REPORT

of the

Meeting of the

API SUBCOMMITTEE ON FIELD OPERATING EQUIPMENT
(API C1/SC11)

AMERICAN PETROLEUM INSTITUTE

San Antonio, Texas
June 18, 2003

Sid Thomas, Chair
Tom Van Akkeren, Secretary

AMERICAN PETROLEUM INSTITUTE
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Washington, D.C. 20005
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MEETING OF THE API SUBCOMMITTEE ON FIELD OPERATING EQUIPMENT

8 AM – 5:00 PM, Wednesday, June 18, 2003, San Antonio, Texas

A. Call to Order: The meeting was called to order by Chairman Thomas at 8:00 AM. The following individuals were in attendance during all or parts of the meeting: Sid Thomas, Chairman (Wilson Supply), Tim Sampson (API), Jeju Varghese (National Oilwell), Art Delacruz (Weatherford), Art Pena (Yates Petroleum), Fred Brownlee (ChevronTexaco), Tom Van Akkeren (Production Technology), Graham Thomas (BP), Norm Hein (ConocoPhillips), David Doyle (Lufkin), Kathleen Combs (API), Larry Williams (Weatherford), Leon Cox (Norris Rods), John Franzwa (BP), John Yonker (Halliburton), Benny Williams (Harbison-Fischer), and Harry Byars (Consultant).

B. Reports by Task Groups

1. TASK GROUP ON ROD PUMPING (API C1/SC11/TG1)

Summary of Activities: This TG is charged with updating and writing Specifications and Recommended Practices for rod pumping systems and related equipment.

A. OLD BUSINESS

Circumferential Displacement

1.6.1 A contract for a CD testing program was executed with Anderson & Associates, Houston, Texas. At the 1997 Conference, Sid Thomas anticipated completion of all work by late 1997, and forwarding to the WG on 11BR for inclusion in that document. At the 1998 Conference, Sid Thomas reported that 4 of the 5 planned tests were completed before PRAC funding was depleted. It was MSP to accept the TG recommendation to incorporate the circumferential displacement recommendations into 11 BR, and keep this item on the agenda until RP 11BR is published. Sid Thomas and Norm Hein will forward comments to the 11BR WG.

Sid Thomas was granted a one year extension from Committee 1 to complete RP 11BR to incorporate the test data. Norm Hein and Sid Thomas will attempt to get funding from ALEOC for the additional testing. At the 2000 Conference, Sid Thomas reported the phase 6 testing was finished but funds weren't available to verify results with additional testing. At the winter work group meeting, it was recommended the results be documented by Sid Thomas and Norm Hein who will forward the material to Brock Watson, WG Chair, to be incorporated as an appendix to 11BR. It was MSP to incorporate the CD test results as an appendix to RP 11BR, submit the document to SC 11 for letter ballot and to disband the WG and keep this item on the agenda until the document is published. At the 2001 meeting, it was reported the WG is completing their effort and RP 11BR will be balloted when the TG completes its work. Approved for publication pending comment resolution. Awaiting publication or reballot. At the 2003 conference the committee noted that this action has been tabled pending completion of Spec 11B. See Item 1.53.1.
Rod String Design

1.45 Slim Hole Coupling Derating Factors

1.45.1 A group was formed in 1991 to investigate need and, if needed, develop derating factors for Slim Hole Couplings and recommend appropriate changes to documents. This work was tabled for several years pending completion of 11B and 11AX revision work. At the 1996 Conference, WG Chair Sid Thomas reported the basic numbers were complete, and awaited completion of the testing in 1.6.1. The test results will prove the validity of the mathematical calculations. At the 1997 Conference, Sid Thomas anticipated completion by late 1997, and forwarding to the WG on 11BR for inclusion in that document. At the 1998 Conference, it was MSP to accept the TG recommendation to incorporate the slim hole derating factors from the Petroleum Engineering Handbook into RP 11BR.

At the 1999 Conference is was MSP to accept the TG recommendation to incorporate editorial revisions of the slim hole coupling ratings into 11BR and keep this item on the agenda until 11BR is published. At the 2000 Conference, it was noted that information from the Petroleum Engineering Handbook will be incorporated into the current revision to RP 11BR. At the 2001 meeting, it was reported the WG is completing their effort and RP 11BR will be balloted when the TG completes its work. Approved for publication pending comment resolution. Awaiting publication or reballot. At the 2003 conference the committee noted that this action has been tabled pending completion of Spec 11B. See Item 1.53.1.

1.48 Sucker Rod Guides

1.48.1 In 1995, Mr. Hein reported he had divided the group to look at three elements: materials, testing and usage. In 1996, Mr. Hein reported he had asked Committee 1 for prioritization. His anticipated results would be included in RP 11BR. Committee 1 approved continuation of this work in coordination with related work items. No progress was reported in 1997, and Sid Thomas agreed to talk to Norm Hein about future direction of this WG. It was agreed that the WG on 11BR should not delay their work and voting on 11BR to incorporate material from this WG. At the 1998 Conference, it was agreed this work would be deferred until work is completed in other WGs. Norm Hein will lead a WG meeting during the winter work session.

At the 1999 Conference, the WG was reactivated with the following members: Norm Hein, Leon Cox, Benny Williams and Mark Mahoney. The first meeting of the WG will be held in conjunction with the winter work group. At the 2000 Conference, it was reported the WG met during the winter work group meetings and added a representative from R&M to the WG. At the 2001 meeting, it was reported the WG is continuing their work and the document should be ready for balloting in two years.

At the 2002 Conference, Benny Williams (Task Group Chairman) reported that there has been no action. The TG chairman will formally contact the workgroup chairman; if no action is forthcoming, the work item will be dropped from future agendas.

At the 2003 Conference, it was decided that this item will be retained on the agenda for informational purposes for future action.
1.53 Revision of RP 11BR

1.53.1 At the 1996 Conference, former WG Chair, Howard Anderson reported that draft revisions, including the NACE section, had been circulated to WG members. He requested comments on the Rod Selection and Transportation and Handling sections. He noted data from Agenda Items 1.6.1 and 1.45.1 would be discussed at the winter work group meeting for possible inclusion, and used rod inspection guidelines will be incorporated when finalized. RP 11BR, last revised by a 1991 Supplement, is past due for revision, reaffirmation or withdrawal under API's five-year policy. At the 1997 Conference, it was reported that Howard Anderson had retired and Brock Watson would chair the WG. It was agreed the WG would meet at the 1998 winter work session to incorporate Section 9 revisions from Tom Van Akkeren, and material from Items 1.6.1 and 1.45.1, then forward the revised document for SC11 special balloting.

At the 1998 Conference, it was MSP to accept the TG recommendation to have the WG incorporate the circumferential displacement revisions, the slim hole coupling factors and others revisions into the document at a planned October meeting and then send the document out for letter ballot.

At the 1999 Conference, it was MSP to accept the TG recommendation to keep this item on the agenda until RP 11BR is published. At the 2000 Conference, it was reported the outstanding items that have delayed balloting are being addressed. It was MSP to authorize the SC Chair to send the revised RP out for letter ballot after it is received. At the 2001 meeting, it was reported the WG is completing their effort and RP 11BR will be balloted when the TG completes its work. Same as 1.6.1.

Approved for publication pending comment resolution. At the 2002 Conference, Benny Williams recommended that 11BR be held from issuance until several technical issues were resolved. The recommendation was MSP by SC11.

At the 2003 Conference the action to table issuance of a revision to 11BR pending resolution of technical issues and publication (via ISO) of Spec 11B.

1.53.2 At the 2003 Conference is was MSP to letter ballot RP11BR, 8th edition, for reaffirmation to ensure that there is a document available for industry use pending completion of the 11B and revised 11BR work items. BALLOT ITEM

1.55 ISO Standard for Progressive Cavity Pumps

1.55.1 In 1995, it was noted an ISO WG had started drafting a PCP standard, and US representatives were solicited. At the 1996 Conference, Mr. Franzwa reported he was still seeking a US representative. Following the 1996 Conference, Mr. James Revard, Tarby Inc., agreed to serve on the ISO project. API staff is represented on the parent ISO WG -- ISO/TC 67/SC 4/WG 4. At the 1997 Conference, it was reported the PCP project team expected to have a Committee Draft (CD) ready by the end of 1997 for TC 67/SC 4 comments. The 1998 agenda reported the CD had been delayed, but was expected by late summer or fall of 1998. At the 1998 Conference, the TG Chair agreed to contact the ISO liaison for an update on progress for the next conference.
At the 1999 Conference it was noted that copies of the ISO WD 15136 for PCP's had been sent out to SC11 members for comments. The document (part 1) is scheduled to go to FDIS before 1-2001. At the 2000 Conference, it was reported the document was on schedule to go out for Final Draft International Standard (FDIS) balloting by the end of 2000. At the 2001 meeting the API staff was asked to check on the status of the ISO document.

At the 2002 Conference, John Yonker reported that 15136 has been published by ISO on July 15, 2001. MSP to letter ballot 15136 as API Spec 11D2, 1st Edition.

Subsequent to the 2002 Conference, the document was balloted by SC11 but insufficient ballots were returned for API/ANSI approval. The document was reballoted with a closing date of July 9, 2003.

At the 2003 Conference there were questions raised if ISO 15136 (11D2) should be classified as a recommended practice and not an API specification, pending the outcome of the reballot. Pending the ballot outcome, the SC11 chair will decide with staff on an appropriate course of action to recommend to SC11. Members were encouraged to review the document and return their ballots by the closing date.

1.58 Revision of Spec 11AX

Published Dec 2001, with errata. At the 2002 Conference, it was reported that a number of technical issues have been identified that need addressing in 11AX: surface finish, marking, etc. The task group will consider moving 11AX forward as an ISO document after completion of 11B.

1.59 Alignment of API Spec 11B and ISO 10428

1.59.1 At the 1997 Conference, under new business, SC11 noted need to pursue establishing an ISO WG to update the ISO sucker rod specification to reflect industry changes. SC11 noted API Spec 11B has had two revisions since the ISO document was last updated, and an effort should be made to maintain alignment. Status: ISO 10428, First Edition, 1993, is basically the 24th Edition of Spec 11B adopted in a now discontinued ISO fast track process. Updating of ISO 10328 was assigned to ISO/TC 67/SC 4/WG 4. The 1998 agenda noted WG4 was ready to restart the ISO project, and had invited the US to name a project leader. The WG4 Convenor had been advised that Brock Watson had offered to lead a US based effort. At the 1998 Conference, it was agreed the SC Chair would request API staff revise Spec 11B to ISO format. WG Chair, Brock Watson, will forward the revised document to SC4 for balloting.

(Note: After the 1998 Conference, API learned that Germany, which had named an earlier project leader who resigned, may want to name a new project leader. API will await WG4 decision and proceed accordingly in consultation with the SC11 Chair.)

At the 1999 Conference, the API staff agreed to get a clarification on the status of the document. US representatives are working to move this effort forward in ISO. At the 2000 Conference, John Yonker, member ISO/TC67/SC4, requested help to reformat Spec 11B into ISO format for development as ISO 10428. Leon Cox, Benny Williams, Mark Mahoney, James Fraysur, Sid Thomas and John Franzwa will work on this. At the
2001 meeting, Leon Cox reported on progress in putting Spec 11B in ISO format. He requested assistance to assure accuracy of the data to be included in the document. He will provide electronic or paper copies of the draft for this purpose. There was discussion about incorporating RP 11BR into the ISO document but the consensus was that combining the documents at this time would make the task too burdensome.

At the 2002 Conference, Leon Cox provided copies of draft 6 of 11B/ISO 10428. The working draft completion is targeted for year end for review at the ISO workgroup meeting in February 2003. It was pointed out that including 11BR with 11B in an ISO document would not be an appropriate fit.

At the 2003 Conference John Yonker reported on the ad-hoc team meeting which took place the day before regarding advancement of the 10428/11B as the ISO project. A meeting is scheduled for July 9th in Midland to further finalize the document with the goal of advancing it to the ISO WG4 Group by Oct 15th for progression to CD phase. The text is nearly finished and Leon Cox is getting the figures put into AutoCAD. The main question remaining is the metric conversion; it was agreed to follow the “hard” conversion for all tables and figures.

1.60 Uniform Gauging Standards

At the 2003 Conference Benny Williams reported that a kickoff meeting would be held in conjunction with the July 9 10428/Spec 11B workgroup meeting in Midland, Texas.

1.61 New Revision of Spec 11AX

At the 2003 Conference it was agreed to form a group to revise Spec 11AX to address corrections to the document; it was further recommended that the document be considered as a candidate for submission to ISO via the “pilot program”. Benny Williams will chair the effort.

B. New Business: None for the rod pumping TG at the 2003 Conference.

2. TASK GROUP ON GAS LIFT

A. Old Business

2.3.4 Proposed RP 11V8

In 1994, it was reported a draft was approximately 85% complete. In 1995, the chairman reported progress had slowed, and Committee 1 deferred work on this item. In 1996, the chairman reported the work awaited Committee 1 authorization, and could be completed within one calendar year. Committee 1 subsequently approved reactivation of this work. At the 1997 Conference, Mr. Bennett reported the draft document had been completed and the TG would review the WG recommendations at the August 27, 1997 meeting.
At the 1998 Conference, it was reported that the TG is still reviewing the document. It was MSP that the SC Chair contact the TG Chair to determine if the document will be ready for balloting before the next conference. If so, it will be sent to SC11 for letter ballot, if appropriate. If the document is not ready, the TG Chair is requested to provide a timetable for completion.

At the 1999 Conference it was reported that 5 of the 8 sections are completed and figures were being developed for the last three. It was also reported that the document would be sent out for TG review in August 1999 and would be ready for SC balloting in 2000.

The work group was not available to report at the 2000 Conference; API staff and the SC11 chairman will establish contact with Wayne Mabry, Schlumberger, to determine SC11’s next action, and report back to the subcommittee. At the 2001 meeting it was reported the WG is completing the final draft and anticipates the document will be ready for balloting at the next standardization conference.

At the 2002 Conference it was reported that 11V8 is now out for letter ballot. Subsequent to the 2002 Conference the document was approved for publication.

At the 2003 Conference, staff reported that the document should be published within the next 60 days. Awaiting Publication.

2.3.5 Revision of Spec 11V1

A revised edition, including gas lift mandrels for the first time, was issued in 1994 (effective February 1, 1995), and a WG started work on specifications for gas lift latches and associated wireline equipment to be added to this document. In 1995, it was reported the WG was surveying manufacturers to determine feasibility of including critical latch dimensions and tolerances. In 1996, Jim Bennett reported the WG had completed a dimensional specification for BK-2 latch (1"), and was gathering manufacturer data on the RK style latch (1-1/2") for consolidation. Preparation of these specifications was expected to take 2-3 years. At the 1997 Conference, Mr. Bennett reported there had been no progress on this work.

The June 1998 SC11 agenda noted that, subsequent to the 1997 Conference, the API work was tabled pending completion of ISO 14310-7 to allow review for possible adoption as an API/ANSI/ISO standard to replace Spec 11V1. This action was taken in consultation with the C1 and SC11 Chairs, under API S1 policy of coordinating related API and ISO efforts to avoid duplication. The ISO project leader, Wayne Mabry of Camco is a member of the API TG2. The project team reports to ISO/TC67/SC4/WG4, and hopes to change the ISO document number and expand the scope to include gas lift valves, inhibitor injection valves, side pocket mandrels, shearing devices, and associated wireline equipment.

At the 1998 Conference, the SC Chair agreed to contact the TG Chair to determine whether it is the TG’s desire to follow the ISO lead in developing this document.

At the 1999 Conference it was reported that a WD of the ISO document on mandrels was distributed with a target date of 2/00 for comments. It was MSP to letter ballot Spec 11V1 for reaffirmation. A cover letter should be sent with the ballot to explain that this
vote is a bridging action to keep the document active until the ISO document is completed. The document was reaffirmed by letter ballot. At the 2000 Conference it was reported the WG is waiting on the completion of the ISO document. API staff and the SC11 chairman will followup with work group members to determine SC11’s next action. At the 2001 meeting, it was agreed to keep this item on the agenda until the final ISO document is completed.

At the 2002 Conference, John Yonker reported as follows:

ISO item 17078 for gaslift is split into three parts; Part 1, Sidepocket Mandrels is currently in CD circulation until July 2002. It will be advanced to DIS status in September and is expected to have DIS circulation November 2002 through March 2003.

Part 2, Sidepocket Valves and Flow Control Devices is expected to advance to CD status in November and CD circulation in early 2003.

Part 3, Sidepocket Latches and Profile Interfaces is expected to advance to CD status in the fall of 2003.

At the 2003 Conference John Yonker reported that ISO 17078-1, Part 1 on the Sidepocket Mandrels, is out for DIS ballot with the US ballot closing July 11th and the ISO ballot closing July 25th.

Part 2 of the standard covering the Sidepocket Valves and Flow Control Devices is still in the Working Draft stage but expected to begin CD review by the WG4 in Sept, 2003 with final advancement for CD circulation expected by mid-2004.

Part 3 of the standard covering Sidepocket Latches and Profile Interfaces is running behind schedule and now expected to advance to CD circulation by mid-2005.

2.4 Intermittent and Chamber Gas Lift Wells

At the 2002 Conference, a new work item was proposed to develop a new RP on design of intermittent and chamber gas lift wells. It was MSP to approve the new work item.

At the 2003 Conference, Sid Thomas advised that Cleon Dunham has agreed to chair the effort.

2.5 Dual Gas Lift Equipment

At the 2002 Conference, a new work item was proposed for a new RP on dual gas lift equipment. MSP to approve the new work item.

At the 2003 Conference, Sid Thomas advised that Cleon Dunham has agreed to chair the effort.

B. New Business: There was no new business for the gas lift TG at the 2003 Conference.
3. TASK GROUP ON ELECTRIC SUBMERSIBLE PUMPS

A. Old Business

3.1 Standardization of ESP

3.1.10 Review of RP’s 11S5, 11S7 AND 11S8

Under new business at the 1997 conference, it was noted that RP 11S5, RP 11S7 and RP 11S8 are four years old and need to be considered for revision, reaffirmation or withdrawal. Fred Brownlee agreed to ask TG members to review need for revisions, and make a recommendation to SC11 at the next Standardization meeting. At the 1998 Conference it was reported there were 10 responses to a survey sent out requesting user feedback on the need to revise, reaffirm or withdraw these documents. SC11 accepted TG recommendations as follows:

3.1.10.1 RP 11S5, Application of Electric Submersible Cable Systems, 1st Ed., February 1, 1993. In the survey, there were 8 votes to reaffirm and 2 to revise. It was MSP to request a 2 year extension for the document and to submit a NWI to revise RP 11S5. The work group met on Tuesday, June 15, 1999, and reported on the status.

At the 1999 Conference it was reported the WG met twice and will meet again at the Winter Work Group meeting. The WG chair said he felt the document would not be ready for balloting before the two year extension expired in 2/00. It was MSP letter ballot to reaffirm the document to keep it active while it was being revised. The SC chair should seek approval from C1 to issue the reaffirmed document without reformatting and republishing as a new edition. The document was reaffirmed as SC11 requested.

At the 2000 Conference, Tom Van Akkeren reported the WG completed a first pass review, plans to meet at a winter work group session and should have the document ready to go to ballot at next year’s conference. At the 2001 meeting, Tom Van Akkeren reported the WG had completed a first draft revision. Because of a need for rapid action to maintain RP11S5 as an active document, it was MSP to allow the document to be balloted by mail through TG approval and then forwarded to the SC11 Chair to be sent out for letter ballot. No report was provided at the 2002 Conference. Subsequent to the conference, Tom Van Akkeren advised that a draft is being developed.

At the 2003 Conference Tom Van Akkeren reported that the document is near completion. Upon completion the document will be submitted to SC11 for letter ballot.

3.1.10.2 RP 11S7, Application and Testing of Electric Submersible Pump Seal Chamber Section, 1st Ed., July 1993. In the survey, 10 votes to reaffirm; none to revise. It was MSP to reaffirm RP 11S7. Awaiting publication.

At the 1999 Conference it was MSP to seek approval from C1 to issue the reaffirmed document without reformatting and republishing as a new edition. 11S7 was reaffirmed without reformatting per SC11’s request. No further action required. This item will remain on the agenda for information only until action is completed on all of Item 3.1.10.
3.1.10.3 RP 11S8, Electric Submersible Pump System Vibrations, 1st Ed., May 1, 1993. In the survey, there were 9 votes to reaffirm; 1 vote to revise. It was MSP to request a 2 year extension and develop a NWI to revise RP 11S8.

At the 1999 Conference it was MSP letter ballot to reaffirm the document to keep it active while it was being revised. The SC chair should seek approval from C1 to issue the reaffirmed document without reformatting and republishing as a new edition. The WG will meet at the Winter Work Group session. The reaffirmation was approved. At the 2000 SC11 meeting, discussion indicated there wasn’t clarity on the need for a revision of this document. TG chair, Fred Brownlee will review the NWI and interview Noel Putscher and Norm Hein to determine the items of concern. API staff will have the document scanned into electronic format to make it easier to edit the document. At the 2001 meeting the TG agreed to gather documentation on the need for a revision to RP 11S8 and to solicit membership for a WG. No report was provided at the 2002 Conference.

At the 2003 Conference Fred Brownlee agreed to determine if there was industry interest to update the document.

B. New Business

At the 2003 Conference it was MSP to letter ballot the following documents for reaffirmation: 11S1, 11S2, 11S3, 11S6, and 11S7. BALLOT ITEM

4. TASK GROUP ON SURFACE PROCESS EQUIPMENT

A. Old Business

Q1 Technical Review of 12 Series Documents

4.13.1 Specs 12D, 12B, 12F, 12GDU, 12J, 12K, 12L, 12N and 11N

This item was added to the agenda in 1989 to review the standards for conformance with Spec Q1. Specs 12D, 12F, 12L, 12N and 11N were reaffirmed in 1993 and reissued in 1994. Spec 12B was reissued in 1995. Specs 12 GDU, 12J and 12K are due for reaffirmation, revision or withdrawal under API's five year review policy. In 1996, the TG reviewed results of a survey on need for the 12 series documents (See Appendix 4.13.1 or 1996 Report, Circ PS-2115) and took the following actions.

-- Agreed to keep 12B, 12D and 12F as separate specifications; and to editorially revise Par. 2.3 of Spec 12D and Spec 12F to read: "Sheets shall conform to the latest revision of ASTM A570, grade 33, 36 or 40. Sheets may be ordered on the weight or thickness basis, at the option of the tank manufacturer." (The editorial change was in response to a 1995 Huntco letter -- 1995 Item 3.17. API staff requested guidance on whether this change should be published now, or await other possible changes.)

-- Agreed to keep 12GDU, 12J, 12K, 12L, 11N and 12N as separate
specifications, and to poll users and manufacturers on use of these standards, purchases of the equipment, and what specifications are used if other than the API standards. Norm Hein agreed to help design the survey.

In 1997, it was reported that reference material had been assembled for the 12B, 12D and 12F, and WG members had reviewed the documents but had not yet prepared draft revisions. A motion passed to request API staff not publish the editorial revision to Par. 2.3 or Spec 12D and Spec 12F as requested by a letter from Huntco in 1995. It was noted the survey on 12GDU, 12J, 12K, 12L, 11N and 12N had not yet been performed.

The 1998 agenda noted the survey was conducted in early 1998. The agenda also noted Spec 12GDU, 12J and 12K were past due for 5 year review/action; and Spec 12D, 12F, 11N, 12L and RP 12N are due for 5 year review/action in 1999. At the 1998 Conference, it was MSP to accept the TG recommendation to reaffirm 12GDU, 12J and 12K. They were reaffirmed by letter ballot.

At the 1999 Conference it was MSP to ballot RP 12N and Specs 12B, 12D, 12F, 12L, 12P and 11N for reaffirmation, revision or withdrawal. All documents were approved for reaffirmation. Comments were received concerning emergency venting recommendations in 12B, 12D, and 12F suggesting that the words in paragraph 4.2 “unless tanks are installed in remote locations…” should be deleted. SC11 should consider this proposed change when the documents are revised. Also, one comment received on 12F, Para 3.12, recommends that the paragraph be revised to include a tolerance for the roof slope.

At the 2000 Conference, Allen Sindel, Shelby Traylor and John Franzwa agreed to reform the WG to prepare revisions to Specs 12F, 12B and 12D. No further action on this item was reported at the 2001 meeting.

At the 2002 Conference, it was MSP to recommend to C1 that the 12 series of specifications be forwarded as new ISO work items. Subsequent to the 2002 Conference it was determined that there was little interest expressed by the international community on developing ISO tank standards.

At the 2003 Conference it was agreed to move forward on updating 12B, 12C and 12F and new editions of API specifications.

4.13.2 Spec 11P

In 1993, it was reported that Spec 11P was being revised, but no subsequent progress was reported. In 1995, the members asked the "drop dead" date for action on Spec 11P, and API staff reported there is a maximum time limit of seven years. In 1996, it was reported that ISO/TC 8 and TC 67 have formed a joint work group (NP 13631, Packaged Compressors). The task group requested the SC11 Chairman to investigate participation by API. In 1997, the TG Chair was asked to determine ISO WG status and assure API participation in the ISO WG. In September 1997, API received and forwarded to the TG chair, a first draft ISO/CD 13631. The Compressed Air and Gas Institute, Cleveland Ohio administer the US TAG for ISO/TC 118.

At the 1998 Conference, it was MSP to accept the TG recommendation to reaffirm Spec 11P.
At the 1999 Conference it was MSP to seek approval from C1 to issue the reaffirmed document without reformatting and republishing as a new edition. Allen Sindel will review Spec 11P and ISO/CD 13631 documents. Spec 11P has been reaffirmed as requested by SC11. At the 2000 Conference, it was reported that a survey of manufacturers confirmed the continuing validity of Spec 11P. There was nothing to report on the status of the ISO/CD 13631 document. Subsequent to the 2002 Conference, API staff was advised that downstream 11P users had concerns with the ISO 13631 document and had submitted comments on these concerns. Also, 13631 is not under the jurisdiction of TC67. No action is recommended at this time.

At the 2003 Conference it was reported that Spec 11P had been withdrawn. ISO 13631 has been published by ISO and is available for use. No further action is required by SC11.

4.14 Q1 Revision of Spec 11E

Norm Hein, Conoco, is WG Chair. In 1990, a WG was formed to revise Spec 11E to satisfy Q1 based on color-coding. In 1994, it was reported that the group had met, and anticipated completion in one year. Spec 11E was editorially reformatted and reissued in 1994 to incorporate ISO 10431, 1993. In 1995, Mr. Hein reported a joint API and ISO effort was being made. In 1996, no progress was reported. The ISO project was not active and API had been requested to provide a US project leader. In 1997, it was reported that no progress had yet been made, but Norm Hein had agreed to chair the ISO project team as a US based effort and awaited confirmation from the Convenor of ISO/TC 67/SC 4/WG 4. At the 1998 Conference, Norm Hein indicated work on the ISO document will start at the winter work session.

At the 1999 Conference Norm Hein reported there was no meeting of the ISO project team. The SC requested a clarification on the status of the ISO document. It was MSP to reaffirm Spec 11E by letter ballot and to seek approval from C1 to issue the reaffirmed document without reformatting and republishing as a new edition. The document was reaffirmed as requested by SC11. At the 2000 Conference, it was reported that John Yonker, Cecil Hunt and Norm Nein will work on an initial draft for the ISO document based on API Spec 11E. At the 2001 meeting Cecil Hunt reported that there was interest in developing a WG to review the AGMA document referenced in Spec 11E. It was suggested that this might be resolved by taking over responsibility for maintaining the document as part of the ISO document development. The SC chair will provide an electronic copy of the document to Cecil Hunt.

At the 2002 Conference it was reported that a working draft on ISO 10431 (11E) has not been completed. SC 11 agreed to seek OGP funding assistance to convert the API document to ISO format in order to initiate a working draft.

At the 2003 Conference John Yonker reported that Neil Reeve has all the figures for ISO 10431/11E converted to AutoCAD and has reviewed them for accuracy. As there apparently is some mix-up on the previous request for OGP funding for the text conversion to ISO format, Tim Sampson accepted the action item to go back to OGP for this request and get the text converted. Once the text is converted, an ad-hoc team from SC11 will review the text for accuracy and currency.
4.16 Installation, Operation, Maintenance & Inspection of Lease Piping

A 1992 WG report indicated need for an RP, but no progress has been made due to loss of the WG Chair. It was noted that ARCO has considerable information it is willing to share with API. In 1996, the TG asked API staff to request a copy of the ARCO specifications for the API file. In 1997, Jim Curfew and John Franzwa agreed to participate when a Chair is found. Sid Thomas subsequently obtained a copy of the ARCO specifications, but a WG Chair is still needed. At the 1998 Conference, the SC Chair said there may be a candidate pending clarification of the scope of this document. If this isn't successful, the SC chair will act on the TG motion to request help from C1 to recruit a chair or direct the SC to quit this effort.

At the 1999 Conference, John Franzwa agreed to make a technical review of API 570 to determine its suitability for use as a lease piping document. At the 2000 Conference, John Franzwa presented a summary of the contents of API Std 570, which covers only inspection of piping and equipment and not installation, operations and maintenance. There was no consensus within the TG to start working on an RP. John Franzwa will act as a liaison to the WG on Std 570 to provide input and will have a report at the 2001 Conference. At the 2001 meeting, it was reported that the comments on Std 570 are being resolved.

At the 2002 Conference, Tim Sampson reported that the 570 TG has decided not to proceed with seeking a NWI with the Upstream Executive Committee on Drilling and Production Operations. No further action by SC11 was recommended at the 2002 Conference.

No action was taken at the 2003 Conference. See New Work Items.

4.18 Spec 1B, Letter from Visurgs Optibelt

In 1995, the TG reviewed the letter in Appendix 4.18, to determine if there was a need to clarify Spec 1B reference to ISO 4183. They agreed that if Spec 1B is a Class C (API only) standard, the group would need to clarify the suitability of the ISO 4183 reference.

Staff confirmed Spec 1B is a Class standard. In 1996, the TG Chair was requested to contact RMA to determine need to maintain Spec 1B parallel to ISO 4183 and 4184. In 1997, the TG Chair had not yet contacted RMA, but agreed to do so to help determine the need to maintain Spec 1B parallel to ISO 4183 and ISO 4184. At the 1998 Conference, the TG chair was requested to provide a report for the next conference.

At the 1999 Conference it was MSP to reaffirm Spec 1B by letter ballot and to seek approval from C1 to issue the reaffirmed document without reformatting and republishing as a new edition. This will keep the document active until ISO documents have been prepared. Spec 1B was reaffirmed by letter ballot. At the 2000 conference, it was reported there has been no contact with RMA or ISO 4183 and 4184 committees to update the status of the documents or their impact on Spec 1B. The TG Chair will get an update and report on the status at the next meeting.

At the 2002 Conference, John Franzwa, TG Chairman, agreed to review the status of 1B (licensees, publication sales, etc) with API to determine if the document should be
withdrawn or carried forward in part as an RP. No action was taken at the 2003 Conference.

C. New Business: There was no new business presented on surface process equipment at the 2003 Conference.

5. Other Standards Activities

5.1 New Work Items/ New Business

At the 2003 Conference Norm Hein reported on the work of the Permian Basin Operators Workgroup to develop onshore piping inspection standards. The workgroup plans to submit the final document to SC11 for consideration as an API RP.

Note: Sid Thomas provided the following report on June 19 to the C1 Committee:

<table>
<thead>
<tr>
<th>Item No./ Type</th>
<th>Brief Description</th>
<th>API STD &amp; Category</th>
<th>Original Ballot</th>
<th>New Ballot</th>
<th>Status</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-11-1-03</td>
<td>Circumferential Displacement. 11BR</td>
<td>RP11BR-C</td>
<td>9/97</td>
<td>7/2001</td>
<td>Re-Affirm</td>
<td>Passed Ballot w/comments</td>
</tr>
<tr>
<td>1-11-1-04</td>
<td>Editorial Update 11BR</td>
<td>RP11BR-C</td>
<td>12/95</td>
<td>7/2001</td>
<td>Pending</td>
<td>Passed Ballot w/comments</td>
</tr>
<tr>
<td>1-11-1-06</td>
<td>Slim Hole Coupling Derating</td>
<td>RP11BR-C</td>
<td>9/97</td>
<td>7/2001</td>
<td>ISO10428</td>
<td>Passed Ballot w/comments</td>
</tr>
<tr>
<td>1-11-1-08</td>
<td>Sucker Rod Guide Design</td>
<td>RP11XX</td>
<td>Working</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-11-2-01</td>
<td>Spec for Latches &amp; WL Tools</td>
<td>Sp11V1-A</td>
<td>9/97</td>
<td></td>
<td>ISO ballot closes 7/5/03</td>
<td></td>
</tr>
<tr>
<td>1-11-4-02</td>
<td>Review &amp; Modify 11E/11ER</td>
<td>Sp11E-A</td>
<td>9/96</td>
<td>7/99</td>
<td></td>
<td>Norm Hein working; OGP funding has accelerated the process</td>
</tr>
<tr>
<td>1-11-01-03</td>
<td>NWI coming</td>
<td>Spec 11AX</td>
<td></td>
<td>Technical changes required and gaging issues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-11-03-02</td>
<td>NWI coming</td>
<td>RP Lease Piping</td>
<td></td>
<td>Working offline by PBOWG. Expect draft by 9/1/03.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PC Pumps</td>
<td>11D2 ISO15136</td>
<td>Pending</td>
<td>Pending</td>
<td>Pending</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Submersible Cable Systems</td>
<td>11S5</td>
<td>Ready</td>
<td>Pending</td>
<td>Pending Technical Review ready for ballot</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub Pumps</td>
<td>11S1,2,3,6,7</td>
<td>2000 Review</td>
<td></td>
<td>Pending Review Reaffirmation etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sucker Rods ISO10428</td>
<td>11B</td>
<td></td>
<td></td>
<td>Working. 7/9/03 meeting.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Liaison Reports

NACE Liaison, H. Byars, provided the following report:

Revised Standards Published Since June 2002:

Changes to NACE Standard MR0175-2003:
Revised Title: "Metals for Sulfide Stress Cracking and Stress Corrosion Cracking Resistance in Sour Oilfield Environments".
Since the publication of NACE Standard MR0175-2003 in January 2003, NACE has received many requests for a document that outlines the changes from the previous edition. A copy of "Changes to NACE Standard MR0175-2003" can be downloaded from the NACE website at: http://nace.org/nace/content/technical/MR0175Changes.pdf. This information is intended to provide strategy and guide users through the new edition of MR0175, but it does not provide interpretations.

RP0176-2003, Corrosion Control of Steel Fixed Offshore Platforms Associated with Petroleum Production. This revised document will be available shortly.

NACE Standard RP0491-2003, Worksheet for the Selection of Oilfield Nonmetallic Seal Systems


NACE Standard TM0284-2003, Evaluation of Pipeline and Pressure Vessel Steels for Resistance to Hydrogen-Induced Cracking

New Standards:


NACE Standard MR0103-2003, "Materials Resistant to Sulfide Stress Cracking in Corrosive Petroleum Refining Environments" was ratified by the NACE Board at CORROSION/2003.
New Standards and Revisions to Be Balloted Soon:

A number of proposed NACE publications will soon be distributed for ballot, including...

**TG 137’s proposed revision to NACE Technical Committee Report 1C184**, "Hydrogen Permeation Measurement and Monitoring Technology";

**TG 247’s proposed NACE standard recommended practice**, "Liquid-Epoxy Coatings for External Repair, Rehabilitation, and Weld Joints on Buried Steel Pipelines";

**TG 260’s proposed NACE standard test method**, "Offshore Platform Atmospheric and Splash Zone Maintenance Coatings";

**TG 263’s proposed NACE standard test method**, "Offshore Platform Ballast Water Tank Coatings";

**TG 264’s proposed NACE standard test method**, "Offshore Platform Exterior Submerged Coatings";

**TG 293’s proposed NACE standard recommended practice**, "Gas Transmission Pipeline Internal Corrosion Direct Assessment Methodology."

Interested persons may contact NACE Headquarters at 281/228-6264 or e-mail ann.miller@mail.nace.org to receive a copy of these ballots.

If there are questions or more information is desired please contact NACE Technical Activities Department at: 281/228-6221 or email Linda.Goldberg@mail.nace.org or contact your liaison representative at: 214/348-7692 or email: hbyars@swbell.net.

Updates on NACE Technical activities, meeting, education courses, etc. may be found at the NACE website: www.nace.org

D. Adjournment: Having no further business the 2003 Conference meeting of SC11 was adjourned.