

*Minutes for HVDC Switches
October 6, 2020
Fall 2020 Meeting*

- The working group met for one online session on October 6th.
- 18 participants were in attendance. See the attached attendance roster.
- Attendees introduced themselves and stated their affiliations.
- WG Chair Bill Hurst reviewed the Patent and SA Copyright slides with working group.
 - No participants stated any patent conflicts with the WG.
- WG Chair reviewed Minutes from spring 2020 meeting and gave the following updates:
 - PAR was submitted and approved.
 - Working Group PC37.30.7
 - Chair called for meeting minutes to be approved. Joanne Hu motioned to approve the minutes. Jacob Blake seconded the motion.
- WG Chair shared the following list of reference standards and technical documents for WG to use as reference in C37.30.7 document development and will investigate with IEEE to make them available for use by the WG members:
 - Cigre Technical Brochure 683: Technical Requirements and Specifications of State-of-the-art HVDC Switching Equipment
 - Cigre Technical Brochure 684: Recommended Voltages for HVDC Grids
 - IEEE 1709: IEEE Recommended Practice for 1kV to 35 kV Medium-Voltage DC Power Systems on Ships
 - IEEE 1899: IEEE Guide for Establishing Basic Requirements for High-Voltage Direct-Current Transmission Protection and Control Equipment
 - IEC 60633: HVDC Transmission - Vocabulary
 - IEC 60038: IEC Standard Voltages
 - IEC 60071-1: Insulation Coordination – Part 1: Definitions, principles & rules
 - IEC 60071-5: Part 5: Procedures for HVDC converter stations
- Steven Chen gave an update on the following:
 - IEC TC 17- Split into the following 5 documents: Common specifications document, Circuit breakers document, and 3 for switches (paralleling & bypass, transfer, disconnect/earthing)
 - Documents under development and some being circulated.
 - Steven to keep WG updated on the progress.
- Discussion on formatting the new document. WG Chair proposed whether it is best to follow C37.30.1 format or split into multiple standards like IEC formatting.
 - Carl Reigart mentioned IEEE C37.30.1 combined several documents into one to prevent circulation issues and reduce costs of purchasing several documents to get all information.
 - Joanne Hu agreed to include all switchgear types into one document.
 - Bill Hurst stated that disconnecting and earthing switches should stay within HVDC switch standard.
- Joanne Hu volunteered to look at overall scope and different types of HVDC devices and give a recommendation of which devices should be covered in the new HVDC circuit breaker standard vs. the new HVDC switch standard, both under development.

- Consensus from WG that development of definitions for the different HVDC devices and their applications should be completed first. Then ratings should be developed.
- WG Chair Bill Hurst proposed to form a working group to define the devices. Working group to consist of the following volunteers:
 - Jacob Blake, John Kaminski, Carl Reigart, Danish Zia, Bruno Bisewski, Laura Reid
- Spring 2021 meeting WG will look at how to evolve the AC switch standard to a DC standard.
- WG Chair noted that second session of Fall meeting was not needed.
- Motion to adjourn the meeting made by Carl Reigart.

Action Items for the Spring 2021 Meeting:

- WG Chair to circulate the list of reference documents to working group participants.
- Joanne Hu to complete device evaluation and give recommendations to WG Chair.
- WG formed of participants list above to work on definitions of different devices to be covered before next meeting once Joanne completes her evaluation.

Laura Reid
WG Vice Chair

WG PC37.30.7 F20 Attendance

Role	First Name	Last Name	Company	10/6/2020
Member	Jacob	Blake	Hubbell Power Systems	x
Member	Brett	Boles	Southern Company	x
Member	Bruno	Bisewski	RBJ Engineering, Corp.	x
Member	Steven	Chen	Eaton	x
Guest	Tim	Cook	Pascor Atlantic	x
Member	Danny	Hoss	Southern States	x
Member	Jim	Houston	Southern Company	
Guest	Joanne	Hu	RBJ Engineering Corp.	x
Chair	Bill	Hurst	GE Renewables	x
Guest	Dave	Johnson		x
Member	John	Kaminski	Siemens Industry	x
Guest	Pete	Kowalik	Cleveland Price	x
Guest	Jeremy	Moore	Pascor Atlantic	x
Vice Chair	Laura	Reid	Hubbell Power Systems	x
Member	Carl	Reigart	Hubbell Power Systems	x
Guest	Eros	Stella	GE Renewables	x
Guest	Adam	Voyles	Ameren	x
Guest	Li	Yu	Eaton	x
Member	Danish	Zia	Underwriters Laboratory	x