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September 14, 2006

BY ELECTRONIC FILING

Magalie Roman Salas, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Re: *Broadwater Energy LLC*, Docket No. CP06-54-000
Broadwater Pipeline LLC, Docket Nos. CP06-55-000 & CP06-56-000

Dear Ms. Salas:

On August 15, 2006, Broadwater Energy LLC and Broadwater Pipeline LLC (collectively, "Broadwater") filed certain supplemental responses to Cryogenic Information Requests ("CIR"), including a response to CIR 3 issued June 20, 2006. At the request of Commission Staff, Broadwater submits for filing a revised response to CIR 3 which deletes reference to the Alternate Compliance Program.

Please contact the undersigned with any questions regarding this submission.

Respectfully submitted

/s/ Brett A. Snyder

Brett A. Snyder

Enclosures

cc: James Martin, FERC
Terry Turpin, FERC
Cooperating Agencies
ENTRIX, Inc.
Roger Stebbing and Associates

CIR2-3 (Revised Response)

Request:

Specify the process that Broadwater will use in the further development of the design to refine the previously provided general list of rules and codes into specific standards used to design and build the various systems and components of the FSRU. This process must clearly describe the method for determining applicability and relative stringency for each particular standard when multiple standards have been identified. In addition, please specify how the comparison and adoption of standards would be documented and approved by the FERC and/or the U.S. Coast Guard. Finally, the role of the third party in the standards evaluation and approval process must be clearly described.

Response:

The requirements for LNG terminals outlined in 49 CFR 193 (*Liquefied Natural Gas Facilities: Federal Safety Standards*) and NFPA 59A (*Standards for the Production, Storage and Handling of Liquefied Natural Gas*) define many of the facility design requirements for an onshore LNG facility. However, since Broadwater is an offshore floating facility these standards are not applicable in their entirety. Please refer to Section 13.14 (Regulatory Compliance) of Broadwater's application, which provides a matrix of the standards defined in 49 CFR 193 and NFPA 59A, and assesses their relative applicability to the FSRU. (See also Section 13.12 [Design Codes and Standards] of Broadwater's application, and Appendix 13.12 for a general discussion of design codes and standards.)

The Broadwater project is, in material respects, similar to the types of facilities that are considered under the Deepwater Port Act. Given this similarity, Broadwater believes that processes for review and approval of design standards developed under the framework of the Deepwater Port Act are appropriate for development of finalized codes and standards for the Broadwater Project. This framework and the proposed process for review and approval of design standards related to the Project are discussed below.

1.0 Navigation and Vessel Inspection Circular No. 03-05

A framework for the design of Deepwater Ports is defined under Navigation and Vessel Inspection Circular (NVIC) 03-05 (*Guidance for Oversight of Post-Licensing Activities Associated with Development of Deepwater Ports [DWPs]*), a copy of which was filed with FERC in Broadwater's August 15, 2006 submission. NVIC 03-05 provides guidance related to design, plan review, fabrication, installation, inspection, and maintenance. It recognizes acceptable design guides and industry standards and establishes procedures for selection of an entity to act on behalf of the agency to assist in the review and acceptance of the design basis. (NVIC 03-05, page 1). Because of the range of design variation among proposed Deepwater Ports, the NVIC does not identify a

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specific regulatory regime that incorporates all the individual standards (U.S. and International) that could be applied. Instead, it determines that the rules and guides published by the recognized classification societies provide a sufficient framework for design, fabrication, installation and maintenance to ensure safe designs and operations. (NVIC 03-05, Section 4(i))

The USCG, in its June 30, 2006 letter to Broadwater, notes that the framework provided by NVIC-03-05 can be useful for projects with similarities to a Deepwater Port, such as the Broadwater Project, and favorably endorsed utilization of the guidance provided by the Circular in connection with the Broadwater Project.

2.0 Use of a Classification Society as a Certifying Entity

As noted above, NVIC 03-05, specifically Section 5(h), endorses the use of classification societies to provide design guidance:

Guides for offshore LNG terminals developed by recognized classification societies such as the American Bureau of Shipping (ABS), Det Norske Veritas (DNV) and Lloyd's Register (LR) provide adequate guidance for safe design and may be utilized as the basis for an overall design of a DWP. Though the Coast Guard expects most will choose to apply guidelines or rules developed by a recognized class society, each applicant is free to identify and propose the industry recognized standards they feel are most applicable to their particular design. Deepwater ports certified to be designed, fabricated, installed and maintained to class guidelines will be recognized as meeting compliance with this part. (emphasis added)

Consistent with this guidance, by letter dated June 13, 2006, Broadwater nominated the American Bureau of Shipping (ABS) as the Certifying Entity to act on the Coast Guard's behalf in performing reviews associated with the Broadwater Project. The USCG responded to Broadwater by letter dated June 30, 2006 that the FERC will be the agency to finalize the evaluation and acceptance as ABS as the Certifying Entity for the project. Accordingly, Broadwater seeks the FERC's confirmation and acceptance of ABS as the Certifying Entity for the Project.

3.0 Design Standards

Assuming that the guidance provided in NVIC 03-05 and the appointment of ABS as the Certifying Entity are both acceptable to FERC, the appropriate reference document to guide the selection of design standards for Broadwater is ABS' *Guide for Building and Classing Offshore LNG Terminals*, April 2004 (ABS 2004 *Guide*). A copy of the ABS 2004 *Guide* was filed with FERC in Broadwater's August 15, 2006 submission. Chapter 3, Section 2 (Design of Floating LNG Terminals) of the ABS 2004 *Guide*

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provides specific requirements for the design of a floating offshore facility such as Broadwater.

The ABS 2004 *Guide* describes the plans and data to be submitted, and a list of areas considered within the ABS Guide. Within the ABS 2004 *Guide* the component parts of the FSRU and YMS can be identified. Using this as a starting point, the appropriate part(s) of the rules and guides applicable to the main components are defined.

Table 1 shows some of the key references as outlined in the ABS 2004 *Guide*.

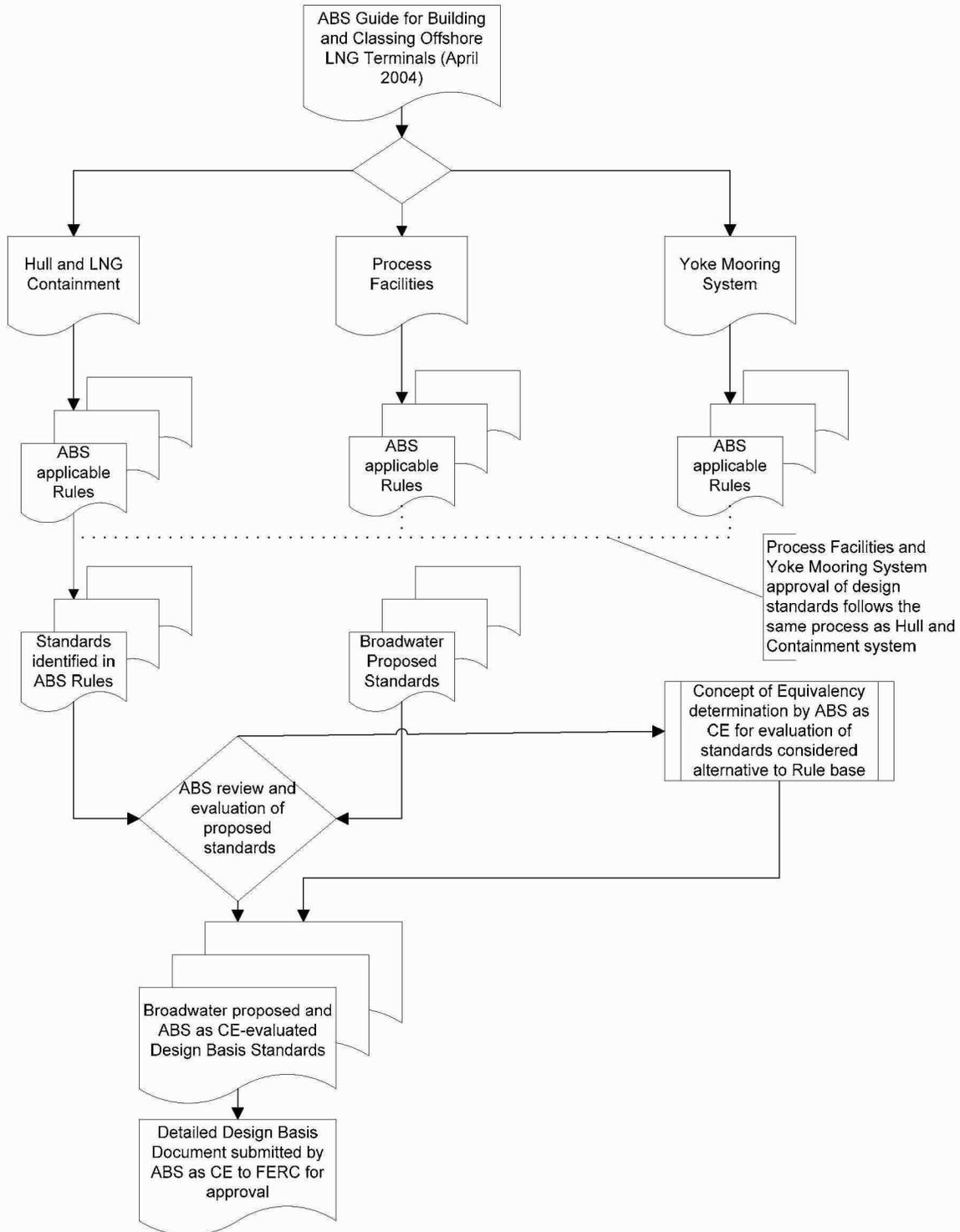
Table 1 – Key ABS Guiding References for Broadwater Facility Design

Major Component	Key ABS References
Hull and Containment System	<ul style="list-style-type: none"> •• Rules for Building and Classing Steel Vessels (2006) •• Guide for Building and Classing Floating Production Installations (2004) - Chapter 3 •• Guide for Building and Classing Membrane Tank LNG Vessels (2002)
Process Facilities	<ul style="list-style-type: none"> •• Guide for Building and Classing Facilities on Offshore Installations (2000)
Yoke Mooring System	<ul style="list-style-type: none"> •• Guide for Building and Classing Floating Production Installations (2004) - Chapter 5 •• Rules for Building and Classing Single Point Moorings (1996)

The references provided above are illustrative of some of the major references only, and are not intended to be indicative of the complete scope of review. A complete summary will be included in the Detailed Design Basis Document, which is discussed below. Figure 1 provides a flowchart which describes the review process. In Figure 1, the references to “ABS applicable Rules” would specifically include the documents referenced in Table 1 above as key sources of guidance.

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Figure 1 - Codes and Standards Review Process





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4.0 Process for Review and Approval of Design Standards

The process for the review and approval of design standards will follow the process contemplated in Enclosure (1) to NVIC 03-05 (*Deepwater Port Guidance – Design Phase*).

4.1 Detailed Design Basis Document

Broadwater will submit a Detailed Design Basis Document to the Certifying Entity for evaluation and submission to FERC (LNG Technical Branch) and the Coast Guard (Marine Safety Center). The design basis document will identify all baseline design standards, regulations, rules and/codes used to design each structure, system or component associated with the construction of the FSRU, and will include the recommendations of the Certifying Entity. Key parameters used in the design will be identified.

It is recognized that, due to the features of the Broadwater FSRU, there may be certain instances where there may be overlapping standards. Initial consultation would be to the ABS Rules as a guideline. In those instances where the design deviates from ABS Rules, a demonstration of equivalency would be undertaken, consistent with the framework provided in *ABS Guide for Risk Evaluations for the Classification of Marine-Related Facilities* (June 2003) (*ABS Risk Guide*).

Typically an equivalence process is a comparative evaluation, by means of a risk analysis, of the proposed design standard compared to an established Rule or Guide. The proposed equivalent standard must explicitly consider personnel safety, property protection and environmental protection. A proposed design can be approved for classification if it is shown that even though some prescriptive requirements are not strictly complied with, all the goals and objectives of those affected requirements are being met by the proposed design.

Figure 2, taken from the *ABS Risk Guide*, presents the risk evaluation process that would be utilized.

Requests for equivalency, exemptions, use of alternate design standards and deviation from design standards prescribed by regulation will be documented in the Detailed Design Basis Document for review by the Certifying Entity and reviewing agencies.

4.2 Review of Design Basis Document by Certifying Entity

Upon receipt of the Detailed Design Basis Document, the Certifying Entity will review Broadwater's submission and provide recommendations to FERC and Coast Guard concerning acceptance, rejection or modification of the subject document. FERC, as the



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lead agency, would inform Broadwater of the status of the review. Figure 1, discussed previously, provides a graphical depiction of the overall review process.

4.3 Report of Certifying Entity to FERC and USCG

The Certifying Entity will prepare a report to FERC and the Coast Guard summarizing the scope of review and providing recommendations with respect to the proposed design. Consistent with the direction of NVIC 03-05, the Certifying Entity will consider and use good engineering practice in conducting an independent assessment of the adequacy of hazard and reliability studies, structural components, safety systems, process and regasification equipment, hazardous area classifications, general arrangements, structural fire protection, gas and fire detection systems, fire fighting equipment, and other areas specifically requested to be reviewed by the LNG Technical Branch and the Marine Safety Center.

4.4 Review and Approval Process

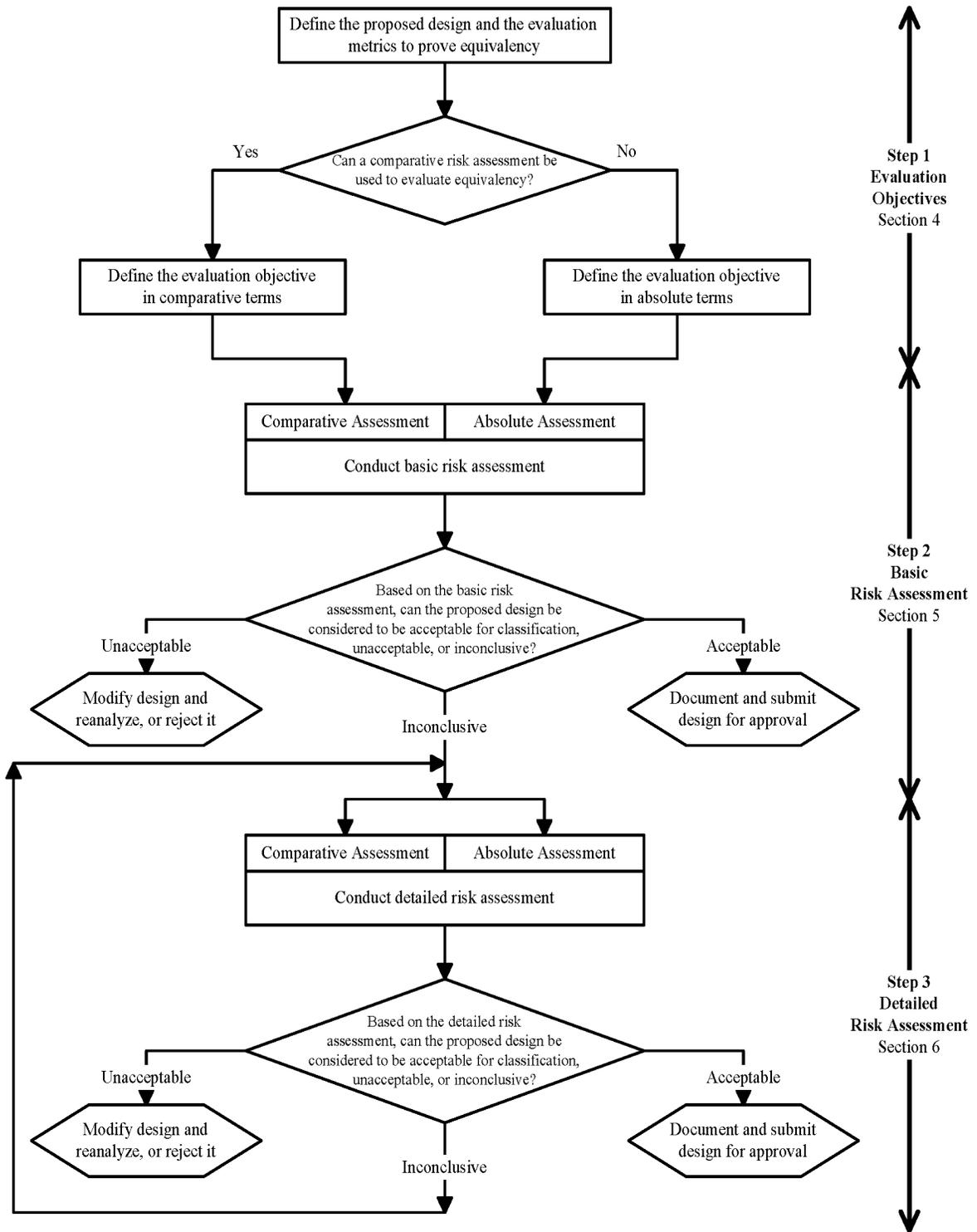
The Detailed Design Basis Document and the report and recommendations of the Certifying Entity will be submitted to the FERC LNG Technical Branch and the Coast Guard's Marine Safety Center.

The Marine Safety Center will review this documentation and submit its comments and recommendations to the LNG Technical Branch. The LNG Technical Branch will then review and approve Broadwater's Detailed Design Basis Document based upon: (1) the recommendations of the Certifying Entity, (2) comments provided by the Marine Safety Center, and (3) comments provided by the LNG Technical Branch, based upon its own review of the relevant sections of specific interest to FERC.

4.5 Review Schedule

In order to ensure timely review of the facility design, Broadwater anticipates that discussion with FERC and the Coast Guard (through ABS) on the development of the Detailed Design Basis Document will be ongoing prior to the receipt of all federal and state approvals, including the FERC certificate. However, as the NVIC 03-05 contemplates the submission and review of the Detailed Design Basis Document as a post-licensing activity, Broadwater expects that the review process described above would be completed after receipt of a FERC certificate. Broadwater would anticipate initial submission of the Detailed Design Basis Document by June, 2007.

Figure 2 – Risk Evaluation Process





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Additional Regulatory Oversight

NVIC 03-05 contains additional guidance for regulatory oversight for the fabrication, installation and maintenance and inspection phases for a Deepwater Port project. Broadwater is of the view that this guidance provides a reasonable framework to assist further regulatory oversight of the development of the Broadwater project. Broadwater is prepared to have further discussions with FERC and Coast Guard personnel to ascertain whether extension of this framework would be useful to both federal agencies to ensure delivery of a safe, secure and environmentally sensitive project.

Name: William Gray
Position: FSRU Technical Manager
Telephone No: 713-241-8937

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the service list compiled by the Secretary in this proceeding in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure.

Dated at Washington, D.C. this 14th day of September 2006.

/s/ Brett A. Snyder

Brett A. Snyder

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