

Guide for the Design of AC/DC Auxiliary Power Systems
For Transmission and Distribution Substations
WG-D9
Nashville, TN
October 19, 2011

Meeting Notes

Chair: Hanna E. Abdallah
Vice Chair: Joseph Gravelle
Secretary: Radoslav Barac
Technical Editor: Dewan Jamir

1. **Opening** – The meeting was opened with introductions. There were 20 members and guests present at this meeting. See attendance list at the end of the minutes.
2. **Obligatory Statement** – The latest revision of the obligatory documents from IEEE regarding patents in standards and inappropriate topics for Working Group Meetings.
3. **Notes** – Hanna lead the meeting with a review of the meeting agenda and a review of the meeting notes from the Chicago meeting.
4. AC section – Review design flow chart and status of the guide.
Dewan Jamir lead the group through the AC section of the guide and the following assignments were agreed to.
 - 4.1.1 Redundancy requirements – Hamid Sharifnia, and Dale Fox
 - 4.1.2 Single-Phase or Three-Phase power – Joe Gravelle Steve Brown and Christian Robles
 - 4.2.1 – Essential vs. Non Essential Loads- Darren Vogt, William Munn
 - 4.2.2 – Dewan will update one line with block diagram style sketch and send to Hannah for review
 - 4.4 O&M Considerations – Ken Larson, Brian Farmer, & William Munn
 - 4.5 Design Considerations – Hanna Abdalla
 - 4.6 – Voltage Selection – Ken Larson
 - 4.8 – TR ratings and types – Hamid Sharifmia and Darren Vogt
 - 4.9.1 Transfer switch – Dale Fox and Brian Wallace
 - 4.10 AC Pannels – Darren Vogt and William Munn
 - 4.11 - Conductor Selection – Dale Fox
 - 4.12 – Circuit Protection – (sections 2-5) Dewan Jamir
 - 4.13 – Equipment Specifications – Dale Fox
 - 4.14 – Panel board bus ratings (thermal rating – Density rating) – Steve BrownBlack Start station considerations – special concerns for black start stations – Hanna Abdallah and Dale Fox

5. DC section – Review design flow chart and status of the guide.

Joe Gravelle lead the group through the DC section of the guide and the following assignments were agreed to.

Garry Beane - provide ISO New England document for redundancy resource.

Ken Larson – provide information on insulation of battery terminals – OSHA standard reference

Joe Gravelle – Add information to O&M section on battery weight considerations.

Joe Gravelle and Mike Nadeau – review document to remove wordiness and align the sections with the flowchart. Possibly move some parts to annex.

The assignments above are to be complete by the end of December 2011, and sent to Dewan Jamir for AC section and Joe Gravelle for DC section.

Joe and Dewan to update and send document to the group by end of January 2012 to get comments back by February and then to Debra Longtin by March.

Meeting adjourned

October 19, 2011 meeting attendance

Name	Company	Member status
Steven D. Brown	Allen & Hoshall, Inc	Member
Hassein Bashirian “Jack”	Southern Company	Member
Tom Davey	ABB Inc	Guest
Darren Vogt	ABB Inc	Guest
Steve Shelton	HDR Engineering	Member
Debra Longtin	American Transmission Co.	Member
Jim Sosinski	SAIC	Guest
Jody Cathey	Allen & Hoshall, Inc	Guest
Christian Robles	Entergy	
Gary Beane	TRC Engineering	Guest
Ken Larson	Pacificorp	Member
Hamid Sharifnia	Pacificorp	Member
Joe Gravelle	Xcel Energy	Vice Chair
Mike Nadeau	CG Power Solutions	Member
Hanna Abdallah	Power Engineers	Chair
William Munn	Southern Company	Member
Brian Farmer	PG&E	Guest
Dale Fox	SRP	Member
Diane Watkins	SRP	
Dewan Jamir	BMcD	Member