D9 Working Group IEEE P1818 - Guide for the Design of Low Voltage Auxiliary Systems for Electric Power Substations Portland, OR – May 21st, 2014 Wednesday, 1:00 p.m. – 5:00 p.m.

Chair:Hanna E. AbdallahVice Chair:Joseph GravelleSecretary:Radoslav BaracTechnical Editor:Chack Haar

MEETING NOTES

1. Chair has shown the IEEE Patent Slides

2. Introduction of guest and members:

There were 13 of 32 members and 18 guests present at this meeting.

3. Nashville meeting notes review and approvals:

Chair has mentioned that PAR expires December 31, 2014.

Erin suggested that PAR should be extended for two (2) years. Extension needs to be done by October 20, 2014.

No corrections the Nashville meeting notes have been noted. Nashville notes have not been posted to the WG website. The notes need to be posted to the website.

4. Review agenda and revise if required

No changes have been added to the proposed Agenda.

5. AC auxiliary system present status and discussion

WG member went through all sections of the AC part. The following has been discussed and decided:

Section 2. Sahi Patel has volunteered to add the Normative References to the Section 2.

Section 3. Bruce Largent has volunteered to add definitions for the Section 3.

Figure 1 – change Block Diagram for Typical Substation AC Station Power To Block Diagram for Typical Substation AC **Auxiliary Power**.

Section 4.

Hanna has told that at certain substation a new AC power supply source for black start might be added.



Patel told an example where a new diesel generator was added to pump oil for the HV cables.

Section 4.1.1. - Tom Priest has volunteered to revise section (System Stability) Section 4.1.2. - Tom Priest mentioned an example where a utility has added AC power supply back-up for meters in order not to lose data from revenue maters in the case of power outage.

Section 4.1.3. – Hanna told of an example where backup power supply was added for main power XFMR's fans.

It was agreed that Sections 4.1.4. and 4.1.5 should be removed.

Section 4.2.

Hanna discussed a practice of using XFMR tertiary as power supply source: inside a substation it is OK to use XFMR tertiary but if outside substation it is risky for XFMR tertiary to be used as AC power source.

Section 4.2.1 – Protection part of this section to be moved to document's Protection Part.

Section 4.2.2 – Matt Rosenfield has volunteered to do this section.

Section 4.3. – It was agreed that Milomir would do this section as his assignment from previous meeting.

It was mentioned that a control building or switchgear building lighting, HVAC and receptacles are consider as depending on geographic location.

Section 4.4. – Figure 3 has to be redrawn, make it larger.

Section 4.5. – On the figures 5 and 6 ground should be shown.

Section 4.6. – Zack Hoffmann will redo whole section.

Section 4.7. – xxxxxxxxxxx

Section 4.8. – Steve has agreed to rewrite the section. <u>Section 4.9 – Protection Section we have a person volunteered to work on the protection</u> <u>section do you remember his name</u>

Section 4.11. – Sashi Patel has volunteered to redo the section.

Annex – AC Auxiliary system example: Nathaniel Postma and Neil Cindar have volunteered to do it.

It was agreed that all assignments to be finished no later than two (2) weeks before Nashville meeting.

6. Next Meeting - Nashville, TN -



7. Adjournment



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