

MAINTENANCE COMMITTEE MEETING MINUTES

10 October 2018

Location: IADC - Crown Center 1 Conference Room

Call to Order:

The committee was called to order by Mr. Michael Anatra (Chairman). A building security and safety briefing was given by Mr. John Pertgen (IADC).

IADC Antitrust Policy and Guidelines:

Mr. Pertgen also covered the IADC Antitrust Policy and Guidelines and stated that the full policy is available on IADC's webpage.

Introductions

Each attendee provided an introduction of them self and their company affiliation. The Chairman then reviewed the meeting agenda.

Regulatory Review / Update:

The regulatory update was presented by Ms. Holly Hopkins (API) [via telecom] and Mr. John Pertgen (IADC).

The Committee is reminded that the following IADC-published semi-annual regulatory report is located on the revised IADC website:

Federal Regulatory Actions Impacting the Offshore Industry –

This report provides a reference summary that reflects the regulatory actions, announced in the Federal Register by U.S. governmental agencies, which may affect operations in the oil and gas industries. (Note: This report is available at <http://www.iadc.org/advocacy/offshore/#reports>)

A list of the regulatory areas that were reviewed at this meeting is included at the end of these minutes.

Class Society Topics

ABS: *Maintenance Maturity* was presented by Mr. David Knowles (ABS).

The main topics covered were:

- What is Maintenance Maturity
- How to Improve Maintenance Maturity
- Assessment of Maintenance Maturity
- Maintenance Maturity Continuum
- Gap Analysis results/fleet performance
- Benefits of improving Maintenance Maturity
- Case Study- Offshore Owner Asset

Please contact the ABS representative via email address if you want a copy of his presentation, have any questions or want to get clarification on any issues that he covered. [dknowles@eagle.org]

DNV GL: *MODU Mooring- Condition Assessment and Integrity Management* was presented by David McKay (DNV-GL).

The main topics covered were:

- Industry Focus on long term mooring
- Line failure on MODUs
- Damage during anchor handling
- Inconsistent reporting
- Tracking of service life
- Lessons Learned

Please contact the DNV GL representative via email address if you want a copy of his presentation, have any questions or want to get clarification on any issues. [David.McKay@dnvgl.com]

MAIN PRESENTATION: *Technology Based Rapid BOP Risk Assessment* was presented by Mr. Ross Witty (BRMS)

The main topics covered were:

- BOP Risk Mitigation Engineering Services (BRMS) background
- BOP Reliability Steps for Continuous Improvement
- Smart- Risk System Tools
- The Virtual Environment Simulator
- Demonstration of the BRMS Tools

Please contact the BRMS representative via email address if you want a copy of his presentation, have any questions or want to get clarification on any issues that were addressed. [ross.witty@bopriskmitigation.com]

Lunch & Learn *Ongoing Maintenance Support* was presented by Terry Grunden (RPG Marine).

The main topics covered were:

- HiMSEN Spare Part Discrepancies
- Spare Parts Material Changes
- Turbocharger Maintenance
- Spare Parts Solutions
- Exchange Pool Overhaul method
 - Strategy
 - Engine Downtime
 - Risk Mitigation
 - Timeline

Please contact the RPG representative via email address if you want a copy of his presentation, have any questions or want to get clarification on any issues that were addressed. [terrygrunden@rpgmarine.com]

AFTERNOON SESSION- OPEN TO ONLY DRILLING CONTRACTORS

2019 Committee Chairman: The floor was opened for nominations for Chairman of the Committee for 2019. Mr. Michael Anatra was nominated and seconded. There were no other nominations. Mr. Anatra agreed to accept the nomination and the position for 2019. He appointed Mr. Ryan Berger (Ensco) as Vice Chairman.

National Oilwell Varco Mr. Amos Ware gave a presentation on *Process Improvement Initiatives*, which covered the following areas:

- Why NOV needs to do something
- What NOV needs to do
- What did NOV do
- What does NOV do now

Please contact the NOV representative via his email address if you have any questions or want to get clarification on any issues he reviewed. [amos.ware@nov.com]

Caterpillar - Robert Froebel (CAT) provided an update for all the issues that CAT is working on for our industry. He discussed components dealing with the following:

- C175 HP Fuel pump
- 3500 ASO Valve

Please contact the CAT representative via his email address if you have any questions or want to get clarification on any issues regarding your CATERPILLAR equipment. [Froebel_Robert@cat.com]

Topics for future meetings:

NOV should plan to address encoding issues and the process used to turn around on determining the root cause at the next meeting.

Information Sharing

One member discussed TDX 1250 de-coupler issues that he encountered. Another member talked about quality issues such as spring issues on new winch brake assemblies. One other member asked about API RP 500 requirements for pump class.

Adjourned: 1345hrs

2019 Lunch Sponsors

16 JAN 2019	TBD
10 APR 2019	TBD
10 JUL 2019	TBD
09 OCT 2019	TBD

API REGULATORY UPDATE

API ACTIVITIES

Explore Offshore (no update)

- On June 6, 2018, API officially launched a new coalition for U.S. offshore energy exploration and development called [Explore Offshore](#). The coalition will focus its efforts in Virginia, North Carolina, South Carolina, Georgia, and Florida – each state will be represented by state chairs. The full list of participants includes: **Explore Offshore National Co-Chairs:** Former Secretary of Veterans Affairs **Jim Nicholson** and Former Secretary of the Navy and Virginia Senator **Jim Webb**

Virginia Co-Chairs: Former Delegates **Winsome Sears** and **Mike Watson**

North Carolina Chair: Former Mayor of Fayetteville **Nat Robertson**

South Carolina Chair: South Carolina African American Chamber of Commerce Chairman **Stephen Gilchrist**

Florida Chairs: Former Puerto Rico State Senator Dr. **Miriam Ramirez**, Former Florida Lieutenant Governor **Jeff Kottkamp**, Former Director of the Crestview Area of Chamber of Commerce **Wayne Harris**

Georgia Chair: Georgia State Petroleum Council Director **Hunter Hopkins**

API S53 Blowout Prevention Equipment Systems for Drilling Wells

- The 4th edition of API 53 was published November 2012 with its only Addendum published July 8, 2016. The last Task Group meeting was held August 15, 2018. The task group has completed development of the 5th edition, completed its first ballot and second limited with consensus, as well as final comment resolution. With final circulation complete the task group will review last comments and the document will be ready for API publication queue. The 5th edition major revisions include: further increasing normative requirements in lieu of informative statements, restructuring to include a larger “General” section that holds identical requirements for land, surface offshore and subsea BOPs in one section, included focus on land BOP operations, and expanded the testing tables for function and pressure testing criteria and frequency. One of the biggest changes is identifying surface BOP equipment requirements according to the MASP while the temporarily installed equipment is on the well, instead of the RWP of the equipment available. Finally, the task group also reviewed nomenclature for well control equipment systems and clearly defined all terms commonly used and replaced terms throughout the document reflecting the new definitions. This drove a change to the title of API S53, the first since 1976, to *Well Control Equipment Systems for Drilling Wells*. Ricky Cummings, Chevron is the chair RCummings@chevron.com.

API RP 4G Operation, Inspection, Maintenance, and Repair of Drilling and Well Servicing Structures

- There is an active task group within API that just finished comment resolutions from ballot 4505 for the 5th Edition of API RP 4G, *Operation, Inspection, Maintenance, and Repair of Drilling and Well Servicing Structures*. The ballot 4505 passed with 0 “no” votes and 6 comments. The document with the revisions from the comments is currently in recirculation within the TG. Next steps will be to submit to legal and editing prior to publication. If you have any questions or concerns, the chair is Anthony Mannering, TM Engineering, PLLC; please contact Anthony at anthony.mannering@tmengineeringpllc.com or (713) 202-3288.

API RP 75 Recommended Practice for Development of a Safety and Environmental Management Program for Offshore Operations and Facilities (no update)

- Sandi Fury, Chevron, SFury@chevron.com and Charlie Duhon, Arena CDuhon@arenaoffshore.com are the co-chairs of the RP 75 revision workgroup. The last meeting was held February 6, 2018. A comment only ballot was issued, and comments were due June 29, 2018. A meeting will be scheduled to resolve the comments.

API Standard 16AR Standard for Repair and Remanufacture of Drill-through Equipment (no update)

- The API Monogram-APIQR Program continues to work with SC16 to design an APIQR certification and audit program for API Std 16AR (standard published April 2017). The program would certify, through an audit process, organizations that perform repair and remanufacture of drill-through equipment and have implemented quality systems and processes that meet the requirements of API Std 16AR. Program development is currently on hold pending subcommittee action on some key API Std 16AR interpretations.

API Spec Q2 Specification for Quality Management System Requirements for Service Supply Organizations for the Petroleum and Natural Gas Industries (1st Edition)

- APIQR continues to register service providers to API Spec Q2. There are just over 115 service facilities with active Q2 certificates in 23 countries (just over 30% US based) with another 40 applications in-process in 17 countries (30% US based).
- API Houston sales / business development staff participated in the IADC API Spec Q2 session held October 2 and are planning to participate in the October 11 session. API staff explained the application and auditing process for APIQR, API Spec Q2 certification.
- API SC18, TG5 continues to investigate APIQR certification and auditing program requirements for Q2 certification of drilling contractor quality management systems/operations. Feedback from the October 2 IADC session is that there is still interest in running through a beta audit and follow-up is required.
- The SC18, TG5 (the SC18 quality committee's task group on API Spec Q2) work groups continue to work revisions to API Spec Q2; a 2-year extension has been granted to allow the revision process to be completed over the next year. A work group (SC 18, TG 5, WG 2) of drilling contractors and Users/Operators has been formed to identify proposed revisions and additions to address the needs of drilling contractors. API 18TR2, Guidance to API Spec Q2, was published December 2017. For more information on the work of SC18, TG5, contact the chair of the TG, Stacey Hagen of ExxonMobil at stacey.w.hagen@exxonmobil.com.
- For information about the Q2 certification program, program requirements, auditing requirements, etc. visit the API website at <http://www.api.org/products-and-services/api-monogram-and-apiqr> or contact certification@api.org. For more information on API-U Q2 training courses please visit the API-U training calendar on the API website at <http://www.api.org/products-and-services/training/api-u/calendar>.

API Standard 18LCM Product Life Cycle Management System Requirements for the Petroleum and Natural Gas Industries (no update)

- The API Monogram-APIQR Programs launched the company registration program for API Std 18LCM on January 16, 2018. The program is now open to applicant organizations that provide life cycle management services for E&P equipment under a management system that meets API Std 18LCM and API Spec Q1. For more information visit the API website at http://www.api.org/products-and-services/api-monogram-and-apiqr#tab_api-18lcm.

API SC 20, Supply Chain Management Standards

- APIQR is working with the SC 20 members to consider a new company registration program for the SC 20 series of supply chain specifications. The program would require conformity to one of the SC 20 specifications plus implementation of a management system that meets API Spec Q1. Currently, APIQR is taking API Spec Q1 registration applications with management system scopes that include reference to the API SC 20 supply chain specifications and related activities. For example, a heat treat provider working to API Spec 20H or a machine shop working to API Spec 20M can apply for API Spec Q1 registration referencing Spec 20H or Spec 20M in their QMS scope. The goal is to gauge industry interest in a specific registration program.

USCG ACTIVITIES

USCG Industry Day (no update)

- The last Industry Day was held May 10, 2018 at USCG Sector Headquarters Houston Galveston, 13411 Hillard Street, Houston, Texas 77034. The next Industry Day has not yet been scheduled.

National Offshore Safety Advisory Committee meeting (NOSAC)

- The last NOSAC meeting was held September 11, 2018 in Houston. At the meeting 3 of the 4 Subcommittee's formed to provide *Input to Support Regulatory Reform of Coast Guard Regulations—Executive Orders 13771 and 13783* (Drilling; Production; and OSV) provided updates to their final reports submitted in March. Additionally, the new Subcommittee formed to provide lessons learned/recommendations from OCS Industries' efforts to contribute to restoration and recovery efforts of hurricanes that impacted US waters in 2017 submitted a final report. A new subcommittee was formed to provide recommendations for the use of Offshore Supply Vessels (OSVs) and other non-purpose built vessels to assist in restoration and recovery efforts in response to natural or man-made disasters. The next NOSAC Meeting is scheduled for March 19-20, 2019 in New Orleans.

USCG Withdrawal Subchapter N NPRM

- On September 19, 2018, the USCG published a FRN which withdrew the Subchapter N Notice of Proposed Rulemaking published December 7, 1999.

USCG Pending Rules (Spring Regulatory Agenda) (no update)

- ~~Interim-Final Proposed Rule Revision to TWIC Requirements for Mariners (04/18 06/18 08/18)~~
- Proposed Rule Crediting Recent Sea Service of Personnel Serving on Vessels of the Uniformed Services (07/18)
- Proposed Rule Implementation of the 2015 and 2016 Amendments to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (09/18)
- Proposed Rule Ballast Water Management--Removal of Annual Reporting Requirement (05/18)
- Final Rule Marine Casualty Reporting on the OCS (~~08/17 02/18~~ 10/18)
- ~~Final Rule Deepwater Ports (12/17 06/18)~~
- ~~Final Rule Marine Casualty Property Damage Thresholds (12/17 06/18)~~

BSEE ACTIVITIES

BSEE Offshore Well Control Rule

- The final rule was announced on April 14 and published on April 29, 2016. Most of the rule became effective on July 28, 2016. API, IADC, OOC, NOIA, IPAA, PESA and USOGA sent BSEE a letter on May 27, 2016 asking for clarification and/or interpretation from BSEE. BSEE has been providing that information on their website at: <https://www.bsee.gov/site-page/well-control-rule-by-date>
- The Joint Industry Trades also send a letter May 17, 2017 to the Trump Administration outlining issues associated with the final rule and its implementation.
- BSEE has announced its intent to revise the WCR and held a public forum in Houston on September 20, 2017 to begin gathering information for the revision. In addition to the May 17, 2017 letter the Joint Industry Trades presented at the Forum on drilling margins, remote real time monitoring, casing and cementing, containment, API 53, BAVOs, shearing requirements, accumulators and codifying Interpretations. The Joint Trades will continue our engagement with BSEE and the Department of the Interior to revise the rule.
- BSEE link to submit comments on the regulatory reform <https://www.regulations.gov/document?D=DOI-2017-0003-0006>
- The proposed revisions to the WCR was sent to OIRA on December 12, 2017. <https://www.reginfo.gov/public/do/eoDetails?rrid=127772>
- The proposed revisions were published in the Federal Register on May 11, 2018, the Joint Trades filed comments on August 6, 2018. We await publication of the final rule.

Revisions to Production Safety System Regulations

- On December 29, 2017, BSEE proposed Oil and Gas and Sulphur Operations on the Outer Continental Shelf, Oil and Gas Production Safety Systems, Revisions

(Subpart H) on January 29, 2018, API, OOC and NOIA filed joint comments. BSEE published the final rule on September 28, 2018, the rule becomes effective on December 27, 2018.

Early Kick Detection possible BAST Candidate (no update)

- BSEE has posted a document announcing BSEE's intention to evaluate Early Kick Detection (EKD) technology as part of the Best Available and Safest Technology (BAST) Program. Use of cost-effective BAST is required by the Outer Continental Shelf Lands Act (OCSLA) to address significant safety issues on the Outer Continental Shelf (OCS). BSEE believes that this assessment is needed to determine if use of BAST involving kick detection and mitigation can reduce the likelihood of loss of well control (LOWC) events. The information can be found on BSEE's website: <https://www.bsee.gov/what-we-do/offshore-regulatory-programs/emerging-technologies/BAST> API filed comments on both BAST candidates.

DOI Public Notice on Regulatory Reform Initiatives (no update)

- On June 22, 2017, the US Department of the Interior published a Federal Register Notice soliciting public input on how the Department of the Interior can improve implementation of regulatory reform initiatives and policies and identify regulations for repeal, replacement, or modification. The notice also provides an overview of Interior's approach for implementing the regulatory reform initiative to alleviate unnecessary burdens placed on the American people, which was established by President Trump in Executive Order (E.O.) 13777, "Enforcing the Regulatory Reform Agenda." There is no deadline to submit comments. Interior commits to review public responses on an ongoing basis. API has previously provided recommendations in various forms to policy leadership at DOI concerning regulations that should be re-examined and potentially considered as candidates for revision and has had ongoing meetings with DOI staff to discuss our specific concerns. Link to submit documents to DOI on all Regulatory reform at the Department <https://www.regulations.gov/docket?D=DOI-2017-0003>

BSEE Bolt Report, Safety Alert & API Response

- August 11, 2014 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. API held a Technical Session during the API Exploration and Production Winter Standards Meeting in New Orleans on January 27, 2015. After the Technical Session, a multi-segment task group was formed to review the detailed recommendations in the report and determine next steps. The final report was shared with BSEE and is now being implemented.

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. API presented at the Forum.

In addition to the work of the multi-segment task group, API met with BSEE on March 31, June 22, September 20, and October 7, 2016, to discuss the Safety Alert. And provides BSEE quarterly updates to track the voluntary industry actions we have committed to to improve subsea BOP bolting. Work continues with BSEE on subsea BOP bolting.

Additionally, the National Academies of Sciences, Engineering, and Medicine (the Academies) through the National Academy of Engineering (NAE) and the National Materials and Manufacturing Board (NMMB) has been contracted by BSEE to hold an Academies' workshop and follow-on study to address issues associated with the reliability of connectors used in critical safety components and equipment for offshore oil and natural gas operations. The workshop was held April 10-11, 2017 in Washington, DC. The website for the Committee: http://sites.nationalacademies.org/DEPS/NMMB/DEPS_174523. The workshop proceedings can be found here: [Bolting Reliability for Offshore Oil and Natural Gas Operations: Proceedings of a Workshop](#)

The pre-publication of the Committee's report "High-Performance Bolting Technology for Offshore Oil and Natural Gas Operations" was posted March 9, 2018 and can be found [here](#). API submitted technical corrections to the Committee on the pre-publication copy. The final report was published in June and can be found here: <https://www.nap.edu/catalog/25032/high-performance-bolting-technology-for-offshore-oil-and-natural-gas-operations> API submitted a letter to BSEE on August 30, 2018 on the final report.

BSEE Pending Rulemaking (Spring Regulatory Agenda) (no update)

- ~~Supplemental Proposed Rule Cost Recovery Adjustment (08/17)~~
- Final OCS Rule Civil Penalties; 2019 Inflation Adjustments for Civil Penalties (01/19)
- Final Rule Federal Oil and Gas Royalty Management Act; 2019 Inflation Adjustments for Civil Penalties (01/19)
- ~~Final Rule Incorporation of Updates of Crane Standards (09/18)~~
- ~~Proposed Rule Extension of Certain Compliance Deadlines in the Blowout Preventer Systems and Well Control Rule (12/17)~~
- Proposed Rule Revisions to the Blowout Preventer Systems and Well Control Rule (05/18)
- Final Revisions to Production Safety System Regulations (05/18)
- ~~Proposed Rule Revisions to the Requirements for Exploratory Drilling on the Arctic Outer Continental Shelf (10/18)~~
- Final Privacy Act Regulations; Exemption for the Investigations Case Management System (05/18)
- ~~Final Rule Pipeline Decommissioning Cost Reporting (12/16)~~
- ~~Proposed Rule Aviation Regulations (03/17)~~
- ~~Proposed Rule Oil Spill Response Requirements (07/17)~~
- ~~Proposed Rule Pipelines and Pipeline Right-of-Way Safety (09/17)~~

OTHER ACTIVITIES

Comments on Maritime Regulatory Reform

- On May 17, 2018, the Office of Information and Regulatory Affairs (OIRA) published a FRN seeking public comment on how existing agency requirements affecting the maritime sector can be modified or repealed to increase efficiency, reduce or eliminate unnecessary or unjustified regulatory burdens, or simplify regulatory compliance while continuing to meet statutory missions. The request for information is meant to inform agencies' development of regulatory reform proposals. For purposes of the initiative, the maritime sector includes all enterprises related to maritime commerce, including: (1) Designing, building, acquiring, repairing, or scrapping vessels; (2) operating, manning, or maintaining vessels, port facilities, or shipyards; (3) operating shipping lines, customs brokerage services, shipping and freight forwarding services, or maritime activities related to resource extraction, renewable energy, cable laying, or marine research. API submitted individually and jointly with OOC and IADC on July 16, 2018.

CBP Rulings Notice on Proposed Modification and Revocation of Ruling Letters Related to Customs Application of the Jones Act to the Transportation of Certain Merchandise and Equipment Between Coastwise Points (no update)

- On January 18, 2017, CBP published a notice entitled "Proposed Modification and Revocation of Ruling Letters Related to Customs Application of the Jones Act to the Transportation of Certain Merchandise and Equipment Between Coastwise Points" in volume 51 of the Customs Bulletin and Decisions. According to CBP they proposed to modify a 1976 Ruling HQ 101925 to make it more consistent with federal statutes and regulations that were amended or promulgated after HQ 101925 was issued, and to clarify the proper reasoning underlying the conclusions reached regarding the subjects covered in the ruling. In addition, CBP proposed to revise its rulings which have determined that articles transported between coastwise points are vessel equipment pursuant to Treasury Decision ("T.D.") 49815(4). CBP intends to revoke or modify all prior rulings inconsistent with the proposed modifications. To respond to this notice, API coordinated a Joint Trade comment letter, filed April 18, 2017, which included (API), the Association of Diving Contractors International (ADCI), IADC, the Independent Petroleum Association of America (IPAA), the International Association of Geophysical Contractors (IAGC), the International Marine Contractors Association (IMCA), the Louisiana Mid-Continent Oil and Gas Association (LMOGA), the Offshore Operators Committee (OOC), the Petroleum Equipment & Services Association (PESA) and the U.S. Oil and Gas Association. On May 10, 2017, CBP withdrew the proposal stating that "Based on many substantive comments CBP received both supporting and opposing the proposed action, and CBP's further research on the issue, we conclude that the Agency's notice of proposed modification and revocation of the various ruling letters relating to the Jones Act should be reconsidered." CBP is currently deciding its

next steps which could include going through a rulemaking process. API and the Industry remain engaged with CBP on this activity.

Attendance:

First Name	Last Name	Company Name
Vinay	Kakuru	
Robert	Conachey	ABS
David	Knowles	ABS
Gordon	Lentz	ALLRIG
Toby	Austin	ATLANTICA MANAGEMENT (USA) INC
Garry	Davis	BOP RISK MITIGATION SERVICES, LLC
Ross	Witty	BOP RISK MITIGATION SERVICES, LLC
Robert	Froebel	CATERPILLAR OIL & GAS
Michael	Yoakum	CONSULTANT
Jim	Ness	DNV GL
David	McKay	DNV GL
Ryan	Berger	ENSCO PLC
John	Pertgen	IADC
Amos	Ware	NATIONAL OILWELL VARCO
Ryan	Spillane	OES OILFIELD SERVICES (USA) INC
Sara Ferreira	Castro	PACIFIC DRILLING
Mike	Anatra	PARKER DRILLING
Robert	Urbanowski	PRECISION DRILLING COMPANY
Jamie	Vargas	PRECISION DRILLING COMPANY
Surya	Komaragiri	SCHLUMBERGER
Kevin	Warren	SEADRILL AMERICAS
Robert	McGrath	SEATRAX, INC.
Joshua	Robnett	SUBSEA SOLUTIONS, LLC
Shawn	Ullrich	THE TIMKEN CORPORATION
Jeff	Marshall	TRANSOCEAN