

February 28, 2024

Via Regulations.gov

U.S. Department of the Interior
Bureau of Safety and Environmental Enforcement
Attention: Regulations and Standards Branch
45600 Woodland Road, VAE-ORP,
Sterling, VA 20166

Re: API and OOC's Comments on BSEE Proposed Rule Regulation Identifier Number 1014-AA51, "Oil and Gas and Sulfur Operations in the Outer Continental Shelf—Documents Incorporated by Reference"

The American Petroleum Institute ("API") and the Offshore Operators Committee ("OOC") appreciates the opportunity to submit comments on the above-referenced Bureau of Safety and Environmental Enforcement ("BSEE") Proposed Documents Incorporated by Reference ("IBR") Rule.

API is the only national trade association representing all facets of the oil and natural gas industry, which supports more than 10 million U.S. jobs and nearly 8 percent of the U.S. economy. API's approximately 600 members include large integrated companies, as well as exploration and production, refining, marketing, pipeline, and marine businesses, and service and supply firms. API was formed in 1919 as a standards-setting organization and is the global leader in convening subject matter experts across segments to establish, maintain, and distribute consensus standards for the oil and gas industry. API has developed more than 800 standards to enhance operational safety, environmental protection, and sustainability across the industry, especially through these standards being adopted globally. API standards are developed under API's American National Standards Institute (ANSI) accredited process, ensuring that the API standards are recognized not only for their technical rigor but also their third-party accreditation which facilitates acceptance by state, federal, and increasingly international regulators.

OOC is a non-political non-profit organization representing the majority of wind energy and oil & gas developers on the Federal Outer Continental Shelf (OCS). For more than 75 years, OOC member companies have collaborated together to foster prudent operations that exhibit stewardship of the environment while continuously improving worker safety on the Federal OCS.

General Comments

API and OOC applaud BSEE for proposing this important regulatory step to ensure that references to standards incorporated into regulation are kept current and therefore recognize the current changes in technology, materials, and safety improvements in the industry. BSEE currently has more than 120 standards incorporated by reference and under current ANSI accreditation requirements those standards are updated or reaffirmed every five years. As BSEE recognizes, the importance of using appropriate industry consensus standards is driven by the National Technology Transfer and Advancement Act (NTTAA) which requires that “all Federal agencies . . . use technical standards that are developed or adopted by voluntary consensus standards bodies, using such technical standards as a means to carry out policy objectives or activities determined by the agencies and departments.”

Standards are developed based on the current industry best practices and in most cases, represent forward-looking requirements for designs, equipment, and engineering systems. When incorporated by reference, standards provide requirements for engineering systems that will be designed after the date of incorporation (effective date). For infrastructure and equipment that was designed, fabricated, installed, or operated on the OCS prior to the effective date of new standard incorporation, BSEE should clarify that compliant operation is defined as operating the equipment with technical specifications meeting the requirements specified in the original basis of design and applicable standards editions used when design was performed.

To keep up with the most updated standards, API and OOC would encourage BSEE to be actively publishing IBR rule notices on an annual basis to reflect the most recent technology and safety criteria. Industry standards often have normative requirements, defining requirements from secondary standards, where the reference is specific to the version or edition of such secondary standard. BSEE should be aware of how compliance will be administered for standards with normative references where secondary standards with different editions are also incorporated by reference. To assure clarity of regulatory requirements, and to avoid edition conflicts, industry recommends that BSEE eliminates direct incorporation of secondary standards, when the primary standard is incorporated. Our comments below will reflect some specific examples of this for BSEE’s consideration.

In addition, BSEE should ensure that BSEE personnel are active and directly engaged in the open and transparent standard development process. BSEE engagement in standard development is a benefit to both industry and the agency, leading to more comprehensive, robust, and effective standard development. However, BSEE should also establish internal processes to ensure that the engaged BSEE experts are sharing their knowledge of the

standards with other BSEE personnel to ensure the broad internal understanding of both the content and the status of the standards and how they should be applied to the OCS.

Measurement Standards

API and OOC are generally supportive of the broad update to the references to the measurement standards included in the rulemaking. However, there are both a significant number of the standards listed below which need additional references and some important comments about the specific standards as listed below:

- BSEE is proposing to IBR for the first time *API MPMS Chapter 9.4—Continuous Density Measurement Under Dynamic (Flowing) Conditions, First Edition, January 2018*. BSEE should note that this standard incorporates the option to use online density in lieu of using the density from a sample. BSEE should ensure that regulators and inspectors are quickly made aware of this update and are prepared to accept and implement this standard in the field.
- BSEE is proposing to update *API MPMS Chapter 12.2, Calculation of Petroleum Quantities Using Dynamic Measurement Methods and Volumetric Correction Factors, Second Edition, July 2021*. It should be noted that this important standard took more than 16 years to develop and reach final consensus. BSEE should be aware that industrywide implementation will require significant time, and therefore we would ask BSEE to consider grandfathering existing systems. Immediate implementation through IBR would be a significant challenge due to limitations on manufacturer development and availability of flow computer systems. This impact would be particularly challenging for small operators.
- BSEE is proposing to incorporate by reference for the first time both *API MPMS Chapter 2.2E, Petroleum and Liquid Petroleum Products—Calibration of Horizontal Cylindrical Tanks, Part 1: Manual Methods, First Edition, April 2004, Reaffirmed August 2014, Errata November 2009*, and *API MPMS Chapter 2.2F, Petroleum and Liquid Petroleum Products—Calibration of Horizontal Cylindrical Tanks, Part 2: Internal Electro-optical Distance-Ranging Method, First Edition, April 2004, reaffirmed September 2014*. During the internal working group discussions on these standards, there were no operators participating who used horizontal cylindrical tanks in offshore operations. Our comments would reflect that there is limited need, potentially no need, for BSEE to incorporate these standards by reference for tanks which are not used offshore.
- BSEE is proposing incorporating *API MPMS, Chapter 20.5—Recommended Practice for Application of Production Well Testing in Measurement and Allocation, First Edition, December 2017; reaffirmed March 2023*. There has been significant learning

in industry since the publication of this 1st edition RP which has shown the need for revision. As a result, our recommendation is that BSEE refrain from incorporating this standard until it is updated and adopt the 2nd edition when published, which will align the provisions of this standard with updates to other standards, thereby eliminating potential conflicting requirements, and instead maintain provisions in current Sub part K 250.1152.

The following standards have been referenced but have had a new edition subsequently published. The references should be replaced with the latest editions as listed below:

- *API MPMS Chapter 2.2A Measurement and Calibration of Upright Cylindrical Tanks by the Manual Tank Strapping Method, Second Edition, November 2019*
- *API MPMS Chapter 3.1B Standard Practice for Level Measurement of Liquid Hydrocarbons in Stationary Tanks by Automatic Tank Gauging, Fourth Edition, October 2021*
- *API MPMS Chapter 4.6 Pulse Interpolation, Third Edition, October 2021*
- *API MPMS Ch. 20.3 Measurement of Multiphase Flow, 2nd Edition, February 2024*
- *API MPMS Chapter 21—Flow Measurement Using Electronic Metering Systems, Section 1—Electronic Gas Measurement, Second Edition, February 2013; reaffirmed June 2021*

The following standards have been superseded by the accompanying standard below which should now be incorporated by reference in place of the standard reference in the rule:

- *API MPMS Chapter 6.1 superseded by API MPMS Chapter 6.4A Metering Assemblies – Lease Automatic Custody Transfer (LACT) Systems, First Edition, December 2023.*
- *API MPMS Chapter 6.6 superseded by API MPMS Chapter 6.3A Pipeline and Marine Loading/Unloading Measurement Systems, First Edition, July 2021.*
- *API MPMS Chapter 6.7 superseded in combination by API MPMS Chapter 6.3A Pipeline and Marine Loading/Unloading Measurement Systems, First Edition, July 2021, and API MPMS Chapter 6.4A Lease Automatic Custody Transfer (LACT) Systems, First Edition, December 2023.*
- *API MPMS Chapter 12.2.4 superseded by API MPMS Chapter 12.4.1 Calculation of Petroleum Quantities – Base Prover Volume Determination – Waterdraw Volumetric Method, First Edition, September 2023.*
- *API MPMS Chapter 14.8 superseded by API MPMS Chapter 14.7 Mass Measurement of Natural Gas Liquids and Other Hydrocarbons, Fifth Edition, February 2018.*

Finally, within a significant number of other references there are additional reaffirmations which should be noted in the rulemaking, these include:

- API MPMS Chapter 3.1A = title, edition, and publication date are correct; need to add *“reaffirmed December 2018”*
- API MPMS Chapter 4.1 = title, edition, and publication date are correct; need to update *“reaffirmed January 2020”*
- API MPMS Chapter 4.5 = title, edition, and publication date are correct; need to add *“reaffirmed September 2022”*
- API MPMS Chapter 4.7 = title, edition, and publication date are correct; need to update *“reaffirmed September 2020”*
- API MPMS Chapter 4.9.2 = title, edition, and publication date are correct; need to update *“reaffirmed October 2020”*
- API MPMS Chapter 5.3 = title, edition, and publication date are correct; need to update *“reaffirmed November 2019”*
- API MPMS Chapter 5.4 = title, edition, and publication date are correct; need to update *“reaffirmed October 2020”*
- API MPMS Chapter 5.5 = title, edition, and publication date are correct; need to update *“reaffirmed October 2020”*
- API Standard 2552 = title, edition, and publication date are correct; need to update *“reaffirmed August 2018”*
- API Standard 2555 = title, edition, and publication date are correct; need to update *“reaffirmed June 2020”*
- API RP 2556 = title, edition, and publication date are correct; need to update *“reaffirmed November 2023”*

API Standard 2CCU

API and OOC recommend that BSEE not incorporate by reference API Standard 2CCU in the CFR, currently making it the sole applicable standard in this area for operations. The original 2CCU standard was developed as guidance for the Gulf of Mexico (GOM) to be complimentary to other international standards. By listing it as incorporated by reference, it would make 2CCU the only compliant standard, however there are other standard examples (industry and company standards) that are used in industry and meet the operational and safety goals necessary for operations. The development of an alternative consensus standard with a U.S. focus, which is what 2CCU was, to what existed internationally at the time, should not be adopted by BSEE as the sole standard for the GOM without further consideration of the appropriate suite of both domestic and international standards applicable in this space. For these reasons, we urge BSEE to withdraw the current listing of 2CCU from this rule and engage in additional discussion on what could be a more appropriate approach to meet the goals sought by BSEE.

API RP 2A-WSD, Bulletin 2 INT-DG and Bulletin 2 INT-EX

BSEE is proposing to update the IBR of *API RP 2A-WSD, Recommended Practice for Planning, Designing, and Constructing Fixed Offshore Platforms—Working Stress Design, Twenty-second Edition, November 2014, Reaffirmation, September 2020*. In making this edition update, it is important that BSEE recognizes that it is permissible for platforms designed to earlier editions of 2A to be managed as designed. As stated earlier, infrastructure that was designed, fabricated, and installed on the OCS conforming to a prior edition of a standard incorporated by reference in regulation at the time is compliant. BSEE should ensure that compliant operation is defined as operating the equipment with technical specifications meeting the requirements specified in the original basis of design and applicable standards editions used when design was performed. In this case, for example, there are operational platforms designed per 2A 19th edition and earlier, 2A 20th and 21st editions, and 2A 22nd edition, and maintaining these distinctions is critical to minimize unnecessary rework to platforms which are operating under their original purpose and design.

BSEE is also proposing in this rule to keep incorporated by reference both *API Bulletin 2INT-DG, Interim Guidance for Design of Offshore Structures for Hurricane Conditions, May 2007* and *API Bulletin 2INT-EX, Interim Guidance for Assessment of Existing Offshore Structures for Hurricane Conditions, May 2007*. The provisions in those interim documents have subsequently been incorporated into the following documents which BSEE proposed including in this rule:

- *API RP 2RIM – Integrity Management of Risers from Floating Production Systems; First Edition, September 2019.*
- *API RP 2FSIM – Floating Systems Integrity Management, First Edition, September 2019.*
- *API RP 2MIM – Mooring Integrity Management; First Edition, September 2019.*
- *API RP 2SIM— Structural Integrity Management of Fixed Offshore Structures, First Edition, November 2014; reaffirmed September 2020*

To avoid conflicting requirements, BSEE should consider removing the interim documents from IBR and adopting, as BSEE proposes, the IBR of the updated documents listed above. There are still a few references within the API SC2 document suite to some of the interim bulletins, however we believe there is no value in the interim documents as primary references since they have been superseded by the above-mentioned standards.

As BSEE reviews the IBR status of these documents, BSEE should consider adding an explicit statement on how the incorporation by reference of the 22nd edition of RP 2A and

the rest of the API 2-series document suite (2SIM, 2GEO, etc.) will impact the existing use, structural repair, minor and major changes in use, and other management of structures designed per earlier editions of API RP 2A. As written, there are clear linkages between 2A and 2SIM, for example, which directs users to provisions in 2SIM for the assessment of existing structures. The adoption in 30 CFR 250.198 of the 22nd edition of 2A, as well as 2SIM, etc. will disrupt some of the language in 30 CFR 250.920, which must be changed to coordinate with the updated incorporation by reference. Specifically, references to 2A 21st Edition Section 17 on platform assessment and Section 15 on platform re-use will need to be revised to refer to the appropriate sections in 2SIM. While these changes are being made to 30 CFR 250.920, BSEE should ensure clear language addressing how 2SIM is cross referenced.

API 6AV2

BSEE proposes in the rule to renumber *API Standard 6AV2, Installation, Maintenance, and Repair of Surface Safety Valves and Underwater Safety Valves Offshore; First Edition, March 2014; Errata 1, August 2014*, however this standard was updated to the 2nd Edition in August 2020. Compliance with the 1st Edition of this standard requires both BSEE and industry to process Alternative Compliance requests. As noted previously, BSEE is strongly encouraged to use this opportunity to update standards to the most current version and in this circumstance BSEE should update 6AV2 to the 2nd Edition.

API Spec 11D1

BSEE proposes renumbering *API Spec 11D1, Packers and Bridge Plugs, Second Edition, July 2009*, however API and OOC have previously recommended that BSEE update this reference to the 4th Edition (2021) because HPHT annexes have been included in the 3rd Edition and have been carried through to 4th Edition, including HPHT requirements for packers, bridge plugs, and Operational Tools (Annex B) and includes external flow testing requirements.

Changes from the 3rd to 4th edition include:

- Validation Grade requirements (V3, V0, etc.) are now in table form;
- Better clarification of rated temperature range versus rated temperature-cycle range;
- A new section on low temperature rating validation;
- A significant update to Annex B, HPHT requirements;
- New Informative Annex E for Validation of Maximum Initiation Pressure for Hydrostatically Set Products;

- New Informative Annex F provides calculations for determining maximum and minimum casing ID; and
- New Informative Annex G provides information and calculations of tubing to packer force.

ANSI/API Specification 14A

BSEE proposes renumbering *ANSI/API Spec 14A, Specification for Subsurface Safety Valve Equipment* as currently referenced, however API and OOC have previously recommended that BSEE update the standard to *API Spec 14A, Specification for Subsurface Safety Valve Equipment, 12th edition (2015), Errata (2015), Addendum (2017), Reaffirmed (2020)* because the newer specification provides added considerations for the equipment for service in HPHT environments. It also recognizes classification of service which is an important addition as compared to the previous edition of the specification. In addition, the 12th edition includes HPHT requirement for safety valves and validation grade for HPHT requirement for Subsurface Safety Valves, Injection Safety Valves, and Secondary Tools used with Subsurface Safety Valves. There are also an additional five tests (closure mechanism minimal leakage, extended sand endurance test, combined load test, gas slam test, and dynamic seal test) in the 12th edition.

API RP 14F

BSEE proposes renumbering *API RP 14F, Recommended Practice for Design, Installation, and Maintenance of Electrical Systems for Fixed and Floating Offshore Petroleum Facilities for Unclassified and Class 1, Division 1 and Division 2 Locations, Upstream Segment, Fifth Edition, July 2008, reaffirmed: April 2013* as currently referenced. API and OOC have previously recommended that BSEE update to *API RP 14F 6th Edition (2018)* because the edition referenced in the CFR is outdated, and the 6th edition was developed with lessons learned and newer technology in mind. As stated previously, outdated references to standards can result in BSEE and industry having to process Alternative Compliance requests.

API Specification 17D, API Specification 6A, and API Standard 6AV1 Recommendations:

As mentioned previously, to ensure that industry is using the most up-to-date standards and that there are no conflicting provisions in the editions of the standards cited, API and OOC recommend the following actions related to these standards, specifically:

- API and OOC support BSEE's proposal to update API Specification 17D to the 3rd Edition, Errata 1, Addendum 1.

- API and OOC recommend that BSEE remove reference to API Specification 6A, 21st Edition within CFR 250.833 and 250.834. These two sections should retain reference to API 6AV1 3rd Edition, and API 17D 3rd Edition, Errata 1, and Addendum 1.
 - API and OOC support BSEE's proposal to update API Spec 6A to the 21st Edition outside of CFR 250.833 and 250.834
- API and OOC supports BSEE's proposal to update API Standard 6AV1 to the 3rd Edition.

API and OOC are making these recommendations considering that ongoing changes and updates to standards are dynamic when standards interact and are used in conjunction with one another, in this case:

- The update to the 3rd Edition of API Spec 17D addresses USVs completely, thus Spec. 6A, 21st Edition, should not be referenced within CFR 250.833 and 250.834. API Spec 17D, 3rd Edition, allows for USVs to be monogrammed, whereas API Spec 17D, 2nd Edition required USV monogramming under API Spec 6A, 21st Edition. Both API Spec 17D, 3rd Edition, and API Standard 6AV1, 3rd Edition, list the same requirements, therefore there is no conflict between them. On the other hand, by keeping reference to API Spec 6A, 21st Edition, in CFR 250.833 and 250.834, there will be a conflict within the CFR regarding USVs because these are different and outdated requirements for USVs.
- API Standard 6AV1, 3rd Edition, provides selective, normative, and appropriate reference to API Spec 6A and API Spec 17D.

API RP 17H

BSEE proposes in the rule to renumber *API RP 17H, Remotely Operated Tools and Interfaces on Subsea Production Systems, Second Edition, June 2013; Errata, January 2014*, however this recommended practice was updated to the 3rd Edition in 2019 and should be incorporated by BSEE as the most up to date standard. The 3rd Edition includes an increased level of technical and operational definitions related to Subsea Interfaces and Intervention equipment, and expanded the scope to include sections for Autonomous Underwater Vehicles and Quality Control. In addition, 17H, 2nd Edition was designed for hot stabs, but only with 1/8" to 1/4" holes. A critical component of the 3rd Edition is the addition of hot stabs with holes of 3/4" to 1" bores for bigger hydraulic fast acting functions like BOPs which are needed for their higher flow rates. If limited to the 2nd Edition, BOP functions could take hours to complete just one function through the smaller bore hot stabs.

Therefore, we are recommending the upgrade to the 3rd edition in the CFR so that “hi-flow” hot stabs can be utilized.

API Standard 53 and Specifications 16A, 16C, 16D

API and OOC support and appreciate the proposed updated reference to “*API Standard 53, Well Control Equipment Systems for Drilling Wells, Fifth Edition, December 2018*”. This work on the 5th Edition, which was completed in 2018, is past due for updated reference by BSEE. BSEE should be aware that there is an active workgroup developing improvements to what will be the 6th Edition and hope that, when completed, BSEE will quickly consider updating the reference in a timely fashion.

One additional area, which is important to highlight, is the cross-reference of standards and specifications within the IBR rule. For the purposes of Standard 53, there are a number of additional normative references included in the document that are also individually incorporated by reference by BSEE. These normative referenced documents are indispensable for the application and use of Standard 53. In Standard 53 the document states that “For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document applies (including any addenda/errata).”

In Standard 53, this example includes Spec 16A, Spec 16C and Spec 16D, all of which are listed as normative references for which the latest edition is required. By requiring the use of Standard 53, one is required to follow the applicable provisions of API 16A, 16C and 16D. While BSEE is proposing that each of these specifications remain IBR, but renumbered in the proposed table, the rule does not update these specifications to reflect the most current status.

Unfortunately, this becomes an area of concern where BSEE IBR updates are lagging the regular required maintenance and updating actions required of API Standards. By requiring through IBR this cross referencing, both the primary standard and the normatively references specifications, BSEE is creating a circumstance where applicants must adhere to the provisions of Standard 53, but potentially require “alternative compliance” because the IBR referenced specifications remain outdated.

API and OOC would encourage BSEE to consider the requirement of Standard 53 adequate and remove the unnecessary cross referencing to Specifications 16A, 16C and 16D. If BSEE will not remove the cross references to those specifications, we would encourage BSEE to update the references to reflect the current version of each of the references. Specifically:

API Spec 16A—Specification for Drill-through Equipment, Fourth Edition, April 2017, API Monogram Program Effective Date: April 1, 2018, Errata 1 August 2017, Addendum 1 October 2017, Errata 2 November 2017, Errata 3 April 2018

API Spec 16C — Choke and Kill Equipment, Third Edition, March 2021, API Monogram Program Effective Date: May 1, 2019, Errata 1 July 2022, Errata 2 September 2022

API Spec 16D— Control Systems for Drilling Well Control Equipment and Control Systems for Diverter Equipment, Third Edition, November 2018, API Monogram Program Effective Date: May 1, 2019, Addendum 1 July 2023 (API Monogram Program Effective Date: January 31, 2024)

API RP 65

BSEE proposes renumbering *API RP 65, Recommended Practice for Cementing Shallow Water Flow Zones in Deepwater Wells, First Edition, September 2002* as currently referenced. API and OOC have previously recommended updating this standard to *API RP 65-1 Recommended Practice for Cementing Shallow Water Flow Zones in Deepwater Wells, First Edition, September 2002, 2nd edition (2018)*, because this edition has an increased level of technical and operational definitions related to Shallow Water Flow Zone site selection, drilling, and cementing practices. In addition, in 2018, with the new 2nd edition, API RP 65 became API RP 65-1.

API 510

BSEE proposes renumbering *API 510, Pressure Vessel Inspection Code: In-Service Inspection, Rating, Repair, and Alteration, Tenth Edition, May 2014; Addendum 1, May 2017*, as currently referenced. API and OOC previously recommended updating to the *10th edition, Addendum 1 (2017), Addendum 2 (2018)*, because this addendum enhances standards for “Interval/Frequency and Extent of Inspection”. There are new definitions for “deferral” and “due date” of inspections. In addition, Section 4.3 enhances standardization of “Repair Organization” and Section 6.7 enhances standardization of “Deferral of Inspections, Tests and Examinations”.

Additional Individual Standard References in Need of Updated Reference

BSEE proposes in the rule to renumber *API RP 90, Annular Casing Pressure Management for Offshore Wells, First Edition, August 2006* is referenced, but this document was replaced by *API 90-1, Annular Casing Pressure Management for Offshore Wells, 2nd edition* in 2021.

BSEE proposes in the rule to renumber *API Spec Q1, Specification for Quality Management System Requirements for Manufacturing Organizations for the Petroleum and Natural Gas Industry, Ninth Edition, June 2013; Errata, February 2014; Errata 2, March 2014; Addendum 1, June 2016*, but *API Spec Q1, 10th Edition* was published in September 2023.

Thank you for the opportunity to provide these comments. API, OOC, and our members remain committed to working with BSEE on the Proposed Rule and look forward to BSEE promptly issuing its final rule. Please do not hesitate to contact us if you have any questions.

Sincerely,



Tim Charters
Director, Upstream Policy
American Petroleum Institute



Evan Zimmerman
Executive Director
Offshore Operators Committee