



THE PEER REVIEW PLAN THAT FOLLOWS FOR THE “RENEWABLE ENERGY FIRE PROTECTION SYSTEMS STUDY” HAS BEEN UPDATED FROM PRIOR VERSIONS PREVIOUSLY ACCESSIBLE ON THIS WEBSITE, TO REMOVE IMPROPER REFERENCES TO A DIFFERENT RESEARCH STUDY, AND TO FURTHER EXPLAIN THE PEER REVIEW PROCESS THAT IS USED BY BSEE.



Peer Review Plan

Date: October, 2022

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 (TAP) Project 799.

Subject and Purpose: The subject of this study is “PEER REVIEW OF THE RENEWABLE ENERGY FIRE PROTECTION SYSTEMS STUDY”. This peer review aims to verify the scientific and technical merit of the assumptions, inputs, methodologies, and results. This study evaluated the available options and performance of both passive and active fire protection and fire suppression systems.

The study was designed to provide an understanding of fire systems equipment, interactions, applications, applicable design criteria, and effectivity of their use in the offshore wind energy industry; to include fuel source and electrical fires. The study also assessed current industry standards, practices, guidelines, and/or regulations (global) related to fire safety systems use and testing (qualification). Understanding of available systems and their functionality will provide DOI the necessary information when inspecting and reviewing facility plans, which will help ensure safe operations and protect the environment. This peer review will evaluate and assess the TAP 799 project results.

Impact of Dissemination: This study is considered by BSEE to be influential scientific information. The study provides a foundation for U.S. offshore wind industry to adopt standardized fire protection practices, addressing safety risks and advanced monitoring technologies. The findings provide BSEE with critical insights and recommendations to develop offshore renewable energy fire protection standards and regulations, enhancing safety, environmental stewardship, and resource conservation.

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: September 2022 – May 2023 (Total peer review process of not more than 8 months is desired for this project.)

Disclaimer: The content of this peer review plan has been verified in compliance with the peer review handbook. For peer review contracts executed prior to peer review plan release, there may be differences in language used between the peer review plan and the executed contract.



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:

- Mechanical Engineering, Electrical Engineering, Fire Protection Expertise.
- Practical experience and knowledge specific to Industrial Safety, Utility Grade Power Generation, Wind Energy Generation, Offshore Energy Production.

The secondary tier of criteria should include the following:

- At least one from inside of the wind industry
- At least one from outside of the wind 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.
- 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.

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- 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 subsea bolts. 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 799 RENEWABLE ENERGY FIRE PROTECTION + 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: Meridith Potts

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