



December 13, 2010

Department of the Interior
Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE)
381 Elden Street, MS-4024
Herndon, Virginia 20170-4817

Attn: Regulations and Standards Branch (RSB)

Re: Increased Safety Measures for Energy Development on the Outer Continental Shelf,
1010-AD68

Dear Sir or Madam:

The American Petroleum Institute (API), The International Association of Drilling Contractors (IADC), the Independent Petroleum Association of America (IPAA), the National Ocean Industries Association (NOIA), the Offshore Operators Committee (OOC), the Offshore Equipment and Operating Procedures Joint Industry Task Forces (JITF) and the US Oil and Gas Association appreciate this opportunity to provide written comments on BOEMRE's already-implemented interim final rule, *Oil and Gas and Sulphur Operations in the Outer Continental Shelf—Increased Safety Measures for Energy Development on the Outer Continental Shelf*, 75 *Fed. Reg.* 63346 (Oct. 14, 2010) (hereinafter, the “interim final rule”).¹

These trade associations and joint industry task forces 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 will be significantly impacted by this BOEMRE rulemaking.

¹ Though we will refer to this action as the “interim final rule,” BOEMRE did not, in fact, adopt an “interim” rule, because BOEMRE has stated that in response to comments, it will either: 1. Confirm this rule as a final rule with no additional changes, or 2. Issue a revised final rule with modifications, based on public comments. BOEMRE's changes to 30 CFR §250.198(a)(3) are not time limited, and will remain in place indefinitely, until the agency chooses to respond to comments. Below we urge the agency to respond to comments with a revised final rule based on our comments.

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. These energy resources are crucial for our nation's energy security and economy. The April 20, 2010 Deepwater Horizon tragedy serves as a vivid reminder of the significance of safety and safe standard industry practices.²

Our comments are submitted without prejudice to any member company's right to have or express different or opposing views, and we have encouraged all of our members to submit comments on the rulemaking. We recommend that BOEMRE: (1) complete notice and comment rulemaking as required by Federal law for other pending or future BOEMRE regulatory actions, (2) revise 30 CFR §250.198(a)(3) to remove new language which would effectively revise more than 14,000 discretionary provisions in 80 API standards to be read as mandatory requirements, and (3) review the questions and technical issues provided by industry and publish a final rule with modifications based on industry public comment.

I. We urge BOEMRE to open its regulatory process to the public, and reiterates its commitment to provide an opportunity for BOEMRE's experts to participate in API's open standards-setting process.

We believe that a commitment by BOEMRE to include the public in its regulatory actions through open notice and comment rulemaking will result in better safety rules and efficient use of agency resources. Further, notice and comment rulemaking will result in more legally defensible actions by the agency. Also, we invite BOEMRE to participate in API's open process for adopting industry standards. We urge BOEMRE to publish a revised final rule that takes its comments into account, and to pursue future regulatory actions through notice and comment rulemaking. As will be seen below, BOEMRE's failure to pursue open notice and comment rulemaking when it revised more than 14,000 discretionary, non-mandatory provisions in 80 API standards to mandatory provisions caused significant broad and unintended undesirable consequences, which need to be corrected and which could have been avoided or minimized if BOEMRE had engaged industry prior to issuance of this final interim rule.

A. Notice and comment rulemaking in future actions will serve BOEMRE's interests by making its rulemakings more efficient and likely to achieve a safety benefit.

In addition to publishing a response to these comments in the form of a final rule adopting the modifications proposed herein, we strongly recommend that BOEMRE conduct its future regulatory actions through notice and comment rulemaking. We are concerned that BOEMRE has exhibited a willingness to promulgate regulations without notice and comment rulemaking as required by the Administrative Procedure Act (APA). Opening BOEMRE's regulatory process to the public through the statutorily-required notice and comment rulemaking process helps the agency to reach better-informed decisions regarding safety benefits. Moreover, given the recent history of successful legal challenges to BOEMRE's actions promulgated outside the normal

² We express no views regarding the cause, fault or liability of the Deepwater Horizon incident or regarding any mechanisms of prevention, nor should any of our comments herein be interpreted as a representation of any such views.

notice and comment process, such rulemaking would not likely impose dramatic increases in time for the agency to take action.

The notice and comment rulemaking provisions found in the APA are intended to ensure that agencies attempt to gather relevant information prior to regulating. One major reason for this notice and comment rulemaking requirement is to avoid the situation where an agency regulates without being aware of the broad and unintended consequences of its actions. Though the APA allows an agency to avoid notice and comment rulemaking when “the agency for good cause finds (and incorporates the finding and a brief statement of reasons therefore in the rules issued) that notice and public procedure thereon are impracticable, unnecessary, or contrary to the public interest,” 5 U.S.C. § 553(b), it is only in extreme circumstances that courts uphold agency determinations that good cause exists. *See, e.g., Chamber of Commerce of U.S. v. SEC*, 443 F.3d 890, 908 (D.C. Cir. 2006), *Hornbeck Offshore Services, L.L.C. v. Salazar*, 696 F.Supp.2d 627, 637-38 (E.D.La. 2010).³ It is not surprising that courts are generally reluctant to accept an agency’s good cause assertion, as Federal regulatory agencies are routinely charged with regulating to promote benefits to human safety and the environment, and it is axiomatic that an agency left to its own devices without adequate oversight will find good cause to regulate without public participation.

We are concerned that BOEMRE has determined that its regulatory charge itself constitutes “good cause” to avoid notice and comment rulemaking, due to the agency’s actions over the past seven months. Since April, BOEMRE has issued numerous Notices to Lessees, one agency memorandum with the effect of a blanket moratorium on all drilling activity in the Gulf of Mexico, and this interim final rule—none of which were developed pursuant to notice and comment rulemaking.⁴

In its interim final rule,⁵ BOEMRE concluded:

Immediate imposition of the requirements contained in this interim final rule is necessary because BOEMRE views strict adherence to improved safety practices set forth herein as necessary to achieving safer conditions that, together with other wild well control and oil spill response capabilities, will allow it to permit future OCS drilling operations. Following notice and comment procedures would be impracticable in these circumstances... Furthermore, following notice and comment procedures would be contrary to the public interest because the delay in implementation of this interim final rule could result in harm to public

³ We note that, in this instance, BOEMRE appears to be incorporating API standards en masse in an attempt to create regulations where none or few existed before. Though API standards are the industry accepted and recognized practices of the oil and gas industry, good cause to suspend the notice and comment rulemaking requirements found in 5 U.S.C. §553 must be supported by more than the bare need for regulations. *See, e.g., National Ass'n of Farmworkers Organizations v. Marshall*, 628 F.2d 604 (D.C. Cir. 1980).

⁴ In fact, two of BOEMRE’s actions regarding oil and gas activities in the Gulf of Mexico have now been rejected by courts as insufficient for either failure to comply with the APA or failure to provide factual bases for regulation which should have been developed during a notice and comment rulemaking. *See Ensco Offshore Co. v. Salazar*, 2010 WL 4116892 (E.D.La. 2010) (holding BOEMRE was not justified in imposing NTL-05 without notice and comment rulemaking), *Hornbeck Offshore Services, L.L.C. v. Salazar*, 696 F.Supp.2d at 637-38 (holding that plaintiffs had made a sufficient showing of success on the merits in a claim that MMS was arbitrary and capricious in imposing a six-month moratorium).

⁵ As noted above, the interim final rule is not “interim” at all. BOEMRE has not limited the rule’s impact temporally, and the interim final rule will remain in effect indefinitely unless BOEMRE issues a revised final rule as we urge in these comments. This argues against the ability to promulgate without any public input. *See Mid-Tex Elec. Co-op., Inc. v. F.E.R.C.*, 822 F.2d 1123, 1132 (D.C. Cir. 1987) (finding that “a rule’s temporally limited scope is among the key considerations in evaluating an agency’s ‘good cause’ claim”).

safety and the environment. Failure to adhere to the safety practices required by this interim final rule increases the risk of a blowout and subsequent oil spill, with serious consequences to the health and safety of workers and the environment.

75 Fed. Reg. at 63350.

Following the rule's issuance, we completed an initial review of API's standards and found 14,109 instances of the use of the word "should" in the 80 API standards that 30 CFR 250.198(a)(3) purports to amend. However, BOEMRE does not appear to have adequately considered the extent or nature of the changes it has attempted to make to the substantive requirements of the API standards. In the interim final rule, BOEMRE did not identify which of the more than 14,000 changes were due to safety measures found in the API standards that BOEMRE believes require immediate compliance. Further, the agency did not state why it was necessary to immediately make such broad changes to the requirements of API standards, other than to conclude that it must make the changes.

Moreover, BOEMRE's benefit-cost analysis appears flawed. In particular, BOEMRE's conclusion that its rule must be adopted immediately as an emergency measure does not appear to be supported by the facts. We believe the costs for compliance prepared by the Agency are not reflective of the total cost of compliance and thus will negatively affect both small and large businesses more than alleged by the Agency. The increased costs will negatively impact future OCS development. The interim final rule itself estimated the baseline risk of a catastrophic blowout at once every 26 years. *75 Fed. Reg.* at 63365. We believe this estimate for a blowout in the Gulf of Mexico is even lower, as it appears the estimate used by BOEMRE is based on worldwide catastrophic blowout data.⁶ Moreover, at least one court has rejected BOEMRE's previous assertion of emergency conditions as to offshore drilling. As the U.S. District Court for the Eastern District of Louisiana recently concluded regarding BOEMRE's earlier blanket moratorium:

The Deepwater Horizon oil spill is an unprecedented, sad, ugly and inhuman disaster. What seems clear is that the federal government has been pressed by what happened on the Deepwater Horizon into an otherwise sweeping confirmation that all Gulf deepwater drilling activities put us all in a universal threat of irreparable harm. While the implementation of regulations and a new culture of safety are supportable by the Report and the documents presented, the blanket moratorium, with no parameters, seems to assume that because one rig failed and although no one yet fully knows why, all companies and rigs drilling new wells over 500 feet also universally present an imminent danger.

Hornbeck Offshore Services, LLC, 696 F.Supp.2d at 638.

The court also went out of its way to note that "[m]ost of the currently permitted rigs passed MMS inspection after the Deepwater Horizon exploded...[a]ccording to the Report, since 1969, before Deepwater Horizon, only some three blowouts have occurred ... all in other parts of the world, not the Gulf." 696 F.Supp.2d at 638, FN 11. In fact, BOEMRE's revision of 30 CFR §250.198(a)(3) accomplishes much of the same task as its earlier blanket moratorium, forcing immediate compliance⁷ with over 14,000 changes to the API standards that could be confusing

⁶ Certainly for the near term, future deepwater drilling in the Gulf of Mexico is likely to be less than the 160 deepwater wells per year as estimated by BOEMRE. *75 Fed. Reg.* at 63365.

⁷ BOEMRE required immediate compliance with 30 CFR §250.198(a)(3), since the agency explicitly rejected compliance with the APA's requirement that rules provide the regulated public with at least 30 days to comply. BOEMRE states that "[t]o the extent that the 30-day period is intended to allow regulated parties to adjust to new requirements, information gathered by BOEMRE in advance of this rulemaking indicates that the oil and gas

or contradictory, meaning auditing may be difficult or impossible. The interim final rule did not explain how BOEMRE would begin to immediately audit these 14,000 new mandatory provisions, but the rule did conclude without explanation that delaying “compliance” with these provisions would threaten safety and the environment. The agency made no attempt to explain why delaying the effective date of its interim final rule by the 30 days required by the APA would have harmed safety, considering the statistical likelihood of another accident. It does not appear that BOEMRE is legally justified in citing to the Deepwater Horizon incident as continuing support for claiming a good cause exemption to the APA’s notice and comment rulemaking requirements.

We urge BOEMRE to consider the comments submitted below, and publish a final rule that addresses our technical comments. Also, we urge BOEMRE to adopt open, notice and comment rulemaking as its standard process going forward for regulation.

B. Notice and comment rulemaking would assist BOEMRE in promulgating more legally defensible regulatory actions.

Notice and comment rulemaking for contentious issues is also in an agency’s interest because engaging the public results in a more defensible procedure and a substantive final rule which reflects considerations the agency might not otherwise have made. For example, in this interim final rule, had BOEMRE opened its regulatory process to the public and conducted a notice and comment rulemaking, the agency could have avoided what we believe are serious procedural deficiencies. Under the APA, regulated entities are entitled to sue BOEMRE to vacate the interim final rule, in line with recent holdings that other actions taken by BOEMRE did not meet the requirements for the “good cause” exemption to notice and comment rulemaking.⁸ In the event a court were to find the APA notice and comment provisions to be applicable to BOEMRE’s actions here, the agency’s failure to comply with the Regulatory Flexibility Act⁹ would create a right of judicial review and relief in the form of a stay of enforcement and

industry is well aware of the general provisions in this interim final rule.” 75 Fed. Reg. at 63351. We note that API has not yet completed its analysis of the more than 14,000 changes BOEMRE intends to make to API’s own standards.

⁸ See *EnSCO Offshore Co. v. Salazar*, 2010 WL 4116892, *Hornbeck Offshore Services, L.L.C. v. Salazar*, 696 F.Supp.2d 627.

⁹ As BOEMRE does not know the true costs of compliance for requiring mandatory compliance with API standards, including the conflicts created by BOEMRE’s own changes to over 14,000 discretionary provisions, it would be impossible for the agency to currently provide an actual estimate of compliance costs for completing its required initial regulatory flexibility analysis. The industry expects increased costs for compliance in the following areas; 1) Capital Investments, 2) Additional time to execute testing provisions, 3) Delays in operations due to professional engineering certification requirements and 4) Additional contingency planning for unlikely catastrophic events. The Interim Final Rule misstates the “Compliance Costs” as only affect drilling, because the rule affects drilling, completion, workover, intervention and abandonments. Nor has the agency provided the statutorily required analysis of regulatory alternatives. 5 U.S.C. §604(a)(5). The interim final rule contained two straw man regulatory alternatives—exempting small businesses and delaying implementation—but dismissed these unspecific and broad alternatives without consideration, stating “[w]e do not believe it is responsible for a regulator to compromise the safety of offshore personnel and the environment for any entity including small businesses.” 75 Fed. Reg. at 63366. This statement is not a legally sufficient basis for rejecting any consideration of regulatory alternatives, especially since BOEMRE has not identified how safety could be compromised by eliminating mandatory new compliance regimes for provisions that are currently impossible to comply with—such as those identified below.

remand. 5 U.S.C. § 612. Also, since the interim final rule did not comply with the Paperwork Reduction Act,¹⁰ any regulated entity confronted with a demand by the agency for information could claim a complete defense to such a request. 35 U.S.C. § 3512. BOEMRE’s compliance with procedural statutes—by opening their proposals to public comments and considering the likely safety benefits and impacts to jobs of BOEMRE’s actions—would help BOEMRE to avoid future potential legal delays and to provide regulatory certainty to the public.

C. We invite BOEMRE again to participate in the API standards-setting process on an ongoing basis.

We take BOEMRE’s goal of industry safety very seriously and we wish to address the issues that BOEMRE raises in its interim final rule. We invite BOEMRE to participate in revising API’s standards. API is the recognized, worldwide authority on oil and gas standards. More than 6,000 industry experts participate in API’s open standards-setting process. The 80 API standards currently incorporated by reference into BOEMRE’s regulations represent their collective judgment. Moreover, in collecting these experts’ ideas, all API standards committees comply with API’s ANSI-approved *API Procedures for Standards Development*,¹¹ which, among other things, guarantee public and open participation by any affected entity, committee interest group balance, fair voting, written technical issue resolution, protections for standards users against intellectual property claims, and appeal rights.¹² Each standard is revised or re-affirmed every five years, and API is currently revising many offshore safety standards. API solicits ongoing input and comments for these revisions from any interested party, including BOEMRE. BOEMRE’s input to the standards committees would be invaluable to help the industry understand the goals of the government and to apply thousands of experts’ thoughtful consideration to ongoing regulatory issues. Moreover, participation in API standards-setting would provide BOEMRE with access to valuable scientific and technical expertise.

API is happy to provide further details to BOEMRE on how it can effectively participate in the API standards setting process, and we request a meeting to discuss BOEMRE’s participation with appropriate Department of Interior and BOEMRE leadership at their earliest convenience.

II. BOEMRE should immediately issue a final rule that revises 30 CFR §250.198(a)(3) to clarify that it will not attempt to read the word “should” as “must,” revising more than

¹⁰ Though BOEMRE concluded that its changes to 30 CFR 250.198(a)(3) constituted an “[a]dministrative provision that does not impose compliance times beyond the substantive provisions involved,” 75 Fed. Reg. at 63347, it is clear from the discussion below that BOEMRE was not aware of the broad scope of the changes it was making through this language, and that the information collection burdens involved are substantial. Under the Paperwork Reduction Act, BOEMRE is required to review the provisions it intends to revise through 30 CFR §250.198(a)(3) and provide an accurate assessment of the burden it is imposing on regulated entities. 44 U.S.C. §3506(c)(3).

¹¹ API has attached a copy of its *Procedures for Standards Development* for BOEMRE’s review and inclusion in the administrative record for this final agency action.

¹² Congress explicitly recognized the importance of government agencies deferring to industry standards setting organizations such as API, when it passed the National Technology Transfer and Advancement Act of 1995 (“NTAA”). The NTAA directed Federal Agencies to use technical standards that are developed or adopted by voluntary consensus bodies. This NTAA mandate is, in fact, cited in BOEMRE’s interim final rule. 75 Fed. Reg. at 63356. In enacting the NTAA, Congress affirmed the integrity of the process and veracity of the products developed by standards developing organizations including API.

14,000 discretionary, non-mandatory provisions in 80 API standards without any review by BOEMRE as to the effects of its actions.

While the industry strongly supports the reliance on industry standards in the interim final rule, we are extremely concerned about new language in 30 CFR §250.198(a)(3) stating:

The effect of incorporation by reference of a document into the regulations in this part is that the incorporated document is a requirement. When a section in this part incorporates all of a document, you are responsible for complying with the provisions of that entire document, except to the extent that section provides otherwise. When a section in this part incorporates part of a document, you are responsible for complying with that part of the document as provided in that section. **If any incorporated document uses the word *should*, it means *must* for purposes of these regulations.”**

30 CFR § 250.198(a)(3) (emphasis added).

As discussed at length below, BOEMRE should immediately issue a final rule that omits the last sentence of this section. As promulgated, the last sentence would have the effect of revising over 14,000 discretionary provisions in 80 standards without any review of the effect of this blanket requirement. While we are not currently questioning BOEMRE’s authority to impose regulatory requirements regarding individual provisions of accepted industry standards, the blanket revision represented in 30 CFR § 250.198(a)(3) will impose many confusing – or impossible – compliance requirements without any additional safety benefit. We strongly recommend that BOEMRE retract its prior language when it publishes a final rule, review the individual provisions it considers important, and make actual determinations as to whether: (1) mandatory compliance with a specific standards provision could result in some regulatory benefit, and (2) mandatory compliance is actually possible for regulated entities.

A. There is no regulatory basis for adopting a blanket requirement for all discretionary language to become mandatory.

BOEMRE has not stated any added safety benefit to be gained from revising language in over 14,000 discretionary provisions.¹³ It appears that the agency has not reviewed the actual discretionary provisions the last sentence of 30 CFR § 250.198(a)(3) would amend. The interim final rule contains no discussion of any safety benefits BOEMRE intends to realize by reading all discretionary language as mandatory. In fact, since the change contemplated in 30 CFR § 250.198(a)(3) would render many provisions impossible to comply with, it is not logical that safety benefits are available for all 14,000-plus currently-existing discretionary provisions.

BOEMRE did not state why it was changing its interpretation of the word “should” as used in API standards to mean “must.” However, BOEMRE’s interim final rule—adopted without public input—should not replace the open process used to arrive at API’s standards and the

¹³ We note that 30 CFR § 250.198(a)(3) applies to many more documents than the 80 API standards incorporated by reference. For example, BOEMRE regulations also incorporate documents published by American Concrete Institute (ACI), American Institute of Steel Construction (AISC), American Society of Mechanical Engineers, (ASME), American National Standards Institute (ANSI), American Society of Testing and Materials (ASTM), American Welding Society (AWS), and National Association of Corrosion Engineers (NACE), we believe this could include at least an additional 20 incorporated standards. For purposes of these comments, however, we will focus on the incorporated API standards.

broad expertise which goes into setting these standards. The API standards-setting process that resulted in the discretionary provisions at issue incorporated the collective judgment of thousands of industry experts. BOEMRE correctly acknowledges in the preamble to its interim final rule that “BOEMRE would not have the proper resources to develop information included in standards on its own (e.g. deepwater, High Pressure, High Temperature)”, and that the “BOEMRE regulatory program benefits from using the expertise in industry on offshore operations through the standards development process.” As discussed above, API sets its standards through an open process involving thousands of industry experts. The provisions BOEMRE has changed without review in its interim final rule were settled upon through standards processes that routinely take two years or more of consideration, and are reviewed every five years, according to API’s procedures. The extensive deliberations have resulted in language which is crafted to unequivocally communicate the document’s intent.

Absent a timely correction of 30 CFR § 250.198(a)(3) by BOEMRE, the industry experts involved in API standards setting must now undertake the immense task of reviewing the thousands of provisions 30 CFR §250.198(a)(3) purports to amend. If BOEMRE concludes that it will not review the effects of its revision to 30 CFR §250.198(a)(3), these experts must also consider the possible detrimental effect such blanket changes could have to offshore safety. Further, these experts will need to consider the safety impacts that could stem from inclusion of any discretionary provisions in the future. We strongly recommend that BOEMRE issue a final rule that takes into account these comments in response to the interim final rule by revising 30 CFR § 250.198(a)(3) to delete the final sentence.

B. “Mandatory compliance” with discretionary API standards provisions is impossible in many cases, as the standards were not drafted with mandatory compliance in mind.

In fact, it may be impossible in some cases to comply with 30 CFR § 250.198(a)(3), as promulgated, because API standards were never drafted with the intent that discretionary provisions would constitute auditable, mandatory requirements. The experts who created these provisions did not phrase them with the intent to create provisions that can be effectively audited by any government regulator, and in some cases, mandatory compliance would result in *increased* safety risks. Further, many of the provisions, when read as mandatory, are internally inconsistent for compliance purposes and may conflict with each other.

1. *Changing discretionary provisions to mandatory provisions will result in serious confusion and is not likely to result in auditable mandatory provisions.*

The immediate effect of BOEMRE’s interim final rule will be confusion, both in industry and among BOEMRE’s own enforcement personnel. This is because the provisions BOEMRE has revised were drafted to afford operators discretion to adopt the appropriate options that best fit their operating circumstances and were never drafted with mandatory “compliance” in mind. These provisions often present a number of options for protecting safety, depending on individual circumstances, and defer to the best professional judgment of the responsible safety engineers. Under 30 CFR § 250.198(a)(3), companies would be required to consider which discretionary options to require, which to ignore, what the elements of the often-unelaborated discretionary elements actually are, and make attempts at compliance. Once the companies have

made attempts at compliance based on their own opinions, BOEMRE enforcement personnel will then impose their own opinions on what the discretionary language actually requires, and attempt to audit compliance based on their own understanding. The result will be confusion and wasted compliance and enforcement resources. Though BOEMRE apparently intended to require industry best practices, this rule will effectively demand revision of the API standards by interpretations made by individual companies and government enforcement inspectors, which is likely to lead to conflicting interpretations and less-uniform application.

Part of the reason for this likely outcome is that API's standardization policy states that: "API standards shall be based on performance to the maximum extent feasible."

This is to allow the voluntary consensus committee members to consider "designs, techniques, processes and materials that have been demonstrated to be satisfactory for the service intended." "Innovation is encouraged" and "[n]ew designs, techniques, processes and materials shall be considered for standards when reasonable proof of fitness is available."

Performance based standards are designed to allow for safe operations *and* innovation and by design will provide for a variety of compliance modes and methodologies. Therefore, requiring industry to treat over 14,000 "shoulds" as "musts" in the 80 referenced API standards will create conflicts due to potential confusion and existing mutually-exclusive requirements.

2. *Blanket revisions of the word "should" to be read as mandatory would actually increase safety risks in some cases.*

We have not had time to thoroughly review the 80 implicated API standards and more than 14,000 provisions changed by the interim final rule. However, a very preliminary review of one the API standards BOEMRE should be most focused on, *Recommended Practice 53, Recommended Practices for Blowout Prevention Equipment Systems for Drilling Wells*, immediately revealed at least two instances where the interim final rule would *increase safety risks* for offshore workers. For example, section 17.4.1 of RP 53, outlining installation testing requirements for the diverter system, states:

- d) A pressure integrity test [200 psi (1.38 MPa) minimum] *should* be made on the diverter system after each installation. The tests may be made on parts of the system on individual components of the system should certain components of the casing string or riser components not support a complete system test. (emphasis added).

However, mandatory pressure integrity testing will not be possible when installing a diverter system on strings which are not cemented, such as drive pipe. A mandatory testing requirement would be detrimental to the formation integrity of the casing shoe, resulting in increased safety risks to workers and increased environmental risk.

Another example of increased safety risks that would be caused by the interim final rule's blanket language is found in section 18.10.1, which states:

After each well, the well control equipment *should* be cleaned, visually inspected, preventative maintenance performed, and pressure tested before installation on the next well. (emphasis added).

Revising this section to include a mandatory requirement for cleaning, visual inspection, preventative maintenance, and pressure testing will increase the risk to worker safety. The mandatory requirement would eliminate the ability to use a subsea BOP on batch operations on multiple wells on a template location without pulling and inspecting the stack. There would be no additional safety benefit for this, since the stack is still subject to pressure testing requirements when it is moved from well to well. Most importantly, pulling, handling, and re-running the riser and BOP creates additional risk to offshore workers that can be avoided under the current language found in section 18.10.1.

We emphasize that these examples are merely a couple that we were able to immediately identify in just one API standard. We believe there are many more instances, both in RP 53, and in the other 79 API standards, where the interim final rule would *increase safety risks* to offshore workers.

3. *Some provisions are simply impossible to “comply” with in a mandatory compliance regime.*

We have not had time to thoroughly review the 80 implicated API standards and more than 14,000 provisions changed by this new rule. However, after an initial review, we immediately identified major conflicts presented by 30 CFR 250.198(a)(3), which make compliance with those standards impossible. This is not an exhaustive list by any means, and we believe that within the 14,000-plus provisions at issue, there may likely be thousands more instances where compliance would be impossible due to current standards language. Revision of all of these provisions to eliminate major conflicts is likely to take years, and short of a blanket withdrawal of the API standards, API will be powerless to revise these provisions to make compliance possible before BOEMRE attempts to enforce its interim final rule.

To highlight this issue and these conflicts, commentary is provided on the following key standards: Spec 6A, RP 65-2, RP 53, MPMS Chapter 7, 20.1 and 21.1. These documents represent an important subset of the referenced standard and include valves, blow-out preventers, cementing practices, and measurement techniques.

API Spec 6A, *Specification for Wellhead and Christmas Tree Equipment*, 19th Edition, July 2004

The following are requirements in conflict if must is substituted for should:

10.2.2.3 Thread counter-bores - End and outlet connections, equipped with internal threads, may be supplied with or without a thread-entrance counter-bore. Internal threads, furnished without a counter-bore, **should** have the outer angles of 45° to a minimum depth of $P/2$, as illustrated in the figure belonging to Table 61* and Figure 10. Internal threads, furnished with a counter-bore, **should** conform to the counter-bore dimensions specified in Table 61* and the bottom of the counter-bore **should** be chamfered at an angle of 45°. As an alternative, counter-bore dimensions may be as specified in API Spec 5B.

Conflict: Clause prescribes bore dimensions with no option, and then allows for alternatives.

Annex A, Informative, Purchasing guidelines, A.1 General - To use this annex, a copy of the data sheets **should** be completed as accurately as possible. **The typical configurations should be referred to, as needed, to select the required equipment.** The decision tree, given in Figure A.14, together with its instructions, provides the recommended practice as to which PSL each piece of equipment **should** be manufactured. A copy of the data sheet **should** then be attached to the purchase order or request for proposal.

Conflict: Highlighted clause is prescriptive and does not allow for changes to accommodate any needed variations specific to unique site conditions.

Annex D, Informative, Recommended flange bolt torque, D.1 General - It has been shown that the torque values given in the tables of this annex are acceptable values for use in type 6B and 6BX flanges in some services. The user **should** refer to API TR 6AF, API TR 6AF1, API TR 6AF2 and API Spec 6FA for data on the effects on flange performance of bolt preload stress and other factors. It **should** be recognized that torque applied to a nut is only one of several ways to approximate the tension and stress in a fastener.

Conflict: Makes API TR 6AF, API TR 6AF1 and API TR 6AF2 no longer bibliographic references, but now normative references.

Annex H, Normative, Design and manufacture of surface wellhead running, retrieving and testing tools, clean-out tools and wear bushings, H.2.3 End connections - Torque-operated tools **should** preferably be threaded left-hand for make-up and right-hand for release to prevent inadvertently backing off of casing/tubing/drill pipe connections during operation/disconnection.

Conflict: Does not allow for changes necessary for the specific site configuration.
H.3.3 Mechanical property requirements - The material requirements for wear bushings shall comply with the manufacturer's written specification; however, the hardness must be between 241 HBW and 321 HBW.

Conflict: Potential conflict with manufacturer specification.

API RP 65-2, Recommended Practice for Isolating Potential Flow Zones During Well Construction, 1st Edition, May 2010

4.2, Hole Geometry - The relationship between hole size and casing size **should**, from a cementing perspective, always strive to achieve the best balance between displacement efficiency and equivalent circulating density.

Conflict: This is a recommendation for designing and modeling of the well. It would be impossible to quantify “achieving the best balance.” There are many other factors that also need to be taken into account during the modeling and simulation.

4.3.1, Drilling Fluid Selection - Low-gravity or active solids should be effectively controlled, and adequate shale inhibition **should** be provided for aqueous drilling fluid systems. HTHP filter cakes **should** exhibit thin, low permeability characteristics. Gel strength and low shear rheology at HTHP conditions **should** be low and non-progressive, but not at the sacrifice of drill cuttings transport or barite support.

Conflict: While the listed characteristics of drilling fluids can result in a drilling fluid that is more effectively displaced during cementing, it is not always the case that these characteristics can be met within the well conditions. Requiring all of this would create significant impediments.

4.3.3, Hydrate Prevention - Pre-emptive measures **should** be taken to insure [sic] that hydrates do not form and do not become a safety/well control problem.

Conflict: Hydrates are not found in every drilling condition, they are mainly found in high pressure locations (e.g. deepwater), and so making this recommendation a requirement would introduce an undue burden for (at least) onshore applications of the document. Further, it is not possible to ensure that hydrates do not form, since they can occur naturally.

4.5, Close-tolerance and Other Flow Restriction Considerations - Close mechanical tolerances **should** be examined for mechanical (drift) compatibility with all components involved in the cementing operations including wiper plugs and associated operating components.

Conflict: This recommendation would become an ambiguous requirement as there is no guidance as to what are the failure criteria.

4.6.5.3, Fluid Type - In addition, all fluids used in the cementing operation **should** be compatible.

Conflict: Making this a requirement would unduly burden the operator. The intent of this 'should' is that all fluids that come into contact with each other should be compatible, not just every fluid used in cementing.

4.6.5.5, Mud Compressibility - For more accurate cement computer displacement simulations, mud samples **should** be tested at a laboratory under higher, more realistic confining pressure.

Conflict: It is not necessary to lab test under higher pressures if actual downhole pressure measurements can be used. Such lab testing can also significantly increase costs since there are only a limited number of labs outfitted with pressurized testing facilities

4.7.1, Slurry Design, General - Cement **should** be placed in the wellbore and provide good contact with the casing and borehole wall, prevent the formation of channels within the cement and prevent the invasion and propagation of fluid through the cement as it sets, and provide mechanical support. The cement **should** maintain its integrity throughout the life of the well.

Conflict: Cementing is not only done between the borehole and casing, it can also be done between pipe and pipe. It would be needlessly restrictive to impose only cementing between borehole and casing.

4.7.8, Gel Strength - Additives for controlling other properties of the cement **should** be selected with control of gel strength in mind.

Conflict: Not every additive will impact gel strength, and occasionally, the properties being controlled by those additives may be more important to control than selecting it based on abilities to control gel strength.

4.8, Wellbore preparation and conditioning - Every effort **should** be made to minimize the time between completion of the hole interval and cementing when flow hazards exist.

Conflict: This recommendation is not auditable if made a requirement. It is not possible to quantify what “every effort” is.

4.8.3.2, Centralizer Program - The recommended standoff **should** be determined from computer modeling of mud removal and will vary with well conditions (see discussion above in 4.6). Centralizers **should** be run according to an engineering design for optimum cementing results.

Conflict: There are times when experience and actual well conditions will supersede a computer model or theoretic engineering design in determining proper centralizer placement. While following these recommendations will help in developing an adequate centralizer program, it does not take the place of sound engineering practices and real in-situ conditions.

4.9.3 Transportation and Storage of Cementing Materials - ... Tanks **should** be physically swept out after a cement blend is stored in the tank

Conflict: Safety. Requiring a tank to be physically swept out will require workers to enter the storage tanks to sweep them out. Workers will be required to work in dusty, confined space entry work conditions, exposing them to health and safety hazards. (If the First Edition is used this remains a conflict. If BOEMRE incorporates API Standard 65-2 Second Edition by reference this is no longer a conflict)

4.9.4, Mixing and Pumping - The cement spacer(s) and slurries **should** be mixed at the planned densities.

Conflict: Some variance in density will occur with field mixing equipment which is allowable, as long as the acceptable performance properties of the fluids are met.

4.9.5, Implementing the Job Design and Adhering to Planned Procedures - All the ‘**shoulds**’ in the section.

Conflict: One could unintentionally affect the integrity of the cementing job if the pumping is done only with consideration to the planned rates and volumes. While these should be considered and it should be done as close to these rates as possible, density control should not be compromised. Further, information from the computer simulation should be used to determine the rates, in conjunction with sound engineering practices, not just with the computer simulation alone.

Additionally, BOEMRE should refer to 4.6, Engineering Design, of RP 65-2 with regards to when to test cement. (4.6.3 for determining the “waiting on cement” or WOC time). In the current regulations, BOEMRE requires 8- to 12-hr periods, which could be detrimental if the

cement is hydrating. The method described in 4.6.3 is specific to attaining a minimum compressive/sonic strength, which is a more reliable practice than just a time period.

In addition to the RP conflicts with operations as noted above, the current CFR's have conflicts with the RP which will now need to be resolved. Some examples of the conflict are as follows;

Clarify that all zones capable of flow do not have to be isolated by cement. However abnormal pressure must be isolated from normal pressure and hydrocarbon bearing zones must be covered by cement as stipulated under 30CFR250.421(d) & (e).

30 CFR 250.423 requires a pressure test on casing for at least 30 minutes. RP-65 requires a transition time of less than 45 minutes. Thus performing the required casing test per the CFR will likely create a micro annulus that all are trying to avoid. Thus the CFR's and RP-65 are not compatible.

API RP 53, Recommended Practice for Blowout Prevention Equipment Systems for Drilling Operations, 3rd Edition, March 1997, Reaffirmed: September 2004, 2-Year Extension: May 2010

While the regulations only cite six sections of RP 53, some potential conflicts do exist:

17.11.6 and 18.11.6, Maintenance, Lubricants and Hydraulic Fluids - The original equipment manufacturer **should** be consulted for the proper lubricants and control fluids to be used on surface applications, a light mineral-based hydraulic fluid can be used.

17.11.7, Maintenance, Weld Repairs - The original equipment manufacturer **should** be consulted to verify proposed weld procedures.

Conflict: The above statements will be impossible to comply with if the BOP Original Equipment Manufacturer (OEM) is no longer in business.

Manual of Petroleum Measurement Standards Chapter 7, Temperature Determination, 1st Edition, June 2001, Reaffirmed March 2007

While there are already several "musts" already used in the document, in regard to calibration of devices for custody transfer and safety requirements, there are still potential conflicts in the following areas:

5.1, Fixed Automatic Tank Thermometers (temperature measurement in tanks) - The selection of a single-point (spot), mid-level, multiple-point, or an averaging ATT **should** be made based on the expected tank temperature stratification and the accuracy requirements (custody transfer versus inventory control).

Conflict: Should and shall (must) requirements require that temperature measurements be taken at certain depths in tanks. It could be difficult to "hit" these depths exactly as the conditions are not always conducive to perfect measurement due to field conditions.

5.3, Glass Thermometers and traceability - Glass reference thermometers include complete-immersion thermometers, partial-immersion thermometers, and total-immersion thermometers (see Figure 4 and refer to ASTM E 344). These thermometers **should** conform to ASTM E 1 specifications for thermometers or to National Institute of Standards and Technology (NIST) specifications. Calibration must be traceable to NIST-certified instruments.

Conflict: All thermometers should be traceable to the National Institute of Standards and Technology, NIST. NIST recently announced that they will no longer calibrate Mercury in Glass Thermometers after March of 2011.

Appendix D: Test Procedures for determining immersion times of measuring devices – All tests start with glass thermometers in their assemblies stabilized at the ice point...suggested bath temperatures at which immersion times **should** be measured are provided in Table D-1.

Conflict: Immersion times are specified for PETS and woodback case assemblies. These times are listed as “recommended”, but the standard implies “should” in the use of these times as they are also referenced as required. This could pose problems as the times vary from 30 seconds to 45 minutes for in motion measurements and 10 minutes to 60 minutes for stationary measurements. The field personnel taking these measurements may not be able to time immersions exactly according to the required values, again influenced by field conditions.

Manual of Petroleum Measurement Standards Chapter 20, Section 1 – Allocation Measurement, 1st Edition, September 1993, Reaffirmed March 2006

1.1, Introduction - Although allocation measurement may not meet the requirements for custody transfer measurement in all cases, it is still possible to refer to existing custody transfer industry standards for the basis of measurement. Where this allocation standard does not specifically address a measurement related issue, it **should** be assumed that custody transfer standards apply.

Conflict: Allocation measurement and custody transfer standards may not always be assumed to be one in the same. In fact, the API Committee on Production Allocation and Measurement is developing an entire series of standards to address these unique issues. Changing this “should” to a “must” would obviate the entire need for these documents, at least from a regulatory perspective.

1.5.2.3 Differential Pressure Devices - Generally, on a bellows secondary element, the gauge lines **should** be connected to the top connections of the bellows assembly. However, depending on the liquid being measured, it may be preferable to connect to the bottom bellows connections.

Conflict: Changing the “should” to a “must” means the second sentence is no longer an option, even though this option may be preferable in some cases depending on field and reservoir conditions.

1.7.2.3.1.1, Factory calibration - The relationship between dielectric constant and water cut varies with different types of hydrocarbons and water. The analyzer **should** be calibrated in the factory using the hydrocarbon liquid and water identical or similar to those in the actual application. A calibration curve between the actual water cut and probe output **should** be developed and incorporated into an associated electronic processor device.

Conflict: How would industry prove that the hydrocarbon liquid and water used to calibrate the analyzer in the factory will be similar to that found in the upstream production environment? And as the crude oil/gas may vary greatly in composition as production progresses, how can this be addressed by calibrating the analyzer in the factory?

1.15.2, Calculation Procedure - Allocation calculations **should** account for 100 percent of sales and shrinkage. This can be done on a volume basis, on an energy content basis, and by test car GPM. The last step is to prorate each volume to actual field or system sales.

Conflict: This is the very core of allocation measurement, and in certain cases the calculation procedure may yield 100%, but may not in others due to field and reservoir conditions.

Manual of Petroleum Measurement Standards Chapter 21, Flow Measurement Using Electronic Metering Systems, Section 1 – Electronic Gas Measurement, 1st Edition, August 1993, Reaffirmed July 2005

1.7.2, Gauge/Impulse lines – Whenever possible, pulsation **should** be eliminated at the source.

Conflict: Field conditions may require pulsation be eliminated at both the source and at other locations to achieve optimal results.

1.8.5.1, Ambient temperature Effect – Operating temperature range and its corresponding effect on measurement uncertainty (that is, percent full scale/degrees temperature change from reference) **should** be listed in the manufacturer’s performance specifications and **should** be considered when selecting and installing EGM equipment

Conflict: Changing these “shoulds” to “musts” would add a performance criteria not specifically envisioned by the consensus committee and would add an additional requirement to the manufacturers of these measurement devices that may not be appropriate in all cases.

Additionally, we would like to comment on proposed revisions to RP 17H, *Recommended Practice for Remotely Operated Vehicles (ROV) Interfaces on Subsea Production Systems*, 1st Edition, July 2004, Reaffirmed: January 2009, and RP 17M, *Recommended Practices on Remotely Operated Tool (ROT) Intervention Systems*, 1st Edition, April 2004, Reaffirmed: January 2009:

One important note to consider on the ROV document (17H) is that it is currently under revision. When completed, it will be a merged document of the current 17H and 17M (Remotely Operated Tools, ROT) documents.

With this initial effort in revising the document, the emphasis was placed on integrating the two components (ROV and ROT) into one document. Therefore most of the current design recommendations/considerations in both documents are not impacted. The document is about to undergo a technical review ballot, so the following items may be impacted by the end of that review.

The new document will include the following changes (if left in its current state through the ballot process):

- ROVs are to be classified dimensionally (small, medium, large) and recommended sizes are noted in order to introduce a standardized method of increasing access to the interface
- Additional design considerations for working platforms
- Increased docking receptacle loading and consideration of failsafe requirements
- Additional handle (used in conjunction with a ROV manipulator or purpose-built tooling to allow direct operation of the interface) design considerations.
- An entire new section on *Coloring and Marking* (to be used as a guidance map for the intervention operations by identifying the structure and orientation; identifying the equipment mounted on the structure and intervention interface; identifying the position of any given part of the structure relative to the complete structure; and identifying the operational status of the equipment, e.g., connector lock/unlock and valve open/close.)

Although the new (combined ROV and ROT) document is about 1.5 years away from publication, if it does get cited by reference in the regulations, it will incorporate ROT equipment by default, currently not part of the on-going discussions. Furthermore, a review of that proposed document shows 362 uses of the work “should”. If they were to be elevated to a “must”, it would have serious impact on the equipment since there are 13 clauses that deal with equipment configuration/conceptualization and 193 clauses that deal with equipment design that would become prescriptive. At that time, this document would need to be reviewed for potential internal conflicts associated with such a change. The subcommittee plans to simultaneously withdraw the current 17H and 17M documents when the *new* 17H document is released.

III. BOEMRE should review the following additional technical issues and publish a response to these comments in the form of a final rule.

§250.198(h)(79)

API Standard 65—Part 2, Isolating Potential Flow Zones During Well Construction, Second Edition was published on December 10, 2010. The Second Edition incorporates learnings from the Macondo well incident, enhances the description and classification of well control barriers, and defines testing requirements for cement to be considered a barrier. The Second Edition also revises Annex D into a checklist based on the requirements of the document. BOEMRE should update the interim final rule to incorporate the 2nd Edition by reference.

Clarification on how RP 65-2 will be used; will a minimum pre-cementing score be required for each cement job and then evaluated after the job also? (or checklist if using the Second Edition)

§250.415(f)

Request clarifications on the level of detail and specific points that must be addressed in a written description of evaluation of the best practices included in API RP 65–2, many items are arbitrary or contradictory.

§250.415(f), §250.416(e)

Will the submittal be with each APD or once for each rig per year unless changed?

§250.416(d)

Confirm that the schematic of the control system includes location, control system pressure for BOP functions, BOP functions at each control station and emergency sequence logic. Specifications on other requirements should be clear.

§250.416(e)

Will there be a standard way to perform these shearing calculations for the drill pipe? Will there be a standard of calculation the MASP? Will the maximum MASP be the rating of the annulars? MASP calculations specified should reference the required calculation techniques. Include reference to MASP calculation method. Is it a requirement of the deadman to also shear at MASP? If so, what usable volume and pressure should remain after actuation?

Please confirm that the Operators will only be required to demonstrate shearing capacity for drill pipe (which includes workstring and tubing) that is run across the BOP stack. BHA components, drill collars, HWDP, casing, concentric strings and lower completion assemblies are excluded from this requirement. Also, from an operational standpoint, shearing capacity with MASP should be modified to shearing capacity with mud hydrostatic pressure plus a conservative shut in pressure limit set by the Operator & Contractor where shut in is transferred from the annular BOP to Ram BOPE. At this point increased pressure in the cavity between the pipe rams and annular preventer should be eliminated. BOEMRE should request the internal bore pressure shear capacity calculation to be provided at the limit of the BOP system and approval contingent upon MASP being less internal bore pressure limit.

§ 250.416(f)

Item 2, of this requirement infers that an inspection of the BOP system is required to ensure the system has not been compromised or damaged from previous service. Please confirm that SS BOP system is not compromised or damaged provided it can be function tested and pressure tested in the subsea environment where it will be in operation. Standardized pressure testing in the subsea environment without visual inspection fulfills the requirements of item 2 of this requirement. If it is mandated that a visual inspection between wells is required then the cost to implement of \$ 1.2 MM is grossly understated in Docket ID BOEM-2010-0034, RIN 1010-AD68. A requirement to pull a BOP for a between well visual inspection would result in \$ 5 - 15 MM per opportunity (opportunity defined as moving between wells without pulling to surface) and the total annual cost could be estimated by determining the number of occurrences per year. 3rd party verification that the BOP stack has not been compromised or damaged from previous service can be accomplished by successful subsea function and pressure tests without visual inspection. Between well visual inspections of the BOP internal components is not required.

§ 250.416(g)

The interim final rule implies that API currently licenses inspection firms capable of providing the verification, inspection, and/or certification required under this directive. While API is currently involved in the licensing and certification of oil and gas equipment manufacturers, at this time API does not specifically license or certify inspectors or inspector organizations to perform independent third party equipment inspections and certifications as so required under this rule.

We support this initiative and believe that proper oversight and control of both the inspection and certification processes of equipment so mandated throughout the regulation can best be achieved by allowing API to act as an independent accreditation body for both organizations and

individuals involved in these third party inspection and certification activities. By so doing, this would ensure industry best practices are followed and ensure that all individuals and companies involved in these processes are performing the required activities as mandated by both the BOEMRE and current and future industry standards. It is essential that such a process be fully defined and controlled by a central body familiar with all equipment utilized and maintained throughout the oil and gas industry. Only upon receiving API certification would an individual or a certifying body be allowed to inspect, verify, or certify equipment to defined standards.

While not specifically addressed in the rule, it is furthermore essential that the competency of all inspectors and certifying bodies be well defined and audited to ensure the highest levels of competence are maintained at both the individual and organizational level at all times. API has extensive experience with auditor competency and equipment manufacturer certification and these principles could easily be applied to the mandates of this directive.

§250.420(a)(6)

What is the definition of well completion activities? This is the first time it has been mentioned that barriers had to be certified by a professional engineer, only casing design and cementing were mentioned in the past.

§ 250.420(a)(6)

Will BOEMRE still check casing designs based on load cases that are not published? If so, will certified plans be rejected due to design reviews within the agency? BOEMRE has not provided specific guidance on what aspects of casing and cementing designs must be initially certified or guidance on triggers which would cause a plan to be recertified for continuance of operations. OOC provided those triggers to BOEMRE on October 12, 2010, (see table below) and requests they be accepted as the only triggers for plan certification. Currently the BOEMRE is inconsistent in their requests for recertification and fearful of approving minor changes that have no effect on safety. Further, delays to operations resulting in additional operational exposure and safety risk are to be expected when the Agency requires arbitrary recertification when simple changes are required. The requirement for an RPE review for OCS operations may become a bottleneck if this requirement becomes a standard for all US operations.

Task Considered	Basis for Recommendation
A change in casing weight, grade or connectors from the current certified plan to a lesser weight or grade of casing or to a connector with lesser performance capabilities and/or seal design. Upgrades in tubular performance properties and/or characteristics would not require recertification by a registered professional engineer.	Could significantly reduce design factors when performance properties are less than the certified plan.
Well deepening beyond current approved total depth.	Changes MASP and casing loads.

Sidetrack a well to a new BHL.	New well plan required and potentially different targets and pressures.
Add a casing string to a previously certified casing design which has been accepted by BOEM.	Fundamental change to the certified well design which could result in changes in MASP.
Eliminate a casing string from a previously certified casing design which has been accepted by BOEM.	Changes the design assumptions for the next casing string or changes the MASP.
Change from a liner to a long string, or vice versa.	Fundamental change in previously certified casing program should be recertified.
Integrity of previously installed casing is compromised.	Damaged casing may be de-rated for wear requiring recalculation of design factors or remediation.

§250.420(b)(1)

Not clear if integral latching capability of casing hanger / seal assembly is acceptable or if a separate mechanism is required.

§250.420(b)(3)

Add clarification to the dual mechanical barrier requirement to ensure the barriers are installed within the casing string and does not apply to mechanical barriers that seal the annulus between casings or between casing and wellhead. Acceptable barriers for annuli shall include at least one mechanical barrier in the wellhead and cement across and above hydrocarbon zones. Placement of cement can be validated by return volume, hydrostatic lift pressure or cased hole logging methods.

Industry best practices do not consider dual float valves to be two separate mechanical barriers because they cannot be tested independently and because they are not designed to be gas tight barriers. This regulation does not achieve the safety objectives of the Drilling Safety Rule.

§250.420 (6)

Can the required "registered professional engineer" be a company employee?

§250.420 (c)

What is the design basis and acceptance criteria required for negative testing?

§ 250.420

Does the dual mechanical barrier requirement apply to just the inside of the casing or to both the inside and annulus flow paths? Our interpretation is the inside of the casing.

§250.420, §250.1712, and §250.1721

Previous guidance/interpretation issued by BOEMRE said that deviation from certified procedures required contact with the appropriate District Manager. This is documented only in the guidance, and is not implicit in this part of the rule. We request that BOEMRE specify the kinds of variances that require this contact.

§250.423 (b)

Need definition or clarity around the term “lock down” and the requirement for locking down a drilling liner. Must all liner hangers have hold down slips. Normally conventional line hangers only have hang off slips to transfer the weight of the liner to the previous casing string. Once the seal is energized for a Liner Top Packer, it will hold pressure from below and above, but not all seals have slips to prevent uplift should the pressure-area effect exceed the weight of the liner. Requiring hold down slips on a conventional liner hanger increases the difficulty to fish the liner out of the hole, in fact it will lead to a milling operation.

Suggested Rewording:

- (b); You must ensure proper installation of casing and liners during subsea operations as follows;
- (1) You must ensure that the latching mechanisms or lock down mechanisms are engaged upon installation of each casing string which is landed in the wellhead housing.
 - (2) You must perform a pressure test on the seal assembly to ensure proper installation of casing or liner. You must perform this test for the intermediate and production casing strings or liner.
 - (3) You must submit for approval with your APD, test procedures and criteria for a successful test.
 - (4) You must document all your test results and make them available to BOEMRE upon request.

§250.423 (c)

What is the definition of intermediate casing? The rule states a negative pressure test is required for intermediate and production casing. If drilling liners are set below intermediate casing is additional negative testing required?

The intent of this requirement is not clear. The magnitude of the negative test is also not apparent. Is the intent to test the entire casing, wellhead, liner top or the shoe? Surface wellheads are negative tested for each BOP test when the stack is drained and water is used for a test. If a negative test of an intermediate shoe is intended, then, what is the purpose since the casing shoe will be drilled out. In general, negative testing should not apply to all wells and should apply if the load is anticipated and then not until such time it is needed.

- Wells with surface wellheads should be exempt from negative tests unless the well is to be displaced to a fluid less than pore pressure and in that case the shoe, productive intervals and liner tops can be negative tested to the amount anticipated prior to or during the displacement. The requirement to negative test wells with surface wellheads should not be mandated since the well can be displaced to a fluid less than pore pressure under controlled conditions without risk of an influx getting in a riser.
- Additional guidance given by BOEMRE has indicated a desire to negative test all liner tops exposed in either the intermediate or production annulus on all wells with surface BOP equipment. This requirement is not consistent with the desire to improve safety since many liner tops are never exposed to negative pressures during the life of the well. Thus performing the test exposes personnel to additional exposure while tripping pipe to perform the test, risks the well by installing non-drillable test packers above the liner top

during the test and will expose personnel to additional material handling requirements. Finally, the Agency has not provided guidance on when the test is to be performed. Testing upon installation is not advisable due to additional pressure cycles applied to the cement early in the development of its strength which could result in premature cement failure. Additionally, if a negative load is anticipated during operations, it is best to defer the negative test to assure well integrity is validated just prior to the intended operation.

- Negative testing should be performed on subsea wells and wells with mudline suspension systems where it is important to validate barriers prior to removal of mud hydrostatic pressure during an abandonment or suspension activity such as hurricane evacuation or BOP repair. Drilling or production liners tops should not require negative testing upon installation. Testing should be deferred until a just prior to performing an operation where a negative load is anticipated on a liner top or wellhead hanger..
- The magnitude and duration of an acceptable negative test should be provided for consistency. Recommend negative tests on subsea wells to be equal to SWHP at the wellhead.

§250.442

Must HWDP be shearable with BSR's?

What does "operable" mean for dual pod controls (100% functional and redundant)? What does "fast mean" for subsea closure and what are the "critical" functions?

What will be competency basis for qualification of an individual to operate the BOP's?

§250.442(d), §250.515(e), §250.615(e)

Revise docket ID BOEM-2010-0034, RIN 1010-AD68 to reflect correct regulation. It should be 250.442 (d) instead of 250.442 (c).

§250.442(e), §250.515(e), §250.615(e)

Revise docket ID BOEM-2010-0034, RIN 1010-AD68 to reflect correct regulation. It should be 250.442 (e) instead of 250.442 (c). The ROV crews should not be required on a continuous basis, this item needs to be revised to reflect the need for having a trained ROV crew on board only when the BOP is deployed.

§250.442(j), §250.515(e), §250.615(e)

Revise docket ID BOEM-2010-0034, RIN 1010-AD68 to reflect correct regulation. It should be 250.442 (j) instead of 250.442 (c).

§250.442(i)

What is meant by operate critical BOP equipment; maintenance or activation of equipment?

§250.446(a) §250.516(h) §250.516(g) §250.617

The record keeping requested should be a responsibility of the Drilling Contractor. Many operations are short lived contracts and once the rig is released, the Contractor has no obligation to ensure the records remain on the rig. Drilling Contractors should be required to have a BOPE certification program complete with a certificate of compliance that is renewed every 3 to 5 years by a Certification Agency or Class Society. This will assure Drilling Contractors maintain their

equipment to a higher standard on a routine basis. Certification documents for rental BOPE would also be used by the Operator or Contractor depending upon who is renting the equipment.

§250.449(h)

Are the requirements for function test for normal or high pressure function or both?

Request change from the required duration from 7 days to 14 days. The basis for this is to mitigate the risk and exposure due to the additional tripping of pipe out of hole in order to function test blind/shear rams. From the views of the Macondo BOP stack it appears that the flow was not due to lack of ram functions, or blind ram leakage but the flow of hydrocarbon was around the blind shear ram itself in the worn body of the stack. It is concluded that frequent function testing of blind/shears will exacerbate this stack body wear and introduce further exposure to leakage within the BOP.

§ 250.449(k), § 250.516(d)(9), § 250.616(h)(2)

We recommend testing the deadman system when attached to a well Subsea upon commissioning or within 5 years of previous test but not at every well. If during the testing time the rig experiences a Dynamic Position incident, i.e. a drive off or drift off, the only options to disconnect from the well are acoustically (if acoustic system fitted), or with an ROV. Failure to disconnect in time could result in serious equipment damage, and/or damage to the well head.

§250.451(i)

A successful seafloor pressure and function test of the BOP following a well control event also is an acceptable means of verifying integrity. Ram sealing elements would be compromised before damage to the rams themselves would be extensive enough to prevent successful shearing of pipe. Additionally, plugging an open hole that may be experiencing ballooning and gas following a well control event and pulling the BOP and riser present safety and operational risks that are likely much greater than proceeding with the drilling program using a fully tested BOP stack.

§250.456(j)

Does this requirement only refer to the end of well during abandonment or at any time during the drilling of a well? There are times when mud weight is cut prior to drilling out a casing shoe due to exposure of weak formations or anticipated lost circulation. Would approval be required to cut mud weight in these circumstances? Consider that mud weight is cut just prior to drilling out the shoe in a controlled environment at which time the entire system is negative tested with pipe in the hole at TD and BOPs are capable of shutting in the well if an when needed.

§250.616(b)(2)

During workover operations utilizing a subsea BOP, operator is currently required to pressure test the BOP every 7 days. This is inconsistent with requirements when utilizing same equipment for either drilling or completion operations where BOP testing is required every 14 days. Recommend revising all of §250.616(b)(2) to be consistent with §250.516(a)(2), which would include 14 day BOP test frequency and add 7 day function test requirements.

§250.1510

What is the definition of enhanced deepwater well control training? Will this require a new certification of well control schools?

Again, we generally support BOEMRE's reliance upon the as originally written industry standards in the interim final rule and appreciate the opportunity to provide comments on the interim final rule. With that said, we strongly urge BOEMRE to revise the regulatory provisions that we have addressed above in a final rule, and reiterate API's open invitation to BOEMRE personnel to participate in the open standards development process. America's oil and natural gas industry looks forward to working with BOEMRE to continue to maintain safe operations and advance the energy security of our nation.

Sincerely,



Jack Gerard, API



Lee Hunt, IADC



Barry Russell, IPAA



Randall Luthi, NOIA



Allen Verret, OOC



Alby Modiano, US Oil and Gas Association