

MAINTENANCE COMMITTEE MEETING MINUTES

11 April 2018

Location: IADC - Crown Center 1 & 2 Conference Rooms

Call to Order:

The committee was called to order by Robert Urbanowski, acting vice-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 Committee Chairman, Mr. Frank Breland (Diamond Offshore), joined the meeting and relieved Mr. Urbanowski in running the meeting)

Regulatory Review / Update:

-The API regulatory update was presented by John Pertgen in collaboration with Holly Hopkins' (API) Regulatory 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 the regulatory areas that were made available at this meeting is included at the end of these minutes.

Class Society Topics

ABS: *New In-service stability program* was presented by Mr. Chris Corcoran (ABS)

The main topics covered were:

- Motivation
- Available technology
- Regulatory driver
- Benefits
- Summary of the process

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. [ccorcoran@eagle.org]

DNV GL- Hybrid and Batteries for Maritime Offshore presented by Anthony Teo (DNV GL)

The main topics covered were:

- Market Status
- Battery costs
- DNV GL R&D Battery Tech
- DNV GL rules
- Joint Industry Product
 - Emission reduction
 - CO2 Savings
 - GHG Emission Savings
 - Efficiency Improvements
 - Fuel Savings
 - Payback period

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. [Tse.Yen.Teo@dnvgl.com]

MAIN PRESENTATION

OCS GROUP- IECEX Implementation and Understanding presented by Wayne Webb (OCS Group- Technical Authority) and David Malhohn (UL- Engineering Leader)

The main topics covered were:

- Project Management and Commissioning
- Regulators for safety and environmental protection
- Fixed facility responsibilities
- MODU responsibilities
- Floating facility responsibilities
- USCG and CFR Ruling
- How is the industry affected?
- Equipment acceptance overview
- NEC versus IECEX
- Confirming Competence
- IECEX Personnel Competency
- Competency Units & Certification
- IECEX Notable Characteristics

Please contact the OCS representative (Rose) via email address if you want a copy of their presentation, have any questions or want to get clarification on any issues that they addressed. [Rose.Rosenkampff@ocsgroup.com]

FINGERBOARD – LATCH Workgoup (Final report attached to minutes)

Lunch

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 Valves (closed)
- C175 HP Fuel pump
- 3500 ASO Valve
- Oil Change intervals
- CAT Connect – product Link
- Product Link Web

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 provided an update on the issues that NOV is working on for our industry. He discussed components regarding the following:

- New Product Development
 - Multispeed Block
 - Powerblade KER's
 - CMC-S
 - Auto Lifting Yoke
 - HR Load Sensing Guide Head
 - TDS -11SAE
 - DSGD- 425 Drawworks
- RIG SENTRY
 - Reducing Total Cost of Ownership
 - Machine Analysis Process
 - Data Library
 - Recommend Maintenance Template

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]

Topics for next meetings:

Taxonomy and failure reporting (Chairman to contact Tony Ciliberti at Reliability Dynamics)

ACTION ITEMS:

1. NOV: How do we turn around on determining the root cause? (Discuss process.)
(What is actual root cause and not what you are going to do about it).
NOTE: This item is retained for later in 2018

Adjourned: 1437hrs

2018 Lunch Sponsors

10 JAN2018	NOV (Shawn Firenza)	shawn.firenza@nov.com
11 APR 2018	OCS Group (Rosemary R)	rose.rosenkampff@ocsgroup.com
11 JUL2018	Precision (Jamie Vargas)	jvargas@precisiondrilling.com
10 OCT2018	PPC (Lucas L)	llove@performancepulsation.com

API ACTIVITIES

API S53 Blowout Prevention Equipment Systems for Drilling Wells

- The 4th edition was published November 2012 with its only Addendum published July 8, 2016. The last meeting was held April 5, 2018. The task group has completed development of the 5th edition, completed its first ballot with consensus and has almost completed comment resolution (90%). The 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. Similar to requiring two shear rams for offshore BOPs in the 4th edition with the capability to MOC out of the requirement, industry recognized a gap in well control operations and has added a requirement for land BOPs to include a shear ram for well MASP over 3000 psi, with also the capability to MOC out with proper justification. This requirement will be discussed in depth over the next couple of weeks for inclusion into the next ballot. The task group anticipates a second ballot due to result of comment resolution. The next meeting will be held on April 18, 2018 in Houston. 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 is working on a new revision to API RP 4G, *Operation, Inspection, Maintenance, and Repair of Drilling and Well Servicing Structures*. The revisions primarily affect CAT III and IV inspections. The task group will review the final draft of API 4G at the [2018 Exploration and Production Standards Conference on Oilfield Equipment and Materials](#) before being sent to ballot. 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

- 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.

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

- 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 over 115 service facilities with active Q2 certificates in 23 countries (just over 30% US based) with another 30 applications in-process in 14 countries (20% US based).
- API SC18, TG5 continues to investigate APIQR certification and auditing program requirements for Q2 certification of drilling contractor quality management systems/operations. API Staff continue to communicate 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. 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

- 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 or API Spec Q2. For example, the registration program would be designed to cover heat treat providers working to API Spec 20H, machine shops working to API Spec 20M, and some of the other specifications being developed under SC 20.

USCG ACTIVITIES

USCG Industry Day

- The last Industry Day was held December 13 at USCG Sector Headquarters Houston Galveston, 13411 Hillard Street, Houston, Texas 77034 in conjunction with the NOSAC meeting. The next Industry Day is scheduled for **May 10, 2018** at USCG Sector Headquarters Houston Galveston, 13411 Hillard Street, Houston, Texas 77034.

National Offshore Safety Advisory Committee meeting (NOSAC)

- The last NOSAC meeting was held March 28, 2018 in New Orleans. At the meeting the 4 Subcommittee's formed to provide *Input to Support Regulatory Reform of Coast Guard Regulations—Executive Orders 13771 and 13783* (Drilling; Production; OSV; and Diving) provided final reports and we re-tasked to provide additional information and prioritization at the next NOSAC Meeting in September in Houston. Additionally, a new task statement and Subcommittee were 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. The new Subcommittee is co-chaired by Fallon Dominique and Richard Wells. The next NOSAC Meeting is scheduled for September 11-12, 2018 in Houston.
- Additionally, on March 23, 2018, the USCG published a FRN announcing vacancies on NOSAC and requesting applications. Applicants selected for service on NOSAC via this solicitation will begin their respective terms January 31, 2019. Completed applications are due on or before May 22, 2018.

USCG Final Rule - Marine Casualty Reporting Property Damage Thresholds

- On March 19, 2018, the USCG published a FRN, announcing they were amending the monetary property damage threshold amounts for reporting a

marine casualty and for reporting a type of marine casualty called a “serious marine incident.” According to the notice, the original regulations that set these dollar threshold amounts were written in the 1980s and have not been updated since that time. Because the monetary thresholds for reporting have not kept pace with inflation, vessel owners and operators have been required to report relatively minor casualties. Additionally, the original regulations require mandatory drug and alcohol testing following a serious marine incident. As a result, vessel owners and operators are conducting testing for casualties that are less significant than those intended to be captured by the original regulations. Updating the original regulations will reduce the burden on vessel owners and operators, and will also reduce the amount of Coast Guard resources expended to investigate these incidents. The final rule is effective April 18, 2018.

USCG Pending Rules (Fall Regulatory Agenda, no changes since January)

- Proposed Rule Revision to TWIC Requirements for Mariners (04/18 06/18)
- Final Rule Marine Casualty Reporting on the OCS (08/17 02/18)
- 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 will be published in the Federal Register after OIRA review.

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. We await comment resolution and publication of the final rule by BSEE.

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> API filed comments on both BAST candidates.

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. 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 and awaits the final publication of the report.

BSEE Pending Rulemaking (Fall Regulatory Agenda, no changes since January)

- ~~Supplemental Proposed Rule Cost Recovery Adjustment (08/17)~~
- Final Rule Civil Penalties; 2018 Inflation Adjustments for Civil Penalties (01/18)
- 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 (10/18)
- Proposed Rule Revisions to the Requirements for Exploratory Drilling on the Arctic Outer Continental Shelf (10/18)

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.

Attendance:

Name		Company Name
Chris	Corcoran	ABS
Aaron	Mueller	AI SAFETY MANAGEMENT GROUP
Robert	Froebel	CATERPILLAR OIL & GAS
Donnie	Bowen	CONTROL UNION INDUSTRIAL INSPECTIONS USA LLC
Ramon	Marin	DEVA PRESERVATION SERVICES, INC
Frank	Breland	DIAOMOND OFFSHORE
David	McKay	DNV GL
Ryan	Berger	ENSCO PLC
John	Pertgen	IADC
William	Waldroop	INTERACTIVE TRAINING SOLUTIONS
Ryan	Hendrix	KEPPEL LETOURNEAU
Jakub	Bednarz	KLUBER LUBRICATION
Lonnie	Latiolais	LOUISIANA MACHINERY COMPANY
Ian	McWilliam	NATIONAL OILWELL VARCO
Phil	Biggerstaff	NOBLE DRILLING
HyoJoo	Kim	NOBLE DRILLING
Rose	Rosenkampff	OCS GROUP
Robert	Walls	OES OILFIELD SERVICES (USA), INC

David	Malohn	OFFSHORE COMMISSIONING SOLUTIONS (OCS GROUP)
Wayne	Webb	OFFSHORE COMMISSIONING SOLUTIONS (OCS GROUP)
Karl	Hay	PARKER HANNIFIN CORPORATION
Robert	Urbanowski	PRECISION DRILLING COMPANY
Robert	McGrath	SEATRAX INC
Joshua	Robnett	SUBSEA SOLUTIONS
Shawn	Ullrich	THE TIMKEN CORPORATION
Jeff	Marshall	TRANSOCEAN
Matthew	Tingsanchali	TRANSOCEAN
Jeff	Thomson	VANTAGE DRILLING
Andy	VanDevelde	VANTAGE DRILLING
Michael	Yoakum	YOAKUM TECHNICAL CONSULTING LLC