

**Meeting Notes**

Chair: Hamid Sharifnia [hamids@ieee.org](mailto:hamids@ieee.org)  
 Vice Chair: Ron Carlson [ronald.carlson.54@sbcglobal.net](mailto:ronald.carlson.54@sbcglobal.net)  
 Secretary: Debra Longtin [dlongtin@atcllc.com](mailto:dlongtin@atcllc.com)  
 Technical Editor: Mason Clark [d.m.clark@ieee.org](mailto:d.m.clark@ieee.org)

Meeting called to order by the Chair, Hamid Sharifnia. Hamid introduced himself and introductions were made. There were 45 attendees (9 members and 36 guests). A list of attendees is located at the end of these notes.

The required statement was read regarding a call for acknowledgement of potentially essential patents.

Hamid discussed the increased interest in physical security of substations, especially by US Homeland Security and the Obama Administration. Hamid shared a letter on the Quadrennial Energy Review Task Force that was just launched by the Obama Administration. The PG&E transformer issue is being highlighted. This physical security topic seems to be mostly a US issue. Hamid told the group to refer any media questions or requests for information about our efforts in revising the IEEE Standard to the IEEE Media folks.

The PAR and the schedule were reviewed along with the meeting notes from the fall Nashville 2013 meeting. The PAR expires in 2015, which does not give us enough time to complete the revision and complete the balloting process. **Hamid will work on requesting an extension of the PAR, hopefully to the end of 2017.**

It was pointed out that the latest version of our document which is posted to the protected area of the website does not contain all of the information from the version that various members revised on GoogleDocs. **Deb will get the GoogleDocs version posted to the protected area of the website for use in completing the various sections of our revised document.**

The following table shows assignments for the document sections. **These sections need to be completed by the section groups and submitted to Deb Longtin, Hamid Sharifna, Ron Carlson, and Mason Clark by September 1, 2014 at the latest.**

Section	Description	Action	Comments
2	Normative References	Hamid Sharifna	Need to review and merge the two document versions
3	Definitions	Hamid Sharifna	Need to review and merge the two document versions
4	Threat Assessment	Brian Farmer	Need to review and merge the two document versions
5	Criteria for Acceptable Designs of the Physical Security System	Keith Graham (lead), Ron Carlson, Sophia Flood, Arthur Graves, Patrick James, Al Longhi, Shashikant Patel, Pino Porciello, Julie Rebac, Alonso Rodriguez, Hamid Sharifna,	Still needs to be written, some input is in the two versions of the document
6	Analysis Process	Steve Shelton (lead), Bruce Largent	Need to review and merge the two document versions
7	Features of the Physical Security System – Advantages and Disadvantages	Julie Rebac (lead), Ron Carlson, Keith Graham, Al Longhi, Deb Longtin, Pino Porciello, Tom Proios, Diane Watkins	Still needs to be written, some input is in the two versions of the document
8	Substation Security Plan	Arthur Graves (lead), Keith Graham, Ben Hooley, Richard Jones. Julie Rebac	Still needs to be written, some input is in the two versions of the document

Note: Action item are shown in bold print.

All attendees agreed that it was acceptable to share their contact information with the working group. **Deb will send a note to each group providing the e-mail addresses for each group member.**

There was an open discussion again about standard versus guide. Craig explained that the C37.240 Cyber Security is a standard because NERC was looking for a standard to refer to. Guidelines for Low, Medium and High would be based on individual utility definition. Perhaps 1402 should mimic the Cyber Security document. The standard versus guide decision was tabled due to the lack of a quorum. An informal poll suggested that an overwhelming majority would prefer that it be a guide. In either case (standard or guide), we will need to be very careful with the wording to make sure that it does not put an undue and unwarranted burden on smaller utilities and commercial / industrial users. If we change back to a guide, the PAR would need to be revised. The group may vote at a future meeting if desired.

The meeting also included a general discussion of security practices and concerns. Some of the items discussed and/or items of interest to the group include the following:

1. OSHA 1910 – check for NESC clearances
2. UL and National Institute of Justice have ballistics documents available
3. GIS bus is vulnerable, especially the expose parts, bushings, etc.
4. Burns and McDonnell has issued a white paper on Asset Protection concerning protecting the grid from emerging threats. They have also held webinars on Physical Security.
5. Lighting – what philosophy to use
6. Walls
7. Presentations of threats, bullets, etc.
8. Testing data from manufacturers (polymer bushings, perimeter materials, ballistics)
9. What are utilities doing about spare parts? Transformers, control houses, other long lead items?
10. Opaque versus see-through perimeters, including fences that are opaque. Some utility crews and law enforcement agencies want to be able to see inside the substation for safety reasons, but other utilities have the philosophy that if it is not visible, it is less likely to be the target of a shooter.

**Summary of Action Items:**

1. **Hamid to request an extension of the PAR**
2. **Groups to complete section assignments by September 1**
3. **Deb to e-mail contact info for group members to each group**
4. **Deb will get the GoogleDocs version of our document posted to the protected area of the website**

Future Meetings:

Nashville: October 6-9, 2014  
Minneapolis, MN: May 17-21, 2015

E7 Working Group – IEEE Draft Standard for Physical Security of Electric Power Substations (1402)  
 2014 Spring Meeting – Portland, OR  
 Wednesday, 5/21 8:00 AM

Meeting Attendees:

<b>Name</b>	<b>Company or Affiliation</b>	<b>Working Group Role</b>
Rad Barac	General Electric Company	Guest
Philip Bolin	Mitsubishi Electric Power Products	Guest
John Bruns	Peak Measure	Guest
Kevin Buhle	American Transmission Company	Guest
W. Bruce Dietzman	Oncor Electric Delivery Company	Member
Brian Farmer	PG&E	Member
Sophia Flood	Oldcastle Precast Inc.	Guest
Alan Gaetz	HDR Engineering, Inc.	Member
Keith Graham	Dominion	Member
Arthur Graves	Ameren	Guest
Dale Hays	Salt River Project	Guest
Charles Holcombe	Southwire Company	Guest
Ben Hooley	Sargent & Lundy, Inc.	Guest
Patrick James	Southern States LLC	Guest
Richard Jones	TechSCorp / Energy Initiatives	Guest
Rejo Jose	Portland General Electric	Guest
Brett Kenerly	Southwire Company	Guest
Matthew Kirby**	Oldcastle Precast Inc.	Guest
Cris Kramschuster	American Transmission Company	Member
Anuradha Kumar	Sebesta	Guest
Bruce Largent	HDR	Guest
Rod Litchfield	UC Synergetic	Guest
Ed Lively	Alstom Grid	Guest
Al Longhi	Tymetal Corp	Guest
Debra Longtin	American Transmission Company	Member - Secretary
Ryan Madigan**	Leidos	Guest
Venkatesh Minisandram	National Grid	Guest
William Munn	Southern Company Services Transmission	Guest
Brett Phillips	Portland General Electric	Guest
Pino Porciello	Systems With Intelligence, Inc.	Guest
Nate Postma	American Transmission Company	Guest
Craig Preuss	Black & Veatch	Member
Thomas Proios	SAIC	Guest
Julie Rebac	EVRAZ North America	Guest
Tony Rodrigues	PacifiCorp	Guest
Alonso Rodriguez	ThermaLimits	Guest
Pravakar Samata	ABB	Guest
Oscar Santos	Southern California Edison	Guest
Hamid Sharifnia	PacifiCorp	Member - Chair
Steven Shelton	HDR Engineering, Inc.	Member
Rick Simonson	Southwire	Guest
Scott Taylor	ABB	Guest
Peter Thompson	EVRAZ North America	Guest
Gilles Tremouille	Alstom Grid	Guest
Don Wengerter	Wisconsin Public Service	Guest

Note that new attendees were assigned to the role of guest. Some have assignments. If those assignments are completed and they continue participating, they may become members if desired.

\*\* Not in 123signup, so no contact information is available. These two individuals will not receive meeting notes or other correspondence.