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 covered by Holly Hopkins (API), who provided the highlights from the API Regulatory Summary handout, and Mr. Pertgen (IADC) 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 the highlighted regulatory areas that were available at this meeting is included at the end of the minutes.

-API RP Q2 status was reviewed by Stacey Hagen (ExxonMobil). Please contact Mr. Hagen if you have any questions regarding his presentation or if you wish to comment on the API document [stacey.w.hagen@exxonmobil.com].
API is looking for participants (Drilling Contractors and IADC members) for API Q2 beta-site assessments of Drilling Contractors (both offshore and onshore). API is looking for an IADC staff member to participate. API is also looking for contractors’ employees to participate in multiple drilling contractor beta-site assessments. Ideally, contractor participants would be either a Contractor’s Quality representative or Equipment representative.

Class Society Issues

ABS

*In-Service semi-sub stability measures* by Dave Forsyth (ABS). His presentation covered the following points:

- Guidance Notes
- Customer benefits
- Flag State acceptance
- Program overview/requirements

ABS expects to be publishing guidelines on this process shortly.

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

DNVGL

The newly revised In-service document [RU-OU-0300] was highlighted by David McKay (DNVGL). This new document included separating in-service requirements from the main rules and introducing new possibilities for data-based classification. This revised document is out for hearing and is expected to be published in 2018.

DNV GL presented the newly developed Reactivation Verification Protocol, which assesses a drilling unit’s readiness to return to work within a given period, based on an extensive and detailed review of the condition of the unit and associated documentation and records.

Please contact David McKay [David.McKay@dnvgl.com] if you have any questions regarding his presentation or to comment on the document.

MAIN PRESENTATION

*Evaluating Safety Critical Equipment after stacking* by Mark A. Koski (Ingersoll Rand). His presentation covered the following points:

- Inspection of Cold Stacked Equipment
- ASME Guidelines
- Qualified Person
- Ten critical tips
- Examples of problem areas
- Critical steps to check hoist
- Long Term service plan

Please contact Mr. Koski [Mark.Koski@irco.com] if you have any questions regarding his presentation or wish to obtain a copy of it from him.

Lunch & Learn
Safeunion by Karma Slusarchuk (Karma Consulting LLC). This presentation explained the device and provided a practical demonstration of its functionality.

Please contact Ms. Karma Slusarchuk [karmaconsultingusa@gmail.com] if you have any questions regarding her presentation or wish to obtain more information from her.

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. He discussed components dealing with the following:

- Valve Recession
- HP fuel pump
- ASO valves

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

- DROPS prevention
- Tracker Ticket flow
- Dropped Object guidelines
- Secondary retention
- Root Cause Analysis
- Design for DROPS
- Metrics and KPI

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]

**ACTION ITEM:**
- 1) How do we improve the turn around on determining on the root cause.(Discuss process.) (What is actual root cause and not what you are going to do about it)
- 2) Discuss warranty process

FINGERBOARD – LATCH SC    a status of this subcommittee’s activities was given by Ian McWilliam for Andy Coven (Noble)

Testing was concluded, and the new design of the fingerboard latches in the US and NORWAY were completed. None failed.
The Bulletin for the US was released. NOV superseded the old latch with a new design (complete latch assembly). NOV will continue to support the current design for parts.

For the NORWAY device the design was finished and they expect to release it within the next two weeks (cylinder portion only replaced).

2018 Maintenance Committee Chairman Nominations

Mr. Frank Breland (Diamond) was nominated and elected Chairman for 2018 and Michael Anatra was appointed as Vice-Chairman for 2018.

Topics for next meetings:

Infrared technologies; hazardous area electrical update.

ACTION ITEM:
1) FOR NOV: How do we improve the turn around on determining the root cause. (Discuss process.) (What is the actual root cause and not what you are going to do about it)

2) FOR NOV: Discuss warranty process

Adjourned: 1436hrs

2018 Lunch Sponsors

10 JAN 2018 OCS Group (Rosemary R) rose.rosenkampff@ocsgroup.com
11 APR 2018 NOV (Shawn Firenza) Shawn.Firenza@nov.com
11 JUL 2018 Precision (Jamie Vargas) jvargas@precisiondrilling.com
10 OCT 2018 PPC (Lucas L) llove@performancepulsation.com

****************************************************************************************************************

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 October 5, 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 in lieu of more “normative” language; and is beginning revision work for the 5th Edition including revising the surface BOP requirements based on well class versus BOP class. The testing work group continues clarifying testing requirements and has updated testing tables in the surface and subsea sections. A land subgroup is developing land-only requirements in API 53 for revision for the 5th edition. The task group is on track to release a comment draft by end of year. The next meeting will be October 26, 2017. 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 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 or (713) 202-3288. The current revisions to CAT III and CAT IV inspections have been circulated to the task group for comment. The comment period is now finished and a meeting will be held to resolve these comments in the near future.

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 October 10, 2017.

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

- The API Monogram-APIQR Program is moving ahead with an APIQR certification and audit program for API S16AR. 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 S16AR.

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

- 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 Program is moving forward with an APIQR certification and audit program for API 18LCM. The program is scheduled to launch in January 2018. 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. API filed comments on September 11, 2017.

Draft NVIC Guidelines for Addressing Cyber Risks at Maritime Transportation Security Act (MTSA) Regulated Facilities
On July 12, 2017, the USCG published a FRN announcing the availability of draft Navigation and Inspection Circular (NVIC) 05–17; Guidelines for Addressing Cyber Risks at Maritime Transportation Security Act (MTSA) Regulated Facilities, and requested public comments on the draft originally by September 11, 2017. The comment period was extended and closes today October 11, 2017. API filed comments on September 25, 2017.

**Draft Marine Safety Information Bulletin for the Gulf of Mexico OCS**

- July 27, 2017, the USCG shared a draft Marine Safety Information Bulletin (MSIB) regarding determinations under 33 CFR 141.15(c) by the Eighth District Outer Continental Shelf Officer in Charge, Marine Inspection (D8 OCS OCMI) for comment. API did not submit comments.

**Marine Safety Information Bulletin for the Gulf of Mexico OCS**

- September 5, 2017, the USCG OCS Inspections Branch re-centralized signature and review authority with the Officer in Charge, Marine Inspection (OCMI) located at the Eighth Coast Guard District in New Orleans.

**USCG Industry Day**

- The next Industry Day will be held December 13 at USCG Sector Headquarters Houston Galveston, 13411 Hillard Street, Houston, Texas 77034 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.

- Additionally a teleconference was held on August 3, 2017 during which a new task statement was issued and 4 Subcommittees formed. The new task statement *Input to Support Regulatory Reform of Coast Guard Regulations—Executive Orders 13771 and 13783*. Executive Order 13771 and the subsequent accompanying guidance from the Office of Management and Budget (M-17-21) together establish the Administration’s deregulatory agenda and regulatory budgeting process. Accordingly, agencies are required to identify regulations and guidance for possible repeal or revision. Executive Order 13783 requires agencies to review all existing regulations that potentially burden the development or use of domestically produced energy resources and appropriately suspend, revise, or rescind those that unduly burden the development of domestic energy resources beyond the degree necessary to protect the public interest or otherwise comply with the law. NOSAC has been tasked to provide input to the USCG on all existing regulations, guidance, and information collections that fall within the scope of the Committee’s charter. They
have formed 4 Subcommittee’s to provide this information: Drilling; Production; OSV; and Diving. The Subcommittees will provide status updates at the next NOSAC Meeting December 13 & 14, 2017, at USCG Sector Headquarters Houston Galveston, 13411 Hillard Street, Houston, Texas 77034.

USCG Pending Rules
- Interim Final Proposed Rule Revision to TWIC Requirements for Mariners (03/17 01/18)
- Final Rule Marine Casualty Reporting on the OCS (12/06 08/17)
- Final Rule Deepwater Ports (12/17)
- Final Rule Marine Casualty Property Damage Thresholds (12/17)

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.

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 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

BSEE Pending Rulemaking

- Supplemental Proposed Rule Cost Recovery Adjustment (08/17)
- 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 held an event entitled *Offshore Well Completion and Stimulation Using Hydraulic Fracturing and Other Technologies: Responsible Development and Risk Management* on October 2 and 3, 2017 in Washington, DC. More information can be found here [http://nas-sites.org/uhroundtable/meetings/](http://nas-sites.org/uhroundtable/meetings/) including more information on the Roundtable and previous events.

**Attendance:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Company Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dave Forsyth</td>
<td>ABS</td>
</tr>
<tr>
<td>Darren Arndt</td>
<td>ACUMEN INTERNATIONAL</td>
</tr>
<tr>
<td>Travis Eckert</td>
<td>ACUMEN INTERNATIONAL</td>
</tr>
<tr>
<td>Robert Froebel</td>
<td>CATERPILLAR OIL &amp; GAS</td>
</tr>
<tr>
<td>Antti Ekqvist</td>
<td>CATERPILLAR OIL &amp; GAS</td>
</tr>
<tr>
<td>Frank Brelan</td>
<td>DIAMOND OFFSHORE</td>
</tr>
<tr>
<td>David McKay</td>
<td>DNV GL</td>
</tr>
<tr>
<td>Stacey Hagen</td>
<td>EXXONMOBIL</td>
</tr>
<tr>
<td>Jefferson Craft</td>
<td>HELMERICH &amp; PAYNE</td>
</tr>
<tr>
<td>John Pertgen</td>
<td>IADC</td>
</tr>
<tr>
<td>Mark Koski</td>
<td>INGERSOLL RAND</td>
</tr>
<tr>
<td>Ryan Wirth</td>
<td>KLUBER LUBRICATION NORTH AMERICA L.P.</td>
</tr>
<tr>
<td>Shawn Firenza</td>
<td>NATIONAL OILWELL VARCO</td>
</tr>
<tr>
<td>lan McWilliam</td>
<td>NATIONAL OILWELL VARCO</td>
</tr>
<tr>
<td>Rose Rosenkampff</td>
<td>OCS GROUP</td>
</tr>
<tr>
<td>Robert Walls</td>
<td>OES OILFIELD SERVICES</td>
</tr>
<tr>
<td>Ryan Spillane</td>
<td>OES OILFIELD SERVICES</td>
</tr>
<tr>
<td>Richard Sporn</td>
<td>PARAGON OFFSHORE</td>
</tr>
<tr>
<td>Lucas Love</td>
<td>PERFORMANCE PULSATION CONTROL</td>
</tr>
<tr>
<td>Robert Urbanowski</td>
<td>PRECISION DRILLING COMPANY</td>
</tr>
<tr>
<td>Jamie Vargas</td>
<td>PRECISION DRILLING COMPANY</td>
</tr>
</tbody>
</table>