Working Group D1 Meeting Notes Nashville, Tennessee October 21, 2010

Chair – Hamid Sharifnia Vice Chair – Robert (Bob) Nowell Secretary – Joseph (Joe) Bell

Attendee's Name	Company	Member	Guest
Hamid Sharifnia (Chair)	PacifiCorp	Х	
Robert (Bob) Nowell (Vice-Chair)	Southern Company	х	
Joe Bell (Secretary)	PacifiCorp	х	
Radoslav Barac	General Electric Co.	Х	
Tom Barnes	Allen Hoshall	х	
Hassen Bashihian	Southern Company		Х
Steven Brown	Allen Hoshall	х	
Judy Cathy	Allen Hoshall		Х
Gary Engmann	Burns & McDonnell	х	
D. Lane Garrett	Southern Company	Х	
Graham Keith	Dominion Virginia Power		Х
Dave Kelley	Salt River Project	Х	
Don Laird	Not Provided		Х
Allen Love	Southern Company		Х
Andrew Nguyen	TVA		Х
Mike Noori	Custom Energy Solutions	Х	
Rey Ramos	Southern Company		Х
Doug Smith	SEPCOR, Inc.		Х
David Stamm	Sega, Inc.		Х
Ryan Stargel	TVA		Х
Brian Story	Entergy		Х

The meeting was called to order at 08:05am. There were 9 members and 9 guests in attendance.

The obligatory slides explaining IEEE's guide lines for patents and meetings were shown.

After welcoming the members and guests, Hamid explained what the working group's purpose was and asked everyone to continue to review the document and let him know if there were any concerns or errors. Hamid also explained that he is continuing to look at paring down the committee roaster to only include those members who were still active participants. We will also be looking at removing individuals listed as guests, but hadn't attended any meetings in awhile. An attempt will be made to

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contact the members that were identified as questionable and verify whether or not they want to continue to be an active member of the WGD1 working group.

Hamid discussed item #3 of the agenda, which provided a brief review of the Working Group's P&P Manual as it related to the D0 and D1 working groups.

A copy of the meeting notes from the May 19, 2010 Montréal meeting was shown and discussed. It was noted that the agreed to action items from that meeting were not completed.

After determining that there were enough members in attendance to constitute a quorum, the discussion turned to the concerns brought up by Randy Clelland and Gary Engmann.

To refresh memories, Randy found what is believed to be a typo regarding the minimum phase to ground clearance value given in table 3, page 13 of the guide for the 169kV, 750kV BIL voltage level. Instead of the 1325mm/56in. listed, it should be 1425/56in. It was again explained that this was most likely a typing error and that it will be corrected in the nest revision.

Hamid discussed Gary Engmann's concerns that were brought up in the Montréal meeting and in some previous communications relating to the 1050 kV BIL level listed in the NESC code book versus the values listed in table 3 of the 1427 guide. Hamid gave the floor to Gary who proceeded to explain his concerns regarding the difference in the two documents. Gary further explained that the altitude correction factor has been missing in Part 1 of the NESC for a long time and that he is still not please with the altitude correction factor that is provided in part 2 of the NESC book. Gary mentioned that there are some conditions which can affect the correction values and feels that these conditions should be explained somewhere in the documentations or at least make the reader of the guide aware that there are factors that need to be considered when apply the listed values.

Gary mentioned that the Chinese have been testing at EHV levels and have expressed concerns with the IEEE correction factors in the guide. It appears that we are specifying correction factors that are too low.

Gary again requested that the WGD1 draft a proposed NESC rule change that will require an elevation adjustment factor and provide a calculation equation, or at the very least, provide a better engineering justification than the approximations given is section 23 of the code book.

Keith Graham volunteered to provide, with help with the wording from Gary, a draft document requesting a "Tentative Interim Amendment" (TIA) for committee review. It is planned that the TIA document will be reviewed at the January 2011 meeting in Atlanta. Once the document is approved, Gary will forward the request on to his contact at NESC.

Gary went on to say that the 1950 NESC book clearance values appear to be greater than the ones listed in table 3 of the 1427 document. Gary suggested that someone should look into the differences and try to ascertain where and why there are discrepancies. Bob Newell mentioned that he thought a comparison was performed some time ago and promised to try and find the documents to see if they will be of value in helping to resolve this issue. If Bob is successful, he is to provide the information

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to Hassein Bashirian. Hassein will then make the comparisons and report back his finding to the committee.

If the outcome of the comparison review indicates that the values published in table 3 are sound and should be considered the benchmark, then it was felt that the working group should prepare an Information Request (IR) to the NESC committee asking why the their clearance levels are less than those provided in table 3.

Action Items:

- Keith Graham, with Gary Engmann's help, is to provide the wording for sending a rule change request to the NESC that will address the group's concern regarding the elevation correction factors. The report is due back the Hamid by 12/17/10 and is to be presented at the January 2011 meeting in Atlanta.
- Hassein Bashirian, with information provided by Bob Newell, is to compare the values
 published in table 3 of the 1427 guide with those given in the 1950 NESC code book and
 provide a report, with justification to support the published value. Report is to be presented at
 the January, 2011 meeting in Atlanta with a preliminary copy sent to Hamid as it becomes
 available.

The next committee meeting is scheduled to be held January 10th through the 14th in Atlanta, GA.

The meeting was adjourned at 09:10am.

Respectfully submitted,

Joe Bell WGD1 Committee Secretary