



## **MAINTENANCE COMMITTEE MEETING MINUTES**

**8 April 2015**

***Location: IADC - Crown Center 1 & 2 Conference Rooms***

### Call to Order:

The committee was called to order and the attendees were welcomed by the IADC Maintenance Committee Chairman, Mr. Frank Breland (Diamond).

A building security and safety briefing was given by Mr. John Pertgen (IADC).

### IADC Antitrust Policy and Guidelines and Committee Mission Statement:

Mr. Pertgen provided a review of the IADC Antitrust Policy and Guidelines and stated that the full policy is available on IADC's webpage. The Chairman read the committee Mission Statement for the group.

### Introductions / Agenda:

Each attendee provided an introduction of them self and their company affiliation.

The Chairman provided an overview of the proposed agenda for this meeting.

### Regulatory Review / Update:

John Pertgen (IADC) provided the Committee with information about the two IADC-published semi-annual regulatory reports on the revised IADC website:

1. International Standards Activities affecting the Offshore Oil and Gas Industries --  
This report provides a handy reference to the standards development activities of various organizations (e.g., the International Maritime Organization, International Labor Organization, the International Organization for Standardization, and various international trade associations).
2. 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: Both reports are available at: <http://www.iadc.org/offshore-operating-division/reports/>)

A review of the highlights of the regulatory changes by the National Agencies and API Activities was presented by Mr. Pertgen and included a handout from API (provided by Holly Hopkins).

## **API ACTIVITIES**

### **API S53 Blowout Prevention Equipment Systems for Drilling Operations**

The API 53 task group met on June 9, 2014, to begin work on a 5th edition of the standard. The following will be sources of proposed changes/additions:

- Compliance assessment spreadsheet;
- responses with interpretations of API 53;
- comments from previous ballots of API 53;
- comments from other task groups, e.g. 16C, 16A, 16D;
- recommendations from industry (operators, drilling contractors, manufacturers, service companies, etc.)
- review informative statements in the document for applicability in the 5<sup>th</sup> edition

The last meeting has held March 18, 2015, next meeting is April 14, 2015.

### **API 2015 API Offshore Safe Lifting Conference & Expo**

API will hold a safe lifting conference on July 14-15, 2015 at the Westin Houston Memorial City, more information can be found at: <http://www.api.org/offshore>

### **API RP 75 Recommended Practice for Development of a Safety and Environmental Management Program for Offshore Operations and Facilities**

- Sandi Fury, Chevron, is the chair of the RP 75 revision workgroup. The next meeting is April 14, 2015.

### **API Specification 16AR Drill Through Equipment Repair and Remanufacturing**

- A task group has been formed to create a new document on the repair and remanufacture of BOPs, similar to Annex B of 16A. Annex B is being removed from 16A. (Contact Jan van Wijk [jan.vanwijk@shell.com](mailto:jan.vanwijk@shell.com) or Chris Johnson [chris.johnson@nov.com](mailto:chris.johnson@nov.com))

### **API Spec Q2 Specification for Quality Management System Requirements for Service Supply Organizations for the Petroleum and Natural Gas Industries (1<sup>st</sup> Edition)**

- The 1<sup>st</sup> edition of Spec Q2 was published December 15, 2011. This is a specification for Quality Management System Requirements for Service Supply Organizations, to identify the expectations for execution of upstream services including well construction, intervention, production and abandonment. (Contact Stacey Hagen [stacey.w.hagen@exxonmobil.com](mailto:stacey.w.hagen@exxonmobil.com))
- API-APIQR has 32 active, certified facilities for API Spec Q2. Most in the USA to Halliburton for GOM service operations.
- We have 68 applications. Most in the USA but we have applications in 17 other countries.
- We continue to add and expand the base of competent auditors through training and auditor observation.
- API-U continues to offer Q2 training courses in a variety of locations worldwide. These can be found on the training calendar on the API website (<http://www.api.org/events-and-training/api-u-training/api-u-calendar>).
- SC18, TG2 (the SC18 quality committee's task group on API Spec Q2) has been having regular meetings. They have established separate work groups working on editorial revisions to API Spec Q2 and development of the guidance document for the application the requirements of API Spec Q2. The output from the group is being used for API auditor training as well.
- During the 2015 API Auditor Summit, held at the end of February 2015, there was a round table on API Spec Q2 which included some information on gaps in auditing and application of the standard requirements.
- For information about the Q2 certification program, program requirements, auditing requirements, etc. (Contact Aaron Duke at [dukea@api.org](mailto:dukea@api.org) 1-202-682-8524)

### **New API document on Life Cycle Management**

- A task group has been formed to create a life-cycle management system document for use in conjunction with products and/or standards used in the oil and gas industry. The document should provide the means of identifying the continued compliance of a product to its original

and/or current manufacturing and design requirements and the ability to demonstrate product compliance to original and/or current product standards and industry/product-specific technical and regulatory requirements throughout the product lifecycle. The document is under development. (Contact Mike Briggs [Michael.Briggs@c-a-m.com](mailto:Michael.Briggs@c-a-m.com) )

## **USCG ACTIVITIES**

### **National Offshore Safety Advisory Committee meeting (NOSAC)**

- The next meeting will be April 7-8 in New Orleans.
- According to the agenda the following will be discussed:
  - Final Report from the Commercial Diving Subcommittee
  - Task Statement on Cyber Security on the US OCS
  - Task Statement on Lifeboat Fall Testing
  - Task Statement on Towage of MODUs, MOUs, and FOIs on the US OCS

### **NPRM Requirements for MODUs and Other Vessels Conducting Outer Continental Shelf Activities With Dynamic Positioning Systems**

- On Friday, November 28, the USCG published a NPRM in the FR “Requirements for MODUs and Other Vessels Conducting Outer Continental Shelf Activities with Dynamic Positioning Systems.” The notice of proposed rulemaking (NPRM) establishing minimum design, operation, training, and manning standards for mobile offshore drilling units (MODUs) and other vessels using DP systems to engage in Outer Continental Shelf (OCS) activities. Comment deadline was extended until May 27, 2015. A public meeting was held in New Orleans on March 31, 2015. API plans to file comments.

### **Final Rule - USCG MODU Electrical Equipment Certification Guidance**

- On June 24, 2013 USCG announced proposed regulatory changes applicable to foreign MODUs, floating facilities, and vessels that engage in OCS activities for the first time after the effective date of the regulations. The NPRM proposes to require 3rd-party testing & certification of electrical equipment in hazardous locations on certain vessels regardless of flag administration. Comments were due November 30, 2013.
- On March 31, 2015, the USCG published final regulations applicable to newly constructed MODUs, floating OCS facilities, and vessels other than offshore supply vessels (OSVs) that engage in OCS activities. The regulations expand the list of acceptable national and international explosion protection standards and add the internationally accepted independent third-party certification system, IECEx, as an accepted method of testing and certifying electrical equipment intended for use in hazardous locations. The regulations also provide owners and operators of existing U.S. MODUs, floating OCS facilities, vessels other than OSVs, and U.S. tank vessels that carry flammable or combustible cargoes, the option of following this compliance regime as an alternative to the requirements contained in existing regulations. This final rule is effective April 30, 2015. The requirements of 46 CFR subpart 111.108 will apply to MODUs, floating OCS facilities, and vessels, other than offshore supply vessels regulated under 46 CFR subchapter L, that are constructed after April 2, 2018 and that engage in OCS activities.

### **Marine Safety Information Bulletin Number: 01-15**

- On March 3, 2015, the USCG issued Marine Safety Information Bulletin Number: 01-15 as a reminder of the Notice of Arrival and movement notification requirements for units on the U.S. OCS.

### **USCG Alert 01-15 & BSEE Safety Alert 315**

- On February 24, 2015 BSEE and the USCG issued a Safety Alert (USCG Alert 01-15 BSEE Safety Alert 315) Dynamic Positioning System Failures on Offshore Supply Vessels Engaged in Oil and Gas Operations in the U. S. Outer Continental Shelf

### **USCG NPRM Commercial Diving**

- On February 19, 2015, the USCG published proposed rulemaking to amend its regulations for commercial diving that is conducted from deepwater ports or deepwater port safety zones, or in connection with Outer Continental Shelf (OCS) activities, or from vessels that are required to have a Coast Guard certificate of inspection. The regulations would be revised and updated to improve safety and to reflect current industry best practices. The proposed regulations would also allow the Coast Guard to approve independent third party organizations to assist with ensuring regulatory compliance of commercial diving regulations. Comments are due to the USCG by May 20, 2015.

### **USCG Pending Rulemaking**

- Final Rule - Revision of Crane Regulation Standards for MODUs, OSVs, and Floating (OCS) Facilities. On May 13, 2013, USCG published NPRM to revise regulations related to the design, certification, inspection, and testing of cranes. Comments were due by August 12, 2013.
- NPRM USCG SMS – On September 10, 2013, the USCG published an ANPRM announcing their intent to promulgate regulations that will require vessels engaged in OCS activities (defined in 33 CFR Chapter I, Subchapter N) to develop, implement, and maintain a vessel-specific Safety and Environmental Management System (SEMS) that incorporates the management program and principles of API's Recommended Practice for Development of a Safety and Environmental Management Program for Offshore Operations and Facilities, Third Edition, May 2004 (API RP 75). Comments were due January 23, 2014.
- Final Rule - Marine Casualty Reporting on the OCS. On January 10, 2014, the USCG published a NPRM on Marine Casualty Reporting on the OCS. Comments were due by April 10, 2014. API did not submit comments.
- Final Rule - Harmonization of Standards for Fire Protection, Detection, and Extinguishing Equipment. On January 13, 2014, the USCG published a NPRM to amend its regulations for certain design and approval standards for fire protection, detection, and extinguishing equipment on inspected and uninspected vessels, outer continental shelf facilities, deepwater ports, and mobile offshore drilling units. Comments were due by April 14, 2014. API submitted comments.
- NPRM on Training of Personnel and Manning on MOUs and Offshore Supply Vessels Engaged in US OCS Activities. On April 14, 2014, USCG published an ANPRM, API filed comments on September 7, 2014.
- Final Interim Rule regarding Offshore Supply Vessels of at Least 6,000 GT ITC

### **BSEE ACTIVITIES**

#### **BSEE Technical Review of Bolting Failure**

- On August 11, 2014, BSEE released a technical review 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. BSEE will continue to monitor information related to the performance of connectors and bolts, and will update this technical review as new information becomes available. API reviewed the report and sent a letter to BSEE on December 1, 2014. A technical session on this topic "QC-FIT Evaluation of Connector and Bolt Failures Summary of Findings – BSEE 2014-01 Report" was held at the API E&P Winter Standards Conference on Tuesday, January 27, 9:00 AM – 12:00 PM. API has formed a multi-segment workgroup to determine next steps.

#### **BSEE Technical Review of Seal Assembly and Cement Failures**

- On January 26, 2015 BSEE released a technical review following an underground loss of well control that resulted in gas flow into a shallow sand reservoir. The technical review, entitled Evaluation of Seal Assembly & Cement Failures, was completed by the bureau's Quality Control-

Failure Incident Team (QC-FIT) and submitted to BSEE Director Brian Salerno. A draft letter to BSEE from API is under review.

### **2015 BSEE Domestic and International Standards Workshop**

- The workshop will be held on May 8, 2015 at the University of Houston Hilton. The 2015 Workshop will focus on the following 4 topics. Each session will review the current status of domestic and international regulations, concerns and needs for standards, progress of current standards development, and industry updates.
  - High Pressure High Temperature
  - Cementing
  - Quality Management and Equipment Reliability
  - Emergency Disconnects: Dynamic Positioning and the BOP response

### **Offshore Well Control Workgroups**

- API with IADC, OOC, NOIA, IPAA, and US O&G have formed 7 workgroups (Drilling Margins, API Standards, RTM, Casing/Cementing, BOPE, Containment, Inspections/Mechanical Integrity) to coordinate and prepare for the BSEE proposed rule on Well Control. A meeting with OMB on the proposed rule was held January 21. Publication of the Proposed Rule is expected this week.

### **BOEM/BSEE Proposed joint rulemaking on Arctic specific operations**

- On February 20, 2015, The Bureau of Safety and Environmental Enforcement (BSEE) and the Bureau of Ocean Energy Management (BOEM) released proposed regulations to ensure that future exploratory drilling activities on the U.S. Arctic Outer Continental Shelf (OCS) are done safely and responsibly, subject to strong and proven operational standards. Comments are due April 27, 2015, an extension to the comment period has been requested.

### **BSEE Pending Rulemaking**

- BSEE Proposed Rule on BOPs/Well Control
- BSEE Final Rule on Production Safety Systems - Subpart H
- BSEE Proposed Rule on Helideck and Aviation Fuel Safety for Fixed Offshore Facilities

### **OSHA - Inclusion of Upstream Oil and Gas Hazards to the High-Emphasis Hazards in the Severe Violator Enforcement Program (SVEP)**

- On February 11, 2015 OSHA's Directorate of Enforcement Programs issued a memorandum to Regional Administrators and State Plan Designees to authorize the addition of upstream oil and gas hazards to the list of High-Emphasis Hazards in the Severe Violator Enforcement Program (SVEP). The memo can be found here:

[https://www.osha.gov/dep/enforcement/memo\\_SVEP\\_oilandgas\\_022015.html](https://www.osha.gov/dep/enforcement/memo_SVEP_oilandgas_022015.html)

The full SVEP Directive can be found here:

[https://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_table=DIRECTIVES&p\\_id=4503](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=DIRECTIVES&p_id=4503)

### **FAA Proposed Rulemaking on Unmanned Aircraft Systems**

- On Monday, February 23, 2015, the Federal Aviation Administration (FAA) published proposed revisions to its regulations to adopt specific rules to allow the operation of small unmanned aircraft systems in the National Airspace System. These changes would address the operation of unmanned aircraft systems, certification of their operators, registration, and display of registration markings. The proposed rule would also find that airworthiness certification is not required for small unmanned aircraft system operations that would be subject to this proposed rule. Lastly, the proposed rule would prohibit model aircraft from endangering the safety of the National Airspace System. Comments are due by April 24, 2015.

### **OTHER ACTIVITIES**

**TRB Committee on the Application of Real-Time Monitoring of Offshore Oil and Gas Operations Workshop**

- The Transportation Research Board of the National Academies' [Committee on the Application of Real-Time Monitoring of Offshore Oil and Gas Operations](#) is conducting a study to advise the Bureau of Safety and Environmental Enforcement (BSEE), U.S. Department of the Interior, on the use of real-time monitoring systems (RTM) by industry and government to reduce the safety and environmental risks of offshore oil and gas operations. The Committee is hosting a workshop in Houston April 20-21 at the Hyatt North Houston, link to: [Registration and Agenda](#)

**Ocean Energy Safety Institute (OESI)**

- The Ocean Energy Safety Institute was announced in November of 2013. Very little information regarding the structure, governance, role, goals, or objectives of the OESI has been released to date. An Industry workgroup (including API, COS, NOIA, IADC, OOC, IPAA) has been formed to give industry feedback to OESI. The Industry workgroup met with OESI on several occasions and agreement was reached to form a Steering Committee between Industry and OESI to continue discussions and development on more detailed governance models, operating plans, delivery demonstrations, research proposals, etc. A joint letter was sent in February and we await a response. In the meantime, OESI solicited members for an Advisory Committee. The Advisory Committee will be comprised of the Industry itself, Governmental Organizations, Academia, and Non-Governmental Organizations. Participation on the Advisory Committee is by invitation, voluntary and has no cost obligation (for a period of time to be decided later). The initial expectation is for the Advisory Committee to meet approximately three times a year. The first conference call was Friday, March 6 and the first face to face meeting was March 10. Draft 'Constitution and By-Laws' were distributed to the Advisory Board for comments by April 27, 2015.

**Bureau of Transportation Statistics (BTS) Confidential Near Miss Reporting Program**

- In August 2013 BSEE announced a cooperative agreement with BTS to form a Confidential Near Miss Reporting System. API and COS have been meeting with BSEE and BTS since early 2014 to discuss this program. BTS published a FRN soliciting comments on an Information Collection Request they filed with OMB. API filed comments. Beta Testing occurred on October 8 with BTS on their ICR form prior to publication in the FR. Industry provided additional feedback to BTS in December. Publication of the OMB 30 day notice occurred on February 3, 2015, comments were due March 5, 2015. The program is expected to go live in May.

**Main Presentation:**

Condition Monitoring Solution for the Drilling Industry Applications was presented by Mark Dunn (SKF)

Mr. Dunn covered the following topics:

1. What is the role of Condition Based Maintenance\*
2. Condition Monitoring Technology Overview
3. Examples of successful applications within drilling industry
4. Issues impacting broad scale adoption in drilling industry\*
5. New developments that show potential for break through\*
6. Summary and possible path forward

Please contact Mr. Dunn ([mark.dunn@skf.com](mailto:mark.dunn@skf.com)) if you have any questions regarding his presentation or merely wish to obtain a copy of his presentation.

**AFTERNOON SESSION\*\*\*\*\***

## Caterpillar

Brad Devorak (CAT) provided an update for all the issues that CAT is working on for our industry and what his group is anticipating for the upcoming year.

Please contact Brad via email address if want a copy of his presentation, have any questions or want to get clarification on any issues regarding your CAT equipment. [devorak\_brad\_c@cat.com]

## National Oilwell Varco

Shawn Firenza (NOV) reviewed the current status of some issues regarding that NOV is working on for our industry. Please contact him via email if you have any questions or want to request a copy of his presentation. [Shawn.Firenza@nov.com]

Mr. Firenza has provided the committee a contact list for HP pumps with these minutes. Attached is the Offshore PLM contact list. Please note that general service and support requests should be directed through the usual channels and the 24/7 Technical Support line at +1-281-569-3050, [houston servicedept@nov.com](mailto:houston servicedept@nov.com).

### Future Topics:

It was requested by our members that we check out new approaches from other industry groups - Aerospace, Military, and Airlines –to determine what we can learn from these industries.

## **NOV - IADC partnership**

Some members requested that we have NOV talk more about Drawworks during their next report out.

With regard to “Challenges with Riser gantry cranes” – some committee members requested that an SME from NOV be provided to discuss further these challenges.

### Info Sharing:

The committee talked about larger size wire ropes usage - in particular maintenance strategies for new inspection and testing techniques ( i.e., tree handling cranes)

Vice Chair elected -Mike Anatara (Parker Drilling)

Adjourned: 1400hrs

### ACTION ITEMS –

Lunch sponsors for 2015 committee meetings held at IADC will be:

14 January 2015	-	Seadrill Americas
08 April	-	Diamond Offshore
08 July	-	Transocean
14 October	-	Precision Drilling

### Attendance –

<b>Name</b>		<b>Company Name</b>
Robert	Conachey	<b>ABS</b>
John	Hagan	<b>ABS</b>
Michael	Yoakum	<b>AMERICAN BLOCK</b>
Tim	Mournian	<b>ARCHER</b>
Brad	Devorak	<b>CATERPILLAR</b>
Phil	Heisch	<b>CATERPILLAR</b>
Colin	Stevenson	<b>CONOCOPHILLIPS</b>
Frank	Breland	<b>DIAMOND OFFSHORE</b>
Stephen	Holtz	<b>HALLIBURTON</b>
John	Pertgen	<b>IADC</b>
Troy	Schwartz	<b>LIFE CYCLE ENGINEERING</b>
Covey	Hall	<b>LLOYD'S REGISTER</b>
Trey	Hebert	<b>LOUISIANA CAT</b>
Donna	Odegard	<b>MRG/EMERSON</b>
Gordon	Lentz	<b>MRI</b>
Shawn	Firenza	<b>NATIONAL OILWELL VARCO</b>
Ian	McWilliam	<b>NATIONAL OILWELL VARCO</b>
Tim	Hayes	<b>NOBLE DRILLING</b>
Robert	Walls	<b>OES OILFIELD SERVICES</b>
Josh	Westling	<b>PACIFIC DRILLING</b>
Richard	Sporn	<b>PARAGON OFFSHORE</b>
Mike	Anatra	<b>PARKER DRILLING</b>
Travis	Middleton	<b>PARKER DRILLING</b>
Robert	Urbanowski	<b>PRECISION DRILLING</b>
Jamie	Vargas	<b>PRECISION DRILLING</b>
Rodney	Barretto	<b>RIGSERV</b>
Clarence	Mann	<b>SCHAEFFER'S</b>
Kevin	Warren	<b>SEADRILL</b>
Tom	Light	<b>SKF</b>
Parveen	Chandila	<b>SKF</b>
Mathew	Bernier	<b>SKF</b>
Ivan	Berdnik	<b>TESCO</b>



Shawn	Ullrich	<b>THE TIMKEN CORPORATION</b>
Mike	Pawlowski	<b>TIMKEN</b>
Jeff	Marshall	<b>TRANSOCEAN</b>