On April 29, 2016, the Department of the Interior's Bureau of Safety and Environmental Enforcement (BSEE) released final regulations concerning blowout preventer systems and well control for oil and gas operations on the U.S. outer continental shelf (81 Fed. Reg. 25887). The regulations aim to reduce the risk of an offshore oil or gas blowout that could jeopardize human safety and harm the environment.

The regulations draw on findings about the causes of the 2010 Deepwater Horizon oil spill in the Gulf of Mexico. Building on previous regulatory reforms implemented after the 2010 spill, the well-control rule contains new requirements for the design, manufacture, repair, maintenance, and testing of offshore well-control equipment, particularly blowout preventers (BOPs), the assemblies of specialized valves installed on a well that are designed to close in the event of an uncontrolled release of oil or gas. A BSEE fact sheet summarizes the rule's requirements.

BSEE released a proposed rule in April 2015 and received more than 175 comments expressing mixed perspectives on the rule. Industry commenters such as the American Petroleum Institute (API), as well as some Members of Congress, stated that the rule was overly prescriptive and could have unintended consequences that would impede rather than enhance safety. Additionally, industry representatives criticized BSEE's initial cost estimate for the rule, which projected considerably lower costs of implementation ($883 million over 10 years) than were projected by an industry study ($32 billion over 10 years). Almost all of the rule's implementation costs would be borne by industry. By contrast, environmental organizations expressed support for many aspects of the proposed rule but asserted that it did not provide enough assurance of offshore drilling safety.

BSEE's final rule reflects changes that the agency made based on some feedback on the proposed rule. The agency elected not to make other suggested changes, as described in Section VI of the final rule. BSEE's revised cost estimate for the final rule shows an implementation cost of $890 million over 10 years. The agency rejected some of the cost assumptions of industry commenters, as discussed in Section VI(B)(6) of the final rule.

The final rule modifies regulatory provisions related to the following issues. (Other BSEE revisions are discussed in Sections V(B)(5), V(B)(6), and 5(C) of the final rule.)
Drilling Margins

The proposed rule contained requirements for the *drilling margin* that operators must maintain to ensure that the pressure exerted by drilling fluids does not fracture the formation. The rule defined a safe drilling margin as 0.5 pounds per gallon (ppg) between the weight of drilling fluids and the amount of pressure a formation can withstand before fracturing. The API and other industry commenters asserted that this definition was arbitrary and economically infeasible. The API cited assessments showing that many safely drilled wells used margins that would violate the new criteria. Environmental organizations did not directly comment on the provisions for drilling margins. For the final rule, BSEE kept 0.5 ppg as a default requirement but allowed an alternative drilling margin if the operator submits adequate justification and documentation.

Accumulator Systems

The proposed rule contained expanded capacity requirements for BOP *accumulators*, which store pressurized hydraulic fluid and provide the energy to operate a BOP independent of another power source. Industry commenters stated that the requirements would necessitate larger and heavier BOP assemblies, which could cause structural problems. Environmental advocacy organizations did not directly comment on the provisions. In the final rule, BSEE deleted its accumulator volume requirement and instead required that accumulator systems meet the volume specifications of an *existing industry standard*. The final rule also extended the compliance date for the accumulator requirements and made other changes as described in Section V(B)(2) of the final rule.

Inspection Frequency

The proposed rule required a complete, third-party-approved breakdown and inspection of a BOP and its associated components once every five years. Environmental organizations expressed support for this requirement, but industry raised concerns that the comprehensive inspections would put rigs out of service, with negative economic impacts. BSEE revised the final rule to allow staggered inspections of different BOP components, as long as each component is inspected once every five years.

Real-Time Monitoring

The proposed rule required real-time monitoring of offshore drilling operations by technical experts onshore. Industry commenters contended that these requirements would undermine the situational awareness and rapid decisionmaking of the offshore personnel. Environmental advocacy groups supported the real-time monitoring requirements but requested a shorter compliance timeline. A National Academy of Sciences report recommended a performance-based approach. BSEE revised the final rule to provide for a more flexible, performance-based approach to real-time monitoring and retained its three-year compliance requirement. Details are in Section V(B)(4) of the final rule.

Compliance Dates

BSEE's final rule extended the compliance dates for several equipment requirements, based on feedback about the availability of the required technologies and the time needed for operators to install new equipment. Industry commenters had found timelines in the proposed rule to be unrealistically short, whereas environmental organizations had stated that compliance periods for some key aspects of the rule were too long. The extended timelines include those for certain equipment described in Section III of the final rule.

Additionally, BSEE extended the timeline by which operators must begin using BSEE-approved verification organizations (BAVOs) to verify certain activities. The date was changed from three months after publication of the final rule to one year after BSEE publishes a list of approved BAVOs.

Congressional Action

Members of Congress and congressional committees submitted comments to BSEE on the proposed rule, and both the House and the Senate held hearings on the rule. After the final rule's release, the Senate passed S. 2012, the Energy Policy Modernization Act, which would require BSEE to review the final rule and determine its economic impact on
small entities in the oil and gas supply chain. (The House passed a version of S. 2012 that did not contain this provision.) Some Members also have sought language in the FY2017 Interior appropriations bill to prohibit BSEE from using funds to implement the rule. Other Members have expressed support for the rule.