

Peer Review Plan

Date: January 17, 2017

BSEE Funding Source or Author's Division: Office of Offshore Regulatory Programs

Risk Assessment and Analysis Branch

45600 Woodland Road Sterling, VA 20166

Title: Evaluation of Pressure Rating Methods Recommended by API 17TR8

Subject and Purpose: The subject is High Pressure and High Temperature rating and qualification methods including modeling, testing, and design basis. BSEE's Office of Offshore Regulatory Programs is the responsible program manager for permit policy oversight and for regulations and standards development for offshore oil and gas facilities. Current regulations require that operators of these offshore oil and gas facilities submit detailed information that demonstrates equipment are able to perform in the applicable High Pressure and High Temperature (HPHT) environment in their permits for applications to drill, applications for permit to modify, and deepwater operations plans (30 CFR 250.804).

Whereas more submissions to BSEE show the need for HPHT applications, BSEE has a need to determine whether or not operators' submissions are acceptable based upon proper modeling, safety factors, correct application of standards, and whether appropriate design bases have been applied. BSEE awarded a contract in 2014 to fill this information need.

Impact of Dissemination: This information product is considered by BSEE to be Highly Influential Scientific Information. The findings of this study may have a direct bearing on the methods, standards, and materials for high pressure and high temperature equipment in offshore oil and gas applications. Results may suggest the need for revisions of one or more standards and affect how BSEE and the offshore oil and gas industry interpret those standards. These decisions are important for new projects in deeper waters offshore.

Timing of Review: February 2017 – July 2017 (A review period of 3 months and a total peer review process of not more than 5 months is desired for this project so as not to delay

costly design decisions for important high volume offshore oil and gas development projects.)

Manner of Review, Selection of Reviewers, and Nomination Process: through contract BAA/BPA Process. The selected peer reviewers shall achieve an optimum level of expertise across the spectrum of issues, balance and independence while minimizing any potential conflicts of interest. Primary criteria for peer reviewers include the following:

- Practical experience with design of offshore equipment in high pressure and high temperature environments
- Practical experience in applying API 17 TR8 and ASME Pressure Vessel Codes Section VII, Division 2 and Division 3, and API Specification 6A in the design, modeling, and/or testing of high pressure and high temperature equipment

The secondary tier of criteria should include the following: no more than 2 persons from the oil and gas industry and at least one from outside of the oil and gas industry.

Reviewers may be selected from Academia, Industry, and Federal Government. The group of reviewers shall not include multiple reviewers from the same affiliation, and shall strive to include various perspectives on the issue considered.

Expected Number of Reviewers: Three reviewers plus contractor oversight and writing personnel.

Requisite Expertise:

- Practical experience with design of offshore equipment in high pressure and high temperature environments.
- Practical experience in applying API 17 TR8 and ASME Pressure Vessel Codes Section VII, Division 2 and Division 3, and API Specification 6A in the design, modeling, and/or testing of high pressure and high temperature equipment.

Opportunity for Public Comment: The report is available on BSEE's website here: https://www.bsee.gov/site-page/technical-evaluations-and-reports via the link titled "High Pressure/High Temperature Research." BSEE welcomes public comment, especially from those with particular experience with high pressure, high temperature topics.

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