



United States Department of the Interior
BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT
WASHINGTON, DC 20240-0001

In Reply Refer To:
Mail Stop VAE-BSEE-FOIA

February 12, 2020

Sent via Electronic Mail foia@americanoversight.org

Mr. Austin R. Evers
Executive Director,
American Oversight
1030 15th Street, N.W., Suite B255
Washington, DC 20005

Dear Mr. Evers:

The Bureau of Safety and Environmental Enforcement (BSEE) FOIA office received your Freedom of Information Act (FOIA) request dated December 12, 2019, and assigned it control number **BSEE-2020-00046**. Please cite this number in any future communications with our office regarding your request. You requested the following:

1. All email communications (including emails, email attachments, and calendar invitations) between (a) any of the employees listed in Column A below and (b) any of the individuals listed in Column B below, including but not limited to at the email addresses and domains specified:

- a) Director Scott Angelle
- b) Regulations and Standards Branch Chief Lakeisha Harrison
- c) Senior Advisor Preston Beard
- d) Petroleum Engineer Kirk Malstrom
- e) Petroleum Engineer Chief Support Frederick Brink

and

- a) American Petroleum Institute Senior Policy Advisor Holly Hopkins (hopkinsh@api.org)
- b) American Petroleum Institute Senior Director Carrie Domnitch (domnitchc@api.org)

Please provide all responsive records from November 1, 2018 to March 30, 2019.

2. Any handwritten or electronic notes, including handouts provided in person or via email, or summaries or readouts of the meeting, from the calendar entry entitled "CALL: BSEE/DOI Final Revisions to the Blowout Preventer Systems and Well Control Rule (1014-AA39)" held on February 26, 2019 from 3:30 PM to 4:00 PM.

We are writing today to respond to your request on behalf of the BSEE. We have enclosed two documents consisting of 160 pages. Of those pages, we have determined that approximately 21 pages are partially or fully withheld under FOIA Exemption 5 [5 U.S.C. § 552\(b\)\(5\)](#) and Exemption 6 [5 U.S.C. § 552\(b\)\(6\)](#).

Exemption 5—[43 C.F.R. §§ 2.23, 24](#)

Exemption 5 allows an agency to withhold “inter-agency or intra-agency memorandums or letters which would not be available by law to a party... in litigation with the agency.” [5 U.S.C. § 552\(b\)\(5\)](#); see *Nat’l Labor Relations Bd. v. Sears Roebuck & Co.*, 421 U.S. 132, 149 (1975). Exemption 5 therefore incorporates the privileges that protect materials from discovery in litigation, including the deliberative process, attorney work-product, attorney-client, and commercial information privileges. The information being withheld consists of conference call pass codes and numbers and deliberate process privilege.

Deliberative Process Privilege

The deliberative process privilege protects the decision-making process of government agencies and encourages the frank exchange of ideas on legal or policy matters by ensuring agencies are not forced to operate in a fish bowl. A number of policy purposes have been attributed to the deliberative process privilege. Among the most important are to: (1) assure that subordinates will feel free to provide the decisionmaker with their uninhibited opinions and recommendations; (2) protect against premature disclosure of proposed policies; and (3) protect against confusing the issues and misleading the public.

The deliberative process privilege protects materials that are both predecisional and deliberative. The privilege covers records that reflect the give-and-take of the consultative process” and may include “recommendations, draft documents, proposals, suggestions, and other subjective documents which reflect the personal opinions of the writer rather than the policy of the agency.

The materials that have been withheld under the deliberative process privilege of Exemption 5 are both predecisional and deliberative. They do not contain or represent formal or informal agency policies or decisions. They are the result of frank and open discussions among employees of the Department of the Interior. Their contents have been held confidential by all parties and public dissemination of this information would have a chilling effect on the agency’s deliberative processes; expose the agency’s decision-making process in such a way as to discourage candid discussion within the agency, and thereby undermine its ability to perform its mandated functions.

The deliberative process privilege does not apply to records created 25 years or more before the date on which the records were requested.

Commercial Information Privilege

The BSEE has determined that the numbers and pass codes constitute intra-agency documents because they are only shared with members of the Department or their consultants for the purpose of conducting official government business. In addition to qualifying as intra-agency documents, the BSEE has determined that the pass codes and phone numbers qualify as

“confidential commercial information” protectable by Exemption 5. In *Government Land Bank v. General Services Administration*, 671 F.2d 663, 665 (1st Cir. 1982), the court held that when the government enters the marketplace as an ordinary commercial buyer or seller, the government’s information should be protected from competitive disadvantage under Exemption 5. Exemption 5 prevails “where the document contains ‘sensitive information not otherwise available,’ and disclosure would significantly harm the government’s commercial interest.” *Id.* at 666; see also *Federal Open Market Committee v. Merrill*, 443 U.S. 340, 363 (1979).

Here, the government entered the marketplace as an ordinary commercial buyer of private conference call numbers and pass codes. In line with *Land Bank* and *Merrill*, the information is “sensitive and not otherwise available” as the numbers provide access to sensitive conversations between government employees and only the government and seller have access to the information. If the conference call numbers and/or pass codes were released, the government’s financial interest would be significantly harmed. The conference calls would no longer be private since unknown, non-governmental parties would have the ability to listen in to the calls. The funds spent on purchasing the call-in numbers and pass codes would therefore be wasted, and the conference call numbers and pass codes would be of no use.

Because the release of the conference call numbers and pass codes would significantly harm the government’s financial interest by publicizing sensitive information, the BSEE is withholding the information in accordance with Exemption 5 of the FOIA.

Exemption 6—[43 C.F.R. §§ 2.23, .24](#)

Exemption 6 allows an agency to withhold “personnel and medical files and similar files the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.” [5 U.S.C. § 552\(b\)\(6\)](#).

The phrase “similar files” covers any agency records containing information about a particular individual that can be identified as applying to that individual. To determine whether releasing records containing information about a particular individual would constitute a clearly unwarranted invasion of personal privacy, we are required to balance the privacy interest that would be affected by disclosure against any public interest in the information.

Under the FOIA, the only relevant public interest to consider under the exemption is the extent to which the information sought would shed light on an agency’s performance of its statutory duties or otherwise let citizens ‘know what their government is up to. The burden is on the requester to establish that disclosure would serve the public interest. When the privacy interest at stake and the public interest in disclosure have been determined, the two competing interests must be weighed against one another to determine which is the greater result of disclosure: the harm to personal privacy or the benefit to the public. The purposes for which the request for information is made do not impact this balancing test, as a release of information requested under the FOIA constitutes a release to the general public.

The information that has been withheld under Exemption 6 consists of personal information, such as personal cell phone numbers, and we have determined that the individuals to whom this information pertains have a substantial privacy interest in withholding it. Additionally, we have determined that the disclosure of this information would shed little or no light on the performance of the agency's statutory duties. Because the harm to personal privacy is greater than whatever public interest may be served by disclosure, release of the information would constitute a clearly unwarranted invasion of the privacy of these individuals and we are withholding it under Exemption 6.

Mr. Gurney S. Small, Attorney-Advisor, Office of the Solicitor, Department of the Interior, Washington, DC was consulted.

Appeal Rights—[43 C.F.R. §§ 2.57, .58, .59](#)

You may appeal this response to the Department's FOIA/Privacy Act Appeals Officer. If you choose to appeal, the FOIA/Privacy Act Appeals Officer must receive your FOIA appeal **no later than 90 workdays** from the date of this final response. Appeals arriving or delivered after 5 p.m. Eastern Time, Monday through Friday, will be deemed received on the next workday.

Your appeal must be made in writing. You may submit your appeal and accompanying materials to the FOIA/Privacy Act Appeals Officer by mail, courier service, fax, or email. All communications concerning your appeal should be clearly marked with the words: "FREEDOM OF INFORMATION APPEAL." You must include an explanation of why you believe this response is in error. You must also include with your appeal copies of all correspondence between you and BSEE concerning your FOIA request, including your original FOIA request and this response. Failure to include with your appeal all correspondence between you and BSEE will result in the Department's rejection of your appeal, unless the FOIA/Privacy Act Appeals Officer determines (in the FOIA/Privacy Act Appeals Officer's sole discretion) that good cause exists to accept the defective appeal.

Please include your name and daytime telephone number (or the name and telephone number of an appropriate contact), email address and fax number (if available) in case the FOIA/Privacy Act Appeals Officer needs additional information or clarification of your appeal.

DOI FOIA/Privacy Act Appeals Office Contact Information

Department of the Interior
Office of the Solicitor
1849 C Street, N.W.
MS-6556 MIB
Washington, DC 20240
Attn: FOIA/Privacy Act Appeals Office
Telephone: (202) 208-5339
Fax: (202) 208-6677
Email: FOIA.Appeals@sol.doi.gov

Conclusion

For your information, Congress excluded three discrete categories of law enforcement and national security records from the requirements of FOIA. *See* [5 U.S.C. 552\(c\)](#). This response is limited to those records that are subject to the requirements of FOIA. This is a standard notification that is given to all our requesters and should not be taken as an indication that excluded records do, or do not, exist.

The 2007 FOIA amendments created the Office of Government Information Services (OGIS) to offer mediation services to resolve disputes between FOIA requesters and Federal agencies as a non-exclusive alternative to litigation. Using OGIS services does not affect your right to pursue litigation. You may contact OGIS in any of the following ways:

Office of Government Information Services
National Archives and Records Administration
8601 Adelphi Road - OGIS
College Park, MD 20740-6001
E-mail: ogis@nara.gov
Web: <https://www.archives.gov/ogis>
Telephone: 202-741-5770
Fax: 202-741-5769
Toll-free: 1-877-684-6448

Please note that using OGIS services does not affect the timing of filing an appeal with the Department's FOIA & Privacy Act Appeals Officer.

Contact information for the Department's FOIA Public Liaison, who you may also seek dispute resolution services from, is available at <https://www.doi.gov/foia/foiacenters>.

We do not bill requesters for FOIA processing fees when their fees are less than \$50.00, because the cost of collection would be greater than the fee collected. *See* [43 C.F.R. § 2.49\(a\)\(1\)](#). Therefore, there is no billable fee for the processing of this request.

This concludes BSEE's response to your request. If you have any questions, please feel free to contact me by email at bseefoia@bsee.gov; by phone at (703) 787-1204; or by postal mail at FOIA Office; Bureau of Safety and Environmental Enforcement; Mail Stop: VAE-BSEE FOIA; 45600 Woodland Road; Sterling, VA 20166.

Sincerely,

X

Ashley Rychak
Government Information Specialist

Enclosure

From: [Holly Hopkins](#)
To: [Doug Morris \(douglas.morris@bsee.gov\)](#)
Cc: [Candi Hudson](#); [Lars Herbst \(lars.herbst@bsee.gov\)](#); [scott.angelle@bsee.gov](#)
Subject: API 3Q 2018 Report to BSEE on subsea bolts & fasteners
Date: Friday, November 2, 2018 12:03:58 PM
Attachments: [API 3Q Bolt Letter to BSEE.pdf](#)

Doug,

Attached please find the API 3Q 2018 Report to BSEE on subsea bolts and fasteners. This is a detailed and comprehensive update to track the progress of implementation of the voluntary industry actions to address the issues related to subsea bolts and fasteners. We look forward to discussing those details and the report on November 6. If you have any questions, please contact me.

Thanks,

Holly A. Hopkins
Sr. Policy Advisor, Upstream
American Petroleum Institute
1220 L Street, NW
Washington, DC 20005
202-682-8439 Tel
hopkinsh@api.org



This transmission contains information that is privileged and confidential and is intended solely for use of the individual(s) listed above. If you received the communication in error, please notify me immediately. Any dissemination or copying of this communication by anyone other than the individual(s) listed above is prohibited.



Holly A. Hopkins
Senior Policy Advisor

1220 L Street, NW
Washington, DC 20005-4070
USA
Phone: 202-682-8439
Fax: 202-682-8426

Email hopkinsh@api.org
www.api.org

November 2, 2018

Doug Morris
Chief Office of Offshore Regulatory Programs
Bureau of Safety and Environmental Enforcement
U.S. Department of the Interior
1849 C Street, NW
Washington, DC 20240

Via email

Dear Mr. Morris:

As part of API and Industry's commitment to improving training, operating procedures, technology and industry standards, attached is a detailed and comprehensive update showing progress of the voluntary actions taken by Industry to address issues related to subsea bolts and fasteners. As we have discussed, this is ongoing work and progress will be reported as new information becomes available. Notably we have made progress on the near-term commitment, which entails replacing all critical bolting having a hardness greater than 35HRC. One hundred percent of our BOPs have the required replacement bolting ordered and 94% have completed the replacement for all active BOPs in the Gulf of Mexico. The attached documents show progress made by Industry on the following bolting topics:

- Research sponsored by API related to this topic;
- Activity by the standards task groups and subcommittees to implement the recommendations in the API Multi Segment Task Group Report on Bolting Failures;
- Voluntary industry adoption of API 20 E/F for critical BOP bolting;
- Voluntary industry replacement of critical bolting having a hardness of >35 HRC;
- Enhanced QAQC of 3rd party manufactured bolting (i.e., sampling, 20 E/F requirements);
- Updated make-up procedures, with additional engineering rigor and oversight;
- Elimination of electroplated Zinc coatings for subsea/marine applications; and
- Enhanced failure reporting with wider distribution.

API appreciates the opportunity to work with BSEE to continue discussing our shared objective of safe operations. As can be seen by the significant progress we've made as an Industry since 2016, we believe that by working in a spirit of cooperation, we can better understand how to best achieve our common goals and, thus, implement actions to help reach our shared safety objectives. We look forward to

discussing this report in detail during our November 6, 2018, webex. If you have any questions in the meantime, please contact me by phone at (202)682-8439, or by e-mail at hopkinsh@api.org.

Sincerely,

A handwritten signature in blue ink that reads "Holly A. Hopkins". The signature is fluid and cursive, with the first name "Holly" being the most prominent.

Holly A. Hopkins

cc: Lars Herbst, GOM Regional Director

Attachment



AMERICAN PETROLEUM INSTITUTE

November 2018

API 3Q 2018 UPDATE ON INDUSTRY ACTIVITIES ON SUBSEA BOLTS AND CONNECTORS

Background

On August 11, 2014 the Bureau of Safety and Environmental Enforcement (BSEE) released a technical Review of Connector and Bolt Failures following the failure of connectors and bolts used in critical equipment. The technical review, entitled Evaluation of Connector and Bolt Failures, was completed by the bureau's Quality Control-Failure Incident Team (QC-FIT) and submitted to BSEE Director Brian Salerno. The objective of the technical assessment was to document and evaluate failures of the connectors, studs and other components used in critical equipment and determine if there were industry wide issues that need to be addressed by the industry or BSEE. This report addressed a December 2012 incident which prompted a global recall of the bolts associated with the H4 connector bolts.

In response to the QC-Fit Report, API held a Technical Session during the API Exploration and Production Winter Standards Meeting in New Orleans on January 27, 2015. BSEE was invited by API to present their report findings and recommendations. After the Technical Session, an API multi-segment task group was formed to review the detailed recommendations in the report and determine next steps. The final report of the task group was shared with BSEE in March of 2016 and is now being implemented.

An incident in February of 2014 involving a lower marine riser package (LMRP) connector leak prompted BSEE to issue an Addendum to the QC-FIT report, with the new information from this incident.

As a result of these ongoing incidents BSEE issued a Safety Alert regarding Connector and Bolt Failures on February 2, 2016. Additionally, BSEE held a public forum on offshore connector equipment failures, including connector bolt failures that have occurred on the OCS, on August 29, 2016, in Washington, DC.

To address the February 2016 safety alert API formed a workgroup which has met with BSEE numerous times to improve safety offshore as it relates to bolts. This work focuses on subsea BOP bolting and 4 specific areas: 1) Materials/Standards; 2) QA/QC – API Monogram Program; 3) Operations; and 4) Research.

API provides this detailed and comprehensive update to track the progress and implementation of the voluntary industry actions to address the issues related to subsea bolts and connectors. This is ongoing work that may evolve as new information becomes available and this is the ninth of regular quarterly reports.

Progress on Research, Materials/Standards and QA/QC

		Topic	Discussion
1	Research	API sponsored research	API has approved a 2017 project to perform testing to determine susceptibility to environmental hydrogen embrittlement of selected materials and coatings. Testing has begun on API 20E bolting material for susceptibility to hydrogen embrittlement under cathodic protection in simulated seawater. Specimen preparation for the first sample group is complete for the testing of zinc and alternatives to zinc electroplating coatings. Testing is expected to begin by year end and be completed in 2019. A second set of samples is in planning. In addition, API has conducted 4 projects related to hydrogen embrittlement and 21 projects related to corrosion resistant alloys.
2	Materials and Standards	API 6A 21st Edition	Being drafted and is expected to require API 20E bolts.
		API 6D 25th Edition	Being drafted. TG has agreed to make mandatory the use API 20E BSL-1 and 20E BSL-2 for all pressure boundary bolting.
		API 6DSS 3rd Edition	Requires API 20E and API 20F for all pressure boundary bolts in the document published August 2017.
		API 16A 4th Edition	4 th edition with addendum 1 is published. HPHT annex is in comment resolution. Addendum 3, which addresses QTC issues, operator qualification testing, and BSR testing requirements, is out for ballot with a closing date of November 13 th .
		API 16AR 1st Edition	Bolting conforming to API 20E or API 20F is a requirement for pressure controlling bolting, closure bolting and pressure retaining bolting in the document published April 2017. Addendum is being developed to correct errors to allow the standard to be included in the registration program.
		API 16B 1st Edition	Currently under development and is expected to adopt the TGR-3 bolting recommendations and text to meet 20E or 20F.
		API 16C 3rd Edition	Currently in comment resolution. For subsea bolting, the document requires BSL3 as per 20E or 20F as applicable.
		API 16F 2nd Edition	Published November 2017. Requires API 20E or API 20F bolting. Addendum 1 is in development.

Progress on Research, Materials/Standards and QA/QC

		Topic	Discussion
		API 16ST 2nd Edition	Currently under development.
		API 17D 3rd Edition	Being drafted and is considering the TGRs.
		API 17G 3rd Edition	Ballot did not meet consensus. New draft being developed. Requires API 20E or API 20F for fasteners.
		API 17TR8 2nd Edition	Published March 2018.
		API 20E 2nd Edition	Published February 2017. An addendum was published allowing for the addition of other product geometries. Another addendum is in the reballot stage (to allow qualification of NDE subcontractors based on ISO 17020). The remaining issue (allowing continuous cast for BSL3) has been considered by a work group but remains open.
		API 20F 2nd Edition	Published May 2018.
		API 53 5th Edition	5th edition final recirculation comments are being resolved. Expect to be published 4Q2018. Includes proposed requirements for the periodic replacement of existing subsea bolting that conforms to the latest editions of 16C and 16A.
		API 64 3rd Edition	Published August 2017. Addendum balloted to clarify 20E/F bolting requirements (closed April 5 th). Comment resolution meeting held on July 16 th . Preparing final recirculation draft.
		API Q1, 9th Edition, Addendum 2	Published June 2018.

Progress on Research, Materials/Standards and QA/QC

		Topic	Discussion
3	TG Recommendations	TGR-1 - SC21 TG notes that there is conflict between B633 and F1941 related to requirements for hydrogen embrittlement mitigation. B633 requires stress-relief and bake for product greater than 31 HRC. F1941 does not require stress-relief and requires bake for product greater than 39 HRC. API should contact ASTM to request resolution of this conflict. If this cannot be achieved through ASTM, then API needs to issue an equivalent document under API through SC21. In either case, the revised or new document will then need to be adopted by product SCs. This work should also include requirements for maximum hardness on bolting material.	ASTM Committee B08 issued a B08 Main Committee ballot to add process controls and returned B633 to the 39 HRC bake threshold. Ballot received, as expected, several negative votes. The negative votes were considered at the ASTM Committee B08 meeting in November in Atlanta. Ballot item sponsors present arguments and data to address the objections raised by the negative voters. A motion to begin to override the negatives fell one vote short of the required two thirds majority. At the May meeting in San Diego, the committee spent an entire day reviewing the negative votes. Many of the issues were resolved. A slightly reworked version of the proposal is expected to be ready for debate at the next meeting in November 2018 in Washington, DC. (See also actions under TGR-4 and TGR-18.)
		TGR-3 - SC21 TG recommends prohibiting Zinc electroplating for Subsea/Marine application. TG further recommends that an investigation be conducted under the direction of SC21 to determine a better short term (storage) corrosion protection system that would not create hydrogen in service. The results of this study would then need to be adopted into product standards.	Phase 1 testing (SnZn, ZnNi, Zn Flake, TDC Zn Alloy, NiCo Electroplated Zn) is in progress with actual testing expected to start before year end. Testing is expected to take about a year. Interim results will be released as they become available.

Progress on Research, Materials/Standards and QA/QC

		Topic	Discussion
		TGR-4 - SC21 TG recommends consideration of an overarching document issued by API through SC21 in cooperation with product SCs covering selection of proper bolting materials for different environments (including subsea) would be helpful.	The comment only ballot for API 21TR1 closed July 13, 2018. Once comment resolution is complete the document will be ready for publication. Publication is expected by year end.
		TGR-8 - SC21 Do not allow use of B7 or L7 grades above 2.5" in diameter.TG recommends that this be included as part of the overarching document under SC21.	Completed. Do not allow the use of ASTM A320 L7/ASTM A193 B7 bolting for diameters above 2 ½ inches unless the DI of the material is intentionally modified. (The recommendation has been provided to SC6, SC16 and SC17 and will also be covered in API 21TR1.)
		TGR-18 - SC21 Product subcommittees should review and consider incorporating 20E and 20F requirements (resolve existing conflicting properties specified in product specifications such as hardness).	*Ties into TGR-1* (This work is in response to the TGR-1 request to establish maximum hardness for bolting material.) Objective is to identify hardness and associated yield limit to prevent HISC in subsea fasteners. Testing is underway and is expected to be completed by the second quarter 2019. Some testing has been completed and results are currently being reviewed within the Subgroup. The results will be presented at the SC21 Task Group meeting in January during the winter conference. . The new Subgroup with a charge to provide recommendations for improved accuracy of hardness testing and calculation of test uncertainty is meeting regularly. An initial report of the groups work is expected by the SC21 Task Group January meeting during the winter conference. A draft report has been circulated within the Subgroup. Additionally, a round robin hardness testing to support the report is beginning. A fifth Subgroup was formed to investigate thread hardness on corrosion resistant alloys. The group met and prepared a test plan. The group's request for API funding for testing has been approved. Testing will begin in 2019.

Progress on Research, Materials/Standards and QA/QC

		Topic	Discussion
		TGR-2 - SC20 TG recommends that API expand 20E to more adequately cover the requirements of plating and coating as well as move the supplemental requirements for plating and coating into the body of the document, making them standard requirements.	Done.
		TGR-9 - SC20 TG recommends that volumetric examination where bolt diameter exceeds 2.5" should be added as a requirement to 20E, 20F, BSL-2, and BSL-3.	Done for API 20E. Done for API 20F.
		TGR-11 - SC20 Revise 20F to restrict use of sulfur based lubricants during manufacture of bolting.	Done for API 20F.
		TGR-17 - SC20 Strengthen heat treating and furnace loading requirements in 20E and 20F (more prescriptive requirements related to: spacing, QTC location, and thermocouple placement). Include requirements for oven calibration for pre and post bake operations.	Done for API 20E. Done for API 20F.
		TGR-20 - SC20 SC20 review the supplier controls in 20E and 20F to ensure these adequately cover required controls for subcontracted processes. SC 20 should also monitor the API Q1 revisions.	Done for API 20E. Done for API 20F.
		TGR-19 - SC18 SC18 to form a TG to review the BSEE FIT-QC Report on connector bolt failures to determine if the current requirements of API Spec Q1 has the provisions needed to ensure that system control features are in place, and clearly stated, to eliminate these type of failures in the future.	Done, TG formed.

Progress on Research, Materials/Standards and QA/QC

		Topic	Discussion
		TGR-3 - SC17 TG recommends prohibiting Zinc electroplating for Subsea/Marine application. TG further recommends that an investigation be conducted under the direction of SC21 to determine a better short term (storage) corrosion protection system that would not create hydrogen in service. The results of this study would then need to be adopted into product standards.	Completed. 17D, 3rd Edition is adopting 20E/20F in the Normative Reference, for which TGR-3 has been incorporated.
		TGR-5/TGR-12 - SC17 -TG recommends that the product specifications require equipment manufacturers to specify acceptable thread compounds for bolting applications based on material, plating and service. -TG recommends adding requirements to API product specifications to restrict combining these elements in thread compounds.	Completed. 17D 3rd Edition Annex G is addressing: 1. Written procedures, incorporating the features of these provisions and specifying the thread lubricant to be used shall be developed for use by the qualified connection assemblers 2. The applied torque/tension in the written procedures shall be validated for some relevant bolt sizes with actual material, coating and lubrication
		TGR-6 - SC17 Torqueing requirements should be reviewed to determine if standardization among product specifications is needed.	Completed. 17D 3rd Edition Annex G is addressing: 1. Standard closure bolting shall be assembled using torque or other validated bolt preload method that is calculated to achieve a nominal tensile stress of 67 % of the bolt's minimum specified material yield strength (SY). This is to ensure gasket seating during make-up and increase face-to-face contact preload in excess of separation forces at rated working pressure.
		TGR-13 - SC17 Guidance should be issued by API on when and how to perform fatigue sensitivity analysis on bolting.	CSOEM approved 2-year research project in SC21 to investigate fatigue properties of bolting. Production of test bolting is expected to be completed in October 2018 with testing to be begin shortly thereafter.

Progress on Research, Materials/Standards and QA/QC

	Topic	Discussion
	TGR-14 - SC17 Involved API SC's should address guidance issued in the product specs to require use of BSL-3 in fatigue sensitive applications.	CSOEM approved 2-year research project in SC21 to investigate fatigue properties of bolting. Production of test bolting is expected to be completed in October 2018 with testing to be begin shortly thereafter.
	TGR-16 - SC17 TG recommends API issue a document to provide guidance on derating of bolting. There are several specifications on material derating due to elevated temperature.	SC17 currently in ongoing discussion with 17D HPHT Annex.
	TGR-18 - SC17 Product subcommittees should review and consider incorporating 20E and 20F requirements (resolve existing conflicting properties specified in product specifications such as hardness).	Completed. 17D 3rd Edition is adopting 20E/20F in the Normative Reference
	TGR-3 - SC16 TG recommends prohibiting Zinc electroplating for Subsea/Marine application. TG further recommends that an investigation be conducted under the direction of SC21 to determine a better short term (storage) corrosion protection system that would not create hydrogen in service. The results of this study would then need to be adopted into product standards.	16C - For subsea bolting, the document requires BSL3 as per 20E or 20F as applicable. 16A - Completed 16ST - The 2nd Edition of API RP 16ST is currently under development and is debating whether or not to adopt the TGR-3 bolting recommendations and text to meet 20E or 20F as this equipment is for surface use only. 16B - The 1st Edition of API Spec 16B is currently under development and is debating whether or not to adopt the TGR-3 bolting recommendations and text to meet 20E or 20F as this equipment is for surface use only. 16D – Completed; will not be included. 16F - Completed

Progress on Research, Materials/Standards and QA/QC

		Topic	Discussion
		TGR-5/TGR-12 - SC16 TG recommends that the product specifications require equipment manufacturers to specify acceptable thread compounds for bolting applications based on material, plating and service.-TG recommends adding requirements to API product specifications to restrict combining these elements in thread compounds.	16C – Is expected to be addressed in the 4th edition (next revision). 16A - Completed 16ST - The 2nd Edition of API RP 16ST is currently under development and is expected to reference the recommendations to be contained in operating manuals of Spec 16B equipment, including assembly and disassembly information, as well as flange make-up procedure (requirements for lubricant, torque, tightening pattern, percentage increments for torque, etc.) 16B - The 1st Edition of API Spec 16B is currently under development and is expected to contain the following requirement for all operating manuals of 16B equipment: assembly and disassembly information that includes flange make-up procedure that includes requirements for lubricant, torque, tightening pattern, percentage increments for torque, etc. 16D - Will discuss this in the 4th Edition or via addendum if deemed necessary.
		TGR-6 - SC16 Torqueing requirements should be reviewed to determine if standardization among product specifications is needed.	16C - Will be addressed in the 4th edition (next revision). 16A - Completed 16ST - The 2nd Edition of API RP 16ST is currently under development and is expected to reference the recommendations to be contained in operating manuals of Spec 16B equipment, including assembly and disassembly information, as well as flange make-up procedure (requirements for lubricant, torque, tightening pattern, percentage increments for torque, etc.) 16B - The 1st Edition of API Spec 16B is currently under development and is expected to contain the following requirement for all operating manuals of 16B equipment: assembly and disassembly information that includes flange make-up procedure that includes requirements for lubricant, torque, tightening pattern, percentage increments for torque, etc. 16D - Will discuss this in the 4th Edition or via addendum if deemed necessary.

Progress on Research, Materials/Standards and QA/QC

		Topic	Discussion
		TGR-13 - SC16 Guidance should be issued by API on when and how to perform fatigue sensitivity analysis on bolting.	16A - API 16A 4th edition does not currently contain requirements for fatigue analysis. The HPHT workgroup included this requirement. 16ST - The 2nd Edition of API RP 16ST is currently evaluating the specific locations within the assembly of well control components where fatigue analysis of bolting is needed, especially in assembly of coiled tubing and snubbing well control components. 16B - The 1st Edition of API Spec 16B is currently evaluating the need for fatigue analysis of bolting, especially in assembly of coiled tubing and snubbing well control components. 16D – Completed - Task group has not noted any areas where fatigue sensitivity analysis is deemed necessary. 16F - API 16F does not currently contain requirements for fatigue analysis.
		TGR-14 - SC16 Involved API SC's should address guidance issued in the product specs to require use of BSL-3 in fatigue sensitive applications.	16C - Completed 16A - Completed 16ST - BSL-3 is expected to be required in the 1st Edition of API Spec 16B for all closure bolting and pressure retaining bolting intended for offshore applications. 16B - BSL-3 is expected to be required in the 1st Edition of API Spec 16B for all closure bolting and pressure retaining bolting intended for offshore applications. 16D – Completed - Task group has not noted areas of fatigue sensitive applications to date. 16F - Completed

Progress on Research, Materials/Standards and QA/QC

		Topic	Discussion
		TGR-15 - SC16 TG recommends revision to API S53 to define a standard method for calculating watch circle.	Completed - S53 Will not incorporate this recommendation as it is outside the scope of S53.
		TGR-16 - SC16 TG recommends API issue a document to provide guidance on derating of bolting. There are several specifications on material derating due to elevated temperature.	16A - Currently, this is only addressed in: API TR 6AF1 Technical Report on Temperature Derating on API Flanges Under Combination of Loading. Note: 16A, 3rd edition only has temperature ratings up to 250F. The referenced 6AF1 provides guidance for derating based on temperature beginning at 350F. Temperature derating is primarily a concern in HPHT applications. This is expected to be addressed in the new 16A HPHT annex. 16ST - The 2nd Edition of API RP 16ST is currently evaluating the need for derating of bolting due to bending stresses and temperature, especially in assembly of coiled tubing and snubbing well control components. 16B - The 1st Edition of API Spec 16B is currently evaluating the need for derating of bolting due to bending stresses and temperature, especially in assembly of coiled tubing and snubbing well control components. 16D – Completed – Task group has not identified any areas of our specification that would be effected by elevated temperatures. 16F - HPHT is expected to be addressed in the next edition.

Progress on Research, Materials/Standards and QA/QC

		Topic	Discussion
		TGR-18 - SC16 Product subcommittees should review and consider incorporating 20E and 20F requirements (resolve existing conflicting properties specified in product specifications such as hardness).	16C - Completed 16A - Completed 16ST - The 2nd Edition of API RP 16ST is debating whether to incorporate 20E and 20F requirements. 16B - The 1st Edition of API Spec 16B is debating whether or not to incorporate 20E and 20F requirements. 16D - Completed - Decided not to require them for the 3rd edition. Manufacturers will be required to provide documented bolting specifications where applicable. 16F - Completed
		TGR-3 - SC6 TG recommends prohibiting Zinc electroplating for Subsea/Marine application. TG further recommends that an investigation be conducted under the direction of SC21 to determine a better short term (storage) corrosion protection system that would not create hydrogen in service. The results of this study would then need to be adopted into product standards.	API 6A 21st to consider results of investigation. Note identifies risk of hydrogen charging during plating. API 6DSS 3rd - Completed
		TGR-5/TGR-12 - SC6 -TG recommends that the product specifications require equipment manufacturers to specify acceptable thread compounds for bolting applications based on material, plating and service. -TG recommends adding requirements to API product specifications to restrict combining these elements in thread compounds.	6A 21st edition in development, is expected to address thread compounds in Annex E. 6DSS 3rd – Completed.

Progress on Research, Materials/Standards and QA/QC

		Topic	Discussion
		TGR-6 - SC6 Torqueing requirements should be reviewed to determine if standardization among product specifications is needed.	6A 21st edition in development, is expected to address torqueing practice in Annex E.
		TGR-7/TGR-10 - SC6 TG recommends modification of 6A to require impact testing at or below design temperature w/ acceptance criteria for larger cross section bolting (over 2.5").	6A 21st edition is expected to address impact testing. 6DSS 3rd – Completed.
		TGR-13 - SC6 Guidance should be issued by API on when and how to perform fatigue sensitivity analysis on bolting.	See TGR-14
		TGR-14 - SC6 Involved API SC's should address guidance issued in the product specs to require use of BSL-3 in fatigue sensitive applications.	6A 21 st – Completed. Fatigue loading is outside the document scope. Annex B guides purchaser to define fatigue application of a product.
		TGR-16 - SC6 TG recommends API issue a document to provide guidance on derating of bolting. There are several specifications on material derating due to elevated temperature.	6A 21st edition in development, is expected to address de-rating due to temperature. 6DSS 3rd – Not applicable to this specification.

Progress on Research, Materials/Standards and QA/QC

		Topic	Discussion
		TGR-18 - SC6 Product subcommittees should review and consider incorporating 20E and 20F requirements (resolve existing conflicting properties specified in product specifications such as hardness).	6A 21st Same as TGR-14 6D 25th Plans are to make 20E BSL-1 mandatory for class rating 900 and higher on the next revision in late 2019. 6DSS 3rd – Completed.
4	QAQC	API Q1 9th Edition, Addendum 2	Published June 2018.

Topic	Discussion	OEM 1	OEM 2	OEM 3	OEM 1 Comments	OEM 2 Comments	OEM 3 Comments
2017 Deliverables							
1	Bulletin identifying critical BOP bolting > 35 HRC	Attach any EB/PNI identifying critical bolting > 35 HRC	Completed - February 2016	Completed - February 24, 2016	Completed - October 2016	Product Notification & Improvement 16-008 issued 9/2016 Product Notification & Improvement 16-009 issued 9/2016 Product Notification & Improvement 16-010 issued 10/2016	Product Information Bulletin D4516545916 Released February 24, 2016 PA 40832 was generated in response to BSEE Safety Alert 318. Company does not provide bolts for pressure containing/pressure controlling with hardness greater than 35 HRC. See attachment. Revision 2 of PA 40832 was released in 12/2016 to communicate that Engineering Bulletin 962D (Torque guidance for critical bolting) was released and Company uses FPR to investigate field issues and uses Product Advisory or Product Safety Alerts to communicate issues to Company equipment owners.
2	Part Numbers for API 20 E/F replacement Bolting for critical BOP bolting > 35 HRC	Attach any EB/PNI identifying part numbers for critical bolting > 35 HRC	Completed - NA	Completed - 2016	Completed - October 2016	Product Notification & Improvement 16-008 issued 9/2016 Product Notification & Improvement 16-009 issued 9/2016 Product Notification & Improvement 16-010 issued 10/2016	All replacement bolting for critical BOP bolting meet API 20E BSL-3 Company has generated critical bolting part numbers for compliance to API 20E, BSL-3. These are available to our customers and more are being generated as needed. A few part numbers have been set up for 20F at this moment as CRA bolting is not normally provided in BOP equipment for critical bolting. See attachment with sample bolting part numbers.
3	Bulletin updating Torque Application	Attach any EB/PNI identifying updated Torque guidance for critical bolting	Completed - March 2016	Completed - February 24, 2016	Completed	Torque procedures issued. Operating procedures updated.	D4516545916 Release February 24, 2016. Torque revision 02 is out in 10/2016 EB-962D, released on March 2016. See attachment.
4	Internal process for enhanced failure reporting of critical bolting	Attach any example of updated failure reporting process. Attach any example of enhanced failure reporting related to critical BOP bolting	Completed - 1990's	Completed	Completed	Failure reporting and tracking through our system. The system provides feedback to customers through tracking responses, and drive analysis. External communication through Engineering Bulletin, Product Notification of Improvement, Customer Letters, etc.	Company has internal procedure called Field Performance Report (FPR) for capturing field performance failures of company equipment. This FPR is the mechanism used to initiate an investigation and determine the Root Cause of the failure. In addition, Company has a system to communicate Product Advisories (PA) and Safety Alerts (SA) as well as Engineering Bulletins (EB) to our customers if deemed necessary resulting from an FPR investigation or internal reviews. The guidelines for these procedures are outlined in Company Engineering Procedure EP-307 (FPRs), CEP-030 (SAs/PAs) and EP-204 (EBs). These procedures are considered "Confidential" and cannot be distributed outside of Company.
5	Updated QAQC standards for bolt manufacturing	Attach any example of updated QA process	Completed - 1990's	Completed	Completed - October 2016	QMS procedure improvements regarding supplier qualification. 20E vendor qualification and audit per family of fasteners, sub-tier supplier audit, review of mill audits. The supplier manufacturing process is locked and audited annually. Improved process incorporates supplier quality, engineering, quality teams and product documentation compliance to original qualification. Increased overall scrutiny on critical bolting incorporates engineering lockdown of parts and 3rd party onsite reviews.	Bolts specified to API 20E BSL-3. All our BSL bolting is only manufactured by vendors our QA department has physically audited and approved for critical fasteners. Per API 20E the manufacture of the finished part has to audit the mill producing the material for BSL. The documentation required of these vendors are as follows: Full Dimensional Inspection Report, Manufactures Material Test Report (Chemical and Mechanical), MPI Test Report, Ultrasonic Test Report, 100% Hardness Testing (If Serialized), Steel Certificate of Test from the Mill, Mechanical Testing by independent Lab to ensure the product from the mill meets the BSL Requirements (Only if manufacture did not buy direct from mill), Heat Treat Certification, Micro-Structure Examination with Photo, Macro-Structure Examination with Photo, and Plating Certification. Quality Plans (QP-000112-09) have been created for Pressure Containing and Primary Load Bearing Oil and Gas Equipment Used in Subsea Applications: API 6A, API 17D and API 20E. Bolting Specification BSL-3. QP-000112-09 is considered "Confidential" and cannot be distributed outside of Company.
2018-2023 Deliverables							
A1	Part numbers for API 20 E/F replacement bolting for all critical BOP bolting	Attach any EB/PNI identifying part numbers for critical bolting	Completed - December 2016	Completed	Completed - October 2016	Product Notification & Improvement 16-008 issued 9/2016 Product Notification & Improvement 16-009 issued 9/2016 Product Notification & Improvement 16-010 issued 10/2016	16543557-001, 16569565-001, 16569606-001, 165004, 16587680-001, 16587681-001, 16587682-001. All part numbers referenced in PIB D4516545196 Company has generated critical bolting part numbers for compliance to API 20E, BSL-3. These are available to our customers and more are being generated as needed. A few part numbers have been set up for 20F at this moment as CRA bolting is not normally provided in BOP equipment for critical bolting. See attachment with sample bolting part numbers. PA 40832 Rev 02 addresses this item.
A2	Replacement bolting coating specified	Attach any EB/PNI identifying replacement coating	Completed - December 2017	Completed	Completed - October 2016	Product Notification & Improvement 16-010 issued 10/2016	Zinc-Nickel Plate - Plate to ASTM F1941 Company is engaging different vendors to find alternatives to electrodeposited zinc plating. Update 04/19/2017 Action still in progress. Estimated completion date End of May 2017. Update 06/30/2017 Action still in progress. Estimated completion date end of August 2017 Update 10/15/2017 We have identified and qualified replacement coating. We are currently working to qualify vendors. Update 01/02/2018 we have qualified the vendors with replacement coating.

Summary of Progress on Equipment Owner Operations
(Q3, 2018)

Total Number of Active BOPs = 36			Not Started		In-Progress		Completed	
			Number	Percent	Number	Percent	Number	Percent
Item	Topic	Discussion						
2017 Deliverables								
1	Replacement 20 E/F bolts for all > 35 HRC critical bolting ordered	List by rig the % of API 20 E replacement bolts ordered	0	0%	0	0%	36	100%
2	Replacement 20 E/F bolts for all > 35 HRC critical bolting installed	List by rig the % of API 20 E bolts installed on the BOP	0	0%	2	6%	34	94%
3	Rig Procedure for torqueing of critical bolting	Can include example rig procedure	0	0%	2	6%	34	94%
4	Internal process for enhanced failure reporting of critical bolts (IOGP Failure reporting procedure)	Can include example procedure for compliance with IOGP Failure reporting	0	0%	0	0%	36	100%
5	MTR review for installed critical bolting:	Can include letter from OEM, example of MTR audit	0	0%	3	8%	33	92%
	- OEM SOF critical bolting per relevant specification		0	0%	0	0%	36	100%
	- MTRs per relevant specification		0	0%	2	6%	34	94%
	- Bolting audit to verify MTR information		0	0%	4	11%	32	89%
6	Preventative maintenance (PM) for BOP bolting API Std 53	Can include PM for BOP bolting maintenance. Example of NDE performed on BOP bolts	0	0%	4	11%	32	89%
2018-2023 Deliverables								
A1	Critical bolting API 20 E/F replacement bolts ordered	List by rig % of bolts ordered	9	25%	7	19%	20	56%
A2	Critical bolting API 20 E/F replacement bolts installed	List by rig % of bolts installed/replaced	13	36%	20	56%	3	8%

			Rig 1 BOP 1	Rig 2 BOP 1	Rig 3 BOP 1	Rig 4 BOP 1
Item	Topic	Discussion	Status	Status	Status	Status
	2017 Deliverables					
1	Replacement 20 E/F bolts for all > 35 HRC critical bolting ordered	List by rig the % of API 20 E replacement bolts ordered	100%	100%	100%	NA
2	Replacement 20 E/F bolts for all > 35 HRC critical bolting installed	List by rig the % of API 20 E bolts installed on the BOP	100%	100%	100%	NA
3	Rig Procedure for torquing of critical bolting	Can include example rig procedure	In-progress	Completed - July 15, 2014	In-progress	NA
4	Internal process for enhanced failure reporting of critical bolts (IOGP Failure reporting procedure)	Can include example procedure for compliance with IOGP Failure reporting	2015 Training in Rig maint. Sys. 100% participation in GOM	Completed - July 20, 2016	2015 Training in Rig maint. Sys. 100% participation in GOM	NA
5	MTR review for installed critical bolting:	Can include letter from OEM, example of MTR audit	Completed	Completed - July 15, 2014	Completed	NA
	PA 40832 from OEM		Completed - July 15, 2014	PA 40832 from OEM	NA	
	Completed - October 2016		Completed - July 15, 2014	Completed - October 2016	NA	
	Completed - October 2016		Completed - July 15, 2014	Completed - October 2016	NA	
6	Preventative maintenance (PM) for BOP bolting API Std 53	Can include PM for BOP bolting maintenance. Example of NDE performed on BOP bolts	Completed - 2015	Completed - March 15, 2016	Completed - 2015	NA
	2018-2023 Deliverables					
A1	Critical bolting API 20 E/F replacement bolts ordered	List by rig % of bolts ordered	plan to replace drill thru bolting in 2019	0%	plan to replace drill thru bolting in 2019	NA
A2	Critical bolting API 20 E/F replacement bolts installed	List by rig % of bolts installed/replaced	0%	0%	0%	NA

			Rig 4 BOP 2	Rig 5 BOP 1	Rig 5 BOP 2	Rig 6 BOP 1
Item	Topic	Discussion	Status	Status	Status	Status
	2017 Deliverables					
1	Replacement 20 E/F bolts for all > 35 HRC critical bolting ordered	List by rig the % of API 20 E replacement bolts ordered	NA	100%	100%	NA
2	Replacement 20 E/F bolts for all > 35 HRC critical bolting installed	List by rig the % of API 20 E bolts installed on the BOP	NA	100%	100%	NA
3	Rig Procedure for torqueing of critical bolting	Can include example rig procedure	NA	Completed - March 9, 2015	Completed - March 9, 2015	NA
4	Internal process for enhanced failure reporting of critical bolts (IOGP Failure reporting procedure)	Can include example procedure for compliance with IOGP Failure reporting	NA	Completed - July 20, 2016	Completed - July 20, 2016	NA
5	MTR review for installed critical bolting:	Can include letter from OEM, example of MTR audit	NA	Completed-May 31, 2018	Completed-March 13, 2018	NA
	NA		Completed-May 31, 2018	Completed-March 13, 2018	NA	
	NA		Completed-May 31, 2018	Completed-March 13, 2018	NA	
	NA		Completed-May 31, 2018	Completed-March 13, 2018	NA	
6	Preventative maintenance (PM) for BOP bolting API Std 53	Can include PM for BOP bolting maintenance. Example of NDE performed on BOP bolts	NA	Completed - March 15, 2016	Completed - March 15, 2016	NA
	2018-2023 Deliverables					
A1	Critical bolting API 20 E/F replacement bolts ordered	List by rig % of bolts ordered	NA	0%	0%	NA
A2	Critical bolting API 20 E/F replacement bolts installed	List by rig % of bolts installed/replaced	NA	0%	0%	NA

			Rig 7 BOP 1	Rig 7 BOP 2	Rig 8 BOP 1	Rig 9 BOP 1
Item	Topic	Discussion	Status	Status	Status	Status
	2017 Deliverables					
1	Replacement 20 E/F bolts for all > 35 HRC critical bolting ordered	List by rig the % of API 20 E replacement bolts ordered	Completed - February 16, 2017	Completed - February 16, 2017	NA	100%
2	Replacement 20 E/F bolts for all > 35 HRC critical bolting installed	List by rig the % of API 20 E bolts installed on the BOP	Completed - July 1, 2017	Completed - Jun 2017	NA	100%
3	Rig Procedure for torqueing of critical bolting	Can include example rig procedure	Completed - November 1, 2016	Completed - November 1, 2016	NA	Completed - Oct 4, 2016
4	Internal process for enhanced failure reporting of critical bolts (IOGP Failure reporting procedure)	Can include example procedure for compliance with IOGP Failure reporting	Completed - November 1, 2016	Completed - November 1, 2016	NA	IOGP Failure reporting
5	MTR review for installed critical bolting:	Can include letter from OEM, example of MTR audit	Completed - November 1, 2016	Completed - November 1, 2016	NA	Completed - January 2017
	- OEM SOF critical bolting per relevant specification		Completed - November 1, 2016	Completed - November 1, 2016	NA	Completed
	- MTRs per relevant specification		Completed - November 1, 2016	Completed - November 1, 2016	NA	Completed
	- Bolting audit to verify MTR information		Completed - November 1, 2016	Completed - November 1, 2016	NA	Completed
6	Preventative maintenance (PM) for BOP bolting API Std 53	Can include PM for BOP bolting maintenance. Example of NDE performed on BOP bolts	Completed - December 1, 2017	Completed - December 1, 2017	NA	Completed - April 2017
	2018-2023 Deliverables					
A1	Critical bolting API 20 E/F replacement bolts ordered	List by rig % of bolts ordered	15%	15%	NA	100%
A2	Critical bolting API 20 E/F replacement bolts installed	List by rig % of bolts installed/replaced	15%	65%	NA	98%

			Rig 9 BOP 2	Rig 10 BOP 1	Rig 10 BOP 2	Rig 11 BOP 1
Item	Topic	Discussion	Status	Status	Status	Status
	2017 Deliverables					
1	Replacement 20 E/F bolts for all > 35 HRC critical bolting ordered	List by rig the % of API 20 E replacement bolts ordered	100%	100%	100%	NA
2	Replacement 20 E/F bolts for all > 35 HRC critical bolting installed	List by rig the % of API 20 E bolts installed on the BOP	100%	100%	100%	NA
3	Rig Procedure for torqueing of critical bolting	Can include example rig procedure	Completed - Oct 5, 2016	Completed - March 9, 2015	Completed - March 9, 2015	NA
4	Internal process for enhanced failure reporting of critical bolts (IOGP Failure reporting procedure)	Can include example procedure for compliance with IOGP Failure reporting	IOGP Failure reporting	Completed - July 20, 2016	Completed - July 20, 2016	NA
5	MTR review for installed critical bolting:	Can include letter from OEM, example of MTR audit	Completed - January 2017	Completed-February 26, 2018	Completed-August 16, 2018	NA
	Completed		Completed-February 26, 2018	Completed-August 16, 2018	NA	
	Completed		Completed-February 26, 2018	Completed-August 16, 2018	NA	
	Completed		Completed-February 26, 2018	Completed-August 16, 2018	NA	
6	Preventative maintenance (PM) for BOP bolting API Std 53	Can include PM for BOP bolting maintenance. Example of NDE performed on BOP bolts	Completed - 2017	Completed - March 15, 2016	Completed - March 15, 2016	NA
	2018-2023 Deliverables					
A1	Critical bolting API 20 E/F replacement bolts ordered	List by rig % of bolts ordered	100%	0%	0%	NA
A2	Critical bolting API 20 E/F replacement bolts installed	List by rig % of bolts installed/replaced	100%	0%	0%	NA

			Rig 12 BOP 1	Rig 12 BOP 2	Rig 13 BOP 1	Rig 14 BOP 1
Item	Topic	Discussion	Status	Status	Status	Status
	2017 Deliverables					
1	Replacement 20 E/F bolts for all > 35 HRC critical bolting ordered	List by rig the % of API 20 E replacement bolts ordered	100%	100%	100%	100%
2	Replacement 20 E/F bolts for all > 35 HRC critical bolting installed	List by rig the % of API 20 E bolts installed on the BOP	100%	100%	100%	100%
3	Rig Procedure for torqueing of critical bolting	Can include example rig procedure	Completed	Completed	Complete	Completed
4	Internal process for enhanced failure reporting of critical bolts (IOGP Failure reporting procedure)	Can include example procedure for compliance with IOGP Failure reporting	IOGP BOP Reliability Database	IOGP BOP Reliability Database	Completed - May 8, 2015	IOGP BOP Reliability Database
5	MTR review for installed critical bolting:	Can include letter from OEM, example of MTR audit	Completed - December 2016	Completed - December 2016	In-progress	Completed - December 2016
	- OEM SOF critical bolting per relevant specification		Completed	Completed	Completed - February 24, 2016	Completed
	- MTRs per relevant specification		Completed	Completed	Completed - May 4, 2016	Completed
	- Bolting audit to verify MTR information		Completed	Completed	In-progress	Completed
6	Preventative maintenance (PM) for BOP bolting API Std 53	Can include PM for BOP bolting maintenance. Example of NDE performed on BOP bolts	Completed	Completed	Completed - December 9, 2015	Completed
	2018-2023 Deliverables					
A1	Critical bolting API 20 E/F replacement bolts ordered	List by rig % of bolts ordered	80%	80%	0%	100%
A2	Critical bolting API 20 E/F replacement bolts installed	List by rig % of bolts installed/replaced	80%	80%	0%	90%

			Rig 14 BOP 2	Rig 15 BOP 1	Rig 15 BOP 2	Rig 16 BOP 1
Item	Topic	Discussion	Status	Status	Status	Status
	2017 Deliverables					
1	Replacement 20 E/F bolts for all > 35 HRC critical bolting ordered	List by rig the % of API 20 E replacement bolts ordered	100%	100%	100%	100%
2	Replacement 20 E/F bolts for all > 35 HRC critical bolting installed	List by rig the % of API 20 E bolts installed on the BOP	100%	100%	100%	100%
3	Rig Procedure for torquing of critical bolting	Can include example rig procedure	Completed	Completed	Completed	Completed
4	Internal process for enhanced failure reporting of critical bolts (IOGP Failure reporting procedure)	Can include example procedure for compliance with IOGP Failure reporting	IOGP BOP Reliability Database	Completed	Completed	IOGP BOP Reliability Database
5	MTR review for installed critical bolting:	Can include letter from OEM, example of MTR audit	Completed - December 2016	Completed	Completed	Completed - December 2016
	- OEM SOF critical bolting per relevant specification		Completed	In Progress	In Progress	Completed
	- MTRs per relevant specification		Completed	Completed	Completed	Completed
	- Bolting audit to verify MTR information		Completed	Completed	Completed	Completed
6	Preventative maintenance (PM) for BOP bolting API Std 53	Can include PM for BOP bolting maintenance. Example of NDE performed on BOP bolts	Completed	In-progress	In-progress	Completed
	2018-2023 Deliverables					
A1	Critical bolting API 20 E/F replacement bolts ordered	List by rig % of bolts ordered	100%	100%	100%	100%
A2	Critical bolting API 20 E/F replacement bolts installed	List by rig % of bolts installed/replaced	90%	8%	8%	37%

			Rig 17 BOP 1	Rig 17 BOP 2	Rig 18 BOP 1	Rig 18 BOP 2
Item	Topic	Discussion	Status	Status	Status	Status
	2017 Deliverables					
1	Replacement 20 E/F bolts for all > 35 HRC critical bolting ordered	List by rig the % of API 20 E replacement bolts ordered	100%	100%	Completed - February 16, 2017	Completed - February 16, 2017
2	Replacement 20 E/F bolts for all > 35 HRC critical bolting installed	List by rig the % of API 20 E bolts installed on the BOP	100%	100%	Completed - Jun 2017	Completed - May 1, 2017
3	Rig Procedure for torqueing of critical bolting	Can include example rig procedure	Completed - March 9, 2015	Completed - March 9, 2015	Completed - November 1, 2016	Completed - November 1, 2016
4	Internal process for enhanced failure reporting of critical bolts (IOGP Failure reporting procedure)	Can include example procedure for compliance with IOGP Failure reporting	Completed - July 20, 2016	Completed - July 20, 2016	Completed - November 1, 2016	Completed - November 1, 2016
5	MTR review for installed critical bolting:	Can include letter from OEM, example of MTR audit	Completed Dec 5, 2017	Completed July 12, 2017	Completed - November 1, 2016	Completed - November 1, 2016
	- OEM SOF critical bolting per relevant specification		Completed Dec 5, 2017	Completed July 12, 2017	Completed - November 1, 2016	Completed - November 1, 2016
	- MTRs per relevant specification		Completed Dec 5, 2017	Completed - July 12, 2017	Completed - November 1, 2016	Completed - November 1, 2016
	- Bolting audit to verify MTR information		Completed Dec 5, 2017	Completed - June 12, 2017	Completed - November 1, 2016	Completed - November 1, 2016
6	Preventative maintenance (PM) for BOP bolting API Std 53	Can include PM for BOP bolting maintenance. Example of NDE performed on BOP bolts	Completed - March 15, 2016	Completed - March 15, 2016	Completed - December 1, 2017	Completed - December 1, 2017
	2018-2023 Deliverables					
A1	Critical bolting API 20 E/F replacement bolts ordered	List by rig % of bolts ordered	10%	20%	Completed - February 16, 2017	Completed - February 16, 2017
A2	Critical bolting API 20 E/F replacement bolts installed	List by rig % of bolts installed/replaced	0%	5%	15%	Completed - August 2018

			Rig 19 BOP 1	Rig 20 BOP 1	Rig 21 BOP 1	Rig 21 BOP 2
Item	Topic	Discussion	Status	Status	Status	Status
	2017 Deliverables					
1	Replacement 20 E/F bolts for all > 35 HRC critical bolting ordered	List by rig the % of API 20 E replacement bolts ordered	100%	100%	Completed - February 16, 2017	Completed - February 16, 2017
2	Replacement 20 E/F bolts for all > 35 HRC critical bolting installed	List by rig the % of API 20 E bolts installed on the BOP	100%	100%	Complete - Feb, 15, 2018	Complete - Mar, 15, 2018
3	Rig Procedure for torquing of critical bolting	Can include example rig procedure	Completed	Completed March 29, 2016	Completed - November 1, 2016	Completed - November 1, 2016
4	Internal process for enhanced failure reporting of critical bolts (IOGP Failure reporting procedure)	Can include example procedure for compliance with IOGP Failure reporting	IOGP BOP Reliability Database	Completed July 28, 2016	Completed - November 1, 2016	Completed - November 1, 2016
5	MTR review for installed critical bolting:	Can include letter from OEM, example of MTR audit	Completed - December 2016	Completed April 1, 2016	Completed - November 1, 2016	Completed - November 1, 2016
	- OEM SOF critical bolting per relevant specification		Completed	Completed February 18, 2016	Completed - November 1, 2016	Completed - November 1, 2016
	- MTRs per relevant specification		Completed	Completed April 1, 2016	Completed - November 1, 2016	Completed - November 1, 2016
	- Bolting audit to verify MTR information		Completed	Completed April 1, 2016	Completed - November 1, 2016	Completed - November 1, 2016
6	Preventative maintenance (PM) for BOP bolting API Std 53	Can include PM for BOP bolting maintenance. Example of NDE performed on BOP bolts	Completed	Completed April 1, 2016	Completed - December 1, 2017	Completed - December 1, 2017
	2018-2023 Deliverables					
A1	Critical bolting API 20 E/F replacement bolts ordered	List by rig % of bolts ordered	0%	100%	Completed - March 1, 2018	Completed - March 1, 2018
A2	Critical bolting API 20 E/F replacement bolts installed	List by rig % of bolts installed/replaced	0%	95%	Completed - August 2018	15%

			Rig 22 BOP 1	Rig 23 BOP 1	Rig 23 BOP 2	Rig 24 BOP 1
Item	Topic	Discussion	Status	Status	Status	Status
	2017 Deliverables					
1	Replacement 20 E/F bolts for all > 35 HRC critical bolting ordered	List by rig the % of API 20 E replacement bolts ordered	100%	100%	100%	100%
2	Replacement 20 E/F bolts for all > 35 HRC critical bolting installed	List by rig the % of API 20 E bolts installed on the BOP	100%	100%	100%	In-progress
3	Rig Procedure for torqueing of critical bolting	Can include example rig procedure	Completed	Completed	Completed	Completed
4	Internal process for enhanced failure reporting of critical bolts (IOGP Failure reporting procedure)	Can include example procedure for compliance with IOGP Failure reporting	IOGP BOP Reliability Database	IOGP BOP Reliability Database	IOGP BOP Reliability Database	Completed
5	MTR review for installed critical bolting:	Can include letter from OEM, example of MTR audit	Completed - December 2016	Completed - December 2016	Completed - December 2016	In Progress
	- OEM SOF critical bolting per relevant specification		Completed	Completed	Completed	In Progress
	- MTRs per relevant specification		Completed	Completed	Completed	In-progress
	- Bolting audit to verify MTR information		Completed	Completed	Completed	In-progress
6	Preventative maintenance (PM) for BOP bolting API Std 53	Can include PM for BOP bolting maintenance. Example of NDE performed on BOP bolts	Completed	Completed	Completed	In-progress
	2018-2023 Deliverables					
A1	Critical bolting API 20 E/F replacement bolts ordered	List by rig % of bolts ordered	100%	100%	100%	100%
A2	Critical bolting API 20 E/F replacement bolts installed	List by rig % of bolts installed/replaced	50%	80%	80%	0%

			Rig 24 BOP 2	Rig 25 BOP 1	Rig 26 BOP 1	Rig 26 BOP 2
Item	Topic	Discussion	Status	Status	Status	Status
	2017 Deliverables					
1	Replacement 20 E/F bolts for all > 35 HRC critical bolting ordered	List by rig the % of API 20 E replacement bolts ordered	100%	NA	Completed - February 16, 2017	Completed - February 16, 2017
2	Replacement 20 E/F bolts for all > 35 HRC critical bolting installed	List by rig the % of API 20 E bolts installed on the BOP	In-progress	NA	Completed - December 5, 2017	Completed - May 1, 2017
3	Rig Procedure for torquing of critical bolting	Can include example rig procedure	Completed	NA	Completed - November 1, 2016	Completed - November 1, 2016
4	Internal process for enhanced failure reporting of critical bolts (IOGP Failure reporting procedure)	Can include example procedure for compliance with IOGP Failure reporting	Completed	NA	Completed - November 1, 2016	Completed - November 1, 2016
5	MTR review for installed critical bolting:	Can include letter from OEM, example of MTR audit	In-progress	NA	Completed - November 1, 2016	Completed - November 1, 2016
	- OEM SOF critical bolting per relevant specification		In Progress	NA	Completed - November 1, 2016	Completed - November 1, 2016
	- MTRs per relevant specification		In-progress	NA	Completed - November 1, 2016	Completed - November 1, 2016
	- Bolting audit to verify MTR information		In-progress	NA	Completed - November 1, 2016	Completed - November 1, 2016
6	Preventative maintenance (PM) for BOP bolting API Std 53	Can include PM for BOP bolting maintenance. Example of NDE performed on BOP bolts	In-progress	NA	Completed - December 1, 2017	Completed - December 1, 2017
	2018-2023 Deliverables					
A1	Critical bolting API 20 E/F replacement bolts ordered	List by rig % of bolts ordered	100%	NA	Completed - July 20, 2018	15%
A2	Critical bolting API 20 E/F replacement bolts installed	List by rig % of bolts installed/replaced	10%	NA	15%	65%

			Rig 27 BOP 1	Rig 28 BOP 1
Item	Topic	Discussion	Comments	Status
	2017 Deliverables			
1	Replacement 20 E/F bolts for all > 35 HRC critical bolting ordered	List by rig the % of API 20 E replacement bolts ordered	100%	100%
2	Replacement 20 E/F bolts for all > 35 HRC critical bolting installed	List by rig the % of API 20 E bolts installed on the BOP	100%	100%
3	Rig Procedure for torqueing of critical bolting	Can include example rig procedure	Completed - July 15, 2014	Complete
4	Internal process for enhanced failure reporting of critical bolts (IOGP Failure reporting procedure)	Can include example procedure for compliance with IOGP Failure reporting	Completed - July 20, 2016	Completed - May 8, 2015
5	MTR review for installed critical bolting: - OEM SOF critical bolting per relevant specification - MTRs per relevant specification - Bolting audit to verify MTR information	Can include letter from OEM, example of MTR audit	Completed - September, 2016	In-progress
			Completed - September 15, 2016	Completed - February 24, 2016
			Completed - July 12, 2017	Completed - February 24, 2016
			Completed - April 7, 2017	In-progress
6	Preventative maintenance (PM) for BOP bolting API Std 53	Can include PM for BOP bolting maintenance. Example of NDE performed on BOP bolts	Completed - March 15, 2016	Completed - December 9, 2015
	2018-2023 Deliverables			
A1	Critical bolting API 20 E/F replacement bolts ordered	List by rig % of bolts ordered	0%	0%
A2	Critical bolting API 20 E/F replacement bolts installed	List by rig % of bolts installed/replaced	0%	0%

From: [Beard, Preston](#)
To: [Holly Hopkins](#)
Cc: [Evan@offshoreoperators.com](#); [Scott Angelle](#)
Subject: Re: [EXTERNAL] Re:
Date: Thursday, November 8, 2018 8:45:26 AM

Just Scott and I will attend.

(b) (5) #

On Wed, Nov 7, 2018 at 3:08 PM Holly Hopkins <hopkinsh@api.org> wrote:

Preston,

Can you please let us know who from BSEE will participate in the meeting on Nov 15. Can we also set up a conference line for the meeting? Or we can use mine if you like. With the new date one of our co-chairs can't come to DC in person on Nov 15.

Thanks,

Holly

From: Beard, Preston <preston.beard@bsee.gov>
Sent: Sunday, October 28, 2018 9:43 AM
To: Holly Hopkins <hopkinsh@api.org>; Evan@offshoreoperators.com; Scott Angelle <scott.angelle@bsee.gov>
Subject: Re: [EXTERNAL] Re:

I have blocked off 2-5 on 11/15

On Sat, Oct 27, 2018 at 3:02 PM Holly Hopkins <hopkinsh@api.org> wrote:

We could do something between 2 and 5 pm on Nov 15. But we are also fine keeping the Nov 27th time. Let us know. Thanks

----- Original message -----

From: Scott Angelle <scott.angelle@bsee.gov>

Date: 10/27/18 2:02 PM (GMT-05:00)

To: Preston Beard <preston.beard@bsee.gov>

Cc: Evan@offshoreoperators.com, Holly Hopkins <hopkinsh@api.org>

Subject: Re:

Isn't that what my original email request you do?

Sent from my iPhone

> On Oct 27, 2018, at 1:13 PM, Preston Beard <preston.beard@bsee.gov> wrote:

>

> I have not. Our November 15-16 slot has opened back up if you would
> prefer that.

>

> -Preston

> 571-585-7001

>

>> On Oct 27, 2018, at 11:30 AM, Scott Angelle <scott.angelle@bsee.gov> wrote:

>>

>> I assume that was before we knew of the changed schedule. Have you
>> asked if they wish to take advantage of the new opening?

>>

>> Sent from my iPhone

>>

>>> On Oct 27, 2018, at 11:27 AM, Preston Beard <preston.beard@bsee.gov> wrote:

>>>

>>> Director,

>>>

>>> We have slated 11/27 at 11am for the meeting

>>>

>>> -Preston

>>> 571-585-7001

>>>

>>>> On Oct 27, 2018, at 10:49 AM, Scott Angelle <scott.angelle@bsee.gov> wrote:

>>>>

>>>> Preston, please contact Evan and holly to advise them of the schedule
>>>> changes that might allow for the accommodation of their original
>>>> request to meet in dc in mid November

>>>>

>>>> Please let me know the results of your efforts

>>>>

>>>> Sent from my iPhone

--

Preston Beard

Advisor, Office of the Director

Bureau of Safety and Environmental Enforcement

(202) 208-3976 (o)

(571) 585-7001 (c)

preston.beard@bsee.gov



--

Preston Beard

Advisor, Office of the Director

Bureau of Safety and Environmental Enforcement

(202) 208-3976 (o)

(571) 585-7001 (c)

preston.beard@bsee.gov



From: [Holly Hopkins](#)
To: [Beard, Preston](#)
Cc: [Evan@offshoreoperators.com](#); [Scott Angelle](#)
Subject: Re: [EXTERNAL] Re:
Date: Thursday, November 8, 2018 8:50:31 AM

Ok great thanks

----- Original message -----

From: "Beard, Preston" <preston.beard@bsee.gov>
Date: 11/8/18 8:45 AM (GMT-05:00)
To: Holly Hopkins <hopkinsh@api.org>
Cc: Evan@offshoreoperators.com, Scott Angelle <scott.angelle@bsee.gov>
Subject: Re: [EXTERNAL] Re:

Just Scott and I will attend.

(b) (5) #

On Wed, Nov 7, 2018 at 3:08 PM Holly Hopkins <hopkinsh@api.org> wrote:

Preston,

Can you please let us know who from BSEE will participate in the meeting on Nov 15. Can we also set up a conference line for the meeting? Or we can use mine if you like. With the new date one of our co-chairs can't come to DC in person on Nov 15.

Thanks,

Holly

From: Beard, Preston <preston.beard@bsee.gov>
Sent: Sunday, October 28, 2018 9:43 AM
To: Holly Hopkins <hopkinsh@api.org>; Evan@offshoreoperators.com; Scott Angelle <scott.angelle@bsee.gov>
Subject: Re: [EXTERNAL] Re:

I have blocked off 2-5 on 11/15

On Sat, Oct 27, 2018 at 3:02 PM Holly Hopkins <hopkinsh@api.org> wrote:

We could do something between 2 and 5 pm on Nov 15. But we are also fine keeping the Nov 27th time. Let us know. Thanks

----- Original message -----

From: Scott Angelle <scott.angelle@bsee.gov>

Date: 10/27/18 2:02 PM (GMT-05:00)

To: Preston Beard <preston.beard@bsee.gov>

Cc: Evan@offshoreoperators.com, Holly Hopkins <hopkinsh@api.org>

Subject: Re:

Isn't that what my original email request you do?

Sent from my iPhone

> On Oct 27, 2018, at 1:13 PM, Preston Beard <preston.beard@bsee.gov> wrote:

>

> I have not. Our November 15-16 slot has opened back up if you would
> prefer that.

>

> -Preston

> 571-585-7001

>

>> On Oct 27, 2018, at 11:30 AM, Scott Angelle <scott.angelle@bsee.gov> wrote:

>>

>> I assume that was before we knew of the changed schedule. Have you
>> asked if they wish to take advantage of the new opening?

>>

>> Sent from my iPhone

>>

>>> On Oct 27, 2018, at 11:27 AM, Preston Beard <preston.beard@bsee.gov> wrote:

>>>

>>> Director,

>>>

>>> We have slated 11/27 at 11am for the meeting

>>>

>>> -Preston

>>> 571-585-7001

>>>

>>>> On Oct 27, 2018, at 10:49 AM, Scott Angelle <scott.angelle@bsee.gov> wrote:

>>>>

>>>> Preston, please contact Evan and holly to advise them of the schedule
>>>> changes that might allow for the accommodation of their original
>>>> request to meet in dc in mid November
>>>>
>>>> Please let me know the results of your efforts
>>>>
>>>> Sent from my iPhone

--

Preston Beard

Advisor, Office of the Director

Bureau of Safety and Environmental Enforcement

(202) 208-3976 (o)

(571) 585-7001 (c)

preston.beard@bsee.gov



--

Preston Beard

Advisor, Office of the Director

Bureau of Safety and Environmental Enforcement

(202) 208-3976 (o)

(571) 585-7001 (c)

preston.beard@bsee.gov



From: [Scott Angelle](#)
To: [Holly Hopkins](#)
Subject: GAO-17-293 Final_03-21-17.pdf
Date: Saturday, November 10, 2018 2:11:28 PM
Attachments: [ATT00001.txt](#)
[GAO-17-293 Final_03-21-17.pdf](#)

Sent from my iPhone



March 2017

OIL AND GAS MANAGEMENT

Stronger Leadership Commitment Needed at Interior to Improve Offshore Oversight and Internal Management

GAO Highlights

Highlights of [GAO-17-293](#), a report to congressional addressees

Why GAO Did This Study

On April 20, 2010, the *Deepwater Horizon* drilling rig exploded in the Gulf of Mexico. The incident raised questions about Interior's oversight of offshore oil and gas activities. In response, in May 2010, Interior reorganized its offshore oil and gas management activities, and in October 2011, created BSEE to among other things, develop regulations, conduct inspections, and take enforcement actions. In February 2011, GAO added the management of federal oil and gas resources to its High-Risk List. In December 2015, BSEE issued a strategic plan outlining initiatives to improve offshore safety and environmental oversight as well as its internal management.

This report examines what efforts BSEE leadership has made in implementing key strategic initiatives to improve its (1) offshore safety and environmental oversight and (2) internal management. GAO reviewed laws, regulations, policies, and other documents related to the development of BSEE's strategic initiatives. GAO also interviewed BSEE officials.

What GAO Recommends

GAO is making four recommendations, including that higher-level leadership within Interior (1) establish a mechanism for BSEE management to obtain and incorporate input from bureau personnel that can affect the bureau's ability to achieve its objectives and (2) address leadership commitment deficiencies within BSEE, including by implementing internal management initiatives and ongoing strategic initiatives in a timely manner. Interior neither agreed nor disagreed with our recommendations.

View [GAO-17-293](#). For more information, contact Frank Rusco at (202) 512-3841 or ruscof@gao.gov.

March 2017

OIL AND GAS MANAGEMENT

Stronger Leadership Commitment Needed at Interior to Improve Offshore Oversight and Internal Management

What GAO Found

The Department of the Interior's (Interior) Bureau of Safety and Environmental Enforcement (BSEE) leadership has started several key strategic initiatives to improve its offshore safety and environmental oversight, but its limited efforts to obtain and incorporate input from within the bureau have hindered its progress. For example, to supplement its mandatory annual regulatory compliance inspections, in 2012, BSEE leadership began developing a risk-based inspection initiative to identify high-risk production facilities and assess their safety systems and management controls. During pilot testing in 2016, several deficiencies—including the usefulness of its facility risk-assessment model and unclear inspection protocols—caused BSEE to halt the pilot. According to bureau officials, during the development of the initiative, BSEE headquarters did not effectively obtain and incorporate input from regional personnel with long-standing experience in previous risk-based inspection efforts, who could have identified deficiencies earlier in the process. GAO previously found that when implementing large-scale management initiatives a key practice is involving employees to obtain their ideas by incorporating their feedback into new policies and procedures. Instead, BSEE leadership appears to have excluded the input of regional personnel by, for example, not incorporating input beyond the risk-assessment tool when selecting the first pilot facility, even though it was prescribed to do so in the bureau's inspection planning methodology. This undercut the pilot effort, raising questions about whether the bureau's leadership has the commitment necessary to successfully implement its risk-based program. Without higher level leadership within Interior establishing a mechanism for BSEE to obtain and incorporate input from personnel within the bureau, BSEE's risk-based inspection initiative could face continued delays.

Similarly, since 2013, BSEE leadership has started several key strategic initiatives to improve its internal management, but none have been successfully implemented, in part, because of limited leadership commitment. For example, BSEE's leadership identified the importance of developing performance measures in its 2012-2015 strategic plan. BSEE began one of three attempts to develop performance measures in July 2014 by hiring a contractor to develop measures, but the bureau terminated this contract in January 2015 after determining a need to complete its internal reorganization before developing such measures. A second effort to develop performance measures started in December 2015, using the same consultant, and yielded 12 performance measures in March 2016, but BSEE did not implement them, in part, because data did not exist to use the measures. By the time BSEE received this consultant's report, it had already begun a third effort to internally develop performance measures; as of November 2016 had identified 17 draft performance measures, but BSEE leadership missed repeated deadlines to review them. BSEE officials told GAO that after leadership approval, the bureau plans to pilot these measures and develop others. BSEE leadership has not demonstrated continuing oversight and accountability for implementing internal management initiatives, as evidenced by its limited progress implementing key strategic initiatives. Without higher-level oversight within Interior addressing leadership commitment deficiencies within BSEE, the bureau is unlikely to succeed in implementing internal management initiatives.

Contents

Letter	1
Background	4
BSEE Leadership Has Started Several Initiatives to Improve the Bureau's Safety and Environmental Oversight Capabilities but Its Actions Have Hindered Progress	7
BSEE Leadership Has Made Limited Progress in Implementing Strategic Initiatives to Improve Its Internal Management	19
Conclusions	32
Recommendations for Executive Action	33
Agency Comments and Our Evaluation	34

Appendix I	Comments from the Department of the Interior	40
------------	--	----

Appendix II	GAO Contact and Staff Acknowledgments	44
-------------	---------------------------------------	----

Abbreviations

Argonne	Argonne National Laboratory
BOEM	Bureau of Ocean Energy Management
BOEMRE	Bureau of Ocean Energy, Management, Regulation and Enforcement
BSEE	Bureau of Safety and Environmental Enforcement
ERM	Enterprise Risk Management
IG	Office of Inspector General
INC	incident of noncompliance
Interior	Department of the Interior
IPRA	Integrity and Professional Responsibility Advisor
IRU	Investigations and Review Unit
MMS	Minerals Management Service
NAPA	National Academy of Public Administration
NEPA	National Environmental Policy Act
OCS	outer continental shelf
OCSLA	Outer Continental Shelf Lands Act
SEMS	Safety and Environmental Management System

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.



March 21, 2017

The Honorable Jason Chaffetz
Chairman
Committee on Oversight and Government Reform
House of Representatives

The Honorable Rob Bishop
Chairman
The Honorable Raúl Grijalva
Ranking Member
Committee on Natural Resources
House of Representatives

The Honorable Blake Farenthold
Chairman
Subcommittee on the Interior, Energy, and Environment
Committee on Oversight and Government Reform
House of Representatives

On April 20, 2010, the Deepwater Horizon drilling rig exploded in the Gulf of Mexico, resulting in 11 deaths, serious injuries, and the largest marine oil spill in the history of the United States. The Deepwater Horizon incident raised questions about the Department of the Interior's (Interior) oversight of offshore oil and gas activities in the Gulf of Mexico and led to investigations by Interior's Office of Inspector General (IG)¹ and Interior's Outer Continental Shelf (OCS) Safety Oversight Board.² In response to the Deepwater Horizon incident, Interior initiated a number of policy reforms intended to strengthen its oversight of offshore oil and gas production on the OCS. On May 19, 2010, Interior reorganized the

¹U.S. Department of the Interior, Office of Inspector General, *A New Horizon: Looking to the Future of the Bureau of Ocean Energy Management, Regulation and Enforcement* (Washington, D.C.: Dec. 7, 2010).

²The OCS refers to the submerged lands outside the territorial jurisdiction of all 50 states, but within U.S. jurisdiction and control. The portion of the North American continental edge that is federally designated as the OCS generally extends seaward 3 geographical miles off the coastline to at least 200 nautical miles. The OCS Safety Oversight Board was created by secretarial order to review and oversee Interior OCS operations to support reasoned and fact-based recommendations for potential improvement. See U.S. Department of the Interior Outer Continental Shelf Safety Oversight Board, *Report to Secretary of the Interior Ken Salazar* (Sept. 1, 2010).

Minerals Management Service (MMS)—the agency responsible for managing oil and gas activities in federal waters and collecting revenues from oil and gas development on all federal lands and waters—to improve the management, oversight, and accountability of activities on the OCS.³ As an interim step, Interior restructured MMS into the Bureau of Ocean Energy, Management, Regulation and Enforcement (BOEMRE), responsible for offshore oil and gas management and the Office of Natural Resources Revenue responsible for revenue collections. On October 1, 2011, Interior completed the reorganization of MMS by splitting BOEMRE into the Bureau of Ocean Energy Management (BOEM), which is responsible for leasing and resource management, and the Bureau of Safety and Environmental Enforcement (BSEE), which is responsible for reviewing drilling permits, inspecting offshore drilling rigs and production platforms, and developing regulations and standards for offshore drilling.

Over the past several years, we have issued a number of reports identifying Interior’s challenges in managing federal oil and gas resources. The balance of our work has shown that management of federal oil and gas resources was a high risk area and we added it to the High Risk List in 2011.⁴ We identified challenges in Interior’s management of oil and gas on leased federal lands and waters. We found that Interior (1) did not have reasonable assurance that it was collecting its share of revenue from oil and gas produced on federal lands and waters; (2) continued to experience problems hiring, training, and retaining sufficient staff to provide oversight and management of oil and gas operations on federal lands and waters; and (3) was undertaking a major challenging reorganization of its oversight of both its offshore oil and gas management and revenue collection functions.

³Secretarial Order No. 3299 (May 19, 2010).

⁴GAO, *High-Risk Series: An Update*, [GAO-11-278](#) (Washington, D.C.: February 2011). In 1990, we began a program to report on government operations that we identified as “high risk.” Since then, generally coinciding with the start of each new Congress, GAO has reported on the status of progress to address high-risk areas and to update the High Risk List. Overall, GAO’s high-risk program has served to identify and help resolve serious weaknesses in areas that involve substantial resources and provide critical services to the public. Our experience with the high-risk series over the past 25 years has shown that the key elements needed to make progress in high-risk areas are top-level attention by the administration and agency leaders grounded in the five criteria for removal from the High Risk List, as well as any needed congressional action. The five criteria for removal are: (1) leadership commitment, (2) capacity, (3) action plan, (4) monitoring, and (5) demonstrated progress.

In February 2016, we reported that BSEE's ongoing organizational restructuring—which it initiated in October 2013 to develop national programs—had not addressed long-standing deficiencies to its investigative, environmental compliance, and enforcement capabilities.⁵ To enhance its ability to effectively oversee offshore oil and gas development, we recommended that the Secretary of the Interior direct the Director of BSEE to take nine actions, including that BSEE complete policies outlining the responsibilities of its investigative, environmental compliance, and enforcement programs and update and develop procedures to guide them. Interior neither agreed nor disagreed with our recommendations. Simultaneous to our assessment of BSEE's organizational restructuring, bureau leadership was developing its Fiscal Year 2016-2019 Strategic Plan, which identifies key initiatives to improve its safety and environmental oversight as well as its internal management. Some of these key strategic initiatives have been under way for several years.

In light of the concerns we identified during our review of BSEE's organizational restructuring, we initiated this review under the authority of the Comptroller General of the United States.⁶ This report examines efforts BSEE leadership has made in implementing key strategic initiatives to improve its (1) safety and environmental oversight and (2) internal management.⁷

To identify progress BSEE leadership has made in implementing key strategic initiatives to improve its (1) safety and environmental oversight and (2) internal management, we reviewed BSEE strategic planning and budget justification documentation as well as interviewed BSEE leadership to identify key bureau strategic initiatives. We then reviewed

⁵GAO, *Oil and Gas Management: Interior's Bureau of Safety and Environmental Enforcement Has Not Addressed Long-Standing Oversight Deficiencies*, [GAO-16-245](#) (Washington, D.C.: Feb. 10, 2016).

⁶Based on our February 2016 report regarding BSEE's oversight capabilities as well as ongoing work in support of this report, in February 2017, we expanded the High Risk List to incorporate the restructuring of offshore oil and gas oversight. See GAO, *High-Risk Series: Progress on Many High-Risk Areas, While Substantial Effort Needed on Others*, [GAO-17-317](#) (Washington, D.C.: Feb. 15, 2017).

⁷In August 2016, BSEE contracted with the National Academy of Public Administration (NAPA) for approximately \$450,000 to assess the bureau's progress in institutionalizing the systems, policies and process since its 2011 establishment and determine where areas of critical need remain to be addressed to ensure a functioning and sustainable organization. NAPA is scheduled to deliver its final report to BSEE in March 2017.

BSEE's strategic initiatives and focused on those that corresponded to our objectives and were topics that we have not reviewed in the last 2 years.⁸ For each initiative, we collected and analyzed BSEE documentation of their purpose and history—including budget justifications, project plans, and contracts, among others—to determine their objectives, time frames, and status. We also interviewed BSEE officials at headquarters responsible for bureau and program leadership as well as officials in the regional and district offices responsible for implementing BSEE oversight activities. For each initiative, we analyzed any progress made and compared BSEE practices for implementing its initiatives to bureau criteria—such as strategic plans and initiative goals—as well as Standards for Internal Control in the Federal Government.⁹

We conducted this performance audit from March 2016 to March 2017 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

BSEE's mission is to promote safety, protect the environment, and conserve resources offshore through vigorous regulatory oversight and enforcement. BSEE's headquarters—located in Washington, D.C., and Sterling, Virginia—is responsible for setting national program policy to meet the bureau's mission. BSEE's three regional offices—the Gulf of Mexico regional office in New Orleans, Louisiana; the Pacific regional office in Camarillo, California; and the Alaska regional office in Anchorage, Alaska—are responsible for executing oversight of oil and gas activities, such as conducting inspections of all facilities on the OCS. The five district offices that the Gulf of Mexico regional office oversees

⁸Within the past 2 years, GAO issued reports on several topics that could be considered BSEE key strategic initiatives, including its organizational restructuring ([GAO-16-245](#)), decommissioning (GAO, *Offshore Oil and Gas Resources: Actions Needed to Better Protect Against Billions of Dollars in Federal Exposure to Decommissioning Liabilities*, [GAO-16-40](#) (Washington, D.C.: Dec. 18, 2015)), and human capital challenges (GAO, *Oil and Gas Oversight: Interior Has Taken Steps to Address Staff Hiring, Retention, and Training but Needs a More Evaluative and Collaborative Approach*, [GAO-16-742](#) (Washington, D.C.: Sept. 29, 2016)).

⁹GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: September 2014).

are the Houma, Louisiana; Lake Jackson, Texas; Lafayette, Louisiana; Lake Charles, Louisiana; and New Orleans, Louisiana district offices.

The Outer Continental Shelf Lands Act of 1953, as amended, (OCSLA) requires Interior to inspect each offshore oil and gas facility at least once per year.¹⁰ OCSLA also authorizes Interior to conduct periodic unscheduled—unannounced—inspections of these facilities.¹¹ BSEE carries out these inspections on behalf of the Secretary throughout America's 1.7 billion acres of the OCS. BSEE's Office of Offshore Regulatory Programs is responsible for overseeing the bureau's national inspection program, which is carried out by the bureau's regional offices. During inspections, BSEE inspectors scrutinize all safety system components designed to prevent or ameliorate blowouts, fires, spillages, or other major accidents. Additionally, inspectors check for compliance with current plans, lease terms, and appropriate stipulations. During inspections, BSEE inspectors check for installation, operation, and maintenance of all appropriate safety and antipollution devices. They perform the inspections, in part, by using a checklist derived from regulated safety and environmental requirements. If an inspector identifies a regulatory violation at an offshore facility, BSEE issues a citation to the operator known as an incident of noncompliance (INC) in response to operator violations of safety or environmental standards. An INC may be issued in the form of (1) a warning, (2) an order to shut down a particular component of the facility (when it can be shut down without affecting the overall safety of the facility or operations), or (3) an order to shut down an entire drilling rig or production platform in cases when the violation could result in serious consequences to the environment or human health and safety, such as a fire or spill.¹² Operators generally

¹⁰43 U.S.C. § 1348(c)(1).

¹¹43 U.S.C. § 1348(c)(2).

¹²Interior's policy is to place operators with a history of poor performance on its increased oversight list, and inspect those operators more frequently until it determines that the operator's performance has improved. BSEE can also place an operator on a performance improvement plan due to serious incidents, poor performance data, criminal referral, civil penalties assessed, or uncorrected deficiencies resulting in a probationary status. A performance improvement plan may result in more inspections or more frequent inspections, which may result in an increase in INCs issued and civil penalties assessed. Operators may also be required to provide increased information, and have operator employees working during certain activities such as construction and simultaneous operations to facilitate communications.

have 20 days to correct the violation and notify Interior that the violation was corrected.¹³

BSEE is responsible for ensuring compliance with OCSLA and provisions of other federal laws, including the National Environmental Policy Act (NEPA).¹⁴ BSEE's Environmental Compliance Division establishes national strategic goals, programs, and procedures to increase the accuracy, effectiveness, and consistency of all bureau environmental compliance policies and initiatives. BSEE's Office of Environmental Compliance, located in the Gulf of Mexico regional office, is staffed by environmental engineers, scientists, and specialists who are responsible for BSEE's NEPA compliance program, as well as field and office environmental compliance verification.

We have previously reported on Interior's challenges with managing federal oil and gas resources. In September 2008 and July 2009,¹⁵ we found shortcomings in Interior's ability to ensure that royalty payment data were reasonable and complete. In addition, in March 2010,¹⁶ we found that Interior's policies and practices did not provide reasonable assurance that oil and gas produced from federal leases was being accurately measured and that Interior experienced challenges hiring, training, and retaining qualified staff to provide oversight and management of oil and gas operations on federal lands and waters. Further, we have reported that organizational transformations are not simple endeavors and require the concentrated efforts of both leaders and employees to realize intended synergies and accomplish new organizational goals. We were also concerned about Interior's ability to balance continued delivery of services with transformational activities in view of the department's history of management problems and challenges in the human capital area.

¹³30 C.F.R. § 250.1452.

¹⁴42 U.S.C. §§ 4321-4347. Under NEPA, federal agencies must assess the effects of major federal actions—those they propose to carry out or to permit—that significantly affect the environment.

¹⁵GAO, *Mineral Revenues: Data Management Problems and Reliance on Self-Reported Data for Compliance Efforts Put MMS Royalty Collections at Risk*, [GAO-08-893R](#) (Washington, D.C.: Sept. 12, 2008) and *Mineral Revenues: MMS Could Do More to Improve the Accuracy of Key Data Used to Collect and Verify Oil and Gas Royalties*, [GAO-09-549](#) (Washington, D.C.: July 15, 2009).

¹⁶GAO, *Oil and Gas Management: Interior's Oil and Gas Production Verification Efforts Do Not Provide Reasonable Assurance of Accurate Measurement Production Volumes*, [GAO-10-313](#) (Washington, D.C.: Mar. 15, 2010).

In December 2015, BSEE issued its Fiscal Year 2016–2019 Strategic Plan. BSEE’s strategic plan identifies strategic goals to improve its operations—including safety and environmental oversight—as well as its internal management. BSEE’s key strategic initiatives to improve safety and environmental oversight include developing a risk-based inspections program and promoting environmental stewardship. BSEE’s key strategic initiatives to improve its internal management include enhancing decision making as well as communication and transparency.

BSEE Leadership Has Started Several Initiatives to Improve the Bureau’s Safety and Environmental Oversight Capabilities but Its Actions Have Hindered Progress

BSEE leadership has started several initiatives to improve its safety and environmental oversight capabilities but its limited efforts to obtain and incorporate input from within the bureau have hindered its progress. Since 2012, BSEE has sought to augment its annual inspection program with a risk-based inspection program, but limited efforts to obtain and incorporate input from experienced regional personnel have hindered BSEE’s ability to develop and implement the risk-based program. Additionally, in 2016, BSEE conducted an environmental stewardship initiative comprised of two simultaneous environmental risk reduction efforts, but these efforts were overlapping, fragmented, and uncoordinated, which reduced the effectiveness of the initiative and hindered the implementation of identified improvements.

Limited Efforts to Obtain and Incorporate Input from Regional Personnel Hindered the Development and Implementation of Risk-Based Inspection Initiative

Since it was established as a separate bureau in 2011, BSEE leadership has continued an initiative begun by its predecessor to transition the bureau’s inspection program to a risk-based approach. In 2012, BSEE leadership started a new initiative that included the development of a risk model and an approach for inspecting production facilities based on the risk they pose. However, BSEE leadership’s limited efforts to obtain and incorporate input from regional staff and management during development of the program led to poor pilot results. As a result, BSEE has changed the focus of the program and reduced expectations for its initial approach to risk-based inspections.

BSEE Leadership Began a New Initiative to Develop a Risk-Based Inspection Program, but the Initial Approach Had Several Deficiencies

Interior's efforts to conduct oversight based on risk date back to the 1990s.¹⁷ In 1998, MMS, BSEE's predecessor organization, contracted for a study from Carnegie Mellon University to develop a model to target inspections of offshore facilities based on risk. MMS did not implement the model at the time because it was too complex, according to BSEE officials. In 2009, one year prior to the Deepwater Horizon incident and the dissolution of the MMS in 2010, the Gulf of Mexico Regional Office piloted a risk-based inspection strategy in the Houma, Louisiana and Lake Jackson, Texas districts that regional management recommended for immediate implementation. However, BSEE officials told us that the 2010 Deepwater Horizon incident and Interior's 2010 Safety and Environmental Management System (SEMS) regulation¹⁸ prompted the bureau to reconsider approaches to conducting risk-based inspections. Since 2011, when it was established as the successor to MMS, BSEE has highlighted in every Interior budget justification for the bureau its ongoing efforts to identify and increase oversight of the highest-risk facilities and operators. Additionally, BSEE affirmed its intentions in its 2016-2019 Strategic Plan to develop this risk-based inspection capability as part of its National Inspection Program.¹⁹

Beginning in 2012, BSEE began an initiative to develop an approach for conducting inspections of offshore facilities based on the level of risks they posed. Specifically, BSEE engaged Argonne National Laboratory (Argonne) to develop a quantitative model to serve as the foundation of

¹⁷For example, in the 1990s, the policy of MMS was to conduct inspections of safety devices using a risk-based sampling procedure.

¹⁸30 C.F.R. Part 250, subpart S. BSEE requires operators to have a SEMS program to identify, address, and manage safety, environmental hazards, and impacts during the design, construction, start-up, operation, inspection, and maintenance of all new and existing OCS facilities. The focus of the Safety and Environmental Management System program is on promoting an operator-driven system that continually improves safety culture and safety practices within the industry.

¹⁹BSEE's long-term transition to a risk-based approach to safety inspection aligns with a 2016 recommendation made by the National Research Council's Transportation Research Board in *Strengthening the Safety Culture of the Offshore Oil and Gas Industry* on October 1, 2016. Specifically, the Board recommended that BSEE make greater use of risk principles in determining inspection frequencies and methods, such that operators with good performance records are subject to less frequent or less details inspections. In addition, inspectors should consider shifting from traditional compliance inspections to inspections that follow the safety management approach outlined in the SEMS regulation.

BSEE's risk-based inspection capability.²⁰ The model ranks offshore production platforms according to five indicator factors:²¹ (1) whether the facility is a major complex,²² (2) whether the facility's slot count is 15 or greater,²³ (3) the number of inspections resulting in an INC in the previous year,²⁴ (4) whether the facility experienced an incident—such as an explosion, fire, fatality, or injury—in the previous year, and (5) whether the facility experienced an incident in the previous 2 years.²⁵ BSEE intended to use risk-based inspections to augment the required annual inspections by using the results of the Argonne model to identify facilities for supplemental multi-day inspections focusing on each facility's risk management strategies. According to 2015 BSEE documentation on its risk-based approach, the bureau planned to eventually shift inspection resources from lower-risk facilities to higher-risk facilities and transition the overall inspection program from annual compliance inspections to a risk-based approach to more effectively use BSEE's available inspection resources.²⁶

However, to date, BSEE has not successfully implemented this supplemental risk-based inspection capability in the 5 years since taking over the initiative from MMS. BSEE leadership led the development of the risk-based program; however, according to officials, leadership developed the program with little input from regional personnel. Officials in the Gulf of Mexico region with knowledge and experience conducting previous

²⁰Argonne is a Department of Energy laboratory in Illinois. To develop the formula, Argonne analyzed platform characteristics and past performance data to identify correlations with platform incidents. Argonne developed this model as part of an approximately \$16.5 million interagency agreement between BSEE and the Department of Energy that included other technical assistance projects.

²¹The model adds these factors together and multiplies the sum by the consequence factor, which is the number of components on the facility.

²²Argonne defined a major complex as a facility containing at least one major structure.

²³A facility's slot count is the total number of drilling slots that the facility was designed to handle. In Argonne's study, the count varied between a maximum of 83 and a minimum of zero.

²⁴BSEE can issue a notice of an INC in response to operator violations of safety or environmental standards.

²⁵Argonne defines risk as the likelihood of an incident occurring relative to the severity of its consequence.

²⁶Implementing an inspection program that does not include annual inspections would require a legislative change.

risk-based inspection efforts told us they were not apprised of key program products until those products were well under development and were given little opportunity to provide comment on them. As a result, BSEE first identified deficiencies with its risk-based program during pilot testing in 2015,²⁷ rather than working closely with experienced regional personnel earlier in the process to obtain their input to identify potential deficiencies and remediate them during program development. For example, BSEE identified deficiencies in three components of its proposed inspection program: (1) an underlying risk model for ranking all production platforms, (2) the annual inspection planning methodology, and (3) the facility-specific inspection protocol.

Risk Model. BSEE regional officials who have longstanding experience evaluating offshore risk told us that the model is not sophisticated enough to identify platforms for risk-based inspection planning, and that they could have identified its deficiencies earlier in the program development process. Specifically, they said that the model does not contain sufficient information to target facilities for additional risk-based inspections. For example, Argonne's model does not incorporate risk factors such as a facility's change in ownership status or operator bankruptcy—factors that BSEE regional officials told us can be correlated with higher risk, as operators tend to reduce expenditures on maintenance at these times. Additionally, the model does not account for the severity of incidents of noncompliance—for example, whether an incident results in shutting down a facility or a warning—or the quantity assessed—such as whether a facility was cited many times or once in a single inspection. Some BSEE regional officials considered these types of operator performance and risk-related intelligence to be as, or more, important for identifying high-risk facilities than the five factors assessed by the model.

BSEE headquarters worked directly with Argonne on the risk model, and although headquarters officials said they included regional personnel, they did not provide us with evidence of efforts they made to include those personnel or obtain their input on the risk model's initial development. BSEE headquarters officials told us that Argonne reached out periodically to senior regional personnel, but they did not specify when the laboratory conducted such outreach, what contributions regional personnel made, or whether regional personnel raised concerns during Argonne's outreach. Conversely, BSEE

²⁷ Although the bureau initially intended to conduct pilots in fiscal year 2014, BSEE officials told us they instead spent September 2013 to February 2015 testing Argonne's model.

regional personnel told us that BSEE headquarters did not inform them of the development of a risk model or ask them for input leading up to the pilot.

Inspection Planning Methodology. In 2015, BSEE outlined an inspection planning methodology founded on Argonne's quantitative risk model that describes how BSEE would target and plan supplemental safety inspections for offshore production platforms. BSEE's inspection planning methodology prescribes the use of two additional categories of information, alongside Argonne's model, to select production platforms for supplemental risk-based inspections. Specifically, it states that BSEE would use the model's ranking to identify the 20 percent of platforms that pose the highest risk. BSEE would then consider information on operator performance—reported hydrocarbon releases, number of incidents of noncompliance assessed in each category, and the quality of SEMS audit reports—and other risk-related intelligence—including proximity to shore, production rates, and inspector assessment of overall safety—to further narrow the selection of high-risk facilities.

BSEE planned to test its inspection planning methodology by selecting and conducting five pilot inspections in late 2015 and early 2016. According to BSEE's program deployment and implementation plan, the bureau applied Argonne's model to identify the pilot inspections in the Lafayette district.²⁸ However, although BSEE's inspection planning methodology prescribed the incorporation of additional information on operator performance and other risk-related intelligence in its selection of pilot facilities, a BSEE regional official told us that during the Risk Based Oversight Team's discussions, BSEE leadership relied heavily on the risk model alone. Furthermore, although regional personnel participated on the Risk Based Oversight Team when it selected the pilots, a regional official told us they were largely sidelined during the discussions. As a result, regional officials told us the pilot selections were not among the highest risk facilities. For example, three of the top five facilities BSEE selected were idle and not producing and therefore were not inspected as part of the pilot. By going against BSEE's inspection planning methodology, BSEE leadership appears to have excluded the input of regional personnel, undercutting the pilot effort and raising questions about

²⁸ BSEE officials told us they selected Lafayette, Louisiana due to the availability of inspector resources and the diversity of operators and facilities in that district that were representative of the region. They said that they determined that a pilot in one district would allow BSEE to better train staff and develop the inspection protocols.

whether the bureau's leadership has the commitment necessary to enable the successful implementation of its risk-based program.

Inspection Protocol. BSEE's inspection planning methodology also specified that the Risk-Based Oversight Team should develop an inspection protocol in advance of conducting risk-based inspections that is tailored to each facility and describes the roles and responsibilities of personnel, including what components and safety systems will be reviewed or tested. Additionally, BSEE's program methodology describes the protocol for deliverables and the dissemination of the inspection results.²⁹

However, BSEE did not establish a clear pilot inspection protocol for the inspection team and operator for the first pilot, which led to confusion for BSEE personnel and the operator. Specifically, BSEE officials involved in the inspection told us that headquarters did not inform inspection team members of their responsibilities, resulting in ineffective use of time. In turn, for the second pilot inspection, BSEE officials told us that BSEE leadership asked regional personnel to develop the inspection protocol. Officials told us that the second pilot inspection was an improvement over the first because personnel were better prepared to carry out their responsibilities. However, officials said the inspection proved to be more time consuming than BSEE expected, particularly when compared to the time required to conduct a typical annual inspection. Specifically, according to one official, the inspection team needed between 500 and 600 total work hours to complete the pilot inspection, in part due to the time required in developing a facility-specific protocol. For comparison, the official told us that a typical annual inspection of a deep water platform requires about 100 total work hours. In addition, the official told us that annual inspections are a more comprehensive review of a facility's safety systems because inspectors test and validate all necessary components, whereas a risk-based inspection considers only specific aspects of safety performance culture. Therefore, it is not clear whether risk-based inspections, as performed during the pilot, have proven to be a more effective method for evaluating safety relative to annual inspections.

Additionally, BSEE's inspection planning methodology prescribes that the Risk-Based Oversight Team provide final pilot reports to the

²⁹According to BSEE's program documentation, the Risk-Based Oversight Team is composed of representatives from BSEE's Office of Offshore Regulatory Programs, and Gulf of Mexico regional and district level staff.

operators of the facilities at the earliest opportunity. However, according to officials, BSEE did not provide the operator of the first pilot facility with a report of its findings. Similarly, they said BSEE did not provide a report to the operator of the second pilot facility, only a verbal debrief until the operator requested a report through BSEE's regional office. Because BSEE did not provide formal reports to operators included in the both pilots in a timely manner, a BSEE debrief noted that one of the operators was confused about the final results of the inspection. The purpose of the risk-based inspection initiative is to provide operators with the opportunity to address issues and improve their safety management systems, for which they need timely access to inspection results.

BSEE headquarters led the development of the inspection planning methodology and the facility-specific inspection protocol without obtaining and incorporating input from regional personnel who had knowledge and experience conducting risk-based inspection efforts. The Gulf of Mexico region was to evaluate risk routinely when planning inspections since at least the year 2000, because BSEE's inspection policy stipulates that the region is to conduct supplemental unannounced inspections based on a quantitative and qualitative assessment of risk.³⁰ In addition, BSEE's inspection policy states that the bureau is to evaluate quantitative and qualitative risk assessment criteria to determine whether a facility's annual scheduled inspection should be a complete inspection or an inspection of a selected sample of safety components. Furthermore, personnel from that region conducted a risk-based inspection pilot in 2009 in the Houma, Louisiana, and Lake Jackson, Texas, districts that regional management recommended for immediate implementation.³¹ Nevertheless, regional officials who had knowledge of the 2009 pilot

³⁰According to BSEE officials, the Gulf of Mexico region conducted 541 unannounced inspections in fiscal year 2016, as of August 2016.

³¹According to officials, prior to the *Deepwater Horizon* incident, MMS had difficulty meeting the annual inspection mandate as laid out in OCSLA because of the small size of the inspection force relative to the facilities operating offshore. Over the years, various attempts were made to ensure that MMS successfully met its annual mandate of inspecting every facility at least once annually. One of these efforts involved only inspecting a set of predetermined mandatory components, as well as a representative sample of other components. The goal of the 2009 risk-based pilot was to identify the lowest risk facilities (e.g., small unmanned platforms, shut-in platforms, low gas producers) for which a full inspection would not be required so that very limited resources could be diverted to higher-risk facilities. Eventually, Interior's Office of the Solicitor determined that inspections using the component sampling technique would not suffice to meet the OCSLA mandate.

said that BSEE headquarters led and developed the first facility-specific inspection protocol without their input.

According to officials, BSEE headquarters proceeded with pilot inspections before regional personnel had the opportunity to raise concerns about the risk model, the inspection planning methodology, and the facility-specific inspection protocol. As a result of these deficiencies, officials involved in the first pilot inspection described it as a failure that produced few, if any, results. Only after the first pilot did BSEE leadership begin to engage regional personnel and incorporate their input on the program, according to officials. In response to the deficiencies BSEE identified during the first two risk-based pilot inspections, in July 2016, BSEE revised the risk-based inspection program based on a proposal that regional personnel told us they developed, which incorporates a risk-based methodology that they had previously used in the Gulf of Mexico. Specifically, to supplement the facility-based approach that BSEE leadership had been developing since 2012 based on Argonne's risk model, BSEE regional personnel proposed reconstituting an inspection methodology that MMS used prior to the Deepwater Horizon incident called "blitz" inspections. Blitz inspections focus on specific facility components—such as compressors, generators, or cranes—that the bureau determines are high-risk based on analyses of trends in incidents. Officials told us that they added this tier of inspections because it allowed them to target risk across more facilities in less time than is required for comprehensive risk-based facility inspections. Specifically, BSEE intends for a typical round of blitz inspections to encompass approximately 50 facilities for 2 to 3 hours each. Under the initial program methodology developed by BSEE leadership, BSEE stated that it would be able to use the facility-based methodology as a systematic way of deciding where to commit annual inspection resources. However, officials said the bureau now anticipates using the risk-based methodology to target no more than five facilities per year, instead of the more than 20 per year officials originally estimated. Instead, BSEE's revised program methodology will use both blitz inspections and facility-based inspections based on Argonne's model. BSEE's current plans are to conduct additional pilots under the revised program methodology prior to implementation in fiscal year 2017.

Limited Efforts to Obtain and Incorporate Input Hindered BSEE's Ability to Identify and Remediate Deficiencies in Its Risk-Based Inspection Program

In July 2003, we found that when implementing large-scale management initiatives, a key practice is involving employees to obtain their ideas and gain their ownership by incorporating employee feedback into new policies and procedures.³² We found that employee involvement strengthens the process and allows them to share their experiences and shape policies, and that in leading organizations, management and employee representatives work collaboratively to gain ownership for these changes. Further, management's responsibility to develop policy and programs in a collaborative manner is established in both BSEE's internal policy and federal internal control standards. BSEE's inspection policy states that headquarters is responsible for coordinating the development of national inspection policy, including taking into account region-specific circumstances. BSEE regional leadership is responsible for administering and implementing the inspection policy; therefore, logically, regional leadership would be a key contributor to helping develop BSEE inspection policy. In addition, under the Standards for Internal Control in the Federal Government, management should internally communicate the necessary quality information to achieve its objectives.³³ For example, quality information is communicated down, across, up, and around reporting lines to all levels of the entity, and management receives such information about the entity's operational processes that flows up the reporting lines from personnel to help management achieve the entity's objectives. Therefore, systematic input from within the entity would help it achieve its objectives.

However, BSEE management made limited efforts to obtain and incorporate input from regional personnel in developing the three components of the risk-based inspection program, which contributed to deficiencies that led to an unsuccessful pilot, and ultimately, BSEE has been unable to achieve its goal of implementing a systematic risk-based inspection program. Without an Interior organizational unit at a higher level than BSEE (i.e., higher level oversight independent from BSEE) establishing a mechanism for BSEE management to obtain and incorporate input from personnel within the bureau, BSEE's risk-based inspection program could experience continued delays and implementation problems.

³²GAO, *Results-Oriented Cultures: Implementation Steps to Assist Mergers and Organizational Transformations*, [GAO-03-669](#) (Washington, D.C.: July 2, 2003).

³³[GAO-14-704G](#).

Coordination Problems Hindered BSEE's Environmental Stewardship Efforts

BSEE leadership initiated two simultaneous Environmental Stewardship efforts to reduce environmental risks related to U.S. offshore oil and gas operations, but the efforts were partially overlapping, fragmented, and uncoordinated, which reduced the value of the outputs. In 2015, BSEE leadership sought to establish a baseline for environmental risks associated with U.S. offshore oil and gas operations and measure the effectiveness of its environmental protection functions and environmental stewardship priorities to better implement BSEE's mission. These efforts included (1) identifying potential environmental risks associated with offshore oil and gas operations; (2) identifying current BSEE functions meant to regulate and manage those risks; (3) linking BSEE environmental stewardship priorities to specific industry activities and associated risks; and (4) identifying potential environmental stewardship gaps where BSEE functions might not be fully addressing industry activities with high environmental risk. These efforts were led and coordinated by BSEE leadership in the Environmental Compliance Division at headquarters, which BSEE created in 2015 to establish national strategic goals and procedures for the bureau's environmental compliance activities.³⁴

As part of the Environmental Stewardship initiative, BSEE conducted two environmental risk reduction efforts. Specifically, in December 2015, BSEE headquarters engaged Argonne to conduct an Environmental Risk Assessment, and in February 2016, established an internal Environmental Stewardship Collaboration Core Group (Core Group) comprised of BSEE personnel.³⁵ In July 2016, both Argonne and the Core Group produced final reports summarizing their findings. Both reports found that some of BSEE's activities, such as those focused on safety oversight, were not clearly linked to environmental stewardship. Additionally, Argonne also reported that some environmental protection and stewardship activities are not described in sufficient detail in BSEE regulations, policies, and interagency agreements. Argonne recommended that BSEE clarify functions that primarily focus on safety to explicitly identify environmental protection as an aspect of safe operations. Likewise, the Core Group found that some programs'

³⁴BSEE also identified environmental stewardship as one of its operational excellence goals in its *Fiscal Year 2016-2019 Strategic Plan*.

³⁵BSEE funded Argonne's effort via an interagency agreement with the Department of Energy for approximately \$600,000.

relationships to environmental stewardship might not always be readily apparent to program staff or more broadly within BSEE.

The efforts were overlapping because BSEE leadership tasked both Argonne and the Core Group with the same five objectives to identify: (1) linkages and gaps in BSEE's environmental stewardship of offshore oil and gas operations, (2) all environmental risks in offshore oil and gas operations, (3) mitigations already in place to reduce the identified environmental risks, (4) stewardship priorities for the Environmental Compliance Division; and (5) opportunities for improvement of BSEE environmental stewardship.

However, the efforts were also fragmented because BSEE leadership did not effectively coordinate the execution of these efforts, which hindered information sharing between Argonne and the Core Group that could have enhanced the value of each effort's report. Instead, both efforts were executed simultaneously with little evidence of information sharing or communication. For example, Argonne presented its work at the Core Group's initial meeting in February 2016; however, at that time, Argonne had not yet completed the majority of its contracted tasks. BSEE officials involved in the Core Group also told us that Argonne did not contribute to the Core Group activities throughout the effort. According to BSEE officials, Argonne's findings were added to the Core Group report by bureau leadership following the completion of the Core Group's assessment and without discussion or assessment by Core Group team members. Similarly, some officials involved in the Core Group said that BSEE headquarters did not communicate the objectives of the Argonne effort, thereby limiting the ability of the Core Group to coordinate with Argonne to maximize its results.

Furthermore, Argonne did not have access to bureau information and personnel that could have enhanced its efforts. Argonne's report stated that BSEE regional experts had information and technical knowledge that could be used to review their assumptions and to identify additional industry activities for analysis. Argonne also stated that it may have over- or underestimated potential risks, and did not determine the effectiveness of BSEE's environmental stewardship activities.³⁶ In turn, Argonne

³⁶Argonne's report stated that identification of possible stewardship gaps does not necessarily mean that the associated environmental impacts are occurring or are not sufficiently limited or mitigated by current BSEE environmental protection and stewardship activities. The Statement of Work did not specify whether BSEE asked Argonne to determine the effectiveness of the bureau's activities.

recommended BSEE regional subject matter experts review its analysis regarding the assumptions used in the risk evaluation and repeat the risk characterization using parameters that regional experts determine to be more appropriate. Because Argonne was aware of the limitations of its assessments, Argonne recommended that BSEE regional experts redo and validate these assessments. In addition to its report, Argonne provided the bureau with a spreadsheet-based risk assessment tool for BSEE to use during office verification and field monitoring. However, given Argonne's concern about the accuracy of its analysis, BSEE plans to review and verify Argonne's work.

In addition to its report, the Core Group established a bureau-wide definition for environmental stewardship and BSEE leadership drafted three work plans. The work plans include one plan to promote environmental stewardship on a continuous basis,³⁷ one work plan to redo Argonne's analysis, and another to create a manual with environmental compliance standard operating procedures for several of its core functions. BSEE anticipates that this work will be ready for management review in January 2017.

BSEE headquarters was responsible for coordinating with Argonne officials to ensure they had access to BSEE subject matter experts during the assessment, especially for the risk characterization and ranking task. Because effective coordination did not occur, the resources used to do these two simultaneous analyses were not used efficiently. BSEE's National Environmental Compliance Policy calls for coordination within the bureau when developing national policies and procedures. When BSEE initiated these efforts, bureau policy stated that communication and coordination within the Bureau and with external stakeholders is an essential component of success for its environmental division. In April 2016, BSEE updated its national policy but maintained an emphasis on good coordination across the bureau. Specifically, the current policy states that the Environmental Compliance Division collaborates within the bureau on national efforts to develop goals and policies. Furthermore, communication is an element of good federal internal controls. Under the Standards for Internal Control in the Federal Government management should internally and externally communicate the necessary quality

³⁷The Core Group defined environmental stewardship as the responsibility of all BSEE employees to carry out to the highest standards all duties that contribute, directly or indirectly, to the management, protection and care of the coastal, marine, and human environments.

information to achieve the entity's objectives.³⁸ Because BSEE management tasked both environmental risk response efforts with the same objectives and did not effectively communicate information to coordinate the efforts, the efforts overlapped and ultimately delivered few results that BSEE can implement immediately. Without higher level oversight within Interior establishing a mechanism for BSEE management to obtain and incorporate input from personnel within the bureau and any external parties, such as Argonne, that can affect the bureau's ability to achieve its objectives, BSEE's Environmental Stewardship efforts are likely to experience continued implementation and efficacy problems.

BSEE Leadership Has Made Limited Progress in Implementing Strategic Initiatives to Improve Its Internal Management

Since 2013, BSEE began four strategic initiatives to improve its internal management, but their successful implementation has been hindered by limited leadership commitment and not addressing factors contributing to trust concerns. In 2013 and 2014, BSEE leadership began initiatives—development of an enterprise risk management framework and performance measures, respectively—to improve its decision making capabilities—but has not fully implemented them. By not fully implementing internal management initiatives, BSEE management demonstrates limited leadership commitment. In 2016, BSEE conducted initiatives—an employee engagement effort and an assessment of its Integrity and Professional Responsibility Advisor—to enhance communication and transparency, but these do not address key factors that contribute to long-standing trust concerns within the bureau.

BSEE Leadership Began Initiatives to Improve Bureau Internal Management Capabilities but Has Not Fully Implemented Them

BSEE leadership began initiatives to improve bureau internal management capabilities but has not fully implemented them. In 2013, BSEE began an initiative to develop an ERM framework but has not fully implemented it as a management tool. In 2014, BSEE began an initiative to develop performance measures for its programs but has not implemented any measures.

BSEE Has Not Fully Implemented Its Enterprise Risk Management Framework

BSEE has made some progress over the past 3 years in implementing an ERM framework but has not completed the actions necessary to fully implement it. In 2013, BSEE began an initiative to develop and implement

³⁸ [GAO-14-704G](#).

an ERM framework to provide enduring management of internal and external risks that threaten achievement of BSEE's mission. The Office of Management and Budget defines ERM as an effective agency-wide approach to addressing the full spectrum of the organization's risks by understanding the combined impacts of risks as an interrelated portfolio, rather than addressing risks only within silos (i.e., viewing problems in isolation).³⁹ BSEE's Fiscal Year 2016-2019 Strategic Plan identifies the integration of enterprise risk management into bureau-wide decision making as a key initiative to meet BSEE's strategic goal to enhance decision making through the collection, management, and analysis of high-quality information.⁴⁰ In conjunction with a contracted ERM support consultant, BSEE developed an iterative ERM cycle that includes six steps: (1) establish an ERM program, (2) identify individual risks and group them into strategic risks, (3) prioritize risks, (4) develop risk treatments, (5) implement selected risk treatments, and (6) monitor performance.⁴¹

BSEE completed the first three of these six steps in its iterative ERM cycle. BSEE officials told us that they had taken actions on the other three steps. Specifically:

1. Establish an ERM program: BSEE established an ERM charter in 2014 and drafted an ERM Handbook and Bureau Manual Chapter to guide ERM activities in April 2016 but has not finalized or distributed them throughout the bureau.
2. Identify individual risks and group them into strategic risks: In 2014, BSEE identified 12 strategic risks that cover the lifecycle of BSEE operations.
3. Prioritize risks: In 2014, the bureau prioritized its strategic risks, according to BSEE ERM planning documentation. BSEE assessed

³⁹Office of Management and Budget, Cir. No. A-11, at § 270.24. In addition, the Office of Management and Budget issued new policy for agency implementation of Enterprise Risk Management in July 2016. Office of Management and Budget, Cir. No. A-123.

⁴⁰BSEE's fiscal year 2016 and 2017 Budget justifications highlighted its ERM initiative as key to implementing its strategic plan.

⁴¹Since 2013, BSEE has spent approximately \$1.5 million on contracted consultant support to develop and implement its ERM framework.

each strategic risk by evaluating the potential severity and likelihood of a failure event occurring and ranked them based on the results.⁴²

4. Develop risk treatments: BSEE planned to verify the prioritization of its top several strategic risk treatments by July 2016 but did not do so. BSEE officials told us that the bureau halted ERM implementation while it acquired automated ERM software. However, in November 2016, BSEE determined that it would reinstate ERM implementation simultaneous to the implementation of software. BSEE now plans to complete evaluation of risk treatments in March 2017.
5. Implement selected risk treatments: BSEE planned to finalize a plan for its prioritized risk treatments by August 2016 but did not do so because of the aforementioned temporary halt to ERM implementation. BSEE officials told us that the bureau has implemented some risk treatments. BSEE now plans to finalize its risk treatment plan in March 2017.
6. Monitor performance: BSEE plans to begin monitoring the performance of its risk treatments following their implementation. BSEE intended to promulgate a monitoring plan by October 2016 but did not do so because of the aforementioned temporary halt to ERM implementation. BSEE now plans to complete its monitoring plan in March 2017.

As part of its ERM initiative, BSEE is assessing the risks posed by its relationships with other agencies. BSEE's Fiscal Year 2016-2019 Strategic Plan identified reviewing the efficacy and implementation of current interagency relationships as a key initiative to support its strategic goal of maintaining productive relationships with external entities.⁴³ In 2015, BSEE's ERM support consultant assessed existing interagency relationships by prioritizing the 35 known memorandums of agreement, understanding, and collaboration based on the risk exposure they pose to the bureau. Of these 35 interagency memorandums, BSEE's consultant determined that 11 created a significant or moderate increase in risk exposure to the bureau. For example, the consultant determined that a

⁴²BSEE's assessment of severity is based on four factors: (1) number of deaths, (2) barrels of oil spilled, (3) dollar value of economic damage, and (4) impact to internal bureau structure. BSEE's assessment of likelihood is based on the frequency of occurrence over a given time period.

⁴³Other BSEE efforts also recommended updating the bureau's interagency relationships. A 2013 internal BSEE internal evaluation recommended improvements to relationships with other agencies. Brian Salerno, *Building Stronger Connections: An independent look at BSEE's [sic] interagency partnerships and their regulatory effectiveness* (July 5, 2013).

memorandum of understanding with BOEM to carry out assigned responsibilities under the agreement between the U.S. and Mexico concerning transboundary hydrocarbon reservoirs in the Gulf of Mexico created the greatest risk exposure to BSEE. BSEE has developed a plan to update one of these agreements but has not developed any specific plans to complete revisions for the other 10.⁴⁴

In 2016, BSEE began developing a systematic process for lifecycle management of interagency agreements and to improve the bureau's awareness of existing agreements and their implementation status, among other things. For example, BSEE has developed four criteria for prioritizing interagency agreements in need of update. BSEE also identified additional interagency agreements not identified by the bureau's ERM consultant. BSEE planned to assess and prioritize the risks posed by these newly discovered agreements by October 2016, but the bureau now plans to do so in March 2017. BSEE also plans to implement a bureau manual chapter and handbook that outlines a lifecycle interagency agreement management process in June 2017.

BSEE Has Not Implemented Program Performance Measures

Since 2012, BSEE has highlighted the need to develop and implement performance measures to inform management decision making. Specifically, BSEE's October 2012 Strategic Plan - Fiscal Years 2012-2015 stated that the bureau must develop performance measures to assess the results of its programmatic efforts as well as its ability to reduce the risks of environmental damage and accidents. Additionally, the October 2013 Director's Intent message—which outlined the BSEE Director's multi-year priorities—reaffirmed this need, stating that BSEE must measure to make informed management decisions and that to do so it must set key performance targets and measures, consistent with its strategic plan, and use them to guide its actions and decisions.⁴⁵

BSEE's initiative to develop performance measures has been comprised of three sequential efforts, none of which have resulted in the implementation of performance measures. In July 2014, the bureau initiated the first of three formal efforts to develop performance measures. Specifically, BSEE contracted with a consultant to reassess its existing

⁴⁴BSEE plans to complete implementations of its updated memorandum of understanding with the Environmental Protection Agency by the end of March 2017.

⁴⁵Each of BSEE's last four annual budget justifications—fiscal years 2014 through 2017—highlighted ongoing efforts to develop performance measures to improve program performance.

performance management system and update it as needed to ensure managers can make informed data-driven decisions.⁴⁶ However, BSEE terminated the contract in January 2015 because, according to BSEE officials, leadership determined that the bureau needed to complete its ongoing internal organizational restructuring prior to developing programmatic performance measures.⁴⁷

In December 2015, BSEE began its second effort, using the same consultant under a separate contract to develop performance measures for the national programs it established during its organizational restructuring—investigations, environmental compliance, and enforcement, as well as its Integrity and Professional Responsibility Advisor (IPRA).⁴⁸ Specifically, the contract stipulated that the consultant analyze program objectives and components, develop potential performance measures, identify data sources and data collection requirements, and coordinate with BSEE officials to establish objectives for each measure. In March 2016, the consultant delivered a report to BSEE that identified 12 performance measures—5 for investigations, 3 for environmental compliance, 2 for enforcement, and 2 for the IPRA.⁴⁹ However, BSEE headquarters officials told us that they are not implementing the measures and plans developed by the consultant due to a variety of factors, such as data availability limitations. For example, one proposed measure included a methodology to assess the effectiveness of issuing civil penalties to operators for safety or environmental infractions as a deterrent to committing future infractions. However, BSEE headquarters officials stated that the bureau does not issue enough civil penalties to conduct such an assessment—that is, the universe of available data to assess is too small. BSEE headquarters officials told us that the bureau did not implement the consultant-developed measures,

⁴⁶The total value of this contract, including all options, was approximately \$875,000.

⁴⁷BSEE paid the consultant approximately \$195,000 prior to its termination.

⁴⁸BSEE's fiscal year 2016 and 2017 budget justifications state that one of the goals of the bureau's organizational restructuring was to develop performance measures for major program functional areas. Developing performance measures for the established national programs was part of a contract to provide support services for an organizational restructuring. The total value of the contract was approximately \$1.23 million, of which \$43,500 was designated for the development of performance measures.

⁴⁹Some measures were classified as "informational" because they do not include performance targets and were developed to provide insight into programmatic function and establish baseline data on activities.

but rather that those measures are informing BSEE's third effort to develop performance measures.

In 2016, BSEE initiated a third effort to develop performance measures by providing a framework for considering performance management. Specifically, in January 2016—simultaneous to the aforementioned consultant's performance measure development effort—BSEE finalized a fiscal year 2016 work plan for the implementation of a revised performance management framework to include the identification of performance measures to help leadership gauge progress against the bureau's strategic plan.⁵⁰ BSEE headquarters officials told us that this initiative, which is being conducted internally by BSEE personnel, represents the beginning of a multi-year effort to implement a performance management system. BSEE initially planned to finalize its internally-developed list of performance measures in February 2016, but did not meet this deadline. Additionally, BSEE headquarters officials told us that in June 2016, the bureau narrowed the scope of the initiative from a comprehensive set of performance measures to no more than three performances measures per program. These officials explained that this was a more feasible scope given the difficulties in obtaining management commitment as well as the technical complexity of the initiative. As of August 2016, BSEE had developed 17 draft performance measures, but bureau leadership has repeatedly missed deadlines to review them. BSEE headquarters officials told us that, subsequent to leadership approval, the bureau plans to pilot these measures and develop others in upcoming years. In December 2016, BSEE completed a fiscal year 2016 Baseline Performance Measure Report that discusses these 17 measures and the bureau's plans for future iterations of their development.

By Not Fully Implementing Internal Management Initiatives, BSEE Management Demonstrates Limited Leadership Commitment

We have previously reported on BSEE's struggles to effectively implement internal management initiatives. Specifically, in February 2016, we found that since its inception in 2011, BSEE had made limited progress in enhancing the bureau's investigative, environmental compliance, and enforcement capabilities.⁵¹ More than 2 years into its restructuring effort—and more than 5 years after the Deepwater Horizon incident—the bureau had not completed the underlying policies and

⁵⁰BSEE contracted with its restructuring support consultant to compile the bureau's 23 fiscal year 2016 program work plans in a February 2016 report for \$64,000.

⁵¹[GAO-16-245](#).

procedures to facilitate the implementation of its national programs for these three capabilities. Moreover, we found that BSEE continues to face deficiencies in each of these capabilities that undermine its ability to effectively oversee offshore oil and gas development. As a result, among other things, we recommended that Interior direct BSEE to complete the policies and procedures for these three capabilities. Interior agreed that additional reforms—such as documented policies and procedures—are needed to address offshore oil and gas oversight deficiencies, but Interior neither agreed nor disagreed with our recommendation.

Likewise, with regard to its ongoing strategic initiatives, more than 3 years have passed since BSEE initiated the development of its ERM framework, and more than 2 years have passed since BSEE prioritized the strategic risks it faces. However, BSEE has yet to develop, implement, and monitor risk treatments to even the highest priority risks. Moreover, more than 4 years have passed since BSEE identified the development and implementation of performance measures as an organizational need. In that time, BSEE initiated several efforts to develop and implement such measures, and although BSEE has developed measures, it has yet to fully implement any.

In our 2013 High-Risk update, because progress had been made in one of the three segments we identified in Interior’s Management of Federal Oil and Gas Resources on our 2011 High-Risk List—reorganization of its oversight of offshore oil and gas activities—we narrowed the scope of the high-risk area to focus on the remaining two segments (revenue collection and human capital).⁵² One of our five criteria for assessing whether an area can be removed from our high-risk list is leadership commitment—that is, demonstrated strong commitment and top leadership support.⁵³ An example of leadership commitment is continuing oversight and accountability. In our 2015 High-Risk update, we determined that Interior had met our criteria for leadership commitment because Interior had implemented a number of strategies and corrective measures to help ensure the department collects its share of revenue from oil and gas produced on federal lands and waters and was developing a comprehensive approach to address its ongoing human capital challenges. However, BSEE leadership has not demonstrated continuing

⁵²[GAO-13-283](#).

⁵³The five criteria for removal are (1) leadership commitment, (2) agency capacity, (3) an action plan, (4) monitoring efforts, and (5) demonstrated progress. [GAO-15-290](#).

oversight and accountability for implementing internal management initiatives, as evidenced by its limited progress implementing key strategic initiatives as well as its inability to address long-standing oversight deficiencies. BSEE leadership has consistently stated that it prioritized internal management initiatives by citing their importance in strategic plans and budget justifications. For example, BSEE's fiscal year 2017 budget justification states that three key initiatives will inform the implementation of the bureau's Fiscal Year 2016-2019 Strategic Plan: (1) refinement of a comprehensive set of output and outcome based performance measures; (2) implementation of an ERM framework to facilitate information sharing and identify the risk relationships among and within programs; and (3) implementation of its national program manager model to ensure consistency across regions. According to the budget justification, these initiatives support both effective decision making and assessment of BSEE's progress in meeting its priorities. However, BSEE leadership has not fully implemented actions to demonstrate the commitment necessary to enable the successful implementation of such initiatives. Without higher-level oversight within Interior addressing leadership commitment deficiencies within BSEE—including by implementing internal management initiatives and ongoing strategic initiatives (e.g., ERM and performance measure initiatives)—in a timely manner, the bureau is unlikely to succeed in implementing internal management initiatives, including its key strategic initiatives for ERM and performance measures, in a timely manner.

BSEE Employee Engagement Initiative and IPRA Process Assessment Have Not Addressed Factors Contributing to Long-Standing Trust Concerns between Headquarters and the Regions

In 2016, BSEE conducted two initiatives—one on employee engagement and an assessment of its IPRA—to enhance communication and transparency, but these initiatives have not achieved results or addressed factors that contribute to trust concerns within the bureau.

BSEE Has Not Developed an Employee Engagement Strategy

BSEE's Fiscal Year 2016-2019 Strategic Plan discusses improving employee engagement—generally defined as the sense of purpose and commitment employees feel toward their employer and its mission—to foster a culture of collaboration within BSEE by, among other things,

enhancing trust and implementing an internal communications approach that encourages dialogue and sets expectations for sharing accurate and timely information. A 2015 bureau strategic planning summary document stated that there is a lack of trust and respect between and among headquarters, regions, and the districts. Additionally, a 2013 BSEE internal evaluation found that some outside the bureau commented that BSEE does not appear to trust its own personnel.⁵⁴ We have previously found that communication from management—as reflected by employee responses in the Federal Employee Viewpoint Survey⁵⁵—is one of the six strongest drivers of employee engagement.⁵⁶ BSEE Federal Employee Viewpoint Survey data for 2013, 2014, and 2015 indicate that approximately one-third of BSEE respondents were not satisfied with information received from management regarding organizational activities (32.9, 31.1, and 32.9 percent, respectively).⁵⁷ Likewise, less than half were satisfied with information received from management regarding organizational activities (41.7, 46.1, and 43.7 percent, respectively).⁵⁸

According to some BSEE officials from across the bureau, the need to improve trust and communication are interconnected. Some senior BSEE officials throughout the organization told us that poor communication from headquarters has exacerbated trust issues between headquarters and the regions (including districts) that have existed since the 2010 Deepwater Horizon incident. As previously discussed, BSEE leadership's safety and environmental stewardship initiatives have had limited success, largely due to poor communication and coordination between headquarters and the regions. BSEE officials from across the bureau told us that the poor communication between headquarters and the regions

⁵⁴Brian Salerno, *Building Stronger Connections: An independent look at BSSE's [sic] interagency partnerships and their regulatory effectiveness* (July 5, 2013).

⁵⁵The Federal Employee Viewpoint Survey is a tool that measures employees' perceptions of whether, and to what extent, conditions characterizing successful organizations are present in their agencies. Survey results provide valuable insight into the challenges agency leaders face in ensuring the federal government has an effective civilian workforce and how well they are responding.

⁵⁶GAO, *Federal Workforce: Additional Analysis and Sharing of Promising Practices Could Improve Employee Engagement and Performance*, [GAO-15-585](#) (Washington, D.C.: July 14, 2015).

⁵⁷The government-wide averages during fiscal years 2013 through 2015 were 28.5, 29.9, and 29.2 percent, respectively.

⁵⁸The government-wide averages during fiscal years 2013 through 2015 were 47.6, 45.6, and 46.8 percent, respectively.

led to a deficit of trust vertically throughout the bureau. They also told us that because BSEE headquarters was newly established as part of the reorganization of MMS in 2010 following the Deepwater Horizon incident, there were not many existing relationships between headquarters and regional personnel. BSEE regional officials told us of specific examples in which BSEE headquarters did not communicate certain information to the regions, which has exacerbated the existing trust concerns, including the following examples:

- BSEE leadership reorganized its Pacific region with a structure that does not align directly with the bureau's national program manager model and did not communicate the reasons why. One of the guiding principles of BSEE's organizational restructuring was consistency, but limited communication regarding BSEE's reorganization of its regions led some to believe that BSEE headquarters was not abiding by this principle. According to senior BSEE officials, the bureau restructured the Pacific Region—which includes 42 permanent full time equivalent positions—due to management problems with some personnel. They told us that to maintain an appearance of impartiality during the reorganization of the Pacific Region, BSEE contracted with a consultant to recommend a new organizational structure.⁵⁹ In turn, the consultant recommended changes to address a lack of leadership and ineffective communication in the region, which BSEE officials told us influenced the new regional structure. However, this new structure does not include offices that correspond to the new national programs established during BSEE's organizational restructuring—investigations, environmental compliance, and enforcement. BSEE leadership officials told us that the small relative size of the Pacific Region necessitated a unique structure. Conversely, the Gulf of Mexico region—an organization more than 10 times as large, with 454 full time equivalent positions—was restructured internally by BSEE personnel without relying on a consultant. Additionally, the Gulf of Mexico Region's revised organizational structure aligns with the national program manager model implemented at BSEE headquarters (i.e., it has offices dedicated to the new national programs—investigations, environmental compliance, and enforcement). Some BSEE officials told us that they were unaware of leadership's rationale for the differences in office structures because it was not communicated across the bureau. In turn, this lack of communication from headquarters led to confusion because regional personnel

⁵⁹The value of this contract was approximately \$410,000.

viewed it as inconsistent with the Director's Intent for the restructuring, which contributed to trust concerns.

- BSEE headquarters did not notify the Gulf of Mexico Region when it advertised for two field-based positions located in the region to manage its SEMS program.⁶⁰ According to BSEE regional officials, these positions would replicate functions that already existed in the Gulf of Mexico Region's Office of Safety Management. Further, the reporting chain of these positions did not align with other actions taken during organizational restructuring, which emphasized consistency across the bureau. Specifically, these field-based positions would report to headquarters rather than regional leadership even though the Gulf of Mexico Region recently had undergone a restructuring to ensure that regional program offices report to regional leadership rather than headquarters. As a result, BSEE regional officials told us that headquarters' actions to create new positions that would affect the region without notifying it contributed to the trust concerns of regional personnel.
- BSEE headquarters did not disseminate the final 2016 Environmental Stewardship Collaboration Core Group report to all group members, including representatives from the Office of Environmental Compliance, which is BSEE's primary organization for conducting environmentally-focused oversight. As a result, BSEE operational personnel who could potentially benefit from the results of the working group were not advised of its final findings.

In February 2016, BSEE announced an initiative to assess internal communications and develop an employee engagement strategy. The data collection plan for this employee engagement initiative focused on conducting outreach across the bureau to identify the means by which BSEE personnel prefer to receive information—for example, town hall meetings, BSEE's website, or e-mail. BSEE conducted this outreach but as of November 2016 had not developed an employee engagement strategy—although its original target completion date was April 2016—and it is unclear when it will do so. In September 2016, BSEE decided to conduct a second round of outreach across the organization by spring 2017 to review feedback from the initial outreach, discuss next steps, and provide guidance on existing communications resources. Additionally, based on its initial outreach efforts, BSEE identified numerous interim projects to undertake while it develops its employee engagement

⁶⁰One of the goals of BSEE's *Fiscal Year 2016-2019 Strategic Plan* is to better define and communicate the roles of all BSEE offices.

strategy: redesigning the bureau's intranet website, updating its online employee directory, briefing employees on employee engagement project findings, training on BSEE's e-mail system, building staff interaction, and streamlining its staff onboarding process. However, BSEE headquarters officials told us that the bureau has not identified a plan with time frames for completion of these efforts.

BSEE employee engagement initiative documentation identifies the need to enhance communication vertically and horizontally across the bureau, but it is unclear whether its employee engagement initiative will address the lack of quality information that BSEE officials told us undermines trust across the organization or set expectations for sharing accurate and timely information as called for by BSEE's Fiscal Year 2016-2019 Strategic Plan. Under Standards for Internal Control in the Federal Government, management should internally communicate the necessary quality information to achieve the entity's objectives.⁶¹ For example, management communicates such quality information down, across, up, and around reporting lines to all levels of the entity. However, it is unclear whether BSEE's employee engagement initiative will do so because the scope of the effort has focused on means of communication rather than quality of information. Without expanding the scope of its employee engagement initiative to incorporate the need to communicate quality information throughout the bureau, BSEE's employee engagement initiative might not address the lack of quality information being communicated throughout the bureau that is exacerbating trust concerns.

**BSEE's IPRA Pilot
Assessment Did Not Address
Unclear and Conflicting
Guidance**

The bureau's IPRA is responsible for promptly and credibly responding to allegations or evidence of misconduct and unethical behavior by BSEE employees and coordinating its activities with other entities, such as the IG.⁶² Senior BSEE officials from across the bureau stated that the IPRA function is critical to bolstering trust within the bureau because personnel need to have a functioning mechanism to which they can report potential misconduct by other employees. However, some BSEE officials from across the bureau expressed concern regarding the IPRA's process for

⁶¹[GAO-14-704G](#).

⁶²As part of BSEE's restructuring of its investigative capabilities in 2015, the bureau established an IPRA within the Office of the Director to investigate allegations of serious misconduct involving any employee not accepted for investigation by the IG. The IPRA function had previously been located in BSEE's Investigations and Review Unit (IRU), which was dissolved as part of BSEE's organizational restructuring in 2015 and split into two new programs: the Safety and Incident Investigation Division and the IPRA.

adjudicating allegations of misconduct. To increase transparency and consistency in how IPRA cases are handled following the completion of an investigation report, BSEE conducted a pilot initiative in 2016 to assess the types of allegations of misconduct being reported to the IPRA as well as the frequency with which the IPRA referred such allegations to other entities. In August 2016, BSEE determined that the majority of incoming allegations are being directed to the appropriate office for action.

However, BSEE's pilot initiative did not address unclear and conflicting guidance that could undermine organizational trust in how the IPRA addresses allegations of misconduct. Specifically, the Interior Department Manual states that IPRA responsibilities include working with the IG on internal matters the IPRA investigates, pursuing certain administrative investigations with the IG's consent and knowledge, and advising the IG of the status and results of IPRA investigations, as requested.⁶³ Additionally, IPRA guidance stipulates that once an allegation is received, the IPRA Board—composed of the IPRA, the head of Human Resources, and the Deputy Director—will assess whether the allegation should be referred to the IG or other appropriate entity, investigated by the IPRA, or closed for no further action. Further, the IPRA told us that the IG has first right of refusal to investigate all allegations of misconduct within the bureau. However, the Interior Department Manual and IPRA guidance do not specify criteria for the severity thresholds for allegations that are to be referred to the IG. As a result, the boundaries of IPRA responsibility are unclear.

Additionally, BSEE's pilot initiative did not address IPRA guidance that conflicts with the reporting chain established by the Interior Department Manual and BSEE's organization chart. Specifically, the Interior Department Manual and BSEE's organization chart indicate that the IPRA reports to the BSEE Director.⁶⁴ However, IPRA guidance also states that, for cases that are not accepted by the IG, an IPRA Board composed of the IPRA, the head of Human Resources, and the Deputy Director will assess whether the allegation should be referred, investigated by the

⁶³The IPRA Internal Investigations Log includes internal investigations conducted by the IRU prior to the creation of the IPRA and its associated guidance. BSEE's IPRA pilot report stated that 1 of the 12 allegations (8 percent) it received during the pilot period were forwarded to the IG.

⁶⁴The IPRA's predecessor organization, the IRU, was also tasked with reporting to the BSEE Director.

IPRA, or closed for no further action. BSEE officials told us that, in practice, the IPRA makes determinations as stipulated by the IPRA guidance. In turn, this reporting structure—in which the IPRA Board determines how to proceed without consultation with the Director—does not align with the Interior Department Manual and BSEE organization chart. Some BSEE regional officials told us that the uncertainty of how the IPRA reports allegations to the IG as well as its reporting structure led them to question the independence of IPRA activities and expressed concern that the IPRA could be used to retaliate against employees, which has undermined organizational trust in its activities.⁶⁵

Under the federal standards of internal control, management should design control activities to achieve objectives and respond to risks.⁶⁶ For example, agencies are to clearly document internal controls, and the documentation may appear in management directives, administrative policies, or operating manuals. While BSEE has documented its policies, they are not clear, because (1) neither the IPRA guidance nor the Interior Department Manual specifies criteria for the severity thresholds for allegations that are to be referred to the IG and (2) the IPRA guidance does not align with the Interior Department Manual and BSEE organization chart concerning the IPRA reporting chain. Moreover, BSEE's IPRA pilot initiative did not address the unclear and conflicting guidance regarding IPRA's referral criteria and reporting chain, respectively. Without assessing and amending its IPRA guidance to clarify (1) the severity threshold criteria for referring allegations and (2) the IPRA reporting chain, BSEE risks further eroding organizational trust in the IPRA to carry out its mission to promptly and credibly respond to allegations or evidence of misconduct by BSEE employees.

Conclusions

Since 2012, BSEE has begun several key strategic initiatives to improve its safety and environmental oversight. However, the bureau has made limited progress in implementing them. For example, BSEE's Environmental Stewardship Initiative encompassed two simultaneous efforts to reduce environmental risks related to U.S. offshore oil and gas operations, but the efforts were partially overlapping, had ineffective

⁶⁵Some IPRA investigations are initiated at the direction of BSEE leadership. 8 of the 34 BSEE internal investigations recorded in the IPRA Internal Investigations Log were initiated by the Director (1) or Deputy Director (7) since 2013. Of these 8, 3 were not referred to the IG, according to the IPRA Internal Investigations Log.

⁶⁶[GAO-14-704G](#).

coordination and communication, and produced few results. Without establishing a mechanism for BSEE management to obtain and incorporate input from bureau personnel and any external parties, such as Argonne, that can affect the bureau's ability to achieve its objectives, BSEE's risk-based inspection program is likely to experience continued delays and implementation problems. Likewise, since 2013 BSEE has begun several strategic initiatives to improve its internal management but has made limited progress in implementing them. Without a higher-level organization within Interior addressing leadership commitment deficiencies within BSEE, including by implementing internal management initiatives and ongoing strategic initiatives (e.g., ERM and performance measure initiatives) in a timely manner, the bureau is unlikely to succeed in implementing internal management initiatives, including its key strategic initiatives for ERM and performance measures, in a timely manner. Additionally, BSEE documentation identifies the need to enhance communication vertically and horizontally across the bureau, but it is unclear whether the bureau's employee engagement initiative will address the lack of quality information that BSEE officials told us undermines trust across the organization or set expectations for sharing accurate and timely information as called for by BSEE's Fiscal Year 2016-2019 Strategic Plan. Without expanding the scope of its employee engagement strategy to incorporate the need to communicate quality information throughout the bureau, BSEE's employee engagement initiative might not address the lack of quality information being communicated throughout the bureau that is exacerbating trust concerns. Further, BSEE's IPRA pilot initiative did not address unclear and conflicting guidance that could undermine organizational trust in how the IPRA addresses allegations of misconduct. Without assessing and amending IPRA guidance to clarify (1) severity threshold criteria for referring allegations of misconduct to the IG and (2) its reporting chain, BSEE risks further eroding organizational trust in the IPRA to carry out its mission to promptly and credibly respond to allegations or evidence of misconduct by BSEE employees.

Recommendations for Executive Action

In this report, we are making four recommendations. We recommend that the Secretary of the Interior direct the Assistant Secretary for Land and Minerals Management, who oversees BSEE, take the following two actions:

- Establish a mechanism for BSEE management to obtain and incorporate input from bureau personnel and any external parties,

such as Argonne, that can affect the bureau's ability to achieve its objectives.

- Address leadership commitment deficiencies within BSEE, including by implementing internal management initiatives and ongoing strategic initiatives (e.g., ERM and performance measure initiatives) in a timely manner.

We also recommend that the Secretary of the Interior direct the BSEE Director take the following two actions:

- To address trust concerns that exist between headquarters and the field, BSEE should expand the scope of its employee engagement strategy to incorporate the need to communicate quality information throughout the bureau.
- To increase organizational trust in IPRA activities, BSEE should assess and amend IPRA guidance to clarify (1) severity threshold criteria for referring allegations of misconduct to the IG and (2) its reporting chain.

Agency Comments and Our Evaluation

We provided a draft of this report to the Department of the Interior for review and comment. In its written comments, reproduced in appendix I, Interior neither agreed nor disagreed with our four recommendations. Interior stated that the recommendations reflect ongoing BSEE commitments and that BSEE and Interior agree with the concepts laid out in the first three recommendations. For the fourth recommendation, Interior stated that BSEE will examine the current guidance for the Integrity and Professional Responsibility Advisor. However, Interior also stated that the draft report neither fully describes the progress made within BSEE nor fully represents the current status of the programs, initiatives, and activities highlighted therein. Interior requested that we consider information that it stated provides status updates and corrections, while also laying out in more detail BSEE's continuing commitments in these areas. Interior also enclosed additional documentation. We reviewed the additional information and documentation that Interior provided and found no evidence to support the revision of any of our findings. In turn, we disagree with Interior's characterization of the progress that BSEE has made and believe that actions to implement our recommendations are necessary. Specifically:

- Regarding our recommendation that Interior develop a mechanism for BSEE management to obtain and incorporate input from bureau personnel and any external parties that can affect the bureau's ability

to achieve its objectives, Interior's comments do not discuss any specific actions taken or underway to do so. Additionally, in its comments, Interior stated that regional personnel, such as regional managers and district managers, were involved throughout the development of the risk model and the pilot testing. To support this statement, Interior provided documentation of electronic communications from BSEE headquarters to senior regional leadership informing them of certain aspects of the program and meeting documents showing that certain regional officials attended meetings regarding program development. However, instead of demonstrating that regional managers were involved in the development of the model and methodology, this documentation demonstrates that regional officials raised concerns about the model and methodology but that headquarters officials said they would not make any changes in response to these concerns. Specifically, Interior provided e-mails that indicate headquarters informed regional officials of the development of the model through the Strategic Plan Implementation Team in late 2012. However, e-mails from early 2015 indicate that regional officials were not involved in the development of the risk model or risk-based inspection program methodology in the intervening more than 2 years, because they had to request information from headquarters about the underlying basis of the model and the methodology that they were being asked to comment on. After regional officials reviewed the methodology and the model, they e-mailed headquarters and raised concerns with the model. Headquarters officials replied that they validated the model and that changing the parameters of the model would decrease its effectiveness. Therefore, the e-mails that Interior provided support what regional personnel told us—that their input was not incorporated into the model and methodology prior to the first pilot. We found that regional personnel became more involved in the risk-based inspection initiative after the first pilot exposed deficiencies in headquarters' approach. In its comments, Interior disagreed with our assessment of pilot test deficiencies and stated that BSEE expected to encounter issues while pilot testing. However, we believe that some of those issues may have been averted had BSEE included the input of regional officials earlier in the process. As described throughout the report across multiple initiatives, we have concerns about the fundamental working relationship between the region and headquarters, which are substantiated by the e-mails that Interior provided in response to our draft report. In turn, we continue to believe that Interior should develop a mechanism for BSEE management to obtain and incorporate input from bureau personnel

and any external parties that can affect the bureau's ability to achieve its objectives in the next risk-based inspection pilot test, which will be conducted by a joint headquarters-regional team in March 2017. However, as we discussed in the report, the first pilot had deficiencies in identifying high-risk offshore facilities, so the extent to which BSEE will be able to apply lessons learned is uncertain.

- Regarding our recommendation that Interior address leadership commitment deficiencies within BSEE, including implementing internal management initiatives (e.g., ERM and performance measure initiatives) in a timely manner, Interior's comments do not discuss any specific actions taken to meet the intent of our recommendation. Interior states that BSEE's implementation of ERM is on target and that BSEE has an established ERM framework, completed its risk register, has a fully developed maturity model, has aligned enterprise and strategic risks with its strategic plan and has linked program risks with appropriate strategic risk categories, in addition to other activities. Interior also stated that BSEE is on schedule to complete its first full ERM cycle in March 2017. Additionally, Interior states that ERM is a relatively new program directed by a fall 2016 Office of Management and Budget Circular regarding ERM.⁶⁷ However, while Circular No. A-123 was revised in July 2016 with new ERM implementation requirements effective for fiscal year 2017, Interior's statement is misleading because BSEE's efforts have been ongoing since 2013. Additionally, Interior provided clarifications but does not dispute our findings on its efforts to develop performance measures. Specifically, Interior states that the November 2016 completion of a fiscal year 2016 Baseline Performance Measure Report represented the first step of implementation of BSEE's performance measure program and that the bureau anticipates having an initial performance dashboard in fiscal year 2018. By considering November 2016 as the first step toward a performance measures program, Interior appears to disregard BSEE's efforts over the prior 4 years. If BSEE succeeds in fiscal year 2018, this will be the culmination of 6 years of attempting to develop performance measures to inform management decision making. Therefore, we continue to believe that Interior should address leadership commitment deficiencies within BSEE, including by implementing internal management initiatives, such as ERM and

⁶⁷ Office of Management and Budget Cir. No. A-123, *Management's Responsibility for Enterprise Risk Management and Internal Control* (July 15, 2016).

performance measures, in a timely manner rather than revising initiative start dates.

- Regarding our recommendation that BSEE expand the scope of its employee engagement strategy to incorporate the need to communicate quality information throughout the bureau, Interior stated that BSEE is committed to enhancing communication and collaboration among its personnel and agrees with the importance strengthening communication between headquarters and the regions. Interior asserts that, since receiving our draft report, BSEE has completed assessment and analysis of employee feedback, and developed an engagement plan. However, Interior did not provide documentary evidence of this plan or what it entails. Moreover, in our report we identified a long history of poor communication between headquarters and regional officials, leading to a widespread lack of trust across the bureau. Without providing evidence of BSEE's activities—and in light of the bureau's documented struggles to effectively implement organizational change—we cannot confirm that any action has been taken and continue to believe that BSEE should expand the scope of its employee engagement strategy to incorporate the need to communicate quality information throughout the bureau.
- Regarding our recommendation that BSEE assess and amend IPRA guidance to clarify (1) severity threshold criteria for referring allegations of misconduct to the IG and (2) its reporting chain, Interior stated that the creation of the IPRA directly impacts trust concerns within BSEE and that the bureau will examine current guidance for the IPRA. However, Interior stated that contrary to our draft report, the Interior Department Manual already includes severity threshold criteria for referring allegations of misconduct to the IG. We believe that the language in the Interior Department Manual, which states that “serious allegations” and “serious complaints” should be referred to the IG, does not provide the specificity needed to adequately define the boundaries of IPRA responsibility. Additionally, Interior stated that the IPRA reports to the BSEE Director, consistent with the reporting chain established in the bureau's organizational chart and the Interior Department Manual. However, the BSEE Director told us that, in practice, the IPRA often reports to the BSEE Deputy Director rather than the Director. Moreover, our work found that the decision making process of the IPRA Board—whereby the IPRA Board determines how to respond to an investigation without consultation with the Director—does not align with the IPRA's prescribed reporting chain. As a result, we continue to believe that BSEE should assess and

amend IPRA guidance to clarify (1) severity threshold criteria for referring allegations of misconduct to the IG and (2) its reporting chain.

Interior's comments on our draft report underscore our concerns regarding deficiencies in BSEE leadership commitment and support the decision to incorporate the restructuring of offshore oil and gas oversight into our High-Risk List in February 2017. Specifically:

- In its comments, Interior highlighted BSEE's decision to contract with NAPA to evaluate the bureau—at a cost of approximately \$450,000—as an example of the bureau's commitment to maturing the organization. However, the timing, scope, and methodology cause us to question its value. Specifically, BSEE issued the contract five months after we began our review, and its scope—which includes identifying BSEE strategic and organizational initiatives and assessing their progress—mirrors our work already underway. Further, the contract stipulates that all work “shall be developed in a collaborative manner with BSEE leadership, but with a focus on document review rather than in-depth interviews with bureau personnel.” This calls into question the independence of the NAPA evaluation. Additionally, when we met with the NAPA team, they indicated that their instructions were to focus on BSEE headquarters and not conduct outreach to the bureau's operational components in the regions. In our experience working with BSEE, we have found extensive outreach to the field to be essential to understanding the operations of the bureau. As a cumulative result of these factors, it is uncertain whether BSEE's decision to engage in this evaluation will produce the organizational improvement advertised by Interior.
- Interior's written comments contain factual errors that are contradicted by the evidence we collected in our work, further heightening our concerns regarding BSEE leadership's commitment to taking the steps needed to improve the bureau. For example, Interior states that environmental risk was not a consideration in the Core Group objectives or final report. However, the Core Group's final report states that the purpose of the report was “to assist in determining current and emerging environmental risks and whether BSEE has the best mitigation strategies in place.” Likewise, Interior states that BSEE's Environmental Stewardship Collaboration Core Group and Argonne Environmental Risk Assessment were not simultaneous efforts. On the contrary, according to its final report, the Core Group convened from February 2016 to May 2016. The Statement of Work

for the Argonne environmental risk assessment contract was issued in December 2015, and Argonne delivered its final report in July 2016.

Interior also provided technical comments that we incorporated into the report, as appropriate.

We are sending copies of this report to the appropriate congressional committees, the Secretary of the Interior, and other interested parties. In addition, the report is available at no charge on the GAO website at <http://gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-3841 or ruscof@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made major contributions to this report are listed in appendix II.



Frank Rusco
Director, Natural Resources and Environment

Appendix I: Comments from the Department of the Interior



United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, DC 20240

MAR - 7 2017

Mr. Frank Rusco
Director, Natural Resources and Environment
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Mr. Rusco:

Thank you for providing the Department of the Interior (Department) the opportunity to review and comment on the draft Government Accountability Office (GAO) report, entitled *Oil and Gas Management: Stronger Leadership Commitment Needed at Interior to Improve Offshore Oversight and Internal Management* (GAO-17-293).

The Department recognizes the significant effort that GAO invested into this general management review of Bureau of Safety and Environmental Enforcement (BSEE). The draft report, however, neither fully describes the progress made within BSEE nor fully represents the current status of the programs, initiatives, and activities highlighted therein.

BSEE is a relatively new organization with a fundamental mission that incorporates functions that were underdeveloped in BSEE's predecessor agency. As such, BSEE is continually working to refine these functions and strengthen the Bureau's strategic and programmatic capacities. The Department, as well as the Bureau itself, recognizes that BSEE must continue to build its organizational maturity. This commitment to maturing the organization is reflected in BSEE's recent choice to voluntarily undertake a comprehensive evaluation of the Bureau. The National Academy of Public Administration (NAPA) is leading this evaluation, bringing its independence and expertise to identifying tangible steps that BSEE can take to enhance the organization. NAPA's report is expected to be publicly available at the end of March.

BSEE is also committed to ensuring effective information exchange across programs and regions, implementing key internal management initiatives, and building trust throughout the Bureau, as described in more detail below and in the enclosed specific comments on GAO's draft report.

The Department, therefore, believes that GAO's recommendations reflect ongoing BSEE commitments. Additionally, GAO's first three recommendations relate to initiatives and pilots that continue to evolve as the Bureau gains experience and understanding. The Department and BSEE agree with the concepts laid out in the recommendations, but believe that the Bureau is already undertaking actions in these areas. Regarding GAO's fourth recommendation, BSEE will examine the current guidance for the Integrity and Professional Responsibility Advisor. As

noted below, however, severity threshold criteria already exist for misconduct referrals to the Department's Office of Inspector General (OIG).

The Department requests that GAO consider the following clarified, updated, and new information on the main topics listed below as the report is finalized. This information provides status updates and corrections, while also laying out in more detail BSEE's continuing commitments in these areas. More detailed comments are enclosed providing further updates and clarifications.

Risk-Based Inspections (RBI)

The RBI approach is a supplement to the annual inspections program required under the Outer Continental Shelf Lands Act (OCSLA), not a replacement. Additionally, the risk model itself is not a stand-alone tool and cannot be the sole basis for determination of risk; other information also contributes to BSEE's consideration of risk factors. Development of this new program represents a significant change in the historical approach to inspection and enforcement by both the Department and industry. Regional personnel such as regional managers and district managers were involved throughout the development of the risk model and the pilot testing, as described in the more detailed comments enclosed.

We disagree with the report's assessment of pilot test deficiencies as it results in a misconception of BSEE's progress in this area. By definition, a pilot program or test is a small-scale, short-term experiment that helps an organization learn how a large-scale project might work in practice. The value of a pilot test is that it informs new approaches and process improvements that may not have been known or identified before conducting the pilot test. BSEE expected to encounter issues while pilot-testing the RBI approach and continues to benefit from the lessons learned. These lessons learned will be applied in the next RBI pilot test, which will be conducted by a joint headquarters-regional team in March 2017.

Environmental Stewardship

The Environmental Stewardship Collaboration Core Group and the Argonne Environmental Risk Assessment were not simultaneous efforts, but two separate and distinct initiatives with different objectives. The Core Group focused on enhancing environmental stewardship within BSEE, while the Argonne effort focused on assessing environmental risk on the Outer Continental Shelf. Environmental risk was not a consideration in the Core Group objectives or the final report. Further, the Core Group was briefed on Argonne efforts at the Core Group's February 9, 2016, meeting. Argonne representatives attended all three of the Core Group's in-person meetings.

Enterprise Risk Management (ERM)

ERM is a relatively new program directed by the Office of Management and Budget (OMB) in the fall of 2016 in Circular A123 to be effective for Fiscal Year (FY) 2017. By definition, ERM is an agency-wide approach that addresses the full spectrum of an organization's significant risks by considering the combined array of risks as an interrelated portfolio, rather than addressing risks only within silos. BSEE's implementation of ERM is on target. BSEE has an established ERM framework, completed its risk register, has a fully developed maturity model, has aligned enterprise and strategic risks with its strategic plan and has linked program risks with appropriate

strategic risk categories, in addition to other activities. BSEE is on schedule to complete its first full ERM cycle in March 2017.

Performance Measures

BSEE is currently implementing a performance measure program at the national level. This program goes beyond the Bureau's reporting of Government Performance and Results Act (GPRA) measures and instead seeks to provide information for management decision-making. The November 2016 completion of a FY 2016 Baseline Performance Measure Report represented the first step of implementation. BSEE is currently collecting data for existing measures identified in that report and both mid-year and end-of-year reports will be provided to leadership. Additionally, BSEE is expanding into national application of those measures initially identified as regional measures, while also establishing new measures related to permitting, Safety and Environmental Management Systems (SEMS), and other program areas. BSEE views this effort as an iterative, multi-year initiative that will lead to a performance dashboard that supports management decision-making. BSEE anticipates having an initial performance dashboard in FY18.

Employee Engagement

BSEE is committed to enhancing communication and collaboration among its personnel. The recent Employee Engagement efforts, including the 2016 Employee Engagement initiative referenced in the GAO report, are key components of this commitment. Since the issuance of the GAO draft report, the Bureau has completed assessment and analysis of employee feedback, and developed an engagement plan. In December and January, BSEE headquarters completed its first round of follow-up visits to the districts and regions. Redesign of the internal website is underway, which reflects input received on enhancing communications.

BSEE is also committed to effective communication among headquarters and the regions. The Bureau recognizes that some issues with cross-bureau communications remain and that this is an area where ongoing improvements are needed. BSEE agrees with the importance of strengthening communication channels between headquarters and regional office personnel.

Integrity and Professional Responsibility Advisor (IPRA)

The creation of the IPRA directly impacts trust concerns within the Bureau. One of the key reasons for the separation of external and internal investigative components was to effectively address factors that contributed to trust concerns among field employees and investigators. Once the internal investigations function was separated from external investigations, cooperation from regional and district offices improved for both IPRA and the external investigators. As a result, employees are able to work more effectively with BSEE's external investigators as the separation of internal investigations has built trust between field staff and external investigators.

The IPRA is an investigative tool to assist managers and supervisors. Any disciplinary actions resulting from investigations are handled in accordance with applicable rules and guidelines. Contrary to the GAO draft report, criteria exist for when IPRA cases should be referred to the Department's OIG. BSEE and the IPRA adhere to the OIG's criteria for the severity thresholds for allegations that are to be referred to the OIG. These criteria are outlined in the DOI Department Manual 355 DM 2, which lays out the OIG's policy for complaints and referrals.

Finally, the IPRA reports to the Director of BSEE, consistent with the reporting chain established in the Bureau's organizational chart and the Department Manual (119 DM 2) and carries out the Director's responsibilities, as outlined in the Departmental Manual (370 DM 752). Additionally, the IPRA briefs the Director on case status and work progress. The composition of the IPRA Board (i.e., the IPRA, Human Resources Chief and the Deputy Director or his/her designee) recognizes that the Director may ultimately be the deciding official during the disciplinary phase. Neither the creation nor the composition of this board alters this reporting chain.

Comments on particular sections of the draft report are provided in Enclosure 1. We believe consideration of these comments will paint a more accurate picture of the achievements, progress, and challenges associated with the issues reported.

If you have any questions regarding this response, please contact Linh Luu, BSEE Audit Liaison Officer, at (202) 208-4120.

Sincerely,



Richard T. Cardinale
Acting Assistant Secretary
Land and Minerals Management

Enclosure

Appendix II: GAO Contact and Staff Acknowledgments

GAO Contact

Frank Rusco, (202) 512-3841 or ruscof@gao.gov

Staff Acknowledgments

In addition to the individual named above, Christine Kehr, Assistant Director; Richard Burkard; Cindy Gilbert; Alison O'Neill; Matthew D. Tabbert; Barbara Timmerman; Kiki Theodoropoulos; and Daniel R. Will made significant contributions to this report.

GAO's Mission

The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through GAO's website (<http://www.gao.gov>). Each weekday afternoon, GAO posts on its website newly released reports, testimony, and correspondence. To have GAO e-mail you a list of newly posted products, go to <http://www.gao.gov> and select "E-mail Updates."

Order by Phone

The price of each GAO publication reflects GAO's actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO's website, <http://www.gao.gov/ordering.htm>.

Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.

Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.

Connect with GAO

Connect with GAO on [Facebook](#), [Flickr](#), [LinkedIn](#), [Twitter](#), and [YouTube](#). Subscribe to our [RSS Feeds](#) or [E-mail Updates](#). Listen to our [Podcasts](#). Visit GAO on the web at www.gao.gov and read [The Watchblog](#).

To Report Fraud, Waste, and Abuse in Federal Programs

Contact:

Website: <http://www.gao.gov/fraudnet/fraudnet.htm>

E-mail: fraudnet@gao.gov

Automated answering system: (800) 424-5454 or (202) 512-7470

Congressional Relations

Katherine Siggerud, Managing Director, siggerudk@gao.gov, (202) 512-4400, U.S. Government Accountability Office, 441 G Street NW, Room 7125, Washington, DC 20548

Public Affairs

Chuck Young, Managing Director, youngc1@gao.gov, (202) 512-4800, U.S. Government Accountability Office, 441 G Street NW, Room 7149, Washington, DC 20548

Strategic Planning and External Liaison

James-Christian Blockwood, Managing Director, spel@gao.gov, (202) 512-4707, U.S. Government Accountability Office, 441 G Street NW, Room 7814, Washington, DC 20548



From: [Preston Beard](#)
To: [Mcbrady, Monica](#)
Cc: [Staci King](#); [Holly Hopkins](#)
Subject: Re: ?Attendees for Thursday Meeting w/OOC & API
Date: Tuesday, November 13, 2018 10:10:39 AM

Holly, can you send us your attendees?

-Preston
571-585-7001

On Nov 13, 2018, at 10:08 AM, Mcbrady, Monica <monica.mcbrady@bsee.gov> wrote:

Staci called about this Thursday's meeting with OOC & API. I dug around and found these two contacts on the email trail about the meeting.

Do you know if anyone else is going to come to the meeting beside Evan and Holly?

I'll forward her this info to get her started. If you know of anyone else coming, kindly let Staci know and she'll prep the welcome poster.

Evan H. Zimmerman
Executive Director
Offshore Operators Committee
Evan@offshoreoperators.com

Holly A. Hopkins
Sr. Policy Advisor, Upstream
American Petroleum Institute
1220 L Street, NW
Washington, DC 20005
202-682-8439 Tel
202-744-2995 Cell
hopkinsh@api.org



--

Monica McBrady

Office of the Director

Bureau of Safety and Environmental Enforcement

(202) 208-6286 (o)

(571) 789-6399 (c)

monica.mcbrady@bsee.gov

From: [Beard, Preston](#)
To: [Monica Mcbrady](#); Evan@offshoreoperators.com
Cc: [Staci King](#); [Holly Hopkins](#)
Subject: Re: ?Attendees for Thursday Meeting w/OOC & API
Date: Wednesday, November 14, 2018 9:11:20 AM

Evan and Holly, please let us know who all is attending tomorrow and what time you plan to arrive.

On Tue, Nov 13, 2018 at 10:10 AM Preston Beard <preston.beard@bsee.gov> wrote:
Holly, can you send us your attendees?

-Preston
571-585-7001

On Nov 13, 2018, at 10:08 AM, Mcbrady, Monica <monica.mcbrady@bsee.gov> wrote:

Staci called about this Thursday's meeting with OOC & API. I dug around and found these two contacts on the email trail about the meeting.

Do you know if anyone else is going to come to the meeting beside Evan and Holly?

I'll forward her this info to get her started. If you know of anyone else coming, kindly let Staci know and she'll prep the welcome poster.

Evan H. Zimmerman
Executive Director
Offshore Operators Committee
Evan@offshoreoperators.com

Holly A. Hopkins
Sr. Policy Advisor, Upstream
American Petroleum Institute
1220 L Street, NW
Washington, DC 20005
202-682-8439 Tel
202-744-2995 Cell
hopkinsh@api.org



--

Monica McBrady
Office of the Director
Bureau of Safety and Environmental Enforcement
(202) 208-6286 (o)
(571) 789-6399 (c)
monica.mcbrady@bsee.gov

--

Preston Beard
Advisor, Office of the Director
Bureau of Safety and Environmental Enforcement
(202) 208-3976 (o)
(571) 585-7001 (c)
preston.beard@bsee.gov



From: [Holly Hopkins](#)
To: [Beard, Preston](#); [Monica Mcbrady](#); [Evan@offshoreoperators.com](#)
Cc: [Staci King](#)
Subject: Re: ?Attendees for Thursday Meeting w/OOC & API
Date: Wednesday, November 14, 2018 9:16:26 AM

Me, Evan and Greg Kusinski, Chevron. We will be there at 2 pm. Thanks

----- Original message -----

From: "Beard, Preston" <preston.beard@bsee.gov>
Date: 11/14/18 9:11 AM (GMT-05:00)
To: Monica Mcbrady <monica.mcbrady@bsee.gov>, Evan@offshoreoperators.com
Cc: Staci King <staci.king@bsee.gov>, Holly Hopkins <hopkinsh@api.org>
Subject: Re: ?Attendees for Thursday Meeting w/OOC & API

Evan and Holly, please let us know who all is attending tomorrow and what time you plan to arrive.

On Tue, Nov 13, 2018 at 10:10 AM Preston Beard <preston.beard@bsee.gov> wrote:
Holly, can you send us your attendees?

-Preston
571-585-7001

On Nov 13, 2018, at 10:08 AM, Mcbrady, Monica <monica.mcbrady@bsee.gov> wrote:

Staci called about this Thursday's meeting with OOC & API. I dug around and found these two contacts on the email trail about the meeting.

Do you know if anyone else is going to come to the meeting beside Evan and Holly?

I'll forward her this info to get her started. If you know of anyone else coming, kindly let Staci know and she'll prep the welcome poster.

Evan H. Zimmerman
Executive Director
Offshore Operators Committee
Evan@offshoreoperators.com

Holly A. Hopkins

Sr. Policy Advisor, Upstream

American Petroleum Institute

1220 L Street, NW

Washington, DC 20005

202-682-8439 Tel

202-744-2995 Cell

hopkinsh@api.org



--

Monica McBrady

Office of the Director

Bureau of Safety and Environmental Enforcement

(202) 208-6286 (o)

(571) 789-6399 (c)

monica.mcbrady@bsee.gov

--

Preston Beard

Advisor, Office of the Director

Bureau of Safety and Environmental Enforcement

(202) 208-3976 (o)

(571) 585-7001 (c)

preston.beard@bsee.gov



From: [Scott Angelle](#)
To: Evan@offshoreoperators.com; [Holly Hopkins](#)
Subject: BAST Production Equipment List-.docx
Date: Wednesday, December 5, 2018 5:37:13 AM
Attachments: [ATT00001.txt](#)
[BAST Production Equipment List-.docx](#)

Good morning. Thank you for providing your work product on your review of the drilling equipment you concluded are subject to BAST. BSEE subject matter experts have been assigned to review and respond.

I am attaching a document that these same subject matter experts have prepared relative to production equipment they believe could be subject to BAST.

BSEE is committed to continuing its recent efforts to elevate solutions to BAST.

Sent from my iPhone

Initial Assessment of Equipment Subject to BAST Statutory Requirements Production Operations

BACKGROUND

The BAST requirement of the OCS Lands Act Amendments of 1978 is stated in section 21(b)¹ of the Act as:

“... the Secretary (of the Interior) and the Secretary of the Department in which the Coast Guard is operating shall require, on all new drilling and production operations and wherever practicable on existing operations, the use of the best available and safest technologies which the Secretary determines to be economically feasible, wherever failure of equipment would have a significant effect on safety, health, or the environment, except where the Secretary determines that the incremental benefits are clearly insufficient to justify the incremental costs of utilizing such technologies.”

This section of the statute is separate and apart from the Section 5(a) provision that requires the Secretary to issue regulations to protect health, safety and the environment.

The BAST requirement is limited to equipment that the BSEE Director requires “wherever failure of **equipment** would have a **significant effect** on safety, health, or the environment”. Unfortunately, neither the statute nor legislative history defines the terms “**equipment**” or “**significant effect**.”

SIGNIFICANT EFFECT

There may be a broad range of equipment that meets this statutory definition of BAST. For purposes of *initially prioritizing* equipment subject to the BAST, BSEE focused on the failure of equipment during production operations that could have the following potential effects:

1. Five or more fatalities which is consistent with the E.U. Directive 2013/30/EU² definition of major offshore safety incident, and/or
2. Oil spills greater than 50,000 barrels/day which is consistent with BOEM’s OCS Report BOEM 2017-007³ description of a catastrophic spill as ranging from 30,000 to 60,000 barrels/day (shallow vs. deepwater OCS).

These criteria, used to measure “significant effect” were used to help prioritize and focus the initial assessment of equipment. There are many incidents that could be considered “significant” that do not meet these initial criteria.

BSEE requests input on a definition of “significant effect” that defines the scope of the BAST requirement.

¹ **Authority:** Outer Continental Shelf Lands Act (OCSLA) Amendments of 1978, 43 U.S.C. §1331 *et seq.* (Section 21(b))

² E.U. Directive 2013/30/EU, Chapter 1, Article 2 (1), Definitions

³ OCS Report BOEM 2017-007, *Catastrophic Spill Event Analysis: High-Volume, Extended-Duration Oil Spill Resulting from Loss of Well Control on the Gulf of Mexico Outer Continental Shelf*

Definition of Equipment

To define equipment that would be subject to BAST, BSEE relied on common terms and definitions used by regulators, industry groups and standards writing organizations. BSEE utilized barrier definitions contained in IOGP documents to define the overall categories of equipment for evaluation and then identified safety critical equipment within each category:

- “Barriers” are systems that prevent realization of a hazard (i.e., accidents). The International Association of Oil & Gas Producers (IOGP) has developed a set of barrier definitions used across the industry and by other regulators. These definitions are contained in IOGP Reports 415 and 544.
- “Safety critical equipment/elements” are the barriers that prevent major accidents from occurring (E.U. Directive 2013/30/EU and API RP 2FB). The failure of an SCE could cause or contribute to a major accident (U.K. Step Change in Safety-definitions).

IOGP Report 544, “*Standardization of barrier definitions*”, (April 2016), defines hardware barriers during production operations:

I. IOGP Standardization of barrier definitions

1. Hardware barrier categories

Within this subcategory, BSEE identified the following as safety critical equipment that must perform when needed to prevent significant effects (as defined above):

- a) Category 2: Process Containment
 - (1) Subcategories of Category 2
 - (a) Fired / Heated Vessels**
- b) Category 4: Detection Systems
 - (1) Subcategories of Category 4
 - (a) Vented Gas Detection System**
- c) Category 6: Shutdown Systems – including operational well isolation and drilling well control equipment
 - (1) Subcategories of Category 6
 - (a) ESD System**
 - (b) Pressure Safety / Relief Valves / System**
 - (c) HIPPS**
 - (d) Subsurface Safety Valves**
 - (e) Surface & Underwater Safety Valves / Trees**
 - (f) Boarding Shutdown Valves**
 - (g) Pipeline Isolation Valves**

BSEE requests input on whether this list describes equipment that should be subject to a BAST requirement and the identification of other equipment that should be added.

From: scott.angelis@bsee.gov
To: hopk.msh@api.org
Cc: ellean.angelico@bsee.gov; preston.beard@bsee.gov; monica.mchradly@bsee.gov
Subject: Invitation: Call with H. Hopkins (10:30am CST) @ Mon Dec 17, 2018 11:30am - 12pm (EST) (hopkinsh@api.org)
Attachments: [invite.cs](#)

more details » <<https://www.google.com/calendar/event?>
action=VIEW&eid=MHZvbU4bmJpOTBycHRtdjU3aXY1cG5NjkgG9wa2Iuc2hAYXBpLn9yZW&tok=MjJjc2NvdHQuYW5nZWxsZUJic2VILmdvdjM0OTMxZWt3ODQ4YjVlNGFhYmlyN2M2YzEzOTFkMDJmOWNhMzA3OGE&ctz=America%2FNew_York&hl=en&es=0>
Call with H. Hopkins (10:30am CST)
When Mon Dec 17, 2018 11:30am – 12pm Eastern Time - New York
Where Please call mobile # (202) 744-2995 (man.<<https://maps.google.com/maps?z=1> Please call mobile %73 %28202%29 744-2995&hl=en>)
Video call [https://\(4\) \(5\)](#)
Calendar hopkin
Who • scott.angelis@bsee.gov - organizer
• ellean.angelico@bsee.gov - creator, optional
• hopkinsh@api.org
• preston.beard@bsee.gov - optional
• monica.mchradly@bsee.gov - optional
Going (hopkinsh@api.org)? - Yes <<https://www.google.com/calendar/event?>
action=RESPOND&eid=MHZvbU4bmJpOTBycHRtdjU3aXY1cG5NjkgG9wa2Iuc2hAYXBpLn9yZW&tok=MjJjc2NvdHQuYW5nZWxsZUJic2VILmdvdjM0OTMxZWt3ODQ4YjVlNGFhYmlyN2M2YzEzOTFkMDJmOWNhMzA3OGE&ctz=America%2FNew_York&hl=en&es=0>
- Maybe <<https://www.google.com/calendar/event?>
action=RESPOND&eid=MHZvbU4bmJpOTBycHRtdjU3aXY1cG5NjkgG9wa2Iuc2hAYXBpLn9yZW&tok=MjJjc2NvdHQuYW5nZWxsZUJic2VILmdvdjM0OTMxZWt3ODQ4YjVlNGFhYmlyN2M2YzEzOTFkMDJmOWNhMzA3OGE&ctz=America%2FNew_York&hl=en&es=0>
- No <<https://www.google.com/calendar/event?>
action=RESPOND&eid=MHZvbU4bmJpOTBycHRtdjU3aXY1cG5NjkgG9wa2Iuc2hAYXBpLn9yZW&tok=MjJjc2NvdHQuYW5nZWxsZUJic2VILmdvdjM0OTMxZWt3ODQ4YjVlNGFhYmlyN2M2YzEzOTFkMDJmOWNhMzA3OGE&ctz=America%2FNew_York&hl=en&es=0>
more options » <<https://www.google.com/calendar/event?>
action=VIEW&eid=MHZvbU4bmJpOTBycHRtdjU3aXY1cG5NjkgG9wa2Iuc2hAYXBpLn9yZW&tok=MjJjc2NvdHQuYW5nZWxsZUJic2VILmdvdjM0OTMxZWt3ODQ4YjVlNGFhYmlyN2M2YzEzOTFkMDJmOWNhMzA3OGE&ctz=America%2FNew_York&hl=en&es=0>
Invitation from Google Calendar <<https://www.google.com/calendar/>>
You are receiving this courtesy email at the account hopkinsh@api.org because you are an attendee of this event.
To stop receiving future updates for this event, decline this event. Alternatively you can sign up for a Google account at <https://www.google.com/calendar/> and control your notification settings for your entire calendar.
Forwarding this invitation could allow any recipient to modify your RSVP response. Learn More <<https://support.google.com/calendar/answer/37135#forwarding>>.

From: [Holly Hopkins](#)
To: scott.angelle@bsee.gov
Subject: Accepted: Invitation: Call with H. Hopkins (10:30am CST) @ Mon Dec 17, 2018 11:30am - 12pm (EST)
(hopkinsh@api.org)

When: Dec 17, 2018 11:30:00 AM

Where: Please call mobile # (b) (6)

From: [Holly Hopkins](#)
To: [Scott Angelle](#); Evan@offshoreoperators.com
Cc: [Beard, Preston](#)
Subject: RE: BAST Production Equipment List-.docx
Date: Thursday, January 24, 2019 9:33:02 AM

Scott,

Hope you had a great holiday and are surviving the government shutdown. Industry is working on our review of the BAST production list and hope to have our comments by the requested February 15th date. Assuming the government has resumed full operations by that time we are prepared to meet in New Orleans on February 14 or 15 or Washington, DC on February 21 or at a later date that is convenient for you. Please let us know.

Thanks,
Holly and Evan

-----Original Message-----

From: Scott Angelle <scott.angelle@bsee.gov>
Sent: Wednesday, December 5, 2018 5:37 AM
To: Evan@offshoreoperators.com; Holly Hopkins <hopkinsh@api.org>
Subject: BAST Production Equipment List-.docx

Good morning. Thank you for providing your work product on your review of the drilling equipment you concluded are subject to BAST. BSEE subject matter experts have been assigned to review and respond.

I am attaching a document that these same subject matter experts have prepared relative to production equipment they believe could be subject to BAST.

BSEE is committed to continuing its recent efforts to elevate solutions to BAST.

From: [Scott Angelle](#)
To: [Holly Hopkins](#)
Cc: [Evan@offshoreoperators.com](#); [Beard, Preston](#)
Subject: Re: [EXTERNAL] RE: BAST Production Equipment List-.docx
Date: Friday, January 25, 2019 7:02:48 PM

Thank you very much. Preston please schedule for February 21 in dc.
Holly and Evan thanks for your interest in a safe ocs

Sent from my iPhone

> On Jan 24, 2019, at 9:32 AM, Holly Hopkins <hopkinsh@api.org> wrote:
>
> Scott,
>
> Hope you had a great holiday and are surviving the government shutdown. Industry is working on our review of the BAST production list and hope to have our comments by the requested February 15th date. Assuming the government has resumed full operations by that time we are prepared to meet in New Orleans on February 14 or 15 or Washington, DC on February 21 or at a later date that is convenient for you. Please let us know.
>
> Thanks,
> Holly and Evan
>
> -----Original Message-----
> From: Scott Angelle <scott.angelle@bsee.gov>
> Sent: Wednesday, December 5, 2018 5:37 AM
> To: Evan@offshoreoperators.com; Holly Hopkins <hopkinsh@api.org>
> Subject: BAST Production Equipment List-.docx
>
> Good morning. Thank you for providing your work product on your
> review of the drilling equipment you concluded are subject to BAST.
> BSEE subject matter experts have been assigned to review and respond.
>
> I am attaching a document that these same subject matter experts have prepared relative to production equipment they believe could be subject to BAST.
>
> BSEE is committed to continuing its recent efforts to elevate solutions to BAST.

From: scott.angel@bsee.gov
To: hopkinsh@api.org
Subject: Invitation: BAST Meeting @ Thu Feb 21, 2019 1pm - 2pm (EST) (hopkinsh@api.org)
Attachments: [nfile.ics](#)

more details » <https://www.google.com/calendar/event?action=VIEW&eid=NZY0MnBvYzhwYjFsYmhsbjV1MmFia3NiOGwgaG9wa2luc2hAYXBpLn9yZw&tok=MjJjc2NvdHQeYW5nZWxsZUBic2VILmdvdjUzZjBhNTYxNTMxYWQZmEzYjA3NzBhMjc3NDIhYjFjYWRIbWJlU4YzM&ctz=America%2FNew_York&hl=en&es=0>

BAST Meeting
When Thu Feb 21, 2019 1pm – 2pm Eastern Time - New York
Video call [\(US, 4 hrs\)](#)

Calendar hopkinsh@api.org
Who • scott.angel@bsee.gov - organizer
• preston.beard@bsee.gov - creator
• hopkinsh@api.org

Going (hopkinsh@api.org)? Yes <https://www.google.com/calendar/event?action=RESPOND&eid=NZY0MnBvYzhwYjFsYmhsbjV1MmFia3NiOGwgaG9wa2luc2hAYXBpLn9yZw&rst=1&tok=MjJjc2NvdHQeYW5nZWxsZUBic2VILmdvdjUzZjBhNTYxNTMxYWQZmEzYjA3NzBhMjc3NDIhYjFjYWRIbWJlU4YzM&ctz=America%2FNew_York&hl=en&es=0>
- Maybe <https://www.google.com/calendar/event?action=RESPOND&eid=NZY0MnBvYzhwYjFsYmhsbjV1MmFia3NiOGwgaG9wa2luc2hAYXBpLn9yZw&rst=3&tok=MjJjc2NvdHQeYW5nZWxsZUBic2VILmdvdjUzZjBhNTYxNTMxYWQZmEzYjA3NzBhMjc3NDIhYjFjYWRIbWJlU4YzM&ctz=America%2FNew_York&hl=en&es=0>
- No <https://www.google.com/calendar/event?action=RESPOND&eid=NZY0MnBvYzhwYjFsYmhsbjV1MmFia3NiOGwgaG9wa2luc2hAYXBpLn9yZw&rst=2&tok=MjJjc2NvdHQeYW5nZWxsZUBic2VILmdvdjUzZjBhNTYxNTMxYWQZmEzYjA3NzBhMjc3NDIhYjFjYWRIbWJlU4YzM&ctz=America%2FNew_York&hl=en&es=0>
more options » <https://www.google.com/calendar/event?action=VIEW&eid=NZY0MnBvYzhwYjFsYmhsbjV1MmFia3NiOGwgaG9wa2luc2hAYXBpLn9yZw&tok=MjJjc2NvdHQeYW5nZWxsZUBic2VILmdvdjUzZjBhNTYxNTMxYWQZmEzYjA3NzBhMjc3NDIhYjFjYWRIbWJlU4YzM&ctz=America%2FNew_York&hl=en&es=0>
Invitation from Google Calendar <<https://www.google.com/calendar/>>
You are receiving this courtesy email at the account hopkinsh@api.org because you are an attendee of this event.
To stop receiving future updates for this event, decline this event. Alternatively you can sign up for a Google account at <https://www.google.com/calendar/> and control your notification settings for your entire calendar.
Forwarding this invitation could allow any recipient to modify your RSVP response. Learn More <<https://support.google.com/calendar/answer/37135#forwarding>> .

From: [Beard, Preston](#)
To: [Scott Angelle](#)
Cc: [Holly Hopkins](#); Evan@offshoreoperators.com
Subject: Re: [EXTERNAL] RE: BAST Production Equipment List-.docx
Date: Sunday, January 27, 2019 9:02:44 PM

Set from 1-2 on the 21.

On Fri, Jan 25, 2019 at 7:02 PM Scott Angelle <scott.angelle@bsee.gov> wrote:

Thank you very much. Preston please schedule for February 21 in dc.
Holly and Evan thanks for your interest in a safe ocs

Sent from my iPhone

> On Jan 24, 2019, at 9:32 AM, Holly Hopkins <hopkinsh@api.org> wrote:

>

> Scott,

>

> Hope you had a great holiday and are surviving the government shutdown. Industry is working on our review of the BAST production list and hope to have our comments by the requested February 15th date. Assuming the government has resumed full operations by that time we are prepared to meet in New Orleans on February 14 or 15 or Washington, DC on February 21 or at a later date that is convenient for you. Please let us know.

>

> Thanks,

> Holly and Evan

>

> -----Original Message-----

> From: Scott Angelle <scott.angelle@bsee.gov>

> Sent: Wednesday, December 5, 2018 5:37 AM

> To: Evan@offshoreoperators.com; Holly Hopkins <hopkinsh@api.org>

> Subject: BAST Production Equipment List-.docx

>

> Good morning. Thank you for providing your work product on your

> review of the drilling equipment you concluded are subject to BAST.

> BSEE subject matter experts have been assigned to review and respond.

>

> I am attaching a document that these same subject matter experts have prepared relative to production equipment they believe could be subject to BAST.

>

> BSEE is committed to continuing its recent efforts to elevate solutions to BAST.

--

Preston Beard
Advisor, Office of the Director
Bureau of Safety and Environmental Enforcement
(202) 208-3976 (o)
(571) 585-7001 (c)
preston.beard@bsee.gov

From: [Holly Hopkins](#)
To: scott.angelle@bsee.gov
Subject: Accepted: Invitation: BAST Meeting @ Thu Feb 21, 2019 1pm - 2pm (EST) (hopkinsh@api.org)

When: Feb 21, 2019 1:00:00 PM

From: [Holly Hopkins](#)
To: [Beard, Preston](#); [Scott Angelle](#)
Cc: [Evan@offshoreoperators.com](#)
Subject: Re: [EXTERNAL] RE: BAST Production Equipment List-.docx
Date: Sunday, January 27, 2019 9:21:42 PM

Thanks

----- Original message -----

From: "Beard, Preston" <preston.beard@bsee.gov>
Date: 1/27/19 9:02 PM (GMT-05:00)
To: Scott Angelle <scott.angelle@bsee.gov>
Cc: Holly Hopkins <hopkinsh@api.org>, Evan@offshoreoperators.com
Subject: Re: [EXTERNAL] RE: BAST Production Equipment List-.docx

Set from 1-2 on the 21.

On Fri, Jan 25, 2019 at 7:02 PM Scott Angelle <scott.angelle@bsee.gov> wrote:

Thank you very much. Preston please schedule for February 21 in dc.
Holly and Evan thanks for your interest in a safe ocs

Sent from my iPhone

> On Jan 24, 2019, at 9:32 AM, Holly Hopkins <hopkinsh@api.org> wrote:

>

> Scott,

>

> Hope you had a great holiday and are surviving the government shutdown. Industry is working on our review of the BAST production list and hope to have our comments by the requested February 15th date. Assuming the government has resumed full operations by that time we are prepared to meet in New Orleans on February 14 or 15 or Washington, DC on February 21 or at a later date that is convenient for you. Please let us know.

>

> Thanks,

> Holly and Evan

>

> -----Original Message-----

> From: Scott Angelle <scott.angelle@bsee.gov>

> Sent: Wednesday, December 5, 2018 5:37 AM

> To: Evan@offshoreoperators.com; Holly Hopkins <hopkinsh@api.org>

> Subject: BAST Production Equipment List-.docx

>

> Good morning. Thank you for providing your work product on your

> review of the drilling equipment you concluded are subject to BAST.

> BSEE subject matter experts have been assigned to review and respond.

>

> I am attaching a document that these same subject matter experts have prepared relative to production equipment they believe could be subject to BAST.

>

> BSEE is committed to continuing its recent efforts to elevate solutions to BAST.

--

Preston Beard
Advisor, Office of the Director
Bureau of Safety and Environmental Enforcement
(202) 208-3976 (o)
(571) 585-7001 (c)
preston.beard@bsee.gov



From: [Holly Hopkins](#)
To: [Doug Morris \(douglas.morris@bsee.gov\)](#)
Cc: [Lars Herbst \(lars.herbst@bsee.gov\)](#); [scott.angelle@bsee.gov](#); [Schwing, Paul](#)
Subject: API 4Q 2018 Report to BSEE on subsea bolts & fasteners
Date: Thursday, January 31, 2019 3:35:36 PM
Attachments: [API 4Q Bolt Letter to BSEE.pdf](#)

Doug,

Attached please find the API 4Q 2018 Report to BSEE on subsea bolts and fasteners. This is a detailed and comprehensive update to track the progress of implementation of the voluntary industry actions to address the issues related to subsea bolts and fasteners. We look forward to discussing those details and the report on February 5. If you have any questions, please contact me.

Thanks,

Holly A. Hopkins
Sr. Policy Advisor, Upstream
American Petroleum Institute
1220 L Street, NW
Washington, DC 20005
202-682-8439 Tel
hopkinsh@api.org



This transmission contains information that is privileged and confidential and is intended solely for use of the individual(s) listed above. If you received the communication in error, please notify me immediately. Any dissemination or copying of this communication by anyone other than the individual(s) listed above is prohibited.



Holly A. Hopkins
Senior Policy Advisor

1220 L Street, NW
Washington, DC 20005-4070
USA
Phone: 202-682-8439
Fax: 202-682-8426

Email hopkinsh@api.org
www.api.org

January 31, 2019

Doug Morris
Chief Office of Offshore Regulatory Programs
Bureau of Safety and Environmental Enforcement
U.S. Department of the Interior
1849 C Street, NW
Washington, DC 20240

Via email

Dear Mr. Morris:

As part of API and Industry's commitment to improving training, operating procedures, technology and industry standards, attached is a detailed and comprehensive update showing progress of the voluntary actions taken by Industry to address issues related to subsea bolts and fasteners. As we have discussed, this is ongoing work and progress will be reported as new information becomes available. Notably we have made progress on the near-term commitment, which entails replacing all critical bolting having a hardness greater than 35HRC. One hundred percent of our BOPs have the required replacement bolting ordered and 93% have completed the replacement for all active BOPs in the Gulf of Mexico. The attached documents show progress made by Industry on the following bolting topics:

- Research sponsored by API related to this topic;
- Activity by the standards task groups and subcommittees to implement the recommendations in the API Multi Segment Task Group Report on Bolting Failures;
- Voluntary industry adoption of API 20 E/F for critical BOP bolting;
- Voluntary industry replacement of critical bolting having a hardness of >35 HRC;
- Enhanced QAQC of 3rd party manufactured bolting (i.e., sampling, 20 E/F requirements);
- Updated make-up procedures, with additional engineering rigor and oversight;
- Elimination of electroplated Zinc coatings for subsea/marine applications; and
- Enhanced failure reporting with wider distribution.

API appreciates the opportunity to work with BSEE to continue discussing our shared objective of safe operations. As can be seen by the significant progress we've made as an Industry since 2016, we believe that by working in a spirit of cooperation, we can better understand how to best achieve our common goals and, thus, implement actions to help reach our shared safety objectives. We look forward to

discussing this report in detail during our February 5, 2019, teleconference. If you have any questions in the meantime, please contact me by phone at (202)682-8439, or by e-mail at hopkinsh@api.org.

Sincerely,

A handwritten signature in blue ink that reads "Holly A. Hopkins". The signature is fluid and cursive, with the first name "Holly" being the most prominent.

Holly A. Hopkins

cc: Lars Herbst, GOM Regional Director

Attachment



AMERICAN PETROLEUM INSTITUTE

January 2019

API 4Q 2018 UPDATE ON INDUSTRY ACTIVITIES ON SUBSEA BOLTS AND CONNECTORS

Background

On August 11, 2014 the Bureau of Safety and Environmental Enforcement (BSEE) released a technical Review of Connector and Bolt Failures following the failure of connectors and bolts used in critical equipment. The technical review, entitled Evaluation of Connector and Bolt Failures, was completed by the bureau's Quality Control-Failure Incident Team (QC-FIT) and submitted to BSEE Director Brian Salerno. The objective of the technical assessment was to document and evaluate failures of the connectors, studs and other components used in critical equipment and determine if there were industry wide issues that need to be addressed by the industry or BSEE. This report addressed a December 2012 incident which prompted a global recall of the bolts associated with the H4 connector bolts.

In response to the QC-Fit Report, API held a Technical Session during the API Exploration and Production Winter Standards Meeting in New Orleans on January 27, 2015. BSEE was invited by API to present their report findings and recommendations. After the Technical Session, an API multi-segment task group was formed to review the detailed recommendations in the report and determine next steps. The final report of the task group was shared with BSEE in March of 2016 and is now being implemented.

An incident in February of 2014 involving a lower marine riser package (LMRP) connector leak prompted BSEE to issue an Addendum to the QC-FIT report, with the new information from this incident.

As a result of these ongoing incidents BSEE issued a Safety Alert regarding Connector and Bolt Failures on February 2, 2016. Additionally, BSEE held a public forum on offshore connector equipment failures, including connector bolt failures that have occurred on the OCS, on August 29, 2016, in Washington, DC.

To address the February 2016 safety alert API formed a workgroup which has met with BSEE numerous times to improve safety offshore as it relates to bolts. This work focuses on subsea BOP bolting and 4 specific areas: 1) Materials/Standards; 2) QA/QC – API Monogram Program; 3) Operations; and 4) Research.

API provides this detailed and comprehensive update to track the progress and implementation of the voluntary industry actions to address the issues related to subsea bolts and connectors. This is ongoing work that may evolve as new information becomes available and this is the tenth of regular quarterly reports.

Progress on Research, Materials/Standards and QA/QC

		Topic	Discussion
1	Research	API sponsored research	API has approved a 2017 project to perform testing to determine susceptibility to environmental hydrogen embrittlement of selected materials and coatings. Initial testing has been completed on API 20E bolting material for susceptibility to hydrogen embrittlement under cathodic protection in simulated seawater and is under review by SC21. Testing is in progress for the first sample group which is testing of zinc and alternatives to zinc electroplating coatings. Testing is expected to be completed in 2019. A second set of samples is in planning. In addition, API has conducted 4 projects related to hydrogen embrittlement and 21 projects related to corrosion resistant alloys.
2	Materials and Standards	API 6A 21st Edition	Published November 2018.
		API 6D 25th Edition	Being drafted. TG has agreed to make mandatory the use API 20E BSL-1 and 20E BSL-2 for all pressure boundary bolting.
		API 6DSS 3rd Edition	Requires API 20E and API 20F for all pressure boundary bolts in the document published August 2017.
		API 16A 4th Edition	4 th edition with addendum 1 is published. HPHT annex is out for second ballot with a closing date of February 14 th . Addendum 3, which addresses QTC issues, operator qualification testing, and BSR testing requirements, is in comment resolution.
		API 16AR 1st Edition	Bolting conforming to API 20E or API 20F is a requirement for pressure controlling bolting, closure bolting and pressure retaining bolting in the document published April 2017. Addendum is being developed to correct errors to allow the standard to be included in the registration program.
		API 16B 1st Edition	Currently under development and is expected to adopt the TGR-3 bolting recommendations and text to meet 20E or 20F.
		API 16C 3rd Edition	Currently in comment resolution. For subsea bolting, the document requires BSL3 as per 20E or 20F as applicable.
		API 16F 2nd Edition	Published November 2017. Requires API 20E or API 20F bolting. Addendum 1 is in development.

Progress on Research, Materials/Standards and QA/QC

		Topic	Discussion
		API 16ST 2nd Edition	Currently under development.
		API 17D 3rd Edition	Being drafted and is considering the TGRs.
		API 17G 3rd Edition	3rd Edition ballot reached consensus Jan 2019. API 20E & 20F adopted as normative references. Requires API 20E or API 20F BSL-3 for critical bolting. Critical bolting is defined as bolting used to assemble/join wellbore pressure-containing parts (including end and outlet connections) or pressure-retaining parts whose failure would result in a release of wellbore fluid to the environment.
		API 17TR8 2nd Edition	Published March 2018.
		API 20E 2nd Edition	Published February 2017. An addendum was published allowing for the addition of other product geometries. Another addendum is in final review (to allow qualification of NDE subcontractors based on ISO 17020) and is expected to be published in January 2019. The remaining issue (allowing continuous cast for BSL3) has been considered by a work group but remains open.
		API 20F 2nd Edition	Published May 2018.
		API 53 5th Edition	Published December 2018. Includes proposed requirements for the periodic replacement of existing subsea bolting that conforms to the latest editions of 16C and 16A.
		API 64 3rd Edition	Published August 2017. Addendum in publication.
		API Q1, 9th Edition, Addendum 2	Published June 2018.

Progress on Research, Materials/Standards and QA/QC

		Topic	Discussion
3	TG Recommendations	TGR-1 - SC21 TG notes that there is conflict between B633 and F1941 related to requirements for hydrogen embrittlement mitigation. B633 requires stress-relief and bake for product greater than 31 HRC. F1941 does not require stress-relief and requires bake for product greater than 39 HRC. API should contact ASTM to request resolution of this conflict. If this cannot be achieved through ASTM, then API needs to issue an equivalent document under API through SC21. In either case, the revised or new document will then need to be adopted by product SCs. This work should also include requirements for maximum hardness on bolting material.	ASTM Subcommittee B08 has passed a revision to B633 (bake threshold 31 HRC) to make B633 essentially consistent with F1941 (bake threshold 39 HRC) about hydrogen embrittlement prevention requirements. The revision is in final ASTM review. Publication is expected in late January or February 2019. (See also actions under TGR-4 and TGR-18.)
		TGR-3 - SC21 TG recommends prohibiting Zinc electroplating for Subsea/Marine application. TG further recommends that an investigation be conducted under the direction of SC21 to determine a better short term (storage) corrosion protection system that would not create hydrogen in service. The results of this study would then need to be adopted into product standards.	Phase 1 testing (SnZn, ZnNi, Zn Flake, TDC Zn Alloy, NiCo Electroplated Zn) is in progress. Initial results are expected in January for review by the SC21 subgroup on coating. Testing is expected to take about a year. Interim results will be released as they become available.

Progress on Research, Materials/Standards and QA/QC

		Topic	Discussion
		TGR-4 - SC21 TG recommends consideration of an overarching document issued by API through SC21 in cooperation with product SCs covering selection of proper bolting materials for different environments (including subsea) would be helpful.	API 21TR1 is in final review. Publication is expected in January 2019.
		TGR-8 - SC21 Do not allow use of B7 or L7 grades above 2.5" in diameter.TG recommends that this be included as part of the overarching document under SC21.	Completed. Do not allow the use of ASTM A320 L7/ASTM A193 B7 bolting for diameters above 2 ½ inches unless the DI of the material is intentionally modified. (The recommendation has been provided to SC6, SC16 and SC17 and will also be covered in API 21TR1.)
		TGR-18 - SC21 Product subcommittees should review and consider incorporating 20E and 20F requirements (resolve existing conflicting properties specified in product specifications such as hardness).	*Ties into TGR-1* (This work is in response to the TGR-1 request to establish maximum hardness for bolting material.) Objective is to identify hardness and associated yield limit to prevent HISC in subsea fasteners. Testing is completed for the first set of specimens. The first specimens are API 20E BSL3 compliant material. The subgroup is reviewing results and will report these to the main task group and subcommittee when ready. Work is still in progress to obtain API 20E BSL2 compliant material for the second group of specimens. Testing is expected to be completed by the second quarter of 2019. The new Subgroup with a charge to provide recommendations for improved accuracy of hardness testing and calculation of test uncertainty is meeting regularly. An initial report of the groups work is expected by the SC21 Task Group January meeting during the winter conference. A round robin hardness testing program to support the report has been completely planned, actual testing is expected to be completed 1st quarter 2019. A fifth Subgroup was formed to investigate thread hardness on corrosion resistant alloys. The group met and prepared a test plan. The group's request for API funding for testing was approved. Testing will begin 1st quarter 2019.

Progress on Research, Materials/Standards and QA/QC

		Topic	Discussion
		TGR-2 - SC20 TG recommends that API expand 20E to more adequately cover the requirements of plating and coating as well as move the supplemental requirements for plating and coating into the body of the document, making them standard requirements.	Done.
		TGR-9 - SC20 TG recommends that volumetric examination where bolt diameter exceeds 2.5" should be added as a requirement to 20E, 20F, BSL-2, and BSL-3.	Done for API 20E. Done for API 20F.
		TGR-11 - SC20 Revise 20F to restrict use of sulfur based lubricants during manufacture of bolting.	Done for API 20F.
		TGR-17 - SC20 Strengthen heat treating and furnace loading requirements in 20E and 20F (more prescriptive requirements related to: spacing, QTC location, and thermocouple placement). Include requirements for oven calibration for pre and post bake operations.	Done for API 20E. Done for API 20F.
		TGR-20 - SC20 SC20 review the supplier controls in 20E and 20F to ensure these adequately cover required controls for subcontracted processes. SC 20 should also monitor the API Q1 revisions.	Done for API 20E. Done for API 20F.
		TGR-19 - SC18 SC18 to form a TG to review the BSEE FIT-QC Report on connector bolt failures to determine if the current requirements of API Spec Q1 has the provisions needed to ensure that system control features are in place, and clearly stated, to eliminate these type of failures in the future.	Done, TG formed.

Progress on Research, Materials/Standards and QA/QC

		Topic	Discussion
		TGR-3 - SC17 TG recommends prohibiting Zinc electroplating for Subsea/Marine application. TG further recommends that an investigation be conducted under the direction of SC21 to determine a better short term (storage) corrosion protection system that would not create hydrogen in service. The results of this study would then need to be adopted into product standards.	Completed. 17D, 3rd Edition is adopting 20E/20F in the Normative Reference, for which TGR-3 has been incorporated.
		TGR-5/TGR-12 - SC17 -TG recommends that the product specifications require equipment manufacturers to specify acceptable thread compounds for bolting applications based on material, plating and service. -TG recommends adding requirements to API product specifications to restrict combining these elements in thread compounds.	Completed. 17D 3rd Edition Annex G is addressing: 1. Written procedures, incorporating the features of these provisions and specifying the thread lubricant to be used shall be developed for use by the qualified connection assemblers 2. The applied torque/tension in the written procedures shall be validated for some relevant bolt sizes with actual material, coating and lubrication
		TGR-6 - SC17 Torqueing requirements should be reviewed to determine if standardization among product specifications is needed.	Completed. 17D 3rd Edition Annex G is addressing: 1. Standard closure bolting shall be assembled using torque or other validated bolt preload method that is calculated to achieve a nominal tensile stress of 67 % of the bolt's minimum specified material yield strength (SY). This is to ensure gasket seating during make-up and increase face-to-face contact preload in excess of separation forces at rated working pressure.
		TGR-13 - SC17 Guidance should be issued by API on when and how to perform fatigue sensitivity analysis on bolting.	CSOEM approved 2-year research project in SC21 to investigate fatigue properties of bolting. Production of test bolting is expected to be completed in October 2018 with testing to be begin shortly thereafter.

Progress on Research, Materials/Standards and QA/QC

		Topic	Discussion
		TGR-14 - SC17 Involved API SC's should address guidance issued in the product specs to require use of BSL-3 in fatigue sensitive applications.	CSOEM approved 2-year research project in SC21 to investigate fatigue properties of bolting. Production of test bolting is expected to be completed in October 2018 with testing to be begin shortly thereafter.
		TGR-16 - SC17 TG recommends API issue a document to provide guidance on derating of bolting. There are several specifications on material derating due to elevated temperature.	SC17 currently in ongoing discussion with 17D HPHT Annex.
		TGR-18 - SC17 Product subcommittees should review and consider incorporating 20E and 20F requirements (resolve existing conflicting properties specified in product specifications such as hardness).	Completed. 17D 3rd Edition is adopting 20E/20F in the Normative Reference
		TGR-3 - SC16 TG recommends prohibiting Zinc electroplating for Subsea/Marine application. TG further recommends that an investigation be conducted under the direction of SC21 to determine a better short term (storage) corrosion protection system that would not create hydrogen in service. The results of this study would then need to be adopted into product standards.	16C - For subsea bolting, the document requires BSL3 as per 20E or 20F as applicable. 16A - Completed 16ST - The 2nd Edition of API RP 16ST is currently under development and is debating whether or not to adopt the TGR-3 bolting recommendations and text to meet 20E or 20F as this equipment is for surface use only. 16B - The 1st Edition of API Spec 16B is currently under development and is debating whether or not to adopt the TGR-3 bolting recommendations and text to meet 20E or 20F as this equipment is for surface use only. 16D – Completed; will not be included. 16F - Completed

Progress on Research, Materials/Standards and QA/QC

		Topic	Discussion
		TGR-5/TGR-12 - SC16 TG recommends that the product specifications require equipment manufacturers to specify acceptable thread compounds for bolting applications based on material, plating and service.-TG recommends adding requirements to API product specifications to restrict combining these elements in thread compounds.	16C – Is expected to be addressed in the 4th edition (next revision). 16A - Completed 16ST - The 2nd Edition of API RP 16ST is currently under development and is expected to reference the recommendations to be contained in operating manuals of Spec 16B equipment, including assembly and disassembly information, as well as flange make-up procedure (requirements for lubricant, torque, tightening pattern, percentage increments for torque, etc.) 16B - The 1st Edition of API Spec 16B is currently under development and is expected to contain the following requirement for all operating manuals of 16B equipment: assembly and disassembly information that includes flange make-up procedure that includes requirements for lubricant, torque, tightening pattern, percentage increments for torque, etc. 16D - Will discuss this in the 4th Edition or via addendum if deemed necessary.
		TGR-6 - SC16 Torqueing requirements should be reviewed to determine if standardization among product specifications is needed.	16C - Will be addressed in the 4th edition (next revision). 16A - Completed 16ST - The 2nd Edition of API RP 16ST is currently under development and is expected to reference the recommendations to be contained in operating manuals of Spec 16B equipment, including assembly and disassembly information, as well as flange make-up procedure (requirements for lubricant, torque, tightening pattern, percentage increments for torque, etc.) 16B - The 1st Edition of API Spec 16B is currently under development and is expected to contain the following requirement for all operating manuals of 16B equipment: assembly and disassembly information that includes flange make-up procedure that includes requirements for lubricant, torque, tightening pattern, percentage increments for torque, etc. 16D - Will discuss this in the 4th Edition or via addendum if deemed necessary.

Progress on Research, Materials/Standards and QA/QC

		Topic	Discussion
		TGR-13 - SC16 Guidance should be issued by API on when and how to perform fatigue sensitivity analysis on bolting.	16A - API 16A 4th edition does not currently contain requirements for fatigue analysis. The HPHT workgroup included this requirement. 16ST - The 2nd Edition of API RP 16ST is currently evaluating the specific locations within the assembly of well control components where fatigue analysis of bolting is needed, especially in assembly of coiled tubing and snubbing well control components. 16B - The 1st Edition of API Spec 16B is currently evaluating the need for fatigue analysis of bolting, especially in assembly of coiled tubing and snubbing well control components. 16D – Completed - Task group has not noted any areas where fatigue sensitivity analysis is deemed necessary. 16F - API 16F does not currently contain requirements for fatigue analysis.
		TGR-14 - SC16 Involved API SC's should address guidance issued in the product specs to require use of BSL-3 in fatigue sensitive applications.	16C - Completed 16A - Completed 16ST - BSL-3 is expected to be required in the 1st Edition of API Spec 16B for all closure bolting and pressure retaining bolting intended for offshore applications. 16B - BSL-3 is expected to be required in the 1st Edition of API Spec 16B for all closure bolting and pressure retaining bolting intended for offshore applications. 16D – Completed - Task group has not noted areas of fatigue sensitive applications to date. 16F - Completed

Progress on Research, Materials/Standards and QA/QC

		Topic	Discussion
		TGR-15 - SC16 TG recommends revision to API S53 to define a standard method for calculating watch circle.	Completed - S53 Will not incorporate this recommendation as it is outside the scope of S53.
		TGR-16 - SC16 TG recommends API issue a document to provide guidance on derating of bolting. There are several specifications on material derating due to elevated temperature.	16A - Currently, this is only addressed in: API TR 6AF1 Technical Report on Temperature Derating on API Flanges Under Combination of Loading. Note: 16A, 3rd edition only has temperature ratings up to 250F. The referenced 6AF1 provides guidance for derating based on temperature beginning at 350F. Temperature derating is primarily a concern in HPHT applications. This is expected to be addressed in the new 16A HPHT annex. 16ST - The 2nd Edition of API RP 16ST is currently evaluating the need for derating of bolting due to bending stresses and temperature, especially in assembly of coiled tubing and snubbing well control components. 16B - The 1st Edition of API Spec 16B is currently evaluating the need for derating of bolting due to bending stresses and temperature, especially in assembly of coiled tubing and snubbing well control components. 16D – Completed – Task group has not identified any areas of our specification that would be affected by elevated temperatures. 16F - HPHT is expected to be addressed in the next edition.

Progress on Research, Materials/Standards and QA/QC

		Topic	Discussion
		TGR-18 - SC16 Product subcommittees should review and consider incorporating 20E and 20F requirements (resolve existing conflicting properties specified in product specifications such as hardness).	16C - Completed 16A - Completed 16ST - The 2nd Edition of API RP 16ST is debating whether to incorporate 20E and 20F requirements. 16B - The 1st Edition of API Spec 16B is debating whether or not to incorporate 20E and 20F requirements. 16D - Completed - Decided not to require them for the 3rd edition. Manufacturers will be required to provide documented bolting specifications where applicable. 16F - Completed
		TGR-3 - SC6 TG recommends prohibiting Zinc electroplating for Subsea/Marine application. TG further recommends that an investigation be conducted under the direction of SC21 to determine a better short term (storage) corrosion protection system that would not create hydrogen in service. The results of this study would then need to be adopted into product standards.	6A 21st – Completed API 6DSS 3rd - Completed
		TGR-5/TGR-12 - SC6 -TG recommends that the product specifications require equipment manufacturers to specify acceptable thread compounds for bolting applications based on material, plating and service. -TG recommends adding requirements to API product specifications to restrict combining these elements in thread compounds.	6A 21st – Completed 6DSS 3rd – Completed.

Progress on Research, Materials/Standards and QA/QC

		Topic	Discussion
		TGR-6 - SC6 Torqueing requirements should be reviewed to determine if standardization among product specifications is needed.	6A 21st – Completed
		TGR-7/TGR-10 - SC6 TG recommends modification of 6A to require impact testing at or below design temperature w/ acceptance criteria for larger cross section bolting (over 2.5").	6A 21st – Completed 6DSS 3rd – Completed.
		TGR-13 - SC6 Guidance should be issued by API on when and how to perform fatigue sensitivity analysis on bolting.	See TGR-14
		TGR-14 - SC6 Involved API SC's should address guidance issued in the product specs to require use of BSL-3 in fatigue sensitive applications.	6A 21 st – Completed. Fatigue loading is outside the document scope. Annex B guides purchaser to define fatigue application of a product.
		TGR-16 - SC6 TG recommends API issue a document to provide guidance on derating of bolting. There are several specifications on material derating due to elevated temperature.	6A 21st – Completed 6DSS 3rd – Not applicable to this specification.

Progress on Research, Materials/Standards and QA/QC

		Topic	Discussion
		TGR-18 - SC6 Product subcommittees should review and consider incorporating 20E and 20F requirements (resolve existing conflicting properties specified in product specifications such as hardness).	6A 21st – Completed 6D 25th Plans are to make 20E BSL-1 and 20F BSL-2 will be mandatory for all pressure boundary bolting on the next revision in late 2019. 6DSS 3rd – Completed.
4	QAQC	API Q1 9th Edition, Addendum 2	Published June 2018.

Topic	Discussion	OEM 1	OEM 2	OEM 3	OEM 1 Comments	OEM 2 Comments	OEM 3 Comments	
2017 Deliverables								
1	Bulletin identifying critical BOP bolting > 35 HRC	Attach any EB/PNI identifying critical bolting > 35 HRC	Completed - February 2016	Completed - February 24, 2016	Completed - October 2016	Product Notification & Improvement 16-008 issued 9/2016 Product Notification & Improvement 16-009 issued 9/2016 Product Notification & Improvement 16-010 issued 10/2016	Product Information Bulletin D4516545916 Released February 24, 2016	PA 40832 was generated in response to BSEE Safety Alert 318. Company does not provide bolts for pressure containing/pressure controlling with hardness greater than 35 HRC. See attachment. Revision 2 of PA 40832 was released in 12/2016 to communicate that Engineering Bulletin 962D (Torque guidance for critical bolting) was released and Company uses FPR to investigate field issues and uses Product Advisory or Product Safety Alerts to communicate issues to Company equipment owners.
2	Part Numbers for API 20 E/F replacement Bolting for critical BOP bolting > 35 HRC	Attach any EB/PNI identifying part numbers for critical bolting > 35 HRC	Completed - NA	Completed - 2016	Completed - October 2016	Product Notification & Improvement 16-008 issued 9/2016 Product Notification & Improvement 16-009 issued 9/2016 Product Notification & Improvement 16-010 issued 10/2016	All replacement bolting for critical BOP bolting meet API 20E BSL-3	Company has generated critical bolting part numbers for compliance to API 20E, BSL-3. These are available to our customers and more are being generated as needed. A few part numbers have been set up for 20F at this moment as CRA bolting is not normally provided in BOP equipment for critical bolting. See attachment with sample bolting part numbers.
3	Bulletin updating Torque Application	Attach any EB/PNI identifying updated Torque guidance for critical bolting	Completed - March 2016	Completed - February 24, 2016	Completed	Torque procedures issued. Operating procedures updated.	D4516545916 Release February 24, 2016. Torque revision 02 is out in 10/2016	EB-962D, released on March 2016. See attachment.
4	Internal process for enhanced failure reporting of critical bolting	Attach any example of updated failure reporting process. Attach any example of enhanced failure reporting related to critical BOP bolting	Completed - 1990's	Completed	Completed	Failure reporting and tracking through our system. The reporting input from database to our system. The system provides feedback to customers through tracking responses, and drive analysis. External communication through Engineering Bulletin, Product Notification of Improvement, Customer Letters, etc.	Company has internal procedure called Field Performance Report (FPR) for capturing field performance failures of Company equipment. This FPR is the mechanism used to initiate an investigation and determine the Root Cause of the failure. In addition, Company has a system to communicate Product Advisories (PA) and Safety Alerts (SA) as well as Engineering Bulletins (EB) to our customers if deemed necessary resulting from an FPR investigation or internal reviews. The guidelines for these procedures are outlined in Company Engineering Procedure EP-307 (FPRs), CEP-030 (SAs/PAs) and EP-204 (EBs). These procedures are considered "Confidential" and cannot be distributed outside of Company.	
5	Updated QAQC standards for bolt manufacturing	Attach any example of updated QA process	Completed - 1990's	Completed	Completed - October 2016	QMS procedure improvements regarding supplier qualification. 20E vendor qualification and audit per family of fasteners, sub-tier supplier audit, review of mill audits. The supplier manufacturing process is locked and audited annually. Improved process incorporates supplier quality, engineering, quality teams and product documentation compliance to original qualification. Increased overall scrutiny on critical bolting incorporates engineering lockdown of parts and 3rd party onsite reviews.	Bolts specified to API 20E BSL-3. All our BSL bolting is only manufactured by vendors our QA department has physically audited and approved for critical fasteners. Per API 20E the manufacture of the finished part has to audit the mill producing the material for BSL. The documentation required of these vendors are as follows: Full Dimensional Inspection Report, Manufactures Material Test Report (Chemical and Mechanical), MPI Test Report, Ultrasonic Test Report, 100% Hardness Testing (If Serialized), Steel Certificate of Test from the Mill, Mechanical Testing by independent Lab to ensure the product from the mill meets the BSL Requirements (Only if manufacture did not buy direct from mill), Heat Treat Certification, Micro-Structure Examination with Photo, Macro-Structure Examination with Photo, and Plating Certification.	Quality Plans (QP-000112-09) have been created for Pressure Containing and Primary Load Bearing Oil and Gas Equipment Used in Subsea Applications: API 6A, API 17D and API 20E. Bolting Specification BSL-3. QP-000112-09 is considered "Confidential" and cannot be distributed outside of Company.
2018-2023 Deliverables								
A1	Part numbers for API 20 E/F replacement bolting for all critical BOP bolting	Attach any EB/PNI identifying part numbers for critical bolting	Completed - December 2016	Completed	Completed - October 2016	Product Notification & Improvement 16-008 issued 9/2016 Product Notification & Improvement 16-009 issued 9/2016 Product Notification & Improvement 16-010 issued 10/2016	16543557-001, 16569565-001, 16569606-001, 165004, 16587680-001, 16587681-001, 16587682-001. All part numbers referenced in PIB D4516545196	Company has generated critical bolting part numbers for compliance to API 20E, BSL-3. These are available to our customers and more are being generated as needed. A few part numbers have been set up for 20F at this moment as CRA bolting is not normally provided in BOP equipment for critical bolting. See attachment with sample bolting part numbers. PA 40832 Rev 02 addresses this item.
A2	Replacement bolting coating specified	Attach any EB/PNI identifying replacement coating	Completed - December 2017	Completed	Completed - October 2016	Product Notification & Improvement 16-010 issued 10/2016	Zinc-Nickel Plate - Plate to ASTM F1941	Company is engaging different vendors to find alternatives to electrodeposited zinc plating. Update 04/19/2017 Action still in progress. Estimated completion date End of May 2017. Update 06/30/2017 Action still in progress. Estimated completion date end of August 2017. Update 10/15/2017 We have identified and qualified replacement coating. We are currently working to qualify vendors. Update 01/02/2018 we have qualified the vendors with replacement coating.

Summary of Progress on Equipment Owner Operations
(Q4, 2018)

Total Number of Active BOPs = 30			Not Started		In-Progress		Completed	
			Number	Percent	Number	Percent	Number	Percent
Item	Topic	Discussion						
2017 Deliverables								
1	Replacement 20 E/F bolts for all > 35 HRC critical bolting ordered	List by rig the % of API 20 E replacement bolts ordered	0	0%	0	0%	30	100%
2	Replacement 20 E/F bolts for all > 35 HRC critical bolting installed	List by rig the % of API 20 E bolts installed on the BOP	0	0%	2	7%	28	93%
3	Rig Procedure for torquing of critical bolting	Can include example rig procedure	0	0%	2	7%	28	93%
4	Internal process for enhanced failure reporting of critical bolts (IOGP Failure reporting procedure)	Can include example procedure for compliance with IOGP Failure reporting	0	0%	0	0%	30	100%
5	MTR review for installed critical bolting:	Can include letter from OEM, example of MTR audit	0	0%	2	7%	28	93%
	- OEM SOF critical bolting per relevant specification		0	0%	0	0%	30	100%
	- MTRs per relevant specification		0	0%	2	7%	28	93%
	- Bolting audit to verify MTR information		0	0%	4	13%	26	87%
6	Preventative maintenance (PM) for BOP bolting API Std 53	Can include PM for BOP bolting maintenance. Example of NDE performed on BOP bolts	0	0%	4	13%	26	87%
2018-2023 Deliverables								
A1	Critical bolting API 20 E/F replacement bolts ordered	List by rig % of bolts ordered	8	27%	5	17%	17	57%
A2	Critical bolting API 20 E/F replacement bolts installed	List by rig % of bolts installed/replaced	12	40%	13	43%	5	17%

Percentages may not add up to 100% due to independent rounding

			Rig 1 BOP 1	Rig 2 BOP 1	Rig 3 BOP 1	Rig 4 BOP 1
Item	Topic	Discussion	Status	Status	Status	Status
	2017 Deliverables					
1	Replacement 20 E/F bolts for all > 35 HRC critical bolting ordered	List by rig the % of API 20 E replacement bolts ordered	100%	100%	100%	NA
2	Replacement 20 E/F bolts for all > 35 HRC critical bolting installed	List by rig the % of API 20 E bolts installed on the BOP	100%	100%	100%	NA
3	Rig Procedure for torquing of critical bolting	Can include example rig procedure	In-progress	Completed - July 15, 2014	In-progress	NA
4	Internal process for enhanced failure reporting of critical bolts (IOGP Failure reporting procedure)	Can include example procedure for compliance with IOGP Failure reporting	2015 Training in Rig maint. Sys. 100% participation in GOM	Completed - July 20, 2016	2015 Training in Rig maint. Sys. 100% participation in GOM	NA
5	MTR review for installed critical bolting:	Can include letter from OEM, example of MTR audit	Completed	Completed - July 15, 2014	Completed	NA
	PA 40832 from OEM		Completed - July 15, 2014	PA 40832 from OEM	NA	
	Completed - October 2016		Completed - July 15, 2014	Completed - October 2016	NA	
	Completed - October 2016		Completed - July 15, 2014	Completed - October 2016	NA	
6	Preventative maintenance (PM) for BOP bolting API Std 53	Can include PM for BOP bolting maintenance. Example of NDE performed on BOP bolts	Completed - 2015	Completed - March 15, 2016	Completed - 2015	NA
	2018-2023 Deliverables					
A1	Critical bolting API 20 E/F replacement bolts ordered	List by rig % of bolts ordered	plan to replace drill thru bolting in 2019	0%	plan to replace drill thru bolting in 2019	NA
A2	Critical bolting API 20 E/F replacement bolts installed	List by rig % of bolts installed/replaced	0%	0%	0%	NA

			Rig 4 BOP 2	Rig 5 BOP 1	Rig 5 BOP 2	Rig 6 BOP 1
Item	Topic	Discussion	Status	Status	Status	Status
	2017 Deliverables					
1	Replacement 20 E/F bolts for all > 35 HRC critical bolting ordered	List by rig the % of API 20 E replacement bolts ordered	NA	100%	100%	NA
2	Replacement 20 E/F bolts for all > 35 HRC critical bolting installed	List by rig the % of API 20 E bolts installed on the BOP	NA	100%	100%	NA
3	Rig Procedure for torqueing of critical bolting	Can include example rig procedure	NA	Completed - March 9, 2015	Completed - March 9, 2015	NA
4	Internal process for enhanced failure reporting of critical bolts (IOGP Failure reporting procedure)	Can include example procedure for compliance with IOGP Failure reporting	NA	Completed - July 20, 2016	Completed - July 20, 2016	NA
5	MTR review for installed critical bolting:	Can include letter from OEM, example of MTR audit	NA	Completed-May 31, 2018	Completed-March 13, 2018	NA
	- OEM SOF critical bolting per relevant specification		NA	Completed-May 31, 2018	Completed-March 13, 2018	NA
	- MTRs per relevant specification		NA	Completed-May 31, 2018	Completed-March 13, 2018	NA
	- Bolting audit to verify MTR information		NA	Completed-May 31, 2018	Completed-March 13, 2018	NA
6	Preventative maintenance (PM) for BOP bolting API Std 53	Can include PM for BOP bolting maintenance. Example of NDE performed on BOP bolts	NA	Completed - March 15, 2016	Completed - March 15, 2016	NA
	2018-2023 Deliverables					
A1	Critical bolting API 20 E/F replacement bolts ordered	List by rig % of bolts ordered	NA	0%	0%	NA
A2	Critical bolting API 20 E/F replacement bolts installed	List by rig % of bolts installed/replaced	NA	0%	0%	NA

			Rig 7 BOP 1	Rig 7 BOP 2	Rig 8 BOP 1	Rig 9 BOP 1
Item	Topic	Discussion	Status	Status	Status	Status
	2017 Deliverables					
1	Replacement 20 E/F bolts for all > 35 HRC critical bolting ordered	List by rig the % of API 20 E replacement bolts ordered	Completed - February 16, 2017	Completed - February 16, 2017	NA	100%
2	Replacement 20 E/F bolts for all > 35 HRC critical bolting installed	List by rig the % of API 20 E bolts installed on the BOP	Completed - July 1, 2017	Completed - Jun 2017	NA	100%
3	Rig Procedure for torqueing of critical bolting	Can include example rig procedure	Completed - November 1, 2016	Completed - November 1, 2016	NA	Completed - Oct 4, 2016
4	Internal process for enhanced failure reporting of critical bolts (IOGP Failure reporting procedure)	Can include example procedure for compliance with IOGP Failure reporting	Completed - November 1, 2016	Completed - November 1, 2016	NA	IOGP Failure reporting
5	MTR review for installed critical bolting:	Can include letter from OEM, example of MTR audit	Completed - November 1, 2016	Completed - November 1, 2016	NA	Completed - January 2017
	Completed - November 1, 2016		Completed - November 1, 2016	NA	Completed	
	Completed - November 1, 2016		Completed - November 1, 2016	NA	Completed	
	Completed - November 1, 2016		Completed - November 1, 2016	NA	Completed	
6	Preventative maintenance (PM) for BOP bolting API Std 53	Can include PM for BOP bolting maintenance. Example of NDE performed on BOP bolts	Completed - December 1, 2017	Completed - December 1, 2017	NA	Completed - April 2017
	2018-2023 Deliverables					
A1	Critical bolting API 20 E/F replacement bolts ordered	List by rig % of bolts ordered	15%	15%	NA	100%
A2	Critical bolting API 20 E/F replacement bolts installed	List by rig % of bolts installed/replaced	25%	65%	NA	100%

			Rig 9 BOP 2	Rig 10 BOP 1	Rig 10 BOP 2	Rig 11 BOP 1
Item	Topic	Discussion	Status	Status	Status	Status
	2017 Deliverables					
1	Replacement 20 E/F bolts for all > 35 HRC critical bolting ordered	List by rig the % of API 20 E replacement bolts ordered	100%	100%	100%	NA
2	Replacement 20 E/F bolts for all > 35 HRC critical bolting installed	List by rig the % of API 20 E bolts installed on the BOP	100%	100%	100%	NA
3	Rig Procedure for torqueing of critical bolting	Can include example rig procedure	Completed - Oct 5, 2016	Completed - March 9, 2015	Completed - March 9, 2015	NA
4	Internal process for enhanced failure reporting of critical bolts (IOGP Failure reporting procedure)	Can include example procedure for compliance with IOGP Failure reporting	IOGP Failure reporting	Completed - July 20, 2016	Completed - July 20, 2016	NA
5	MTR review for installed critical bolting:	Can include letter from OEM, example of MTR audit	Completed - January 2017	Completed-February 26, 2018	Completed-August 16, 2018	NA
	Completed		Completed-February 26, 2018	Completed-August 16, 2018	NA	
	Completed		Completed-February 26, 2018	Completed-August 16, 2018	NA	
	Completed		Completed-February 26, 2018	Completed-August 16, 2018	NA	
6	Preventative maintenance (PM) for BOP bolting API Std 53	Can include PM for BOP bolting maintenance. Example of NDE performed on BOP bolts	Completed - 2017	Completed - March 15, 2016	Completed - March 15, 2016	NA
	2018-2023 Deliverables					
A1	Critical bolting API 20 E/F replacement bolts ordered	List by rig % of bolts ordered	100%	0%	0%	NA
A2	Critical bolting API 20 E/F replacement bolts installed	List by rig % of bolts installed/replaced	100%	0%	0%	NA

			Rig 12 BOP 1	Rig 12 BOP 2	Rig 13 BOP 1	Rig 14 BOP 1
Item	Topic	Discussion	Status	Status	Status	Status
	2017 Deliverables					
1	Replacement 20 E/F bolts for all > 35 HRC critical bolting ordered	List by rig the % of API 20 E replacement bolts ordered	NA	NA	100%	NA
2	Replacement 20 E/F bolts for all > 35 HRC critical bolting installed	List by rig the % of API 20 E bolts installed on the BOP	NA	NA	100%	NA
3	Rig Procedure for torqueing of critical bolting	Can include example rig procedure	NA	NA	Complete	NA
4	Internal process for enhanced failure reporting of critical bolts (IOGP Failure reporting procedure)	Can include example procedure for compliance with IOGP Failure reporting	NA	NA	Completed - May 8, 2015	NA
5	MTR review for installed critical bolting:	Can include letter from OEM, example of MTR audit	NA	NA	In-progress	NA
	- OEM SOF critical bolting per relevant specification		NA	NA	Completed - February 24, 2016	NA
	- MTRs per relevant specification		NA	NA	Completed - May 4, 2016	NA
	- Bolting audit to verify MTR information		NA	NA	In-progress	NA
6	Preventative maintenance (PM) for BOP bolting API Std 53	Can include PM for BOP bolting maintenance. Example of NDE performed on BOP bolts	NA	NA	Completed - December 9, 2015	NA
	2018-2023 Deliverables					
A1	Critical bolting API 20 E/F replacement bolts ordered	List by rig % of bolts ordered	NA	NA	0%	NA
A2	Critical bolting API 20 E/F replacement bolts installed	List by rig % of bolts installed/replaced	NA	NA	0%	NA

			Rig 14 BOP 2	Rig 15 BOP 1	Rig 15 BOP 2	Rig 16 BOP 1
Item	Topic	Discussion	Status	Status	Status	Status
	2017 Deliverables					
1	Replacement 20 E/F bolts for all > 35 HRC critical bolting ordered	List by rig the % of API 20 E replacement bolts ordered	NA	100%	100%	100%
2	Replacement 20 E/F bolts for all > 35 HRC critical bolting installed	List by rig the % of API 20 E bolts installed on the BOP	NA	100%	100%	100%
3	Rig Procedure for torquing of critical bolting	Can include example rig procedure	NA	Completed	Completed	Completed
4	Internal process for enhanced failure reporting of critical bolts (IOGP Failure reporting procedure)	Can include example procedure for compliance with IOGP Failure reporting	NA	Completed	Completed	IOGP BOP Reliability Database
5	MTR review for installed critical bolting:	Can include letter from OEM, example of MTR audit	NA	Completed	Completed	Completed - December 2016
	- OEM SOF critical bolting per relevant specification		NA	In Progress	In Progress	Completed
	- MTRs per relevant specification		NA	Completed	Completed	Completed
	- Bolting audit to verify MTR information		NA	Completed	Completed	Completed
6	Preventative maintenance (PM) for BOP bolting API Std 53	Can include PM for BOP bolting maintenance. Example of NDE performed on BOP bolts	NA	In-progress	In-progress	Completed
	2018-2023 Deliverables					
A1	Critical bolting API 20 E/F replacement bolts ordered	List by rig % of bolts ordered	NA	100%	100%	100%
A2	Critical bolting API 20 E/F replacement bolts installed	List by rig % of bolts installed/replaced	NA	7%	9%	90%

			Rig 17 BOP 1	Rig 17 BOP 2	Rig 18 BOP 1	Rig 18 BOP 2
Item	Topic	Discussion	Status	Status	Status	Status
	2017 Deliverables					
1	Replacement 20 E/F bolts for all > 35 HRC critical bolting ordered	List by rig the % of API 20 E replacement bolts ordered	100%	100%	Completed - February 16, 2017	Completed - February 16, 2017
2	Replacement 20 E/F bolts for all > 35 HRC critical bolting installed	List by rig the % of API 20 E bolts installed on the BOP	100%	100%	Completed - Jun 2017	Completed - May 1, 2017
3	Rig Procedure for torquing of critical bolting	Can include example rig procedure	Completed - March 9, 2015	Completed - March 9, 2015	Completed - November 1, 2016	Completed - November 1, 2016
4	Internal process for enhanced failure reporting of critical bolts (IOGP Failure reporting procedure)	Can include example procedure for compliance with IOGP Failure reporting	Completed - July 20, 2016	Completed - July 20, 2016	Completed - November 1, 2016	Completed - November 1, 2016
5	MTR review for installed critical bolting:	Can include letter from OEM, example of MTR audit	Completed Dec 5, 2017	Completed July 12, 2017	Completed - November 1, 2016	Completed - November 1, 2016
	- OEM SOF critical bolting per relevant specification		Completed Dec 5, 2017	Completed July 12, 2017	Completed - November 1, 2016	Completed - November 1, 2016
	- MTRs per relevant specification		Completed Dec 5, 2017	Completed - July 12, 2017	Completed - November 1, 2016	Completed - November 1, 2016
	- Bolting audit to verify MTR information		Completed Dec 5, 2017	Completed - June 12, 2017	Completed - November 1, 2016	Completed - November 1, 2016
6	Preventative maintenance (PM) for BOP bolting API Std 53	Can include PM for BOP bolting maintenance. Example of NDE performed on BOP bolts	Completed - March 15, 2016	Completed - March 15, 2016	Completed - December 1, 2017	Completed - December 1, 2017
	2018-2023 Deliverables					
A1	Critical bolting API 20 E/F replacement bolts ordered	List by rig % of bolts ordered	10%	20%	Completed - February 16, 2017	Completed - February 16, 2017
A2	Critical bolting API 20 E/F replacement bolts installed	List by rig % of bolts installed/replaced	0%	5%	Completed - December 2018	Completed - August 2018

			Rig 19 BOP 1	Rig 20 BOP 1	Rig 21 BOP 1	Rig 21 BOP 2
Item	Topic	Discussion	Status	Status	Status	Status
	2017 Deliverables					
1	Replacement 20 E/F bolts for all > 35 HRC critical bolting ordered	List by rig the % of API 20 E replacement bolts ordered	NA	100%	Completed - February 16, 2017	Completed - February 16, 2017
2	Replacement 20 E/F bolts for all > 35 HRC critical bolting installed	List by rig the % of API 20 E bolts installed on the BOP	NA	100%	Complete - Feb, 15, 2018	Complete - Mar, 15, 2018
3	Rig Procedure for torquing of critical bolting	Can include example rig procedure	NA	Completed March 29, 2016	Completed - November 1, 2016	Completed - November 1, 2016
4	Internal process for enhanced failure reporting of critical bolts (IOGP Failure reporting procedure)	Can include example procedure for compliance with IOGP Failure reporting	NA	Completed July 28, 2016	Completed - November 1, 2016	Completed - November 1, 2016
5	MTR review for installed critical bolting:	Can include letter from OEM, example of MTR audit	NA	Completed April 1, 2016	Completed - November 1, 2016	Completed - November 1, 2016
	- OEM SOF critical bolting per relevant specification		NA	Completed February 18, 2016	Completed - November 1, 2016	Completed - November 1, 2016
	- MTRs per relevant specification		NA	Completed April 1, 2016	Completed - November 1, 2016	Completed - November 1, 2016
	- Bolting audit to verify MTR information		NA	Completed April 1, 2016	Completed - November 1, 2016	Completed - November 1, 2016
6	Preventative maintenance (PM) for BOP bolting API Std 53	Can include PM for BOP bolting maintenance. Example of NDE performed on BOP bolts	NA	Completed April 1, 2016	Completed - December 1, 2017	Completed - December 1, 2017
	2018-2023 Deliverables					
A1	Critical bolting API 20 E/F replacement bolts ordered	List by rig % of bolts ordered	NA	100%	Completed - March 1, 2018	Completed - March 1, 2018
A2	Critical bolting API 20 E/F replacement bolts installed	List by rig % of bolts installed/replaced	NA	95%	Completed - August 2018	15%

			Rig 22 BOP 1	Rig 23 BOP 1	Rig 23 BOP 2	Rig 24 BOP 1
Item	Topic	Discussion	Status	Status	Status	Status
	2017 Deliverables					
1	Replacement 20 E/F bolts for all > 35 HRC critical bolting ordered	List by rig the % of API 20 E replacement bolts ordered	NA	100%	100%	100%
2	Replacement 20 E/F bolts for all > 35 HRC critical bolting installed	List by rig the % of API 20 E bolts installed on the BOP	NA	100%	100%	In-progress
3	Rig Procedure for torquing of critical bolting	Can include example rig procedure	NA	Completed	Completed	Completed
4	Internal process for enhanced failure reporting of critical bolts (IOGP Failure reporting procedure)	Can include example procedure for compliance with IOGP Failure reporting	NA	IOGP BOP Reliability Database	IOGP BOP Reliability Database	Completed
5	MTR review for installed critical bolting:	Can include letter from OEM, example of MTR audit	NA	Completed - December 2016	Completed - December 2016	Completed
	- OEM SOF critical bolting per relevant specification		NA	Completed	Completed	In Progress
	- MTRs per relevant specification		NA	Completed	Completed	In-progress
	- Bolting audit to verify MTR information		NA	Completed	Completed	In-progress
6	Preventative maintenance (PM) for BOP bolting API Std 53	Can include PM for BOP bolting maintenance. Example of NDE performed on BOP bolts	NA	Completed	Completed	In-progress
	2018-2023 Deliverables					
A1	Critical bolting API 20 E/F replacement bolts ordered	List by rig % of bolts ordered	NA	100%	100%	100%
A2	Critical bolting API 20 E/F replacement bolts installed	List by rig % of bolts installed/replaced	NA	80%	80%	0%

			Rig 24 BOP 2	Rig 25 BOP 1	Rig 26 BOP 1	Rig 26 BOP 2
Item	Topic	Discussion	Status	Status	Status	Status
	2017 Deliverables					
1	Replacement 20 E/F bolts for all > 35 HRC critical bolting ordered	List by rig the % of API 20 E replacement bolts ordered	100%	NA	Completed - February 16, 2017	Completed - February 16, 2017
2	Replacement 20 E/F bolts for all > 35 HRC critical bolting installed	List by rig the % of API 20 E bolts installed on the BOP	In-progress	NA	Completed - December 5, 2017	Completed - May 1, 2017
3	Rig Procedure for torquing of critical bolting	Can include example rig procedure	Completed	NA	Completed - November 1, 2016	Completed - November 1, 2016
4	Internal process for enhanced failure reporting of critical bolts (IOGP Failure reporting procedure)	Can include example procedure for compliance with IOGP Failure reporting	Completed	NA	Completed - November 1, 2016	Completed - November 1, 2016
5	MTR review for installed critical bolting:	Can include letter from OEM, example of MTR audit	Completed	NA	Completed - November 1, 2016	Completed - November 1, 2016
	- OEM SOF critical bolting per relevant specification		In Progress	NA	Completed - November 1, 2016	Completed - November 1, 2016
	- MTRs per relevant specification		In-progress	NA	Completed - November 1, 2016	Completed - November 1, 2016
	- Bolting audit to verify MTR information		In-progress	NA	Completed - November 1, 2016	Completed - November 1, 2016
6	Preventative maintenance (PM) for BOP bolting API Std 53	Can include PM for BOP bolting maintenance. Example of NDE performed on BOP bolts	In-progress	NA	Completed - December 1, 2017	Completed - December 1, 2017
	2018-2023 Deliverables					
A1	Critical bolting API 20 E/F replacement bolts ordered	List by rig % of bolts ordered	100%	NA	Completed - July 30, 2018	15%
A2	Critical bolting API 20 E/F replacement bolts installed	List by rig % of bolts installed/replaced	10%	NA	15%	65%

			Rig 27 BOP 1	Rig 28 BOP 1
Item	Topic	Discussion	Comments	Status
	2017 Deliverables			
1	Replacement 20 E/F bolts for all > 35 HRC critical bolting ordered	List by rig the % of API 20 E replacement bolts ordered	100%	100%
2	Replacement 20 E/F bolts for all > 35 HRC critical bolting installed	List by rig the % of API 20 E bolts installed on the BOP	100%	100%
3	Rig Procedure for torqueing of critical bolting	Can include example rig procedure	Completed - July 15, 2014	Complete
4	Internal process for enhanced failure reporting of critical bolts (IOGP Failure reporting procedure)	Can include example procedure for compliance with IOGP Failure reporting	Completed - July 20, 2016	Completed - May 8, 2015
5	MTR review for installed critical bolting:	Can include letter from OEM, example of MTR audit	Completed - September, 2016	In-progress
	- OEM SOF critical bolting per relevant specification		Completed - September 15, 2016	Completed - February 24, 2016
	- MTRs per relevant specification		Completed - July 12, 2017	Completed - February 24, 2016
	- Bolting audit to verify MTR information		Completed - April 7, 2017	In-progress
6	Preventative maintenance (PM) for BOP bolting API Std 53	Can include PM for BOP bolting maintenance. Example of NDE performed on BOP bolts	Completed - March 15, 2016	Completed - December 9, 2015
	2018-2023 Deliverables			
A1	Critical bolting API 20 E/F replacement bolts ordered	List by rig % of bolts ordered	0%	0%
A2	Critical bolting API 20 E/F replacement bolts installed	List by rig % of bolts installed/replaced	0%	0%

From: [Jones, Lisa M. EOP/OMB](#)
To: [Palmieri, Rosario A. EOP/OMB](#); [Mancini, Dominic J. EOP/OMB](#); [Theroux, Rich P. EOP/OMB](#); [Thomas, Amanda L. EOP/OMB](#); [Hodson Marten, Elke L. EOP/OMB](#); [Oreska, Matthew P. EOP/OMB](#); [Justin Abernathy](#); [Lakeisha Harrison](#); [Weber, Jeremy G. EOP/CEA](#); [DL CEO RegReview](#); [Burnett, Ben D. EOP/OMB](#); [Holly Hopkins](#); [Carrie Domnitch](#)
Subject: E.O. 12866 re: BSEE/DOI Blowout Preventer Systems and Well Control

This meeting was requested by the American Petroleum Institute.

Call-in: (b) (5)

Here's the link for security information needed and it may be shared with others: <https://events.whitehouse.gov/?rid=4RVYPRPYMH>

Please include name as it shows exactly on your driver's license or government-issued identification to be used.

Thank you.

From: [Google Calendar](#) on behalf of preston.beard@bsee.gov
To: preston.beard@bsee.gov; hopkinsh@api.org; evan@offshoreoperators.com
Subject: BAST Meeting
Date: Thursday, February 7, 2019 8:03:21 AM

Good morning, unfortunately Director Angelle will not be in Washington DC during this week and we will need to reschedule this morning. I apologize for the inconvenience and will get back to you shortly.

BAST Meeting

When Thu Feb 21, 2019 1pm – 2pm Eastern Time - New York

Video call (b) (5)

Who

- scott.angelle@bsee.gov - organizer
- preston.beard@bsee.gov - creator
- hopkinsh@api.org
- oiea@ios.doi.gov

From: [Holly Hopkins](#)
To: preston.beard@bsee.gov; evan@offshoreoperators.com
Subject: Re: BAST Meeting
Date: Thursday, February 7, 2019 9:06:42 AM

Ok thanks. Let us know

----- Original message -----

From: preston.beard@bsee.gov
Date: 2/7/19 8:03 AM (GMT-05:00)
To: preston.beard@bsee.gov, Holly Hopkins <hopkinsh@api.org>, evan@offshoreoperators.com
Subject: BAST Meeting

Good morning, unfortunately Director Angelle will not be in Washington DC during this week and we will need to reschedule this morning. I apologize for the inconvenience and will get back to you shortly.

BAST Meeting

When Thu Feb 21, 2019 1pm – 2pm Eastern Time - New York

Video call (b) (5)

Who

- scott.angelle@bsee.gov - organizer
- preston.beard@bsee.gov - creator
- hopkinsh@api.org
- oiea@ios.doi.gov

From: [Jones, Lisa M. EOP/OMB](#)
To: [Thomas, Amanda L. EOP/OMB](#); [Burnett, Ben D. EOP/OMB](#); [DL CEQ RegReview](#); [Mancini, Dominic J. EOP/OMB](#); [Carrie Domnitch](#); [Hodson Marten, Elke L. EOP/OMB](#); [Holly Hopkins](#); [Weber, Jeremy G. EOP/CEA](#); [Oreska, Matthew P. EOP/OMB](#); [Theroux, Rich P. EOP/OMB](#); [Palmieri, Rosario A. EOP/OMB](#); [douglas.morris@bsee.gov](#); [bivan_patnaik@ios.doi.gov](#); [frederick.brink@bsee.gov](#); [marcella.burke@sol.doi.gov](#); [kirk.malstrom@bsee.gov](#); [Lakeisha Harrison](#); [benjamin_simon@ios.doi.gov](#); [karen.hawbecker@sol.doi.gov](#); [dennis.daugherty@sol.doi.gov](#); [justin_abernathy@ios.doi.gov](#); [scott.angelle@bsee.gov](#); [preston.beard@bsee.gov](#)
Subject: Invitation: E.O. 12866 re: BSEE/DOI Blowout Preventer Systems and We... @ Wed Feb 13, 2019 3:30pm - 4pm (EST) (null)
Attachments: [invite.ics](#)

E O 12866 re: BSEE/DOI Blowout Preventer Systems and Well Control

This meeting was requested by the American Petroleum Institute

Call-in: (b) (5)

Here's the link for security information needed and it may be shared with others: <https://events.whitehouse.gov/?rid=4RVYPRPYMH> <<https://www.google.com/url?q=https%3A%2F%2Fevents.whitehouse.gov%2F%3D4RVYPRPYMH&sa=D&ust=1549984142352000&usg=AFQjCNGjhpFLPKuKkKNFov2HsfrncQRybw>>
Please include name as it shows exactly on your driver's license or government-issued identification to be used

Thank you

When Wed Feb 13, 2019 3:30pm – 4pm Eastern Time - New York

Where Room 9258, New Executive Office Building (NEOB)/OMB, 725 17th Street, NW, Washington, DC 20503 (map <<https://maps.google.com/maps?q=Room+9258,+New+Executive+Office+Building+%28NEOB%29/OMB,+725+17th+Street,+NW,+Washington,+DC++20503&hl=en>>)

Who • Jones, Lisa M EOP/OMB - organizer

- [justin_abernathy@ios.doi.gov](#) - creator
- Thomas, Amanda L EOP/OMB
- Burnett, Ben D EOP/OMB
- DL CEQ RegReview
- Mancini, Dominic J EOP/OMB
- Carrie Domnitch
- Hodson Marten, Elke L EOP/OMB
- Holly Hopkins
- Weber, Jeremy G EOP/CEA
- Oreska, Matthew P EOP/OMB
- Theroux, Rich P EOP/OMB
- Palmieri, Rosario A EOP/OMB
- [douglas.morris@bsee.gov](#)
- [bivan_patnaik@ios.doi.gov](#)
- [frederick.brink@bsee.gov](#)
- [marcella.burke@sol.doi.gov](#)
- [kirk.malstrom@bsee.gov](#)
- Lakeisha Harrison
- [benjamin_simon@ios.doi.gov](#)
- [karen.hawbecker@sol.doi.gov](#)
- [dennis.daugherty@sol.doi.gov](#)
- [scott.angelle@bsee.gov](#)
- [preston.beard@bsee.gov](#)

Invitation from Google Calendar <<https://www.google.com/calendar/>>

You are receiving this courtesy email at the account [kirk.malstrom@bsee.gov](#) because you are an attendee of this event

From: scott.angelle@bsee.gov
To: oiea@ios.doi.gov; hopkinsh@api.org
Subject: Canceled event: BAST Meeting @ Thu Feb 21, 2019 1pm - 2pm (EST) (oiea@ios.doi.gov)
Attachments: [invite.ics](#)

This event has been canceled and removed from your calendar.

BAST Meeting

When Thu Feb 21, 2019 1pm – 2pm Eastern Time - New York

Video call (b) (5)

Calendar oiea@ios.doi.gov

Who • scott.angelle@bsee.gov - organizer

• preston.beard@bsee.gov - creator

• oiea@ios.doi.gov

• hopkinsh@api.org

Invitation from Google Calendar <<https://www.google.com/calendar/>>

You are receiving this email at the account oiea@ios.doi.gov because you are subscribed for cancellations on calendar oiea@ios.doi.gov.

To stop receiving these emails, please log in to <https://www.google.com/calendar/> and change your notification settings for this calendar.

Forwarding this invitation could allow any recipient to modify your RSVP response. Learn More

<<https://support.google.com/calendar/answer/37135#forwarding>> .

From: [Holly Hopkins](#)
To: [Preston Beard](#)
Cc: [Andy Radford](#); [Carrie Domnitch](#)
Subject: Meeting with the Director
Date: Friday, February 8, 2019 11:45:07 AM

Preston,

API would like to brief Director Angelle on our GOM Policy Initiatives report. We'd like him to come to API if possible. Available times are (in order of preference):

1. Wednesday, 2/13 - Morning anytime, but finish by Noon
2. Monday, 2/11 – Afternoon, end by [3:30](#)
3. Thursday, 2/14 – [11:00 am](#)
4. Thursday, 2/14 – [2:30](#) or later (last resort)

If not available next week, then Wednesday, 2/20.

Thanks,

Holly

From: [Preston Beard](#)
To: [Holly Hopkins](#)
Subject: Re: [EXTERNAL] Meeting with the Director
Date: Sunday, February 10, 2019 11:24:08 AM

Would you forward any read aheads?

-Preston
571-585-7001

On Feb 8, 2019, at 11:44 AM, Holly Hopkins <hopkinsh@api.org> wrote:

Preston,

API would like to brief Director Angelle on our GOM Policy Initiatives report. We'd like him to come to API if possible. Available times are (in order of preference):

1. Wednesday, 2/13 - Morning anytime, but finish by Noon
2. Monday, 2/11 – Afternoon, end by [3:30](#)
3. Thursday, 2/14 – [11:00 am](#)
4. Thursday, 2/14 – [2:30](#) or later (last resort)

If not available next week, then Wednesday, 2/20.

Thanks,

Holly

From: evan@zimmerman-co.com
To: [Beard, Preston](#)
Cc: [Holly Hopkins](#); [Greg Kusinski](#); C.Shull@shell.com
Subject: RE: [EXTERNAL] RE: BAST Meeting
Date: Monday, February 11, 2019 11:05:51 AM

Preston, Thank you for the quick response. 10am at DOI on the 26th would be great.

Cheers,

Evan H. Zimmerman
Executive Director
Offshore Operators Committee
evan@offshoreoperators.com

----- Original Message -----

Subject: Re: [EXTERNAL] RE: BAST Meeting
From: "Beard, Preston" <preston.beard@bsee.gov>
Date: Mon, February 11, 2019 9:32 am
To: <evan@zimmerman-co.com>

Morning of the 26 works. Let me know what time

On Mon, Feb 11, 2019 at 10:31 AM <evan@zimmerman-co.com> wrote:
Preston,

Any update so we can schedule this meeting?

Cheers,

Evan H. Zimmerman
Executive Director
Offshore Operators Committee
evan@offshoreoperators.com

Malstrom, Kirk

From: Holly Hopkins <hopkinsh@api.org>
Sent: Thursday, February 21, 2019 3:03 PM
To: Malstrom, Kirk
Subject: [EXTERNAL] RE: DWH reports

Importance: High

thanks

From: Malstrom, Kirk <kirk.malstrom@bsee.gov>
Sent: Thursday, February 21, 2019 2:52 PM
To: Holly Hopkins <hopkinsh@api.org>
Subject: DWH reports

Holly,
here are a list of the organizations:

- DOI
- DOI OCS Safety Oversight Board
- DOI OIG
- DOI/Department of Homeland Security (DHS) Joint Investigation Team
- National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling
- Chief Counsel for the National Commission
- National Academy of Engineering
- Joint Industry Subsea Well Control and Containment Task Force
- Environmental Law Institute
- Ocean Energy Safety Advisory Committee
- Chemical Safety Board
- Joint Industry Oil Spill Preparedness and Response Task Force
- Transportation Research Board
- GAO

and here are the reports:

1: DOI Report to the President, "Increased Safety Measures for Energy Development on the OCS." May 10, 2010

2: DOI OCS Safety Oversight Board Sept. 2010**

3: National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, Jan. 2011

4: DOI/Department of Homeland Security (DHS) Joint Investigation Team, Sept. 14, 2011

5: Chief Counsel for the National Commission, 2011

6: National Academy of Engineering, Dec. 14, 2011

7: Joint Industry Subsea Well Control and Containment Task Force, March 13, 2012

8: Environmental Law Institute

9: Ocean Energy Safety Advisory Committee, April 2011

10: Ocean Energy Safety Advisory Committee, May 2012

11: Ocean Energy Safety Advisory Committee, October 2012

12: Ocean Energy Safety Advisory Committee, January 2013

13: Chemical Safety Board Investigation, April 12, 2016

14: Joint Industry Oil Spill Preparedness and Response Task Force

15: Transportation Research Board Report 309

16. Federal Oil and Gas Leases: Opportunities Exist to Capture Vented and Flared Natural Gas, Which Would Increase Royalty Payments and Reduce Greenhouse Gases (2011)

17. Interior Has Begun to Address Hiring and Retention Challenges Needs to Do More (2014)

18. Interior Has Strengthened Its Oversight of Subsea Well Containment, but Should Improve Its Documentation (2012)

19. Interior Has Taken Steps to Address Staff Hiring, Retention, & Training but Needs a More Evaluative & Collaborative Approach (2016)

20. Interior's BSEE Restructuring Has Not Addressed Long-standing Oversight Deficiencies (2016)

21. Interior's Oil & Gas Production & Verification Efforts Do Not Provide Reasonable Assurance of Accurate Measurement of Production Volumes (2010)

22. Stronger Leadership Commitment Needed at Interior to Improve Offshore Oversight and Internal Management (2017)

23. Production Verification and Royalty Data (2015)

24. Oil Dispersants: Additional Research Needed, Particularly on Subsurface and Arctic Applications (2012)

25. Interior's Reorganization Complete, but Challenges Remain in Implementing New Requirements (2012)

26. Actions Needed to Better Protect Against Billions of Dollars in Federal Exposure to Decommissioning Liabilities (2016)

27. Additional Guidance Would Help Strengthen the Minerals Management Service's Assessment of Environmental Impacts in the North Aleutian Basin (2010)

**Petroleum Engineer
Bureau of Safety and Environmental Enforcement
Regulations Development Section
(202) 258-1518**

more details » <https://www.google.com/calendar/event?action=VIEW&eid=NTJmZjFpNnN0ODJyYmVycmVjBQjXN3s3M0bzMgaG9wa2lu2hAYXBpLm9yZw&tok=MjJjc2NvdHQuYV50ZjZwX3ZUBic2VILmdvdjRlZGEyNDBiMWJlNGNmNdk5YzAwZWZwMDMzYjdlYWQ1M2Y5NzhmMGM&ctz=America%2FNew_York&hl=en&es=0>

BAST Meeting
When Tue Feb 26 2019 10am – 11am Eastern Time - New York

Video call (b) (5)
Calendar hopkinsh@api.org
Who • scott.angelle@bsee.gov - organizer
• preston.beard@bsee.gov - creator
• staci.king@bsee.gov
• evan@offshoreoperators.com
• hopkinsh@api.org
• oiea@ios.doi.gov

[illegible]

From: [Holly Hopkins](#)
To: scott.angelle@bsee.gov
Subject: Accepted: Invitation: BAST Meeting @ Tue Feb 26, 2019 10am - 11am (EST) (hopkinsh@api.org)

From: [Jones, Lisa M. EOP/OMB](#)
To: [Thomas, Amanda L. EOP/OMB](#); [Burnett, Ben D. EOP/OMB](#); [DL CEO RegReview](#); [Mancini, Dominic J. EOP/OMB](#); [Carrie Domnitch](#); [Hodson Marten, Elke L. EOP/OMB](#); [Holly Hopkins](#); [Weber, Jeremy G. EOP/CEA](#); [Oreska, Matthew P. EOP/OMB](#); [Theroux, Rich P. EOP/OMB](#); [Palmieri, Rosario A. EOP/OMB](#); [douglas.morris@bsee.gov](#); [bivan_patnaik@ios.doi.gov](#); [frederick.brink@bsee.gov](#); [marcella.burke@sol.doi.gov](#); [kirk.malstrom@bsee.gov](#); [Lakeisha Harrison](#); [benjamin_simon@ios.doi.gov](#); [karen.hawbecker@sol.doi.gov](#); [dennis.daugherty@sol.doi.gov](#); [justin_bernathy@ios.doi.gov](#); [scott.angelle@bsee.gov](#); [casey_hammond@ios.doi.gov](#); [preston.beard@bsee.gov](#)
Subject: Invitation: E.O. 12866 re: BSEE/DOI Blowout Preventer Systems and We... @ Wed Feb 13, 2019 3:30pm - 4pm (EST) (null)
Attachments: [invite.ics](#)

E O 12866 re: BSEE/DOI Blowout Preventer Systems and Well Control

This meeting was requested by the American Petroleum Institute

Call-in: (b) (5)

Here's the link for security information needed and it may be shared with others: <https://events.whitehouse.gov/?rid=4RVYPRPYMH> <<https://www.google.com/url?q=https%3A%2F%2Fevents.whitehouse.gov%2F%3Frid%3D4RVYPRPYMH&sa=D&ust=1550442929118000&usg=AFQjCNHqJMyHRVPWnr1INbpqQbRYAajw9w>>
Please include name as it shows exactly on your driver's license or government-issued identification to be used

Thank you

When Wed Feb 13, 2019 3:30pm – 4pm Eastern Time - New York

Where Room 9258, New Executive Office Building (NEOB)/OMB, 725 17th Street, NW, Washington, DC 20503 (map <<https://maps.google.com/maps?q=Room+9258,+New+Executive+Office+Building+%28NEOB%29/OMB,+725+17th+Street,+NW,+Washington,+DC++20503&hl=en>>)

Who • Jones, Lisa M EOP/OMB - organizer

- [scott.angelle@bsee.gov](#) - creator
- Thomas, Amanda L. EOP/OMB
- Burnett, Ben D. EOP/OMB
- DL CEO RegReview
- Mancini, Dominic J. EOP/OMB
- Carrie Domnitch
- Hodson Marten, Elke L. EOP/OMB
- Holly Hopkins
- Weber, Jeremy G. EOP/CEA
- Oreska, Matthew P. EOP/OMB
- Theroux, Rich P. EOP/OMB
- Palmieri, Rosario A. EOP/OMB
- [douglas.morris@bsee.gov](#)
- [bivan_patnaik@ios.doi.gov](#)
- [frederick.brink@bsee.gov](#)
- [marcella.burke@sol.doi.gov](#)
- [kirk.malstrom@bsee.gov](#)
- Lakeisha Harrison
- [benjamin_simon@ios.doi.gov](#)
- [karen.hawbecker@sol.doi.gov](#)
- [dennis.daugherty@sol.doi.gov](#)
- [justin_bernathy@ios.doi.gov](#)
- [casey_hammond@ios.doi.gov](#)
- [preston.beard@bsee.gov](#)

Invitation from Google Calendar <<https://www.google.com/calendar/>>

You are receiving this courtesy email at the account [casey_hammond@ios.doi.gov](#) because you are an attendee of this event

From: [Jones, Lisa M. EOP/OMB](#)
To: [Palmieri, Rosario A. EOP/OMB](#); [Mancini, Dominic J. EOP/OMB](#); [Theroux, Rich P. EOP/OMB](#); [Thomas, Amanda L. EOP/OMB](#); [Hodson Marten, Elke L. EOP/OMB](#); [Oreska, Matthew P. EOP/OMB](#); [Justin Abernathy](#); [Lakeisha Harrison](#); [Weber, Jeremy G. EOP/CEA](#); [DL CEO RegReview](#); [Burnett, Ben D. EOP/OMB](#); [Holly Hopkins](#); [Carrie Domnitch](#); [frederick.brink@bsee.gov](#); [benjamin_simon@ios.doi.gov](#); [scott.angelle@bsee.gov](#); [marcella.burke@sol.doi.gov](#); [casey_hammond@ios.doi.gov](#); [kirk.malstrom@bsee.gov](#); [martin.heinze@boem.gov](#); [preston.beard@bsee.gov](#)
Subject: CALL: BSEE/DOI Final Revisions to the Blowout Preventer Systems and Well Control Rule (1014-AA39)

Call-in: (b) (5)

From: [Jones, Lisa M. EOP/OMB](#)
To: [Thomas, Amanda L. EOP/OMB](#); [Burnett, Ben D. EOP/OMB](#); [DL CEQ RegReview](#); [Mancini, Dominic J. EOP/OMB](#); [Carrie Domnitch](#); [Hodson Marten, Elke L. EOP/OMB](#); [Holly Hopkins](#); [Weber, Jeremy G. EOP/CEA](#); [Oreska, Matthew P. EOP/OMB](#); [Theroux, Rich P. EOP/OMB](#); [Palmieri, Rosario A. EOP/OMB](#); [lane.nemirow@sol.doi.gov](#); [douglas.morris@bsee.gov](#); [matthew.ballenger@sol.doi.gov](#); [martin.heinze@boem.gov](#); [frederick.brink@bsee.gov](#); [marcella.burke@sol.doi.gov](#); [kirk.malstrom@bsee.gov](#); [Lakeisha Harrison](#); [benjamin_simon@ios.doi.gov](#); [karen.hawbecker@sol.doi.gov](#); [dennis.daugherty@sol.doi.gov](#); [justin_abernathy@ios.doi.gov](#); [scott.angelle@bsee.gov](#); [casey_hammond@ios.doi.gov](#); [preston.beard@bsee.gov](#); [christian_crowley@ios.doi.gov](#)
Subject: Invitation: CALL: BSEE/DOI Final Revisions to the Blowout Preventer ... @ Tue Feb 26, 2019 3:30pm - 4pm (EST) (null)
Attachments: [invite.ics](#)

CALL: BSEE/DOI Final Revisions to the Blowout Preventer Systems and Well Control Rule (1014-AA39)

Call-in: (b) (5)

When Tue Feb 26, 2019 3:30pm – 4pm Eastern Time - New York

Where Number - see below (map <<https://maps.google.com/maps?q=Number+-+see+below&hl=en>>)

Who • Jones, Lisa M. EOP/OMB - organizer

- [justin_abernathy@ios.doi.gov](#) - creator
- Thomas, Amanda L. EOP/OMB
- Burnett, Ben D. EOP/OMB
- DL CEQ RegReview
- Mancini, Dominic J. EOP/OMB
- Carrie Domnitch
- Hodson Marten, Elke L. EOP/OMB
- Holly Hopkins
- Weber, Jeremy G. EOP/CEA
- Oreska, Matthew P. EOP/OMB
- Theroux, Rich P. EOP/OMB
- Palmieri, Rosario A. EOP/OMB
- [lane.nemirow@sol.doi.gov](#)
- [douglas.morris@bsee.gov](#)
- [matthew.ballenger@sol.doi.gov](#)
- [martin.heinze@boem.gov](#)
- [frederick.brink@bsee.gov](#)
- [marcella.burke@sol.doi.gov](#)
- [kirk.malstrom@bsee.gov](#)
- Lakeisha Harrison
- [benjamin_simon@ios.doi.gov](#)
- [karen.hawbecker@sol.doi.gov](#)
- [dennis.daugherty@sol.doi.gov](#)
- [scott.angelle@bsee.gov](#)
- [casey_hammond@ios.doi.gov](#)
- [preston.beard@bsee.gov](#)
- [christian_crowley@ios.doi.gov](#)

Invitation from Google Calendar <<https://www.google.com/calendar/>>

You are receiving this courtesy email at the account [douglas.morris@bsee.gov](#) because you are an attendee of this event.

From: scott.angelis@bsee.gov
To: staci.kipsh@bsee.gov; evan@offshoreoperators.com; hopkinsh@api.org; olea@ios.doi.gov
Subject: Updated invitation: BAST Meeting @ Tue Feb 26, 2019 10am - 11am (EST) (hopkinsh@api.org)
Attachments: [invite.ics](#)

This event has been changed.
more details > <https://www.google.com/calendar/event?action=VIEW&eid=NTJmZzFpNnNuODJzYmVmcwJlBqZXNsa3M0bzMgaG9wa2Iuc2hAYXBpLn9yZW&rst=MjJlc2NvdHQuYW5nZWssZUBic2VILmdvdjRlZGEyNDBiMWJlNGNmNDk5YzAwZWZzMDMzYjdlYWQ1M2Y5NzhmMGM&ctz=America%2FNew_York&hl=en&es=0>
BAST Meeting
When Tue Feb 26, 2019 10am – 11am Eastern Time - New York
Where Changed: MIB Rm 5056 (map <<https://maps.google.com/maps?q=MIB+Rm+5056&hl=en>>)
Video call (1) (5)
Calendar [hopkinsh@api.org](#)
Who > scott.angelis@bsee.gov - organizer
• preston.heard@bsee.gov - creator
• staci.kipsh@bsee.gov
• evan@offshoreoperators.com
• hopkinsh@api.org
• olea@ios.doi.gov
Going (hopkinsh@api.org)? Yes <https://www.google.com/calendar/event?action=RESPOND&eid=NTJmZzFpNnNuODJzYmVmcwJlBqZXNsa3M0bzMgaG9wa2Iuc2hAYXBpLn9yZW&rst=MjJlc2NvdHQuYW5nZWssZUBic2VILmdvdjRlZGEyNDBiMWJlNGNmNDk5YzAwZWZzMDMzYjdlYWQ1M2Y5NzhmMGM&ctz=America%2FNew_York&hl=en&es=0>
- May be <https://www.google.com/calendar/event?action=RESPOND&eid=NTJmZzFpNnNuODJzYmVmcwJlBqZXNsa3M0bzMgaG9wa2Iuc2hAYXBpLn9yZW&rst=MjJlc2NvdHQuYW5nZWssZUBic2VILmdvdjRlZGEyNDBiMWJlNGNmNDk5YzAwZWZzMDMzYjdlYWQ1M2Y5NzhmMGM&ctz=America%2FNew_York&hl=en&es=0>
- No <https://www.google.com/calendar/event?action=RESPOND&eid=NTJmZzFpNnNuODJzYmVmcwJlBqZXNsa3M0bzMgaG9wa2Iuc2hAYXBpLn9yZW&rst=MjJlc2NvdHQuYW5nZWssZUBic2VILmdvdjRlZGEyNDBiMWJlNGNmNDk5YzAwZWZzMDMzYjdlYWQ1M2Y5NzhmMGM&ctz=America%2FNew_York&hl=en&es=0>
more options > <https://www.google.com/calendar/event?action=VIEW&eid=NTJmZzFpNnNuODJzYmVmcwJlBqZXNsa3M0bzMgaG9wa2Iuc2hAYXBpLn9yZW&rst=MjJlc2NvdHQuYW5nZWssZUBic2VILmdvdjRlZGEyNDBiMWJlNGNmNDk5YzAwZWZzMDMzYjdlYWQ1M2Y5NzhmMGM&ctz=America%2FNew_York&hl=en&es=0>
Invitation from Google Calendar <<https://www.google.com/calendar/>>
You are receiving this courtesy email at the account hopkinsh@api.org because you are an attendee of this event.
To stop receiving future updates for this event, decline this event. Alternatively you can sign up for a Google account at <https://www.google.com/calendar/> and control your notification settings for your entire calendar.
Forwarding this invitation could allow any recipient to modify your RSVP response. Learn More <<https://support.google.com/calendar/answer/37135#forwarding>> .

From: [Holly Hopkins](#)
To: scott.angelle@bsee.gov
Subject: Accepted: Updated invitation: BAST Meeting @ Tue Feb 26, 2019 10am - 11am (EST) (hopkinsh@api.org)

When: Feb 26, 2019 10:00:00 AM
Where: MIB Rm 5056

From: scott.angelle@bsee.gov
To: hopkinsb@api.org; eleen.angelico@bsee.gov; evan@offshoreoperators.com; olea@ios.doi.gov; staci.king@bsee.gov
Cc: monica.mchardy@bsee.gov; tiffany.gray@bsee.gov; michael.harre@bsee.gov
Subject: Invitation with note: BAST Meet ng @ Tue Feb 26, 2019 10am - 11am (EST) (tiffany.gray@bsee.gov)
Attachments: [invite.ics](#)

You have been invited to the following event with this note:
"Meeting in room 5056."
more details » <https://www.google.com/calendar/event?action=VIEW&eid=NTJmZmZpbnNuODJzYmcwcjBqZXNsa3M0bzMgdGlmZmFueS5ncmF5QGJzZWUuZ292&tok=MjJjc2NvdHQuYW5nZWssZUBic2VILmdvdmRlNjA0OWYzNmE2YjQyYjk3Yzg1YzcxNTE1MTViZDgzNmI3NjNhZWWM&ctz=America%2FNew_York&hl=en&es=1>

BAST Meeting
When Tue Feb 26, 2019 10am – 11am Eastern Time - New York
Where 5056 (map <<https://maps.google.com/maps?q=5056&hl=en>>)
Video call <https://www.google.com/calendar/event?action=VIEW&eid=NTJmZmZpbnNuODJzYmcwcjBqZXNsa3M0bzMgdGlmZmFueS5ncmF5QGJzZWUuZ292&tok=MjJjc2NvdHQuYW5nZWssZUBic2VILmdvdmRlNjA0OWYzNmE2YjQyYjk3Yzg1YzcxNTE1MTViZDgzNmI3NjNhZWWM&ctz=America%2FNew_York&hl=en&es=1>
Calendar <https://www.google.com/calendar/event?action=VIEW&eid=NTJmZmZpbnNuODJzYmcwcjBqZXNsa3M0bzMgdGlmZmFueS5ncmF5QGJzZWUuZ292&tok=MjJjc2NvdHQuYW5nZWssZUBic2VILmdvdmRlNjA0OWYzNmE2YjQyYjk3Yzg1YzcxNTE1MTViZDgzNmI3NjNhZWWM&ctz=America%2FNew_York&hl=en&es=1>
Who » scott.angelle@bsee.gov - organizer

- preston.beard@bsee.gov - creator
- hopkinsb@api.org
- eleen.angelico@bsee.gov
- evan@offshoreoperators.com
- olea@ios.doi.gov
- staci.king@bsee.gov
- monica.mchardy@bsee.gov - optional
- tiffany.gray@bsee.gov - optional
- michael.harre@bsee.gov - optional

Your attendance is optional.
Going (tiffany.gray@bsee.gov)? Yes <https://www.google.com/calendar/event?action=RESPOND&eid=NTJmZmZpbnNuODJzYmcwcjBqZXNsa3M0bzMgdGlmZmFueS5ncmF5QGJzZWUuZ292&tok=MjJjc2NvdHQuYW5nZWssZUBic2VILmdvdmRlNjA0OWYzNmE2YjQyYjk3Yzg1YzcxNTE1MTViZDgzNmI3NjNhZWWM&ctz=America%2FNew_York&hl=en&es=1>
- Maybe <https://www.google.com/calendar/event?action=RESPOND&eid=NTJmZmZpbnNuODJzYmcwcjBqZXNsa3M0bzMgdGlmZmFueS5ncmF5QGJzZWUuZ292&tok=MjJjc2NvdHQuYW5nZWssZUBic2VILmdvdmRlNjA0OWYzNmE2YjQyYjk3Yzg1YzcxNTE1MTViZDgzNmI3NjNhZWWM&ctz=America%2FNew_York&hl=en&es=1>
- No <https://www.google.com/calendar/event?action=RESPOND&eid=NTJmZmZpbnNuODJzYmcwcjBqZXNsa3M0bzMgdGlmZmFueS5ncmF5QGJzZWUuZ292&tok=MjJjc2NvdHQuYW5nZWssZUBic2VILmdvdmRlNjA0OWYzNmE2YjQyYjk3Yzg1YzcxNTE1MTViZDgzNmI3NjNhZWWM&ctz=America%2FNew_York&hl=en&es=1>
more options » <https://www.google.com/calendar/event?action=VIEW&eid=NTJmZmZpbnNuODJzYmcwcjBqZXNsa3M0bzMgdGlmZmFueS5ncmF5QGJzZWUuZ292&tok=MjJjc2NvdHQuYW5nZWssZUBic2VILmdvdmRlNjA0OWYzNmE2YjQyYjk3Yzg1YzcxNTE1MTViZDgzNmI3NjNhZWWM&ctz=America%2FNew_York&hl=en&es=1>
Invitation from Google Calendar <<https://www.google.com/calendar?>>
You are receiving this email at the account tiffany.gray@bsee.gov because you are subscribed for invitations on calendar tiffany.gray@bsee.gov.
To stop receiving these emails, please log in to <https://www.google.com/calendar/> and change your notification settings for this calendar.
Forwarding this invitation could allow any recipient to modify your RSVP response. Learn More <<https://support.google.com/calendar/answer/37135#forwarding>> .

From: [Scott Angelle](#)
To: [Holly Hopkins](#)
Date: Tuesday, February 26, 2019 9:14:11 PM

Thank you for your research on BAST !

Sent from my iPhone

