STATEMENT OF BRIAN SALERNO DIRECTOR, BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT UNITED STATES DEPARTMENT OF THE INTERIOR BEFORE THE COMMITTEE ON ENERGY AND NATURAL RESOURCES UNITED STATES SENATE

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Chairman Murkowski, Ranking Member Cantwell, and members of the Committee, thank you for the opportunity to appear here today to discuss the Bureau of Safety and Environmental Enforcement's (BSEE) proposed Well Control Rule and other regulations related to offshore oil and gas production.

The proposed Well Control Rule is an outgrowth of an unprecedented amount of analysis and critical thought that followed the Macondo blowout and resulting consequences of the *Deepwater Horizon* tragedy. Many words have been spoken and written about avoiding another *Deepwater Horizon* incident and learning lessons that can help us prevent such tragedies. Perhaps this use of shorthand loses sight of the horrific details of April 20, 2010. On that night, the crew of the *Deepwater Horizon* was finishing work after drilling the Macondo exploratory well. The crew had one step to complete before it could move off of the well – temporary abandonment of the well. At just before 10:00PM, an undetected influx of hydrocarbons escalated into a blowout. When the well blew out, a mixture of hydrocarbons, mud, and water rained down on the workers on the rig floor. Very quickly, hydrocarbons that had flowed onto the rig floor ignited in two separate fiery explosions. Hydrocarbons continued to flow from the well and fueled the fire that continued to burn until the rig sank on April 22. Eleven men died and 16 were injured in the explosion and fire on the *Deepwater Horizon* that evening. Over the next 87 days, millions of barrels of oil flowed from the out-of-control Macondo well into the Gulf of Mexico.

Following the Macondo blowout, numerous investigations were conducted, including a

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joint investigation by the Department of the Interior and the Department of Homeland Security¹, an investigation by the National Academy of Engineering², a report by the Council on Environmental Quality³, and an investigation by a National Commission⁴ formed by the President. These investigations and reports made clear that the loss of life on April 20, 2010 and the subsequent pollution of the Gulf of Mexico were the result of poor risk management, last minute changes to the operational plan, failure to observe and respond to critical indicators, inadequate well control response, and insufficient training by companies of individuals responsible for drilling the Macondo well. In particular, BP and Transocean failed in myriad ways to protect the lives of those onboard and to prevent the environmental catastrophe that ultimately occurred. The tragic events of April 20, 2010 showed the dire consequences that can result when companies fail to implement a culture of safety that assesses and mitigates risk. The tragedy that has become synonymous with the *Deepwater Horizon* was preventable.

The various investigations and reports that took place after the *Deepwater Horizon* tragedy resulted in recommendations regarding blowout preventers, well design, cementing, well integrity testing, kick detection and response, real-time monitoring of well operations, and other areas. The Well Control Rule synthesizes and incorporates a variety of these recommendations in an effort to reduce risks across all phases of drilling operations. This rule will be a critical component of BSEE's efforts, writ large, to drive down risks associated with offshore operations.

The need for the Well Control Rule is demonstrated by the fact that loss of well control

¹ The Bureau of Ocean Energy Management, Regulation and Enforcement, U.S. Department of the Interior, *Report Regarding the Causes of the April 20, 2010 Macondo Well Blowout* (Sep. 2011),

http://www.bsee.gov/uploadedFiles/BSEE/BSEE_Newsroom/Publications_Library/OCS_Archives/DeepwaterHoriz on/BOEMRE%20Final%20DWH%20Sept2011.pdf; United States Coast Guard, U.S. Department of Homeland Security, *Report of Investigation into the Circumstances Surrounding the Explosion, Fire, Sinking, and Loss of Eleven Crew Members Aboard the Mobile Offshore Drilling Unit Deepwater Horizon in the Gulf of Mexico – April* 20, 2010 (Sep. 2011),

http://www.bsee.gov/uploadedFiles/BSEE/BSEE_Newsroom/Publications_Library/OCS_Archives/DeepwaterHoriz on/2_DeepwaterHorizon_ROI_USCG_Volume%20I_20110707_redacted_final.pdf.

² National Academy of Engineering and National Research Council (NAE/NRC), *Macondo Well-Deepwater Horizon Blowout* (Dec. 2011), http://www.nae.edu/Publications/Reports/53926.aspx.

³ Council on Environmental Quality, Report Regarding the Mineral Management Service's National Environmental Policy Act Policies, Practices, and Procedures as They Relate to Outer Continental Shelf Oil and Gas Exploration and Development (Aug 2010),

https://ceq.doe.gov/current_developments/docs/CEQ_Report_Reviewing_MMS_OCS_NEPA_Implementation.pdf. ⁴ National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, *Deep Water: The Gulf Oil Disaster and the Future of Offshore Drilling* (Jan. 2011), http://www.gpo.gov/fdsys/pkg/GPO-OILCOMMISSION/pdf/GPO-OILCOMMISSION.pdf.

(LWC) incidents are happening at the same rate five years after the Macondo blowout as they were before. In 2013 and 2014, there were eight and seven LWC incidents per year, respectively - a rate on par with pre-Macondo losses of well control.⁵ These represent LWC in all water depths. Some of these LWC incidents have resulted in blowouts, such as the 2013 Walter Oil and Gas incident in which a loss of well control resulted in a blowout that caused a massive explosion and fire on the rig. All 44 workers were safely evacuated, but the fire lasted over 72 hours and the rig was completely destroyed, resulting in a financial loss approaching \$60 million. It was determined that this incident occurred due to the crew's inability to identify critical well control indicators and the failure of critical well control equipment. The Incident Report published about the Walter blowout identified numerous points throughout the drilling operation where things could have been much worse.⁶ Blowouts like these can easily lead to much larger incidents that pose a significant risk to human life and can cause serious damage to the environment. It is abundantly clear that despite post-Macondo improvements in safety and technological advancements, there are still issues that must be addressed in order to see an appreciable decrease in dangerous loss of well control incidents. The proposed Well Control Rule represents a concerted effort to address these issues and reduce risk offshore.

The Well Control Rule is an important pillar of BSEE's ongoing efforts to promote safe and environmentally responsible operations. This rule, which is in the process of being revised to address comments and suggestions made in response to the publication of the proposed version, includes safety enhancements in well design, cementing, blowout preventer maintenance and operations, real-time monitoring, and a number of other provisions. The Rule seeks to mitigate or eliminate different types of risks associated with drilling activities in several ways. First, the rule implements many of the recommendations related to well-control equipment and fill gaps in the regulatory program. It calls for increases in the performance and reliability of well-control equipment, with particular focus on blowout preventers. It improves regulatory oversight of the design, fabrication, maintenance, inspection, and reporting requirements for critical equipment. It also seeks to gain information on leading and lagging indicators of BOP

⁵ See Attachment 1. Also available at

http://www.bsee.gov/uploadedFiles/BSEE/BSEE_Newsroom/Publications_Library/Annual_Report/BSEE%202014 %20Annual%20Report.pdf.

⁶ See Bureau of Safety and Environmental Enforcement, U.S. Department of the Interior, *Investigation of Loss of Well Control and Fire South Timbalier Area Block 220, Well No. A-3 OCS-G24980 – 23 July 2013* (July 2015), http://www.bsee.gov/uploadedFiles/BSEE/Enforcement/Accidents_and_Incidents/Panel_Investigation_Reports/ST %20220%20Panel%20Report9_8_2015.pdf.

component failures and identify trends in those failures and help prevent accidents. Finally, the rule ensures that industry uses recognized engineering practices as well as innovative technology and techniques to increase overall safety.

BSEE began drafting the Well Control Rule following the release of numerous investigative reports on the Deepwater Horizon disaster that made specific suggestions on modifications to existing rules. BSEE considered all of more than 400 recommendations, conducted workshops with industry participants, and engaged all stakeholders about how its regulations could be modified to address the risks that were exposed on April 20, 2010, when 11 lives were lost and millions of barrels of oil were spilled into the Gulf of Mexico. The Well Control Rule is the culmination of a significant amount of analysis and input by many acclaimed engineers, scientists, investigators, management systems specialists, and experts from a variety of other disciplines. From the very beginning of the rulemaking process, industry and other stakeholders have been directly and substantially involved and engaged – through workshops, listening sessions, information exchanges, and formal and informal communications. Prior to releasing the proposed rule, BSEE conducted over 50 meetings with various companies, trade associations, regulators, and other stakeholders. After issuing the proposed rule in April 2015, BSEE extended the original 60-day comment period by an additional 30 days to provide industry and other interested stakeholders ample opportunity to review the proposed rule and submit comments. In that time, BSEE received over 5,000 pages of technical comments from over 170 commenters.

The Bureau is now in the process of reviewing these comments and will revise the regulations accordingly where doing so will improve the quality of the rule. While I cannot discuss those specific changes at this time because the process has not been completed, I can assure you that the Bureau has heard industry's and other stakeholders' comments loud and clear. We have heard the concerns about drilling margins, blowout preventer inspections, accumulator capacity, and real-time monitoring. We have heard the concerns about the use of prescriptive language and about the potential, unintended consequences of the rule. The Bureau must now go through the process of reviewing the technical input received and determine how the text can be revised to best serve the interests of safety, environmental protection, and resource conservation. Any changes made will be the result of the Bureau's careful consideration of comments and suggestions made by the entities that will be affected by the Rule. This is

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precisely how Congress intended the rulemaking process to work when it enacted the Administrative Procedure Act. Any suggestion that industry was blind-sided by this Rule or was somehow cut out of the process is plainly false. I share your frustration that I cannot discuss the substance of our deliberations about the rule, and although I cannot yet share how we are revising the text of the rule, I would be happy to explain any changes we have made once the final rule is published.

In addition to the Well Control Rule, the Bureau is in the process of finalizing several other proposed rules: the Arctic Rule, the Production Safety Systems Rule, and the Crane Safety Rule.

The Arctic Rule revises and adds requirements for exploratory drilling operations on the Arctic Outer Continental Shelf (Beaufort Sea and Chukchi Sea Planning Areas) where the extreme environmental conditions, geographic remoteness, lack of fixed infrastructure, and sensitive marine environment require heightened safety requirements and measures that are specifically tailored to the operational and environmental challenges of the Arctic OCS. The Arctic Rule went through very much the same process of technical development and stakeholder engagement as the Well Control Rule. In developing the Arctic Rule, the Bureau conducted an extensive campaign of public meetings and other outreach activities and reviewed more than 100,000 formal comments. Such a process is absolutely essential when developing highly technical rules that affect a broad range of stakeholders like the Arctic Rule and the Well Control Rule. Indeed, the highly complex and impactful rules through which our Bureau executes our mission depends on the types of outreach in which we have engaged throughout the development of both of our latest rules.

The Bureau is also engaged in two other major rulemakings. The Production Safety Systems Rule amends and updates BSEE regulations pertaining to safety and pollution prevention systems and will bolster human safety, environmental protection, and regulatory oversight of critical equipment involved in the production of hydrocarbons. Finally, the Crane Safety Rule proposes to incorporate the latest industry standard for the design and operation of cranes mounted on offshore platforms with the goal of reducing the risk of lifting incidents – a much needed improvement in our regulations as lifting incidents involving cranes have increased

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in recent years.⁷ Each of these rulemakings, in addition to the Well Control Rule, plays a critical role in advancing offshore safety and reducing the risk of fatalities, injuries, oil spills, and other offshore incidents.

Since its formation in 2011, the Bureau of Safety and Environmental Enforcement (BSEE) has focused on ensuring that companies operate offshore in a safe and environmentally responsible manner. The Well Control Rule represents a substantial step forward in line with our agency's mission to improve safety and reduce risk offshore. The Rule is the result of a confluence of investigations, studies, technology assessments, stakeholder consultations, and other activities and, once finalized and put into effect, we believe will represent the greatest improvement in offshore safety in almost three decades. It also serves as a testament to the 11 lives lost as a result of the *Deepwater Horizon* tragedy.

Our work as regulators – on behalf of the American people – is never finished and we must strive to keep pace with the risks of offshore drilling and production while promoting the development of a positive culture of safety amongst offshore operators. Our commitment and duty to the public is to remain vigilant in instituting the reforms necessary to achieve this goal. We believe that the Well Control Rule is one of several necessary reforms that we are undertaking that will create a safer environment offshore. We will continue to work cooperatively with the regulated community to promote best practices and to support a robust culture of safety within the offshore oil and gas industry, which produces these resources that are so valuable and essential to our economy.

This concludes my formal statement, and I am happy to answer any questions you have at this time.

⁷ See Attachment 1 at 43. Also available at

http://www.bsee.gov/uploadedFiles/BSEE/BSEE_Newsroom/Publications_Library/Annual_Report/BSEE%202014 %20Annual%20Report.pdf.