1. John Bednar, API SC17 Chairman, welcomed the group to the meeting at 8:00 AM with opening remarks and safety/housekeeping overview.

2. Organizational announcement, noted changes and introduction of new members:
   - Gary Hurta - Retired
   - John McManus - On-leave
   - New members to Leadership Team - See Organization Chart
     - Bruce Witwer, role of Liaison Materials
     - Man Pham, Interim Secretary for John McManus
     - Terry Cook, assumes Vice-Chairman role; retain oversight for Industry Standardization

3. Attendance and Rosters
   - Roll call of attendees/rosters

4. A roll call was completed and confirmed there was a quorum of 25 (out of 29) voting members present for this meeting.

5. Agenda review: A motion was made, seconded, and passed to approve minutes from summer 2014 meeting.

6. The updated SC17 Voting Representation Listing was updated (Attachment 1), the API Work Group Leads Contact List was presented (Attachment 2) and the Standards Status Matrix (Attachment 3) were reviewed. Corrections were noted, and will be incorporated by API staff.

7. The 2014 Summer Meeting draft minutes of June 28, 2014 in Chicago, Illinois were reviewed. A motion was made, seconded, and passed to approve the minutes.

8. Update on SC18, Subcommittee on Quality, Task Group Liaise: Moshen Shavandi (Attachment 4)
   - Two categories of organizations are introduced: Licensable & Non-licensable
- No action by SC17 is necessary for now, but licensees should take note of proposed changes.
- API Q2 March Meeting will be at BP Campus
- Definition of “manufacturers” is being modified - no apparent impact on SC17, however, SC17 Task Groups should monitor
- TG6, Welding Requirements in the API Product Specifications: Bud Weightman
  - Recommend SC17 Task Groups review for application and impact, especially monogrammed products (when it goes to ballot). Ed Baniak to send notice when it is released for comment/ballot
- TG7: Product Life Cycle Management (Feb 3, 2015 ballot date), Mike Briggs
  - SC 17 Task Groups need to review for impact
- TG8: Spec Q1 Guidance Document, Kim Wiita
- TG3: Monogram Program
  - Currently there are 4086 licensees under the API Monogram Program,

9. Subsea Industry Standardization Landscape: Terry Cook (Attachment 5)
- Provided summary of a study commissioned by the IOGP and shared with API.
- Recognition to IOGP: API is a member
- Taskforce commissioned to assess standardization within the subsea industry
- Did not include API / ISO activity
- Currently there are 60 efforts in subsea industry
- Conclusion was that it appears there is no overlap or conflict between current API SC17 standardization work and other groups in industry (e.g. no duplication of effort noted)
- API needs to continue to monitor these and identify for overlaps and collaboration activities

10. Standardization of Phase 2 of DNV Forgings to SC20 / SC17A
- DnV JIP on subsea forgings about to kick-off Phase 2 (per Jeff Jones - ExxonMobil).
- SC 20 is the appropriate committee for this work when complete
- SC 17 Material Liaison should monitor progress of the JIP and report to API CSOEM Materials/SC 20

11. International involvement: Jens-Henrik Neuenkirchen (Attachment 6)
- Increase international participation in API standardization work outside of Houston, Texas
- Reminder of the embargoed countries issues: prevent nationals from embargoed countries from participating in meetings outside US (Ed Baniak briefed on system for use in international API meetings).
- A pre-register mechanism based on the API C-vent system will be made available for participants
- The purpose of meeting and list of participants need to be submitted to API prior to meetings
  - Relevant documents where the proposed work method may be implemented for opportunities in international participation: 17A, 17D, 17E, 17F, 17G, 17H, 17P

12. Monogram Program Issues: John Bednar/Ed Baniak
- Jim Raney is assigned to SC17 to represent SC17 Monogram concerns back to SC18 on the API Monogram Program Board
13. Task Group / Project Lead Reports

a. API 17H: ROV Intervention, 17M: ROV Tooling (Attachments 7 & 7P)
   - The Task Group report was given by Charles White
   - SRRR submitted/accepted for next revision
   - 17H and 17M were combined, issued as 2nd Edition of 17H, and 17M has been withdrawn
   - Inquiries received for 17H 2nd Edition for clarifications of:
     1) Quality requirements for hotstab,
     2) Dimensions of Figure 20, Type C hot stab. Released errata to correct Figure 20 in Jan 2014
     3) dimensions of Type D hot stab
   - Ongoing work to review inquiries related to hotstab drawings
     - Committee discussion on dimensions on "donated" drawings; Can API change? “Yes”, per API Staff.
     - Propose to circulate for comments on drawing and release another errata.
   - No new actions

   - The Task Group report was given by John Jacobson
   - DeepStar has completed their project and the report related to standardization of AUV interface in subsea production application, similar to API standards for AUV
   - DeepStar forwarded a draft letter to API in January 2015 for review and comment, to formally donate the work/report to API.
   - DeepStar is to retain the ownership of the AUV report.
   - API is to acknowledge DeepStar’s contribution, any or all of the report, prior to publication.
   - The Committee expresses appreciation to DeepStar for their contribution of the AUV reports and DeepStar to liaise with John Day for API progress
   - Committee discussed on “how to bring it in to API?” - incorporate into 17H, or standalone document?
     - The Committee considered incorporation into 17H: Motion made to incorporate into 17H. Motion carries.

c. API 17P: Subsea Manifold (Attachments 8 & 8P)
   - The Task Group report was given by Charles White
   - Update and rationalize material section
   - Review outstanding comments from previous ballot
   - Add a target date to associate with the SRRR

d. API 17TR8: High Pressure – High Temperature (Attachment 9)
   - The Task Group report was given by Brian
   - 1st Edition is with API, for publication in February 2015
   - SRRR#1 submitted for Phase 2: First motion made to initiate 2nd Edition of 17TR8: Motion carried
• SRRR#2 seeking API CSOEM funding for industry study on hydrostatic test pressure and material testing (approximately $345K): Second motion made for SRRR with requesting funding to CSOEM: Motion carried with one negative
• ASME and API collaboration: ASME High Pressure Workgroup has formed Subsea Applications Task Group in collaboration of issues derived from the ASME PVP 2014 Conference. This task group first meeting is January 28, 2015
• Chris Kocurek provided details in similar research effort to SRRR#2 by DeepStar. Man Pham is to engage with Chris Kocurek to gather details to DeepStar research project.
• BSEE also has similar intent for research project related to material testing for compliance with API 17TR8. Man Pham is to engage with Christy Lan/BSEE for understating BSEE’s intent.
• The Committed discussed that there should be a collaboration efforts between API, DeepStar and BSEE on any proposed 17TR8 research projects.

  e. API 17U: Wet and Dry Thermal Insulation (Attachment 10)
  • The Task Group report was given by Aquiles Perez
  • Document with API for publication

  f. API 17Y: Chemical Injections (Attachment 11)
  • The Task Group report was given by Farah Saidi
  • Design and operation of safe reliable Subsea Chemical Injection - Design, Testing, and Qualification
  • Draft Table of Content developed
  • Structure and scope described
  • Request for a more precise target completion date
  • No actions noted

  g. API 17N: Subsea Reliability / API 17Q: Subsea Qualification (Attachment 12)
  • The Task Group report was given by Don Wells
  • Revised 17N to API for ballot (January 2015)
    – API 17N incorporated existing 17Q
    – API 17N included Integrity Management (IM)
  • The task group agree that there is a need for a standalone document on “Qualification” or new “Q” for Technology Qualification
    – SRRR needed for “new” API 17Q for Technology Qualification. To be worked offline.
    – The task group discussed the new “Q” to initiate as a Technical Report (TR), to allow for a more reactive process.
  • Issues to be considered in the new “Q” TR
    – Greater guidance on qualification testing,
    – Solicit input from others task groups, i.e. 17TR8, 17X, 17A, other API SCs).
    – Software is a recognized gap and should eventually be addressed
  • Reform work groups for “Q” TR from 17N/17Q and other interested parties
  • Motion made to capture above items
h. API 17F: Subsea Production Control Systems (Attachment 13)
   - The Task Group report was given by Christopher Curran
   - 17F 3rd Edition was published in May 2014.
   - There is a need for a 4th Edition due to the failure of ISO to publish an update (ongoing issue of API / ISO separation)
   - SRRR has been submitted to API to sanction work on 4th Edition
   - Motion made and carried to capture the above

i. API 17O: HIPPS (Attachment 14)
   - The Task Group report was given by Christopher Curran
   - Published
   - No current or planned activities
   - No actions

j. API 17V: Subsea Safety (Attachment 15)
   - The Task Group report was given by Christopher Curran
   - 17V is with API for publication (Feb 2015)
   - Objective is cover areas not addressed in API 14C.
   - The document was sent to API for ballot in December, expect to publish in February 2015
   - No outstanding actions

k. SWiG: Subsea Wireless Group (Attachment 16)
   - The Task Group report was given by Christopher Curran
   - The objectives of SWiG is to:
     - Define and promote open standards to support interoperability in subsea wireless communications and control
     - Raise awareness and acceptance of subsea wireless communications and control
     - Promote best practice and knowledge transfer
   - The Radio standard has been submitted to API 17F for adoption / API 17F will look at/consider the output of this work
   - Work has started on the acoustic standards to review NATO acoustic standard, identify benefits related to monitoring (e.g. riser, seismic, environmental), and/or AUVs
   - Basic/101 training course will be held in Houston, Texas this Spring
   - No actions

l. API 17B, API 17J, API 17K, API 17L1, API 17L2: Flexible Pipe & Ancillary Equipment (Attachment 17)
   - The Task Group report was given by Krassimir Doynov
   - ISO equivalent of 17K is not being developed at this time.
   - No outstanding actions
   - Document is due for automatic re-affirmation in 2015
   - New 17K revision to be completed in 1Q2016
   - Errata for API 17L1 to be issued 1Q2015
   - No outstanding actions for API 17L2
   - Not outstanding actions for 17J and 17B
- API 17TR2: The Ageing of PA-11 in Flexible Pipes
- 17TR2, The Ageing of PA-11 in Flexible Pipes, was published in 2003 and to be updated by 2017/2018 when work on 17K completed.
- The JIP was kick-off in November 2014 with planned completion by 1Q2017
- The JIP scope of work is to provide Guidelines for Qualification of Polyamides (e.g. PA11, PA12, etc.) in Flexible Pipes based on collecting field experience and integrity issues, including test procedures and acceptance criteria, and performing round robin tests to ensure reproducibility.
- K. Doynov will submit SRRR form for revision to 17TR2.

m. API 17W: Capping Stack (Attachment 18)
- The Task Group report was given by Ross Fraser
- 17W 1st Edition was published 2Q2014
- No outstanding action.

n. API 17C: TFL
- The Task Group report was given by Ross Frasier
- 1 or 2 installations with TFL still in existence
- Ross F is to contact Steve Bodden (Stone Energy) to name a task group representative.

o. API 17D: Subsea Production System (Attachment 19)
- The Task Group report was given by Ross Frasier
- Removal of PSL 3G
  - A revision to remove PSL 3G for wellheads and revise closure bolting language passed with three negative votes
  - Resolution of comments has been completed
- Qualification testing of valves and actuators - Annex O
  - To propose an auditable definition for valve cycle.
  - The task group will release this work under Annex O as “Informative”
  - Circulation for API Ballot is planned for Feb 10, 2015.
- Metric/English conversion work is still ongoing, proving more difficult than originally anticipated.

p. API 17E: Subsea Umbilical (Attachment 20)
- The Task Group report was given by Ed Baniak
- 17E draft will be available for ballot/comment in April 2016.
- The current edition is dated October 2010 which will require an administrative extension due to availability of the subsequent work (Jan 2016).
- SRRR is needed to to request a formal extension

q. API 17TR9: Subsea Umbilical Termination (SUT) Selection and Sizing Recommendations & API 17TR10: Subsea Umbilical Termination (SUT) Selection and Sizing Recommendations (Attachment 21)
- The Task Group report was given by Ed Baniak
- 17TR9 - The JIP is working on the document and expect to have a final version submitted to SC17 in April 2015.
- 17TR10 - The JIP finalized the reconciliation of the comments received form the API vote March 13, 2014. Comments resolution is completed and the document should be re-balloted soon.
r. API 17R: Flowline Connections (Attachment 22)
   - The Task Group report was given by Ron Pfluger
   - Completed comment resolution.
   - 17R is in API final review towards publication (March 2015)

s. API 17Z: Bonded Composite Pipe (Attachment 23)
   - The Task Group report was given by Ed Baniak
   - JIP Kick-Off
   - Draft by 3Q2015
   - No current action

t. API 17TR7: Connectors
   - The Task Group report was given by Brian Skeels
   - Equivalent to Annex I in API 17G
   - Waiting on API 17G technical writing team
   - No current action.

u. API 17S: Subsea Metering (Attachment 24)
   - The Task Group report was given by John Allen
   - 17S passed its ballot in December 2014 with one negative vote was submitted. Initial discussion with 17S task group that resolution of the attendant comments would result in the withdrawal of the negative vote
   - Task group work to commence comment resolution by end of January 2015

v. API 17TR11: Pressure Effects on Subsea Hardware During Flowline Pressure Testing In Deep Water (Attachment 25)
   - The Task Group report was given by Man Pham
   - API 17TR11:
     - Comment resolution is required and re-ballot is necessary, as it has been over 1 year since the document passed its initial ballot
     - Comment resolution should start once 17TR12 is approved as there are many common issues

API 17TR12: Consideration of External Pressure in the Design and Pressure Rating of Subsea Equipment (Attachment 26)
   - The Task Group report was given by Man Pham API 17TR12
   - Completed comment resolution to 2nd ballot and document is with API for publication - March 2015

w. API 17A: Subsea Production Systems (Attachment 27)
   - The Task Group report was given by Ed Knerr
     - No new material was added to the annex wording except that applicable definitions and abbreviations were included.
     - API Ballot is due January 28, 2015
Annex B (Colors and Markings) has been updated to match to API RP 17-H. The changes being proposed are almost exclusively formatting changes to make the two documents look the same. Almost no content is being changed.

Annex C (Verification, Validation and Qualification) will be reviewed for terminology consistency against other API 17 series documents.

Annex D (Typical Procedure for Commissioning) will be deleted. The ISO/API Joint Task Force proposed draft addresses Wellhead Integrity specifically and therefore it will be proposed for API 17D inclusions.

Annex E (Documentation) will be retained.

Annex F (Datasheets) has been deleted since it has already been picked up in API 17D, Annex M.

Annex G (Structures Process Valves and Piping) has been deleted since it has already been picked up in API 17P.

Annex H (System Engineering in Subsea Field Developments) will be retained.

Annex I (Flow Assurance Considerations) has been deleted from the document. This annex has been converted into a technical report and was sent out for ballot on December 3rd as API 17TR14, Flow Assurance Considerations in Subsea Production Systems, 1st Edition. No new material was added to the annex wording. API Ballot is due on January 28, 2015.

Annex J (Barrier Philosophy Considerations) will be reviewed by the task force.

Some of the items addressed in Annex K (Requirements and Recommendations for Lifting Devices) are being addressed in API 17D, but not all. The Task Force will review this document to ensure that it does not contradict with 17D and retain it.

Material sub-group: on-going discussion
  – Forgings Spec 20C: In revision
  – Recap 20C and ASTM/API - Forgings
  – Action: Provide and update at Summer Meeting 2015, Bruce Witwer

x. API 17G: Well Intervention (Attachment 28)
  – The Task Group report was given by Brian Skeels
  – Complete draft by end August 2015
  – The 6th Working Draft (WD6) closure is to completed by end April 2015 and to be sent out for comment ballot
  – Task group proposes to issue the 17G as a “Standard” not “Specification” nor “Recommended Practices”
  – The technical writing team has struggled with competing technical requirements with respect to hardware performance and material ductility and toughness properties while finalizing clauses 6 and 7.
  – Most of the other clauses and annexes have undergone a line by line review which has netted a roughly 20% reduction in the size of the document
  – Formal balloting of Std. 17G, 3rd Edition anticipated sometime late second quarter of 2015
  – The "Baby G" [G1, G2, G3 and G4] efforts have developed their respective tables of content and begun drafting the documents. All of the "baby G's" will be RPs. Work is on-going
  – Baby G’s reports were provided as follows:
• G1: Non-Ferrous systems (Ti, Al and composite materials)  
  (Attachment 29)
  - Ongoing development with planned by June 2015
  - Titanium - Draft completed, for June 2015 review
  - Due to limited resources by a number of members aluminum and composite sections have not been started.
  - Alcoa, Airborne, and Magma have decided not to participate due to limited personnel and the complexity related to main body of 17G.
  - Fuchs of Germany will step in and prepare draft

• G2: Subsea Pumping Well Intervention System  (Attachment 30)
  - Scope of the document has been defined; what to include / exclude
  - Pumping fluid into or out of a well (not flowlines/storage)
  - This is considered to be “riserless system”, comprised mostly spooled products not being rigidly attached to the subsea well
  - Target is to have a draft document by October 2015.
    - Distribute work product to main 17G this summer for comments, recommendations, etc. before moving to document finalization
  - Issues: participants with Controls expertise, connector expertise, technical writer skills
  - The G2 Group is sharing work in progress and documentation with other Baby G teams in an effort to avoid duplication of effort pertaining to the same or similar subject matter
  - BSEE recommended they have a full-time person to work 17G type of work

• G3: Light Duty Intervention System (LDIS)  (Attachment 31)
  - The Task Group report was given by Mike Swift
  - API 17G3 differs from G2 (subsea pumping) and G4 (riserless intervention) in that it is a pipe based system
  - Draft LDIS design flow charts are available for review and were presented in Intervention workshop held in Galveston, Texas in August 2014
  - API 17G3 should document an example, common application, such as executing a through-tubing intervention with wireline only by using the 17G safety strategy in the form of a design flow chart
  - Consideration for “RP” or “TR”
  - Concern: participation has fallen off. Resources from manufactures and end users are needed to mature the example design flow chart

• G4: Riserless Light Well Intervention Systems  (Attachment 32)
  - The Task Group report was given by Neil Crawford
  - The first draft of G4 is available with second draft ready by the end of March 2015
  - Task group is working closely with the 17G2 group to ensure there is no overlap and also the main 17G document to avoid duplication

y. API 17X: Recommended Practice on Subsea Pumping Systems  (Attachment 33)
  - The Task Group report was given by John Allen
The Task Group is coordinating with 17A, 17Q, 17N relating to clarity on definitions of qualification, verification and validation. This is achieved by overlapping members.

- Active participation of 70 members with global membership
- Draft standard for review is planned for April 2015
- API ballot is planned for September 2015
- Target publication of document - January 2016
- Editorial assistance will be needed to complete the final document starting January 2015 (previously approved SRRR). The full committee agreed to accept IntecSea as editor based on capabilities and experience in the area. If this is not available, the milestones may shift further right 6 months to 9 months

z. API Consideration for Worst Case Discharge (WCD) (Attachment 34)
   - The Task Group report was given by Bruce Witwer
   - The term “worst case discharge” appears in BSEE and BOEM regulations, however, varying interpretations exist.
   - Manufacturers are frequently requested to calculate WCD and associated allowable stress, but under which loading conditions or events:
     - Survival Loads
       - Watch circles
       - Storm events
       - Repeatable (probabilistic)
     - Worst Case Loads
       - Drive-off
       - Blowout/uncontrolled flow
       - One-time event (stochastic)
     - Allowable stress scenario (ref. API 17G/ API 2RD)
       - Rated = 0.67 (σY)
       - Extreme = 0.80 (σY)
       - Survival = 1.00 (σY)
   - There is a need for industry’s consensus to the definition of “WCD” condition and associated allowable design stresses
   - BSEE indicated that the WCD information is “good to know” information in their review and approval process.
   - Consider meeting and/or discussion with SC16, capping stack, casing design and regulators (BSEE).
   - The Committee decided to table this topic for the Roundtable Discussion at the Summer Meeting.

14. Actions Items were reviewed and updated during the course of the meeting

15. Reminder of the Focus Session – Update on the 17G-Series – Brian Skeels to immediately follow the subcommittee meeting

16. Upcoming Meetings:
   a. 2015 API Exploration and Production Standards Conference on Oilfield Equipment and Materials – San Francisco, California, June 22 – 26, 2015
   b. 2016 SC17 Committee Winter Meeting – Houston, Texas TBD January 2016

17. The meeting adjourned at 2:30 PM