



TECHNOLOGY ASSESSMENT & RESEARCH

The Bureau of Safety and Environmental Enforcement (BSEE) works to promote safety, protect the environment, and conserve resources offshore through vigorous regulatory oversight and enforcement. The bureau develops standards and regulations to enhance operational safety and environmental protection in connection with the exploration and development of offshore oil and natural gas on the U.S. Outer Continental Shelf (OCS). The responsibilities of the bureau include permitting, inspections, offshore regulatory programs, oil spill response, and newly formed training and environmental compliance functions. BSEE's Technology Assessment & Research (TA&R) program supports research regarding operational safety and pollution prevention related to offshore oil and natural gas and renewable energy exploration and development, and is an important part of BSEE's safety program.

TA&R's primary objectives include:

- **Technology Assessment:** Investigating and assessing industry applications of technological innovations to enable the bureau to promote the use of Best Available and Safest Technologies through regulations, rules and operational guidelines.
- **Research Catalyst:** Promoting leadership in the fields of operational safety and pollution prevention associated with offshore energy development activities.
- **Technical Support:** Providing technical engineering support to the bureau's decision makers in evaluating industry operational proposals and related technical issues, and ensuring that these proposals comply with all applicable regulations, rules, operational guidelines and standards.
- **International Regulatory Cooperation:** Providing support for international research and development initiatives to enhance the safety of offshore energy development activities and the development of appropriate regulatory program elements worldwide.

These objectives are met through the program's functional research areas:

Operational Safety and Engineering Research (OSER) activities focus on the development of new concepts, operational procedures, production facilities and transportation facilities to meet the physical and economic challenges imposed by the operating environments associated with water depths between 3,000 to 10,000 feet. Other activities examine the means to address the problematic aging of platforms and pipelines, and to determine the most feasible and effective methods of decommissioning and removing these facilities, as well as the possible effects on the marine and coastal environments arising from regulatory decisions.

The **Renewable Energy Research (REnR)** program addresses technology and engineering issues associated with renewable energy projects in the OCS. These activities must accommodate the *Energy Policy Act of 2005* requirement that any activity be carried out in a manner that provides for safety of operations and protection of the environment.

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