



September 28, 2012

Rear Admiral James A. Watson
Director, Bureau of Safety and Environmental Enforcement
United States Department of the Interior
1849 C Street, NW
Washington, DC 20240

VIA EMAIL

Dear Admiral Watson:

The American Petroleum Institute (API), the National Ocean Industries Association (NOIA), the International Association of Drilling Contractors (IADC) and the Offshore Operators Committee (OOC) are writing on behalf of the industry members who recently met with the Bureau of Safety and Environmental Enforcement (BSEE) on 22 August 2012 to discuss technical issues and complexities of subsea blow-out preventers (BOPs) and industry concerns with possible requirements being included in the upcoming proposed rule on BOPs.

These trade associations represent oil and gas producers who conduct essentially all of the OCS oil and gas exploration and production activities in the Gulf of Mexico. Additionally, many of our members are involved in drilling, construction and support services for the offshore oil and gas industry and could be significantly impacted by this BSEE rulemaking.

America's oil and natural gas industry recognizes that offshore operations must be conducted safely and in a manner that protects the environment. The offshore industry in the Gulf of Mexico has a long history of safe operations that have advanced the energy security of our nation, and the energy resources in the region are also crucial to our nation's economy

Our comments are submitted without prejudice to any member company's right to have or express different or opposing views.

We very much appreciated the opportunity to meet with your staff to discuss this very important topic, but frankly think the meeting would have been more productive if we could have discussed specific topics or requirements being contemplated in the proposed rule rather than talking about generalities. Nonetheless, we appreciate the opportunity to provide some comments/questions for your consideration as BSEE works to draft the proposed rule.

BSEE indicated they were evaluating different and/or supplemental requirements for BOPs in addition to the requirements in the draft 4th edition of API Standard 53 (S53), but that S53 was in line with what they are seeking. The industry discussed how it had to work through the current rig fleet, the new build rigs and future technology developments in drafting S53 and utilized the process to solicit and address comments from industry during drafting. Current plans are to release S53 for publication early in the fourth quarter of 2012. BSEE stressed the need to get S53 published in order to align with the timeframe of the rulemaking process for the new BOP rule.

A discussion then followed related to pipe rams and shearing capability. The industry explained concerns around specific requirements and the loss of flexibility in BOP stack design. BSEE indicated their desire to ensure redundancy/back up for BOPs. BSEE indicated that they were not interested in making existing BOPs obsolete, but that the new regulations may result in limits to their operations. Of particular concern to industry is the potential requirement for much longer space-out between shear rams which will significantly impact the existing floating rig fleet. The industry also reiterated that a large number of new rigs were under construction and that significant new requirements may necessitate extensive modifications with cost and schedule impact. BSEE repeated that there would be time to implement any new requirements, since there would be a gap between publishing the final BOP rule, and the effective date of the rule. In this regard, estimates for time and costs for upgrades and/or modifications should be submitted during the open comment period.

A discussion was held about the current focus on shearing rather than well control. The industry stressed the importance of being able to maintain communication with the bottom of the well to control pressure, and only resort to shearing the pipe as a last measure. The industry wondered if well control scenarios and practices are being fully considered by BSEE while drafting these new rules, and highlighted potential unintended consequences if the rule making process solely focused on the BOP emergency functionality.

The industry expressed the need to address risk assessment in future rulemaking and provided an explanation about risk assessment requirements included in S53.

In response to BSEE's stated interest in life cycle analysis of critical equipment, the industry discussed efforts to develop a new document, API 16AR, which would address repair and re-manufacturing of well control equipment.

BSEE also asked about investing in new technology, specifically about research on next generation well control equipment. BSEE confirmed that shear capability, automation, and enhanced sensors were technology focus areas being addressed in the proposed BOP rule. Regarding these three focus areas, the industry offers the following comments, some of which are reiterations of points raised during the meeting:

Shear capability:

The industry has a strong concern about the focus on "shear certain." While the industry is already developing better technologies in this regard, a much greater focus should be placed on maintaining primary well control. When pipe is sheared in a well, a "conventional" well control situation immediately becomes a technically challenging, "unconventional" well control situation. Also, the drive towards "shear certain" can add significant complexity to an already sophisticated system (e.g. increased volume and pressure requirements, additional control

system functionality, etc.) Our concern is that increased complexity can potentially add more risk to the overall well control process.

Automation:

Currently, “automated” elements of the BOP system are primarily deadman/autoshear systems. Automating the entire well control process is an incredibly difficult task given the uncertain and changing subsurface pressures, fluids, rock strengths, etc. Careful consideration must be made as to the level of automation being requested.

Enhanced sensors:

BOP/well control system manufacturers are already developing ram position indicators and systems to monitor the “health” of the subsea well control system. Further research and development is needed to provide the additional capabilities like flow measurement as mentioned by BSEE and others. Again, additional complexity could introduce failure points (i.e. leak paths) in the operating system and potentially reduce the reliability of the entire system. The industry would rather focus initial development efforts on improving initial kick detection and response by use of advance sensors and smart alarms, than on measurement of conditions after an event occurs.

Finally, the industry recognizes that BSEE has to quantify the costs associated with any rule changes, so the following comments are offered to assist BSEE in this process:

- Most costs will be rig-specific. For rigs currently under contract, the contracts will affect how costs are allocated for new requirements imposed by regulatory changes, as well as rig non-productive time associated with equipment modification, testing and acceptance, and associated training and familiarization. For rigs not under contract, modification costs will be solely borne by the drilling contractor.
- In either of the scenarios above, there is a lost opportunity cost since the rig will not be able to be used for drilling or completion operations.
- Modification costs including any resulting from schedule delay must be taken into account for rigs currently under construction that are being built in anticipation of operation in areas under US jurisdiction.
- Costs associated with training personnel to understand the functionality of the modified equipment and control system will be incurred by drilling contractors, operators, equipment manufacturers, and training providers who will need to modify training curricula. These costs need to be included in the totals.
- If the rule imposes a requirement for additional cavities to be added to existing BOP stacks to provide for additional functions, there is a high likelihood that it will not be feasible for some existing rigs to be modified to accommodate the larger equipment and associated handling systems. The lost opportunity costs associated with limiting marketability of such rigs should be included.
- The rule may create additional economic impact if it does not provide a clear path for operators and drilling contractors to demonstrate that their well control equipment will be acceptable to BSEE. Regulations, rather than the permitting process, must clearly specify the required functionality. If not, any uncertainty must be considered as a continuing cost of the regulation.

Once again, we appreciate BSEE's time to meet and discuss this very important aspect of our business. In addition to this engagement, industry is actively participating in the current *BSEE Blowout Preventer (BOP) Maintenance and Inspection in Deepwater Operation Study* being facilitated by the American Bureau of Shipping to reduce the risk of BOP failures and improve reliability of BOP operations and functionality. We support this effort and suggest that BSEE postpone issuing the proposed rule on BOPs until this important work is concluded early next year.

We look forward to opportunities to continue working closely with BSEE to ensure safe operations on the Outer Continental Shelf of the United States and to advance the energy security of our nation. We are available for further discussions as necessary.

Sincerely,



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Allen Verret, OOC

cc: Doug Morris, Chief, Office of Offshore Regulatory Programs, BSEE
Ben Coco, Petroleum Engineer – Operations and Technical Specialist, BSEE