

**Bureau of Safety and Environmental Enforcement  
Interim Policy Document**

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**Series:** Offshore Regulatory Programs

**Title:** Approval of New, Unproven, and Innovative Technologies

**Originating Office:** Offshore Regulatory Programs

**1. Purpose:** This document establishes guidance for the review and approval of systems, projects, or operations that are considered higher risk activities due to the use of unproven technology, location in sensitive environmental locations such as Alaska, or their potential impact on the offshore safety and the environment.

**2. Policy/Action:**

The success or failure of activities involving “unproven” or “cutting edge” technologies, projects, or operations can have a direct impact on offshore safety and the Bureau’s effectiveness. These activities and projects should not be approved until a comprehensive review and assessment has been completed.

This IPD is focused on proposed activities which pose an inherently greater risk to life and the environment. The greater risk may derive from the adverse performance history associated with the operator, unique environmental concerns, or unusually complex activity. “Unproven or cutting edge” technologies include those using new and innovative technologies to explore and develop resources. These projects often utilize technology for which there are no recognized industry standards or best practices or involve high temperature or high pressure environments. Many such technologies have never been field tested and therefore, require greater scrutiny and discussion within BSEE to ensure that mitigation measures are in place.

The comprehensive review and assessment process used by BSEE personnel should ensure that all decisions are made based on data and sound engineering analysis using all of the resources that are available to the Bureau. The process should ensure that: (1) all the risks are properly identified, assessed, and mitigated to an acceptable level based on data, (2) the use of technical resources available within BSEE, other Federal agencies, and from third party consultants are used to the maximum extent practicable, and (3) that decisions are fully vetted, documented, and communicated to BSEE senior leadership in the Office of the Director before any final approvals are issued. To ensure that this occurs, the following guidelines should be utilized:

- A. Unproven or cutting edge technologies projects or operations should not be approved until sufficient data is available to fully assess the risk and that potential risks have been mitigated to a level that is consistent with good engineering practices. When feasible, third party expertise will be utilized to supplement the

BSEE review in the identification of data gaps, analysis of the data submission, and performance of overall risk assessments. When practicable, “phased approvals” should be utilized. BSEE should concurrently assess the operator’s capacity to successfully carry out the project in light of their demonstrated performance history.

B. The burden is on the operator to clearly demonstrate the safety of the technology or operations and to provide sufficient data to BSEE. The operator is solely responsible for:

- a. Establishing that, to the satisfaction of BSEE, the proposed design or operations is based on the use of safe and reliable technology, and that potential risks have been identified and mitigated
- b. Providing all data, including test and research results, needed to clearly demonstrate to BSEE that the technology or project will work safely and reliability as designed and is consistent with good engineering practices.
- c. Responding to BSEE data requests in a timely manner and providing access to any testing or operational facilities or
- d. Ensuring that BSEE is engaged early in the process to allow a comprehensive assessment of the proposed project, operation, or technology.
- e. Providing the agency with an opportunity to witness critical points in the design verification or fabrication process.
- f. Providing any third party certifications deemed necessary by BSEE to demonstrate safe and reliable performance.
- g. Identifying key decision points

C. In order to ensure that all available internal and external resources are available to assist in the review process, the Chief, OORP should be notified as soon as it appears likely that the use of a specific “cutting edge” technology will be proposed for use in the near future. The Chief, OORP will be responsible for working closely with regional personnel to ensure that necessary expertise, research, and contractor support within the agency is fully engaged in the assessment process.

D. In order to ensure that BSEE satisfies its obligations related to safety, a more active oversight role by BSEE in the design verification and fabrication stage for new technologies may be warranted. Discussions with the operators should be initiated early in the process to identify key decision/witnessing points.

E. For any activities covered by this IPD, the BSEE assessment of risk, technical evaluation, and any decisions or recommendations along with supporting data should be clearly documented and included in a technical administrative record that is provided to senior management.

F. The final approvals to allow an operator to proceed with higher risk activities or projects using cutting edge technologies should not be granted until senior

management in the office of the Director has received a comprehensive briefing of the technology and an assessment of the risks. The Director (or designee) should receive timely updates throughout the process.

3. **Expiration:** This IPD remains valid until superseded.

4. **Contact:** Chief, Office of Offshore Regulatory Programs. (202) 208-3974

4 AUG 2015

Date

A handwritten signature in black ink, appearing to read "C. J. Salas", written over a horizontal line.