



Peer Review Plan

Date: October 31, 2023

BSEE Funding Source or Author's Division: Office of Offshore Regulatory Programs
Emerging Technologies Branch
45600 Woodland Road
Sterling, VA 20166

Title: Evaluation of Technology Assessment Program (TAP) 729 - CRANE SAFETY ASSESSMENT FINDINGS, RESULTS, AND RECOMMENDATIONS

Subject and Purpose: The subject of this study is to peer review report “CRANE SAFETY ASSESSMENT FINDINGS, RESULTS, AND RECOMMENDATIONS.” This Peer Review aims to verify the scientific and technical merit of the assumptions, inputs, methodologies, and results for the BSEE study entitled, “CRANE SAFETY ASSESSMENT FINDINGS, RESULTS, AND RECOMMENDATIONS.”

This peer review focuses on developing an inspection methodology that may be used by BSEE and USCG personnel in performing an assessment regarding the safety of cranes and material handling equipment. The study was performed on behalf of the US Department of the Interior, Bureau of Safety and Environmental Enforcement (BSEE), by ABSG Consulting, Inc.

The study area includes the population and attributes of cranes and material handling equipment operating on the outer continental shelf (OCS). Crane Operators and service providers contributed information on the age, type, and population of cranes. BSEE and USCG provided Government Furnished Information (GFI) such as lifting PINCs, records of OCS lifting incidents, and records of crane population.

Following the collection of information, the study team performed a statistical analysis on the population of cranes and material handling equipment operating on the OCS. The incident data supplied by BSEE through GFI was analyzed to identify failure event data, trends and key issues that could be addressed in the development of an improved offshore crane and material handling equipment inspection program. The study team reviewed the lifting PINCs and provided recommendations for improvement and consideration. Lifting standards, inspection methodologies and strategies were analyzed to identify best practices and provide recommendations for BSEE's consideration in the incorporation of these practices into an inspection strategy. BSEE stakeholders were consulted and engaged throughout the analysis phase of the study and provided interim feedback on the analysis results. The study team evaluated the findings of the incident analysis and applied their understanding of lifting standards and methodologies to develop interim recommendations.”

Impact of Dissemination: BSEE considers the “CRANE SAFETY ASSESSMENT FINDINGS, RESULTS, AND RECOMMENDATIONS.” Comprised of influential technical data and analyses information. The study findings may suggest the future inspection strategy move away from a prescriptive methodology, like BSEE's philosophy of regulatory compliance, towards ensuring operators create and comply with a robust Safety and Environmental Management System (SEMS)

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tailored for each facility.

Upon conclusion of the peer review, BSEE will post all possible contracted deliverables, tasks, data, analyses, and information, including the peer-review reporting, reports, and comments on BSEE's research records website: <https://www.bsee.gov/research-record>.

Timing of Review: October 2022 – January 2024 (Total peer review process of not more than 16 months is desired for this project.)

Manner of Review, Selection of Reviewers, and Nomination Process:

This peer review shall be conducted through the contract BSEE BPA Process. This process will provide for a panel of qualified subject matter experts (SMEs) selected by the agency in order to achieve an optimum level of expertise across the spectrum of issues. The SMEs will be required to maintain both balance and independence while minimizing any potential conflicts of interest. The public will not be consulted in the nomination of potential peer reviewers.

Primary criteria for peer reviewers include the following:

- Offshore oil and gas operations related to construction, installation, operation, testing maintenance, material handling, and inspection of cranes
- Offshore pedestal-mounted cranes
- Areas you deem your company has energy-related expertise
- Risk identification, assessment communication, and mitigation
- Evaluation of best practices, industry standards, and applications

The secondary tier of criteria should include the following:

- No more than two persons from the oil and gas industry
- 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:

- Subject Matter Experts with five years of experience in a relevant field and should also have some other strong credentials, e.g., a Ph.D. with a substantial publication or patent record specific to the evaluated technology, a young investigator award, or a strong pedigree (e.g., a Ph.D. from a high caliber institution or under a recognized leader in the field).
- Publications and Patents. Qualified experts often have many peer-reviewed journals and/or patents on the evaluated technology.
- Other evidence is that the person is a recognized expert in the field. Qualified experts have often managed a public policy program that has had a national impact, has a record of bringing innovations to the market or holds vital patents.

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- In a relevant field, an advanced degree - Ph.D., Sc.D., D.Eng., MS, or MBA. Experts with only a bachelor's degree should have other experience and or a record of significant accomplishments indicating their expertise.
- Relevant awards. Qualified experts may have received a prestigious award such as the National Medal of Science, American Chemical Society National Award, Young Investigator Award, R&D 100 Award, or other awards specific to technology (e.g., Fuel Cell Seminar Award).
- Key Society Membership. Qualified experts may be members of a society like the National Academy of Sciences (NAS), the National Academy of Engineering (NAE), the American Physics Society, a National Laboratory Fellow, etc.

Opportunity for Public Comment:

At the time of this peer review plan's posting, the research report will be available on BSEE's Peer Review Public Posting website located here: <https://www.bsee.gov/what-we-do/research/peer-review>. BSEE welcomes public comment, especially from those with experience with tension leg platforms. BSEE invites the public to comment within the 30-day window indicated on the website through the process described below, which is consistent with the guidance on the website:

- For comments pertaining to this peer review plan, send emails to:
bsee_peerreviewplancomments@bsee.gov
- For comments pertaining to the research, send emails to:
bsee_researchpubliccomment@bsee.gov

In the subject line list of a public comment email, please state: "TAP 729 - CRANE SAFETY ASSESSMENT FINDINGS, RESULTS, AND RECOMMENDATIONS" + the words "peer review plan" or "research" + the words "public comment."

- List out any comments, questions, feedback by number (ex. 1, 2, 3, etc.)
- If referencing any sources of published information, please list the complete source information in a recognized reference format (such as APA)
- Please include your name, contact information, and affiliation

The agency will provide public comments deemed significant and relevant to the peer reviewers to address during their review.

Agency Contact: Marvin Montgomery

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