamically positioned lay barge.

14. If Broadwater determines that subsea plowing cannot be used across Stratford Shoal, Broadwater shall file a contingency plan with the Secretary, for review and written approval by the Director of OEP, that outlines the specific alternative method, potential impacts, and mitigation measures that would be developed in coordination with federal and state agencies to avoid and minimize potential impacts associated with pipeline installation **prior to implementation of an alternative installation method across Stratford Shoal**.

15. If a dredging contingency installation method across Stratford Shoal is proposed, Broadwater shall coordinate with EPA and COE **prior to implementation** to determine a suitable disposal site for dredge spoil if one is warranted.

16. **Prior to installation activities in Long Island Sound**, Broadwater shall file plans with the Secretary, for review and written approval by the Director of OEP, describing methods to mechanically backfill the trench with the excavated spoil material in a manner that successfully results in the excavated material being returned to the trench following installation. The plan shall be developed in coordination with COE, EPA, and NMFS to identify the conditions under which backfilling would be required, the appropriate methods for backfilling, and detailed post-construction monitoring criteria to assess success including use of a multi-beam echosounder system or comparable technology.

17. **Prior to installation activities in Long Island Sound**, Broadwater shall develop and file with the Secretary, for review and written approval by the Director of OEP, a backfilling plan for the 2-mile-long pipeline section closest to the FSRU (MP 0.0 to MP 2.0). The plan shall include the use of native sediment from the spoil piles, as appropriate, to overlay the backfill to minimize the amount of

20080320-3102 FERC PDF (Unofficial) 03/20/2008

sediment conversion that would occur.

18. **Prior to installation activities in Long Island Sound**, Broadwater shall file with the Secretary, for review and written approval by the Director of OEP, an offshore-specific SPCC Plan that includes the estimated volumes associated with a worst-case spill scenario; an appropriate evaluation of the associated potential impacts to water resources and marine life; and appropriate mitigation measures to minimize the likelihood of a spill, as well as measures to contain and clean up a spill if it were to occur during construction or operation.

19. Broadwater shall use a silicon-based anti-fouling paint on the hull of the proposed FSRU and any other structures requiring anti-fouling paint. **Prior to installation activities in Long Island Sound**, Broadwater shall file with the Secretary, a material safety and data sheet of the silicon-based anti-fouling paint to be used.

20. **Prior to installation activities in Long Island Sound**, Broadwater shall coordinate with NMFS to identify appropriate mitigation measures as they relate to Level A harassment and Level B harassment thresholds for construction (especially pile-driving) and operational noise. Broadwater shall file with the Secretary, for review and written approval by the Director of OEP, a written description of the agency-approved noise thresholds, including any appropriate mitigation to avoid and minimize potential impacts during construction and operation.

21. **Prior to final design**, Broadwater shall coordinate with FWS and NMFS to develop a detailed lighting plan that will be protective of avian species, fish species, and marine mammals, and file the plan with the Secretary, for review and written approval by the Director of OEP.

22. Broadwater shall continue consultations with NMFS to develop a final set of whale strike avoidance measures specific to the Broadwater Project. The final version of the plan shall be filed with the Secretary for review and written approval by the Director of OEP **prior to operation**.

23. Broadwater shall conduct pile-driving operations between the December 1 through March 31 period to avoid impacts to sea turtles.

24. **Prior to installation activities in Long Island Sound**, Broadwater shall coordinate with NYSDEC to identify any measures appropriate to avoid and minimize potential impacts to state-listed species.

20080320-3102 FERC PDF (Unofficial) 03/20/2008

25. Broadwater **shall not begin installation activities** in Long Island Sound until the Commission completes any necessary consultations with NMFS, and FWS if necessary, and Broadwater receives written notification from the Director of OEP that construction and/or implementation of conservation measures may begin.

26. **Prior to installation activities in Long Island Sound**, Broadwater shall develop, in consultation with AT&T and the Cross Sound Cable Company, site-specific construction plans that would avoid impacts to the utilities; and file the plans with the Secretary, for review and written approval by the Director of OEP.

27. **Prior to installation activities in Long Island Sound**, Broadwater shall file the final FSRU and YMS color scheme with the Secretary, for review and written approval by the Director of OEP.

28. **Prior to installation activities in Long Island Sound**, Broadwater shall file the NYSDOS determination of the project's consistency with the New York CMP, under the applicable provisions of the CZMA.

29. **Prior to operation**, Broadwater shall file with the Secretary documentation of completion of the final compensation agreements between Broadwater and the commercial fishermen related to fishing grounds within the fixed safety and security zone.

30. **Prior to operation**, Broadwater shall file with the Secretary documentation describing the mechanism for fishermen to file damaged gear claims and receive compensation.

31. **Prior to towing the FSRU and mooring tower into U.S. territorial waters**, Broadwater shall file with the Secretary written documentation that it has coordinated the timing of delivery with the Coast Guard and each of the ferry companies that could be affected by the towing activities.

32. Broadwater shall **defer implementation** of any treatment plans/measures (including archaeological data recovery), construction of facilities, and use of all staging, storage, or temporary work areas and new or to-be-improved access roads **until**:
    a. Broadwater files with the Secretary cultural resources survey and evaluation reports, any necessary treatment plans, and the New York State Historic Preservation Officer's comments on the reports and plans; and
    b. the Director of OEP reviews and approves all cultural resources survey

20080320-3102 FERC PDF (Unofficial) 03/20/2008

reports and plans, and notifies Broadwater in writing that treatment plans/mitigation 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."**

33. Broadwater shall conduct all activities associated with construction of the proposed project outside of the ozone control period (May 15 through September 15), unless otherwise allowed by NYSDEC.

34. Broadwater should submit a plan for review and approval by the Director of the OEP, that indicates the specific procedures it would use to reduce sulfur dioxide emissions generated by the LNG carriers servicing the FSRU.

35. Broadwater shall engage and retain a qualified certifying entity for an independent review of the codes and standards development, detailed design, fabrication, installation, and operation of the proposed FSRU for the life of the facility. **Prior to approval of each phase of project development** as described above, a detailed project management plan shall be filed with the Secretary, for review and written approval of the Director of OEP. At a minimum, this plan shall be in accordance with the Coast Guard Navigation and Inspection Circular 03-05, Guidance for Oversight of Post-Licensing Activities Associated with Development of Deepwater Ports.

36. Broadwater shall maintain classification for the life of the proposed facility, using a member of the International Association of Classification Societies. Use of an alternate classification society other than ABS must be reviewed and approved by the Director of OEP.

The following measures apply to Broadwater FSRU 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 keel laying or any other project-related construction activity; prior to construction of final design; prior to commissioning; or prior to commencement of service, as indicated by each specific condition. Specific engineering, vulnerability, or detailed design information meeting the criteria specified in Order No. 683 (Docket No. RM06-24-000), including security information, shall be submitted as critical energy infrastructure information (CEII) pursuant to 18 CFR 388.112. See Critical Energy

20080320-3102 FERC PDF (Unofficial) 03/20/2008

Infrastructure Information, Order No. 683, 71 Fed. Reg. 58,273 (October 3, 2006), FERC Stats. & Regs. ¶ 31,228 (2006). 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. This information shall be submitted a minimum of 30 days before approval to proceed is required.

37. The piping and instrumentation diagrams (P&IDs) and design information for the FSRU process, utility, and safety systems as reviewed by the certifying entity shall be filed **prior to keel laying or any other project-related construction activity**.

38. Complete plan drawings and a list of the hazard detection equipment shall be filed **prior to keel laying or any other project-related construction activity**. The list shall include 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.

39. Broadwater shall provide a technical review of its proposed facility design that:
    a. identifies all combustion/ventilation air intake equipment and the distances to any possible hydrocarbon release (LNG, flammable refrigerants, flammable liquids, and flammable gases); and
    b. demonstrates that these areas are adequately covered by hazard detection devices and indicates how these devices would isolate or shutdown any combustion equipment whose continued operation could add to or sustain an emergency.

    Broadwater shall file this review **prior to keel laying or any other project-related construction activity.**

40. 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 keel laying or any other project-related construction activity.** The list shall include the equipment tag number, type, size, equipment covered, and automatic and manual remote signals initiating discharge of the units. Plan drawings shall clearly show the planned location of all fixed and wheeled extinguishers.

41. Facility plans showing the proposed location of, and area covered by, each monitor, hydrant, deluge system, hose, and sprinkler, as well as P&IDs, of the fire water system shall be filed **prior to keel laying or any other project-related construction activity**.

20080320-3102 FERC PDF (Unofficial) 03/20/2008

42. A complete equipment list of the process and utility equipment, with process data sheets and design specifications shall be filed **prior to keel laying or any other project-related construction activity**.

43. Manufacturer's data submitted in response to process equipment design specifications shall be filed **prior to keel laying or any other project-related construction activity**.

44. A copy of the hazard design review and list of recommendations that are to be incorporated into the final facility design shall be filed **prior to keel laying or any other project-related construction activity**.

45. Broadwater shall develop an Emergency Response Plan 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 and other public use areas that are within any transient hazard areas along the route of the LNG carrier transit;
    e. procedures for evacuation and rescue of persons on board the FSRU and LNG carriers;
    f. locations of permanent sirens and other warning devices;
    g. an "emergency coordinator" on each LNG carrier to activate sirens and other warning devices;
    h. provisions to address the recommendations contained in Section 6.2 of the WSR;
    i. procedures for off-loading LNG from the FSRU to LNG carrier in the event that the FSRU must be removed from the mooring; and
    j. procedures for pumping down the LNG onboard the FSRU in preparation for severe weather events such as a hurricane.

    The Emergency Response Plan shall be filed with the Secretary, for review and written approval by the Director of OEP, **prior to keel laying or any other project-related construction activity**. Broadwater shall notify Commission staff

20080320-3102 FERC PDF (Unofficial) 03/20/2008

of all planning meetings in advance and shall report progress on the development of its Emergency Response Plan at 3-month intervals.

46. 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 keel laying or any other project-related construction activity**.

47. The **final design** of the fixed and wheeled dry-chemical, fire-extinguishing, and hazard control equipment shall identify manufacturer and model.

48. The **final design** shall specify that the LNG unloading arm isolation valves SDV-101/3/5 be equipped with bypass valves sized for draining the unloading arms into the unloading line.

49. The **final design** shall include thermal relief valves for the unloading arms and piping upstream of the isolation valves.

50. The **final design** shall include boil-off gas flow and temperature measurement from the LNG storage tanks.

51. The **final design** shall include an LNG flow control element upstream of the vaporizer LNG flow control valve, dedicated to vaporizer flow control.

52. The **final design** shall include details of the control system and interlocks that would prevent the LNG flow to the vaporizer from exceeding the heating capacity of the flowing heating medium and prevent the LNG flow control valve from opening without appropriate heating medium flow and temperature conditions being verified.

53. The **final design** shall specify that piping specification change shall occur downstream of the system isolation valve.

54. The **final design** shall specify that, for LNG and natural gas service, branch piping and piping nipples less than 50 millimeters (2 inches) are to be no less than Schedule 160.

20080320-3102 FERC PDF (Unofficial) 03/20/2008

55. The **final design** shall specify that spiral-wound gaskets for LNG and natural gas service are to be equipped with inner and outer stainless steel retaining rings.

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

57. The **final design** shall include details of the shutdown logic, including cause-and-effect matrices for alarms and shutdowns.

58. 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.

59. 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 shut down the appropriate systems.

60. The **final design** shall include a hazard and operability review of the completed design. A copy of the review and a list of the recommendations shall be filed.

61. 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- by 17-inch 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 specification, size, and insulation;
    c. LNG tank pipe penetration size or nozzle schedule;
    d. piping specification 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. numbering of all control valves;
    i. all valve operator types and valve fail position;
    j. instrumentation numbered;
    k. control loops, including software connections;

20080320-3102 FERC PDF (Unofficial) 03/20/2008

l. alarm and shutdown set points;
m. shutdown interlocks;
n. numbering of relief valves, 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. numbering of all manual valves including check, vent, drain, and car sealed valves; and
t. alarm and shutdown set points.

62. The **final design** shall specify that all hazard detection equipment include redundancy, fault detection, and fault alarm monitoring.

63. The **final design** of the FSRU, subject to verification by the Coast Guard, shall include provisions for:
    a. appropriate navigation equipment to assess the potential of a vessel alliding with the FSRU, as well as to monitor the FSRU's position and movement around the mooring tower;
    b. appropriate lights, sound signals, and communications equipment;
    c. a qualified navigation watch, as specified in the WSR, that would consist of three Vessel Traffic Supervisors; and
    d. a pre-rigged emergency towing bridle.

64. The **final design** of the FSRU shall meet or exceed all applicable design and construction standards for LNG carriers trading in the U.S.

65. The **final design** of the FSRU shall include an adequate number of side shell bitts as well as at least two sets of emergency towing equipment.

66. The **final design** shall provide detailed engineering specifications for the appropriate cryogenic material for the spill control system, the slope and sizing of the diversion channels, and the measures that would be used to avoid LNG splashing against the FSRU or LNG carrier hull side.

67. All valves, including drain, vent, main, and car sealed valves, shall be tagged in the field **during construction and prior to commissioning**.

68. The design details and procedures to record and to prevent the tank fill rate from exceeding the maximum fill rate specified by the tank designer shall be filed **prior to commissioning**.

20080320-3102 FERC PDF (Unofficial) 03/20/2008

69. Complete plan drawings and a list of the proposed hand-held fire extinguishers shall be filed **prior to commissioning**. The list shall include the equipment number, type, size, number, and location. Plan drawings shall include the type, size, and number of all hand-held fire extinguishers.

70. Operation and maintenance procedures and manuals, as well as safety procedure manuals, shall be filed **prior to commissioning**.

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

72. Progress on the construction of the FSRU 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**.

The following seven measures shall apply throughout the life of the facility:

73. 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, Broadwater 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 P&IDs 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.

74. The FSRU and YMS shall be subject to regular structural surveys for the life of the facility. These surveys shall include participation of Coast Guard marine inspectors, and shall be conducted in accordance with a plan to be developed by the certifying entity and approved by the Director of OEP. Survey intervals shall not be less than those specified in the API RP2A standard and applicable classification rules.

75. 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); and plant modifications, including future plans and progress thereof. Abnormalities shall

20080320-3102 FERC PDF (Unofficial) 03/20/2008

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 therefor), 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 boil-off 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)" shall be included in the semi-annual operational reports. Such information would provide Commission staff with early notice of anticipated future construction/maintenance projects at the LNG facility.

76. In the event that the temperature of any region of any secondary containment 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.

77. Significant non-scheduled events, including safety-related incidents (such as., LNG or natural gas releases, fires, explosions, mechanical failures, unusual over pressurization, and major injuries) and security-related incidents (such as, attempts to enter the site and suspicious activities) shall be reported to the Commission staff. In the event that 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 the 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, hurricane, or flood, that impairs the serviceability, structural integrity, or reliability of an LNG facility that contains, controls, or processes gas or LNG;

20080320-3102 FERC PDF (Unofficial) 03/20/2008

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 buildup 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 the FSRU or YMS;
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 carriers 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 onsite inspection by Commission staff, and the timing of an initial incident report (normally within 10 days) and follow-up reports.

78. Broadwater shall provide the Commission and the Coast Guard with a report on any structural repairs, modifications, or failures of yoke mooring systems owned or operated by Broadwater, Shell, or TransCanada. This report shall be filed with the Secretary (or in the **semi-annual** operational report) and shall address the applicability of these repairs, modifications, or failures to the YMS provided for the FSRU.

79. Broadwater shall amend its Preliminary Project Security Assessment Overview (PPSAO) to incorporate the recommendations in Sections 5.5.1, 5.5.2, 5.5.3, 5.5.7, 5.5.8, 5.5.9, 5.5.11, 5.5.14, and 5.5.17 of the SSI Supplement to the WSR. In addition, Broadwater shall **annually** review and amend, as necessary, the PPSAO

20080320-3102 FERC PDF (Unofficial) 03/20/2008

and submit it to the Coast Guard Captain of the Port Long Island Sound for review.

The following six measures shall apply to the YMS 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 keel laying or any other project-related construction activity, or prior to construction of final design. This information shall be submitted a minimum of 30 days before approval to proceed is required.

80. **Prior to keel laying or any other project-related construction activity**, a failure modes and effect analysis shall be conducted by a third party to verify that there is not a single point of failure in the design of the YMS.

81. The **final design** of the YMS shall meet or exceed the design and construction requirements in the American Petroleum Institute RP2A standard for high consequence designs for offshore structures that are accepted by MMS upon completion of their review based on Hurricanes Katrina and Rita.

82. The **final design** of the YMS and FSRU shall be capable of withstanding a Category 5 hurricane.

83. The **final design** of the FSRU and YMS shall include measures to prevent the FSRU from being set adrift following a potential failure of the mooring, regardless of the cause of the failure. Proposed measures shall take into account, among other things, adverse wind and sea conditions, potential impacts of mishaps onboard the FSRU (such as fire and collision damage), time of day, proximity to shoal waters, and other vessel traffic in the vicinity. A layered approach for mitigation measures shall be used.

84. The **final design** shall specify, for different weather conditions, how long the mooring tower would be able to accommodate the anticipated range of forces associated with the attached FSRU and a berthed LNG carrier, following an allision with the mooring tower.

85. The **final design** of the yoke mooring tower shall verify that the results of the detailed geotechnical studies are consistent with the preliminary results upon which the load and survivability analysis was based.

In addition, we recommend that the following measure shall apply throughout the life of the facility:

20080320-3102 FERC PDF (Unofficial) 03/20/2008

86. Throughout the life of the facility, Broadwater shall ensure that the FSRU and any LNG vessel transiting to and from the FSRU comply with all requirements set forth by the Coast Guard Captain of the Port which includes all risk mitigation measures as set forth in the WSR.

87. Broadwater shall conduct a study evaluating the costs and feasibility of altering operations or modifying equipment to ensure that the temperature of the natural gas discharged from the FSRU approximates the ambient water temperature of Long Island Sound from May through September. This study and any proposed modifications shall be filed with the Director of the Office of Energy Projects for approval prior to any construction related activities.

20080320-3102 FERC PDF (Unofficial) 03/20/2008

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Broadwater Energy LLC	Docket No. CP06-54-000
Broadwater Pipeline LLC	Docket Nos. CP06-55-000 CP06-56-000

(Issued March 20, 2008)

MOELLER, Commissioner concurring:

I recognize that our decision will upset the citizens, civic groups, and government leaders who are opposed to the Broadwater LNG project. Throughout this review process, I have considered the applicant's proposal from an objective standpoint, without passion, prejudice, or emotion. As such, my vote to permit the construction of this needed energy infrastructure project is based on the law, but also on the facts, environmental studies, and reports that have been submitted into the record.

Residents living on both shores of the Long Island Sound are concerned with the development of a floating LNG platform. Their suspicions are understandable, as the very concept of installing a 1,215-foot long barge in the middle of this scenic estuary is foreign. However, the public should recognize that I carefully considered and evaluated the concerns raised before making the decision to vote for the authorizations to construct and operate these facilities. To those who have not already done so, I would encourage interested persons to review the Commission's Final Environmental Impact Statement that was issued earlier this year. This substantial document thoroughly considered the relevant environmental, scientific, economic, and safety factors associated with this project. Additionally, the Commission's authorization to construct the LNG terminal (and the related pipeline facilities) is not unfettered, as we impose dozens of conditions and compliance measures that Broadwater must meet prior to construction and operation. These requirements help address and seek to eliminate or minimize adverse effects and foreseeable risks to the extent possible.

As many residents of this region are familiar, particularly those on Long Island, the Shoreham Nuclear Power Plant is an unforgettable reminder of how a power project that had great promise ended up failing at significant cost to the ratepayers. This sensitivity is not lost on me. However, we must move forward and recognize that we are at a crossroad where the region's energy future is uncertain without additional infrastructure and fuel sources. The need for new natural gas supplies to satisfy New

20080320-3102 FERC PDF (Unofficial) 03/20/2008

York and Connecticut's growing appetite for energy is real, as there are projections that the demand for natural gas in this metropolitan area is growing at a rate of 2.7% per year (and an astonishing 8% on Long Island). It should also be noted that New York and Connecticut have almost no natural gas production of their own and must rely on imports to satisfy their needs. Weighing these considerations, I believe that the region's need for the natural gas supplies that the Broadwater LNG project can deliver has been demonstrated.

Unlike Shoreham, Broadwater has the potential to become a success story for this region. One only need look at the new wind turbines that have risen in the shadow of the defunct nuclear plant, as well as other successful energy infrastructure projects in the area (*e.g.,* the Cross Sound Cable and the Neptune Line), to recognize that the addition of new energy projects can succeed by delivering the benefits of a greater diversity of supply, increased reliability, and hopefully lower costs to ratepayers and the public. Ultimately, I find that the Broadwater proposal satisfies the legal, regulatory, environmental, and safety criteria as set forth in the Natural Gas Act and the Commission's regulations, and I support today's decision in furtherance of the public's convenience and necessity.

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Philip D. Moeller
Commissioner

Document Content(s)

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