

IEEE Power and Energy Society Entity Annual Report 2021

Entity: Energy Development and Power Generation Committee
Website: site.ieee.org/pes-edpgcom
Chair: Robert Thornton-Jones
Vice-Chair: Kai Strunz
Secretary: Michael Negnevitsky
Immediate Past Chair: John Yale

1. Significant Accomplishments:

Subcommittees and working groups continued coping with the Covid pandemic with mostly virtual meetings. This included standard working groups maintaining progress on standard development and revision.

IEEE Std 2760-2020 (the Wind Power Plant grounding guide) was finally published January 29, 2021.

The Hydroelectric Power Subcommittee (HPS) and the IEC TC4-WG14 joint working group continue their development of a new dual-logo standard (P2793) containing harmonized governor terms and definitions. A dedicated working group of IEEE governor continues to meet at least monthly working on these terms and definitions as well as two other governor standards under revision (125 and 1207).

IEEE Std 1147-2021 Guide for the Rehabilitation of Hydroelectric Power Plants was officially published 26 October 2021.

EDPG continued to coordinate with Emerging Technologies, Wind and Solar Coordinating Committee, Policy Development and the Energy Internet Coordinating Committee.

Seven panel sessions and 30 pre-recorded sessions were delivered for the General Meeting by the International Practices Subcommittee.

Working group on Distributed Battery Energy Storage Systems (BESS) produced a white paper on the modeling, managing and the application of grid connected BESS.

2. Benefits to Industry and PES Members from the Committee Work:

The committee has eight subcommittees which provide benefits to industry and members through:

- Panel sessions at the PES General Meeting
- Tutorial at the PES General Meeting including professional development course
- Sponsorship of two entity standards with coordination with IEC



- 18 standards and guides in development or revision
- Developed a harmonization of hydro governor terms for a dual logo standard with IEC
- Liaison with four other technical groups

3. Benefits to Volunteer Participants from the Committee Work:

Volunteers benefit from participation in committee and subcommittee activities. Networking at meetings, both in person and virtual are the most common benefit. Others and increased knowledge through discussion during the development and revisions of technical standards such as the excitation 421 series or hydro governor guides 125 and 1207.

The breadth of opportunities to engage internationally in important topics in energy development are also provided by the subcommittees. Distributed Energy Resources Isolated Power System Connect (IPS-Connect) meeting in Hobart Tasmania is an example of subcommittee involvement that provides international exposure and access to volunteers.

4. Recognition of Outstanding Performance:

Rama Ramakumar is recognized for his 51 years of work with IEEE.

5. Coordination with Other Entities (PES Committees, CIGRE, standards, etc.):

- The committee has four formal liaisons:
- Emerging Technologies
 - Wind and Solar Coordinating Committee
 - Policy Development
 - Energy Internet

The Hydro Subcommittee is coordinating the entity standard 2775, Smart Hydro and a guide for harmonization of turbine governor terms with IEC

6. New Technologies of Interest to the Committee:

Variable speed hydro and variable speed pumped storage is of particular interest to the HPS, and the HPS is seeking expertise from individuals involved in these technologies to contribute to a whitepaper currently being developed by a taskforce of the subcommittee.

7. Global Involvement

PES is looking to increase involvement with members from Regions 8, 9 and 10 (Africa, Europe, Middle East, Latin America, Asia and Pacific). Please provide the following information.

Total Number of committee members 21 active, 31 corresponding	Officers from regions 8,9 and 10 3	Subcommittee officers from regions 8, 9 and 10 2	Subcommittee members from regions 8,9, and 10 unsure
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8. Significant Plans for the Next Period:

Most working group meetings will be held virtually. We are hoping for increased participation due to decreased overhead costs. 2022 meeting will coincide with the PES General Meeting.

Submitted by: John B. Yale, Past-Chair

Date: 7 February 2021