SCC14

Quantities, Units and Letter Symbols Committee Draft Minutes 24 May 2016 at 11:04 AM EDT 2016 SCC14 Meeting

The meeting was called to order by the chair, Gary Hoffman, at 11:04 am Eastern Daylight Time, Tuesday, May 24, 2016. The minutes were taken by the SCC14 Secretary, Gordon Aubrecht.

Members present: Gordon Aubrecht, Ohio State University; Peter Balma, Peter M Balma Engineering Consulting; Bruce Barrow, retired; Angelo Campanella, Campanella Associates; James Frysinger, Metric Matters; Michael Heinsdorf, ARCOM; Gary Hoffman, Advanced Power Technology; Ronald Petersen, CPP Wind Engineering and Air Quality Consultants; Howard Ressel, New York State Association of Transportation

Guests present: Mihaela Albu, Daewoo Mangalia Heavy Industry; Clair Claiborne, ABB; Steve Conrad, VEI Global (?); Doug Edwards, Doug Edwards Engineering (?); Keith Flowers, U.S. Army Corps of Engineers; Elizabeth Gentry, NIST; Robin Goldsmith, Go Pro Management, Inc.; Don Hilger, NOAA; Michael Kipness, IEEE; John Webb, John B. Webb & Associates (?)

- 1. Call to order
- 2. Introductions (attendees gave their affiliations)
- 3. Roll Call of Voting Members—anyone who wishes to become a member should email Gary Hoffman
- 4. Determination of Quorum—The secretary reported that there was a quorum.
- 5. Approval of Agenda—Frysinger moves, Aubrecht seconds; approved by unanimous consent
- 6. Approval of April 2015 SCC14 Meeting Minutes—Frysinger moves, Ressel seconds; approved by unanimous consent
- 7. Chair's remarks—4 IEEE standards are due to be withdrawn unless we move forward to take action; this is our most important business. Future endeavors—guides to get wider global acceptance. Gary has been on Standards RevCom 4 years. There are committees that do not follow metric standards, we liberally exclude certain fixtures. How can we describe inch-pound materials to be consistent with SI? The chair is grateful that so many people from other standards are joining us.

There are currently two working groups, led by Frysinger and Barrow. It could be that we could be involved in patents, but in any case all SCCs must read this material to members.

- 7.1. SCC14 P&P—Aubrecht asked about the 2 November WG P&P.
- 7.2. IEEE-SA Patent Policy—This was discussed with attendees
- 24 May 2016, SCC14 Meeting Agenda

8. Subcommittee reports

8.1. SCC14.1:

8.1.1. WG PSI 10 American National Standard for Metric Practice, Frysinger PAR expires 31 December, 2019—Frysinger reports that IEEE and ASTM formed a joint committee. The two societies work jointly to produce the American National Standard for Metric Practice (as approved by industry); this is adapted to the needs of the two societies. The two societies work jointly to produce the American National Standard for Metric Practice; this is adapted from the SI Brochure to the needs of the two societies and other industrial societies. This is not to be confused with the NIST Special Publications 330 and 811, which apply to federal agencies. Ours in the industrial national standard. Barrow noted that this is IEEE and ASTM standard. We need to make sure that the standard applies to all parts of IEEE; IEEE is an international organization. We bring a standard that has international acceptability. Barrow emphasized the international involvement, said he recalls the old metric confusion. There is basically no metric confusion any longer.

The joint committee has 10 members, 5 from IEEE and 5 from ASTM. We have gone through the revision process. This must pass the approval process in both IEEE and ASTM. IEEE is ready to go forward for approval. ASTM lags a little; they are doing a recirculation ballot, finishing in the early part of June. If no changes, both societies will push this "uphill." Frysinger hopes for fall approval. Hoffman mentioned that 16 or 19 September meeting will be the one that approves. Both bodies must approve the standard before it can go forward.

Kipness showed the calendar, 5 August is the date to get on the RevCom agenda. The following deadline in 17 October.

Gentry commented on SP-330 and SP-811. Ambler Thompson announced his retirement from NIST. There is a plan for the next update by Dr. David Newell, Dr. Eite Tiseinga, and Elizabeth Gentry around the 2018 date.

Aubrecht expressed his gratitude to Frysinger. Hoffman added to that.

Balma asked Frysinger about the 5-digit-numerals to compose the 80000 series. There are 13 parts. Part 1 is the general one. Subsequent parts are amplifications. Those provide implementation guidance for the SI in those fields. Frysinger represented the US as a deputy on the 80000 series and the 80003 series. That series is a "big ball of worms." There is cultural analysis! We worked mostly on the 80000 series. He also worked on the online electronics dictionary.

8.2. SCC14.2:

8.2.1. WG 270-2006 IEEE Standard Definitions for Selected Quantities, Units, and Related Terms, with Special Attention to the International System of Units (SI), Hoffman

Standard active until 31 December 2022

Hoffman took the position of chair. We are good until 2022, so there is no need for action. He would love to give this to someone else, Hoffman would welcome involvement.

8.3. SCC14.3:

8.3.1. WG 260.1-2004 IEEE Standard Letter Symbols for Units of Measurement (SI Units, Customary Inch-Pound Units, and Certain Other Units), Barrow Standard active until 25 March 2020

Barrow is the chair, good until 2020. Barrow will be in his 90s by 2020! Our standards are pretty stable. Not much update is expected. We do need to check. Frysinger chaired the WG the last time. One of the unique things is an annex. It is the most contentious; it provides alternatives when limited character sets are necessary (missing mu or omega). The annex provides informative guidance. That will be most discussed for its renewal. We should take out a PAR in 2016 and 2017. We cannot reaffirm any longer, so it is a bit more complicated. Hoffman said earlier is better. Frysinger volunteered whenever Barrow wants to withdraw.

8.3.2. WG 1541-2002 IEEE Standard for Pefixes for Binary Multiples, Frysinger

Standard active until 31 December 2018

This needs to be discussed. Frysinger briefed the attendees. It's unusual. This standard was developed to avoid SI prefixes when they mean something else (I.e., kilo- for $1024 = 2^{10}$). These are near SI prefixes but different enough to be recognized.

8.4. SCC14.4:

8.4.1. WG 280-1985 IEEE Standard Letter Symbols for Quantities Used in Electrical Science and Electrical Engineering, Petersen Standard active until 31 December 2018

Peterson agreed to chair. He believes he already has a PAR. He does not foresee many changes necessary. He is confident that we can do in essence a reaffirmation after it has been formatted in the new template.

8.5. SCC14.5:

8.5.1. WG 260.4-1996 American National Standard Letter Symbols and Abbreviations for Quantities Used in Acoustics, Hoffman Standard active until 31 December 2018

Hoffman discussed this with Campanella, who is very familiar with the standard. Campanella He looked it over, there are not many updates. Some sections on physics may not be relevant, Campanella thinks. This might be better in the science and technology standard. There may be pruning in this standard, or we could broaden the scope of the PAR to encompass measurement.

8.6. SCC14.6:

8.6.1. WG 260.3-1993 American National Standard Mathematical Signs and Symbols for Use in Physical Sciences and Technology, Aubrecht Standard active until 31 December 2022

Aubrecht said nothing is needed at this time.

8.7. WG P945 Recommended Practice for Preferred Metric Units for Use in Electrical and Electronics Science and Technology, Barrow PAR expires 31 December 2017

Hoffman is concerned we will face a new date for the PAR. Barrow says there is no reason we can't begin. He hadn't realized it was only a year away. He wants younger people on the committee. A call for participation will be out within the next week, according to Kipness. Hoffman asked whether SA or all of IEEE, and there are three societies involved, Kipness said. Power, instrumentation and measurement, and the computer societies are also receiving the call. We can do more societies after the first call. Hoffman asked whether there should be a PAR extension. Barrow said that we should see what the progress is by the end of the year. Aubrecht and Frysinger volunteered. Clair and Doug also volunteered.

Note: Chairs must be a member of IEEE and SA.

9. New Business

9.1. Motion to submit a PAR for revision to IEEE Std 280

If we seek a revision, we need to carry the title and scope. If there needs to be a modification, Hoffman can appoint a task force to fine tune this. Barrow thinks there is a working group. Hoffman said that there was not such a group. Peterson has volunteered as chair. Frysinger thinks Haffman is confounding two separate things. As an example, SCC14.3 subcommittee exists. It oversees 160.1 and 1541. The subcommittee can and does exist and fields comments. Currently, subcommittee SCC14.4 has oversight until a PAR is approved.

The motion to seek a PAR for revision of IEEE Standard 280 was moved by Aubrecht, Barrow seconded. The roll call was unanimous in favor. We have until 31 December 2018.

9.2. Motion to submit a PAR for revision to IEEE Std 1541

Frysinger had explained this above. The chair sensed a consensus. Frysinger moved a revision for a PAR for IEEE Standard 1541; Barrow seconded. The roll call was unanimous in favor. Frysinger volunteered as chair. He will submit a PAR by the deadline. Volunteers should email Frysinger.

9.3. Discussion on disposition of IEEE Std 260.4 and possible action

The scope may be changed, pruning material that does not fit. SCC14.5 is the subcommittee in charge. The title and scope the chair showed was incorrect. Hoffman asked Kipness to bring up the correct PAR. Light is included as normative text; it would have been fine in formative text.

Campanella suggestes that we remove it to simplify the standard. Barrow questions what should be removed. There was a misunderstanding. Hoffman listed three options—go forward, sponsor withdrawal, or let the standard expire.

Campanella moved that we seek a PAR for the revision of IEEE Standard 260.4; Barrow seconded.

Balma said we need to review the scope and see that the document is consistent.

Frysinger sees nothing about light and electricity in the document, but Hoffman said that the material was actually there.

The roll call was unanimous in favor. Campanella asked for a volunteer for chair, as he has not be a member of IEEE for some time. Hoffman volunteered as chair, asked for volunteers.

9.4. Motion to submit a PAR for revision of IEEE Std 260.1

Frysinger moved to submit a PAR for IEEE Standard 260.1; Aubrecht seconded. The informative annex is important. The roll call was unanimous in favor. Frysinger volunteered as chair.

Frysinger developed a P&P document for 14.1. All the other working groups need only change the title and use it as the P&P. There should be no problem in approval in such a case.

9.5. Change WG P&P title to: SCC14 WG P&P, Hoffman

The chair recommends a change in title to allow any SCC14 WG to use the P&P developed by SI10. Aubrecht moved that the title be changed to change of title of the P&P SCC 14 Working Groups; Balma seconded. If the motion is approved, no other group needs to develop its own P&P. Balma volunteered to revise the cover. The roll call was unanimous in favor.

9.6. Productivity tools from the IEEE-SA to assist WG Chairs and WG Participants, Spiewak (IEEE-SA)

Kipness showed the collaboration space: imeetcentral. He submitted written notes describing how to use it.

10. Old Business

None

11. Next SCC14 Meeting

Hoffman suggested a meeting in November of 2016, perhaps an hour. A doodle poll will be sent out for availability.

12. Adjournment

The meeting adjourned the meeting at 13:02.

Draft 2—24.5.16, 17:36 EDT

Members not attending: Randall Groves John Scott, Ambler Thompson, Bill Potts, Paul Trusten