

IEEE / PES ELECTRIC MACHINERY COMMITTEE GENERATOR SUBCOMMITTEE

Minutes of Meeting

Wednesday, August 7, 2019; 10:00 AM – 12:00 PM

Location: Grand Ballroom A, Hilton Atlanta, GA.

1. Call to Order

The meeting was called to order by Chairman William Bloethe. Attendees presented themselves in order of seating. There were also attendees present by a web meeting app (Circuit). Please refer to Attachment A for a listing of attendees.

2. Approval of 2018 Minutes

Haran Karmaker asked about the 2018 minutes. There was a discussion of the last meeting which was a phone call on 12/4/2018. There were eight people present for the December meeting. A question was asked if the 12/4/18 meeting had a quorum. The chairman explained that extreme measures were taken due to not many members being present, but committee work still needs to be done. [] moved and Marc Ziedman seconded that the minutes of the 2018 meeting be approved. The motion passed.

3. Approval of 2019 Agenda

There was a discussion about adding a panel session for Std. 1110 to be added to the agenda. [] moved and [] seconded that the agenda for the meeting be approved. The motion passed.

4. Officer's Reports

Chairman Gayland Bloethe stated that a large number of standards are coming up on the 10-year point where they need to be looked at and possibly revised. As a result, Jim Lau pulled up all the standards that the EMC is responsible for. IEEE 67 which is the Operation and Maintenance of Turbo-generators will expire soon. The hydro-generator equivalent standard is IEEE 492 which also needs work. IEEE 1129 will expire next year and needs work. The word went out for people to start thinking about who would be interested in working these WG's.

In the immediate future, IEEE Stds. 67, 492 and 1129 need people to be recruited to work on. Both IEEE 67 and 492 need a chairman.

Gayland also expressed concern that the community is changing and there is more emphasis being placed on power electronics in the field and less or no thought about how the changes affect electric machines. IEEE 1547.1 has had a recent publication. IEEE 2800 is a standard about connecting inverter fed sources to the GRID. IEEE 1547.2 has examples of connections to the distribution system below 100 kV.

Secretary Rob Messel talked about how WG 1665 is progressing and vision is to take the draft standard to ballot in the next few months.

5. Election of Officers

The chairman William Bloethe is stepping down as chairman this year. By order of succession, this means that the Vice Chairman becomes the Chairman and the Secretary becomes the Vice Chairman. The new Chairman will be Edson Bortoni and the new Vice Chairman will be Rob Messel.

The chairman asked for volunteers for the new Secretary role. Since there were no volunteers for Secretary, Rob Messel agreed to remain secretary if someone would volunteer for Vice Chairman. Robert Thorton-Jones volunteered for Vice Chairman. Nils Nilsson made a motion to approve and [] seconded the motion. The motion carried.

6. Working Group Reports

WG 1 Awards & Recognition. Details presented at EMC.

WG 3 (IEEE Std. 1665). Rob Messel reported that work is progressing to finalize a draft of the standard to go to balloting in the next few months.

WG 7 (IEEE Std. 115). Haran Karmaker stated that the ballot is in recirculation and will close today and as of now there were no new responses. The WG met on Sunday and mentioned that there were still a few issues such as the air gap line that need to be worked out in the next revision of the standard. There was a discussion of holding a panel session of the standard changes at the next PES meeting in 2020.

WG 8 (Harmonization of IEC and IEEE - IEEE C50.13). Mike Sedlak is not able or willing to perform the duties of the WG chairman. Jim Lau is now the new chairman. There was discussion that the scope of the standard may need to be increased to incorporate 4 pole large salient pole machines. Scope may also need to include DFIG machines.

WG 10 (IEEE Std. 1110). The standard was in recirculation and the time frame ended on 8/1. There is a good possibility of going through. Due to industry changes, the latest revision may need to be enhanced in the future.

Task Force on Grid Code Impacts on Machine Standards. The technical report as a result of this task force is available. The task force has a meeting later today. The meeting plans to discuss topics such as operating in a standby basis and operating in a very dynamic environment. IEEE has an upcoming webinar on 9/10.

WG 14 (IEEE C50.12 Revision). This standard may need work to include hydro-generators with cylindrical rotors.

7. Liaison Reports

Jim Lau gave an update on what work was going on in the Materials Subcommittee & DEIS. The group met on 6/1/18 in Calgary and the next two meetings will be on 10/1/18 in Toronto and on 11/1 in Charlotte hosted by Siemens. The 2020 meeting will be in Knoxville hosted by the DEIS.

Mike Basler gave an update on the work going on in the Excitation Systems Subcommittee. There is work going on in revising IEEE Std. 421 definitions and IEEE Std. 421.5 which discusses modelling. The committee is considering putting a tutorial together for the 2020 PES meeting.

Nils Nilsson gave an update on the work in the Power System Relaying Committee. The next meeting is in September in Denver. The PSRC is very interested in working more closely with the EMC. Nils also took a few minutes to discuss and make everyone aware of the awards that EMC members were receiving during the conference.

Hydro Power Subcommittee has their next meeting starting Monday in Denver where 12 standards will be discussed.

Motor Subcommittee stated that Dr. Chiba will be the 2020 Tesla award winner.

Members from the Renewable Machines Committees were not present.

8. Standards Review & Status

Innocent Kamwa will provide a formal report after the meeting on all the standards in the EMC.

9. Web site report

To be provided at EMC meeting.

10. Old Business (All)

No old business to be discussed

11. New Business (All)

[John] made the motion to have the revised IEEE Std. 1665 go to ballot before the next GSC meeting and Jim Lau seconded. The motion carried.

There was also a discussion of having a panel session to discuss the issues with testing machines per the current circulating version of IEEE Std. 115. A few of the issues are how to calculate the air gap line, how to address end winding vibration and a new method for calculating machine reactances. The committee agreed to bring this up in the upcoming EMC meeting.

12. Next GSC Meeting

Next meeting is during the 2020 PES meeting in in Montreal, Canada August 2 – 6.

13. Adjourn

Attachment A – 2019 Attendees

Attendee	Affiliation
Greg Anderson	Southern California Edison
Haran Karmaker	TECO Westinghouse
Nils Nilsson	Lanier Consulting
Roberto Siniscalchi	Furnas Centrais Electricas
Marc Ziedman	Sargent & Lundy
Jacob Jewison	Kato Engineering
Henrique Menarin	Reivax
Uwe Seeger	Siemens AG
Yannick Ferland	Hydro-Quebec
Ruediger Kutzner	HS Hannover
Aleksadr Khazanov	
Ian Nelson	Siemens Energy
Gayland Bloethe	Sargent & Lundy
Hugh Zhu	
Kevin Chan	GE Switzerland
Edson Bortoni	Itajuba Federal University
Jim Lau	Siemens Energy
John Ready	Bechtel
Robert Thornton-Jones	Brush
Derek Brown	Pacific Gas & Electric
Allan Windhorn	Kato Engineering
Michael Basler	Basler Engineering
Dan Ionel	University of Kentucky
Bruno Tonsic	ABB
Rob Messel	Siemens Energy
Anna Gogenava	
Dean Yager	Sask Power
Stefano Bomba	Ontario Power Generation