Day 1, Monday, 11 February 2013

1. Call to Order
   • The meeting was called to order at 8:40 am.
   • All present introduced themselves and declared their affiliation.
   • A sign-in sheet will capture attendance each day.

2. IEEE Patent Policy
   • Chair Siira made a call for potentially essential patents. No potentially essential patent claims were declared, and no holders of potentially essential patents were identified.

3. Scope and Objectives
   • Agenda was reviewed and approved.
   • Minutes from prior meetings (20-21 August, San Francisco) were approved as posted for review on Mentor.
   • Review of the scope and objectives of the WG was presented. (IEEE P2030.2 Feb2013tgSlides-LIVE.ppt)

4. P2030.2 Draft 2.1 Overview
   1. Chair Siira reviewed the action plan and goal of a Ballot ready draft by October this year
      o Use both live and WEBEX meetings for the full Working Group
      o Use subgroups for additional work on specific areas
         ▪ Leads to organize subgroup WEBEX or Conf Calls outside of the full Working Group meetings
         ▪ Sara, the ICT Subgroup lead highlighted the usefulness of a keeping a standing-weekly meeting
      o A general call for volunteers was issued to the attendees, and volunteers came forward throughout the meeting (summarized here)
         ▪ NEW Subgroup “Microgrids”, Eduardo Alegria is lead. Other subgroup volunteers include Mark Siira, Bob O’Hagen, Hiroshi Irie, and Jim Reilly
         ▪ NEW Subgroup “Interconnection”, Jay Liu is lead. Other subgroup volunteers include Wayne Stec, Mark Siira, and Charlie Vartanian
         ▪ ICT Subgroup new volunteers, Bill Steeley and ________________
      o The latest version of the Draft was reviewed to highlight the areas that received new input for discussion at the meeting
5. Clause 3 Info and Update
   - Chet S. advised that the ESA/DoE Storage Handbook update is still active. He also
     noted that the PNNL work is producing relevant work that can be leveraged for use in our
     standard. (Chet sent additional definitions for Clause 3 via email, for inclusion in the
     meeting’s Draft redline.
   - Additional edits to the Draft, from the group during live discussion

6. Clause 4 Update
   - Wayne Stec reviewed his submitted input for sub clause 4.2
   - Additional edits to the Draft, from the group during live discussion
   - Comments on topics for inclusion in this section also saved as redline edits in the Live
     meeting Draft redlines

7. Clause 7 and 8, Update from the ICT Subgroup
   - ICT Subgroup Lead, Sara Biyabani provided an overview of the ICT Subgroup’s draft
     updates to Clause 7 and 8.
   - There was discussion about Clause 9, and the use of examples to illustrate the translation
     of an Application into the three 2030-2011 “perspectives. The power PS-IAP, information
     technology IT-IAP, and the communications technology CT-IAP
     - The Chair asked for a “single line” representation of the energy storage application
       in the introduction of each of the Applications. The format of the single-line should
       be consistent across all the examples
   - The ICT Subgroup will continue being active, and work on the Clauses they lead

8. Recap
   - Chair Mark Siira recapped the day, and the meeting adjourned

The WG recessed at 3:45 pm.
Day 2, Tuesday, 12 February 2013

The WG reconvened at 8:10 am.

May 2, 2012 (Wednesday 8:00 am – Noon)

9. Call to Order, Chair Mark Siira
   • Day 2 of the meeting was called to order at 8:40 am
   • Sign in sheet was made available for logging attendance

10. Continued Edits to the Draft
   • Chair Mark Siira and Vice Chair Tom Basso jointly led group through continued review of the latest Draft.
     i. Mark discussed Clause 10, Legacy Systems
     ii. Feedback included: Move a lot of history to annex; add more focus on ESS going forward as enabler of sg. Add discussion of ES as enabler of renewable
     iii. Edits and comments from discussion saved as redline edits in the Draft

11. Meeting Recap
   • Remaining gaps in the Draft should drive activity in support of achieving a Ballot ready draft this year
     o Clause 5, security. Need draft text. Significant prior input information submitted. Now needs conversion into content for this standard.
       ▪ Mariana H leading.
     o Clause 7, ICT subgroup active. Continue subgroup work editing this section.
       ▪ Sara B leading
     o Clauses 10-11, Legacy Systems and Testing. Continue adding content and editing
       ▪ Mark S leading

12. Next Meetings
   • Candidates for next live meeting discussed
     i. Time coincident to the next ESA Meeting 20-22
        1. Use Intel campus
     • EESAT, October 21-23, San Diego CA
        i. Consider use this event for a 3rd working group meeting in Fall timeframe, for prep of a Ballot-ready draft
     • IEEE 1547A WG’s next meeting. No date set as of now.
     • Energy Research Center, Madison Wisconsin, candidate location for summer timeframe
     • IEEE Headquarters, is a candidate host location for future live meeting
     • NEXT WEBEX, around March 18th
        i. Charlie V to coordinate and get IEEE help setting up the WEBEX and WEBEX registration
The WG adjourned at 12:00pm
IEEE P2030.2 Energy Storage Systems Integrated with Electric Power Infrastructure Working Group
Sponsored by SCC21
11-12 February 2013
Santa Clara, CA

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<tr>
<th>ATTENDEE</th>
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<tbody>
<tr>
<td>Eduardo Alegria,</td>
<td>Chevron Energy Service, Microgrid Subgroup Chair</td>
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<td>Bill Ash</td>
<td>IEEE-SA</td>
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<td>Thomas Basso,</td>
<td>NREL, P2030.2 Vice Chair</td>
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<td>Pierre-Yves Bertholet</td>
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<td>Sara Biyabani,</td>
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<td>Matthew Ceglia,</td>
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<td>Rhys Foster,</td>
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<td>David Kaplan,</td>
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<td>Maeda Kazuto,</td>
<td>NEDO (Japan)</td>
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<td>Frederic Kracke</td>
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<td>Doug Ledbetter</td>
<td>Chevron Energy Services</td>
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<td>Jay Liu</td>
<td>PJM, Interconnection subgroup Chair</td>
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<td>Hiotsui Maejima,</td>
<td>Mitsubishi Research Institute</td>
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<td>Andrew Miller</td>
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<td>Masatake Sakuma</td>
<td>Toshiba Corp.</td>
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<td>Chet Sandberg</td>
<td>Consultant</td>
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<td>Karl Schoder</td>
<td>CAPS @ FSU</td>
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