

## **MAINTENANCE COMMITTEE MEETING MINUTES**

**12 July 2017**

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

### Call to Order / Agenda:

The committee was called to order and the attendees were welcomed by the IADC Maintenance Committee Chairman, Frank Breland (Diamond). The Chairman provided an overview of the proposed agenda for this meeting. A building security and safety briefing was given by Mr. John Pertgen (IADC).

### Introductions:

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

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

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

### Regulatory Review / Update:

The API regulatory update was made available by Mr. Pertgen, who provided some of the highlights from the IADC Federal Summary.

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/advocacy/#reports>)

A list of most of the regulatory highlighted areas that were made available at this meeting is included at the end of the minutes.

## **Class Society Issues**

### ABS

**Dropped Objects Prevention Guide** by Chris Corcoran (ABS). His presentation covered the following points:

- Mission of ABS
- ABS publications
- Research Findings-Industry in General
- Findings on Dropped Objects

- The Challenge
- ABS Solutions- Asset Owner
- ABS Solutions- Equipment Manufacturer
- ABS Solutions- Surveyors
- External Specialists
- Potential Benefits (Owners, Manufacturers)
- ABS Guide for Dropped Objects
- ABS Type Approval Advantages
- Product Design Assessment
- Type Approval

Please contact Chris Corcoran (ABS) [ccorcoran@eagle.org] if you have any questions regarding his presentation or wish to obtain a copy of it from him.

### DNVGL

**Additive Manufacturing / 3D Printing** by Kevin Mandeville (DNVGL). His presentation covered the following points:

- What is Additive Manufacturing
- How can it be beneficial (e.g.; spare parts)
- What are the challenges (standardization, process control, quality control, technical qualification)
- How to address those challenges

Please contact Kevin Mandeville (DNVGL) [Kevin.Mandeville@dnvgl.com] if you have any questions regarding his presentation or wish to obtain a copy of it from him.

### MAIN PRESENTATION

**Energy Grid Tie** by David Blood (Parker Hannifin). His presentation covered the following points:

- Parker history
- Energy Grid Division
- Energy Storage Applications
- Energy Storage System Solutions
- Site Power Management
- How does it work?
- What are the benefits of adding Energy Storage?
- How is it accomplished?
- Taking liquid cooling to the next level
- Proven Value of evaporative cooling
- Micro-grid Challenges

Please contact Karl Hay [khay@parker.com] if you have any questions regarding his presentation or wish to obtain a copy of it from him.

### Lunch & Learn Presentation

**Reducing cost and enhancing integrity through strategic management of asset operation and maintenance** by Peter Adam (Add Energy)

Please contact Denis Adams [denis.adams@addenergy.no] if you have any questions regarding this presentation or wish to obtain a copy of it.

**AFTERNOON SESSION\*\*\*\*\*[Meeting was closed to drilling contractors only at this point]**

## Caterpillar

Robert Froebel (CAT) provided an update for all the issues that CAT is working on for our industry.

Please contact the CAT representative via his email address if you want a copy of his presentation, have any questions or want to get clarification on any issues regarding your CATERPILLAR equipment. [Froebel\_Robert@cat.com]

## National Oilwell Varco

Ian McWilliam (NOV) provided an update for all the issues that NOV is working on for our industry.

Please contact the NOV representative via email address if you want a copy of his presentation, have any questions or want to get clarification on any issues regarding your equipment. [Ian.McWilliam@nov.com]

## Fingerboard Latch Workgroup

The workgroup committee chairman provided an update on the current status of the workgroup's actions.

[NOTE: The mission of the Fingerboard Reliability Task Group is to improve the safety and efficiency of drill floor operations by promoting improvements in the reliability and performance of Fingerboards and related products provided by Fingerboard original equipment manufacturers.]

**ACTION ITEM:** 1. NOV to cover topic of dropped objects at next meeting.

## Open Forum

The attending members had a general discussion about equipment performance on their rigs.

Topic recommendations for future presentations: critical load path, "hammerless" harmer union, oil dehydrators, and active vapor inhibitor

Adjourned: 1505hrs

**Lunch sponsors for 2017 committee meetings held at IADC will be:**

11 January - NOV  
12 April - CAT  
12 July - Add Energy  
11 October - Diamond

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## REGULATORY UPDATE

### API ACTIVITIES

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

- The addendum to the 4th edition was published on July 8, 2016. The last meeting has held June 26, 2017. The task group has reviewed all design requirements in API 53 for retention or movement into the relevant API Specification Documents; completed Section 6 & 7 comparison for consistency; reviewed all informative statements throughout the document for retention; and is beginning revision work for the 5th Edition including revising the proposed Assessment Tool and surface BOP requirements based on well class versus BOP class. The testing work

group continues clarifying testing requirements. A land subgroup is developing land-only requirements in S53 for revision for the 5th edition. The next meeting will be August 2, 2017. Ricky Cummings, Chevron is the chair [RCummings@chevron.com](mailto: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 is working on modifications to API RP 4G, “Operation, Inspection, Maintenance, and Repair of Drilling and Well Servicing Structures”. This group is working on changes mainly to CAT III and IV inspections. Plans to add CAT IV inspections for all offshore drilling structures have been halted due to a lack of consensus that this change needs to be made. The task group is looking for more offshore contractors to participate in their meetings, the chair is Anthony Mannering, TM Engineering, PLLC, please contact Anthony if you are interested in participating [anthony.mannering@tmengineeringpllc.com](mailto:anthony.mannering@tmengineeringpllc.com) or (713) 202-3288. The next meeting will be scheduled after the current revisions to CAT III and CAT IV inspections have been circulated to the task group for comment. The comment period is expected to be 40 days.

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

- Sandi Fury, Chevron, [SFury@chevron.com](mailto:SFury@chevron.com) and Charlie Duhon, Arena [CDuhon@arenaoffshore.com](mailto:CDuhon@arenaoffshore.com) are the co-chairs of the RP 75 revision workgroup. The last meeting was held June 13, 2017, the next meeting is scheduled for August 8, 2017.

#### **API Standard 16AR Standard for Repair and Remanufacture of Drill-through Equipment**

- API Standard 16AR *Standard for Repair and Remanufacture of Drill-through Equipment* First Edition was published in April 2017.
- The API Monogram-APIQR Program is moving ahead with an APIQR certification and audit program for API Spec 16AR. The program will 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 Spec 16AR.

#### **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)**

- There are 93 service facilities with active Q2 certificates in 20 countries (35% US based) with another 41 applications in-process in 16 countries (18% US based).
- APIQR continues to work with API SC18, TG5 members and drilling contractors to define the APIQR certification and auditing program requirements for Q2 certification of drilling contractor quality management systems/operations. API Staff are working with SC18 members to plan beta testing of the API Spec Q2 requirements and audit process with drilling contractors.
- 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. The initial ballot for API 18TR2, Guidance to API

Spec Q2 (the user's guide on the intent of the API Spec Q2) closed February 21, 2017 and the comment resolution process has been initiated. Publication is expected by end of 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](mailto: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](mailto: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**

- API Standard 18LCM *Product Life Cycle Management System Requirements for the Petroleum and Natural Gas Industries* First Edition was published in April 2017.
- The API Monogram-APIQR Program is moving forward with an APIQR certification and audit program for API 18LCM. The program will certify, through an audit process, organizations that perform equipment life cycle management activities and have implemented quality systems and processes that meet the requirements of API 18LCM. In order to fully conform with API 18LCM, organizations providing life cycle management services must implement quality systems that meet the requirements of API Spec Q2.

### **USCG ACTIVITIES**

#### **Evaluation of Existing Coast Guard Regulations, Guidance Documents, Interpretative Documents, and Collections of Information**

- On June 8, 2017, the USCG published a notice in the Federal Register in which they seek comments on Coast Guard regulations, guidance documents, and interpretative documents that we believe should be repealed, replaced, or modified. Also, they welcome comments on their approved collections of information, regardless of whether the collection is associated with a regulation. They are taking this action in response Executive Orders 13771, Reducing Regulation and Controlling Regulatory Costs; 13777, Enforcing the Regulatory Reform Agenda; and 13783, Promoting Energy Independence and Economic Growth. They plan to use the comments to assist them in their work with the Department of Homeland Security's Regulatory Reform Task Force. Comments and related material were originally due on or before July 10, 2017, but that date has been extended to September 11, 2017. API will be filing comments.

#### **USCG Industry Day**

- The last Industry Day was held May 16, 2017 in New Orleans in conjunction with the NOSAC Meeting. The next Industry Day will likely be held in Houston in December in conjunction with the next NOSAC meeting.

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

- The last NOSAC meeting was held May 17, 2017 in New Orleans. The Well Intervention Subcommittee presented their final report. A new task statement and subcommittee on Recommendations on Safety Management Systems (SMS) for Vessels engaging in Well Intervention Activities has been issued/established.

### **USCG Gulf of Mexico Area Maritime Security Committee Cyber Themed Table Top Exercise**

- The Gulf of Mexico Area Maritime Security Committee has scheduled a Cyber Themed Table Top Exercise for August 8, 2017 in New Orleans. Please contact [Christy.coffey@mpsisao.org](mailto:Christy.coffey@mpsisao.org) for more information. There is no cost associated with this exercise to participants.

### **USCG Pending Rules**

- Interim Final Rule Revision to TWIC Requirements for Mariners (03/17)
- Final Rule Marine Casualty Reporting on the OCS (12/06)

### **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 send a letter May 17, 2017 to the Trump Administration and continue to work with them to resolve issues associated with the rule and its implementation.

#### **Early Kick Detection possible BAST Candidate**

- 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> Comments are being accepted until July 28, 2017 (but this date is likely to be extended).

#### **DOI Public Notice on Regulatory Reform Initiatives**

- 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.

#### **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 final report will be delivered sometime early 2018 to the public via the NAP website. The website for the Committee:

[http://sites.nationalacademies.org/DEPS/NMMB/DEPS\\_174523](http://sites.nationalacademies.org/DEPS/NMMB/DEPS_174523)

#### **NASA 5 Year Agreement with BSEE to Examine Risk Offshore**

- On February 6, 2017, BSEE posted the Draft PRA Guide for the Oil and Gas Industry that NASA prepared. NASA is also working on an ~ 40 page PRA White Paper. They expect to be completed within about a month. When it is finished, they will make it available. More information is available on the BSEE website <https://www.bsee.gov/what-we-do/offshore-regulatory-programs/probabilistic-risk-assessment-analysis>

#### **BSEE Pending Rulemaking**

- Final Incorporation of Updates of Crane Standards (12/16)
- 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**

**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**

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.

**National Academies Unconventional Hydrocarbon Roundtable OFFSHORE Event**

- The Unconventional Hydrocarbon Roundtable of the National Academies is planning an October event entitled Offshore Well Completion and Stimulation Using Hydraulic Fracturing and Other Technologies: Responsible Development and Risk Management, more information can be found here <http://nas-sites.org/uhrroundtable/meetings/> including more information on the Roundtable and previous events.

Attendance:

Name		Company Name
Chris	Corcoran	ABS
Kevin	Mandeville	DNV GL
John	Pertgen	IADC



Robert	Walls	<b>OES OILFIELD SERVICES (USA), INC</b>
Mike	Anatra	<b>PARKER DRILLING</b>
Karl	Hay	<b>PARKER HANNIFIN CORPORATION</b>
Victor	Rasanow	<b>PARKER HANNIFIN CORPORATION</b>
Philippe	Herve	<b>SPARKCOGNITION</b>
Richard	Sporn	<b>PARAGON OFFSHORE</b>
Dave	Forsyth	<b>ABS</b>
Dave	Blood	<b>PARKER HANNIFIN CORPORATION</b>
David	McKay	<b>DNV GL</b>
Roger	Pool	<b>ADD ENERGY</b>
Peter	Adam	<b>ADD ENERGY</b>
Kevin	Warren	<b>SEADRILL</b>
Frank	Breland	<b>DIAMOND OFFSHORE</b>
Robert	Conachey	<b>ABS</b>
Andy	Covin	<b>NOBLE DRILLING</b>
Jamie	Vargas	<b>PRECISION DRILLING</b>
Ryan	Spillane	<b>OES OILFIELD SERVICES (USA), INC</b>
Jeff	Marshall	<b>TRANSOCEAN</b>
Ian	McWilliams	<b>NATIONAL OILWELL VARCO</b>
Robert	Froebel	<b>CATERPILLAR</b>