Thursday, May 2, 2019 10:00 AM - 12:00 PM (EDT)

Item	Description 10.00 AW = 12.00 PW (ED1)	Presenter
1	Call Meeting to Order	Todd Irwin – Chairman
'	Called to order at 10:01 AM.	Toda II WIII Olla II II II
2	Introduction of Members & Guests	Todd Irwin
		Toda II WIII
	Self-introductions with affiliations were made by the attendees.	
	Attendance and Quorum Check	
3	Rosters are being passed around.	Doug Edwards –
Ū	Sign only one.	Secretary
	Add your name and affiliation information if you are not on the list.	
	Sign-in sheets were circulated. Quorum was verified.	
	 82 members + 4 Corresponding and Honorary members = 86 Main Committee Me Thus 42 members required for quorum. 59 members present (quorum met) 68 Guest 127 Total attendees 	mbers for Quorum Check
	Attendance is documented in at the end of this document and is maintained in 123Sign	пир.
4	Agenda Review and Approval	Todd Irwin
	Motion to approve by: Paul Sullivan Motion seconded by: John Webb Motion approved unanimously.	
5	Recognition of Supporters	Todd Irwin
	THANK YOU to our financial supporters for this mee	eting!
G&W	B, CESI, Cleaveland Price, DNV GL KEMA, Doble, Eaton, Ele Electric, GE Grid Solutions, H-J, HICO, Hitachi T&D, Mitsubis owell Industries, S&C Electric, Schneider Electric, Siemens, S	shi Electric, NEMA,
6	Approval of Fall 2018 Minutes	Todd Irwin
	Motion to approve by: Allan Morse Motion seconded by: Tom Hawkins Motion approved unanimously.	
7	Tributes Paul Notarian Bob Puckett	Todd Irwin
	Tributes provided Minute of silence observed.	
8	Chairman's Report Technical Council Report	Todd Irwin
	See: Chair's Report included with Main Committee minutes (IEEE PES Switchgear minutes – Spring 2019)	

Thursday, May 2, 2019 10:00 AM - 12:00 PM (EDT)

Item	Description	Presenter
9	Switchgear Committee Financial Report	Doug Edwards – Treasurer
	IEEE PES Switchgear Committee is in sound financial position.	
	Audit	
	 In process. Currently working on submittals of 2019 Audit documentation. Will be executing Audits every year. 	
10	Standards Coordinator's Report	Todd Irwin (for Michael Wactor – Standards Coordinator)
	See: Standards Coordinator's Report included with Main Committee minutes (IEEE PES Switchgear minutes – Spring 2019)	
	Reminder: Request that all Subcommittee Chairs send their status updates no later the Spring and Fall face-to-face meetings.	nan (NLT) 30 days prior to
11	Technical Committee Program Coordinator (TCPC)	Alex Lizardo
	Two conference papers, "A Survey on Mechanical Switches for Hybrid Circuit Breaker Circuit Breaker with Capability of Reducing Reclosing", were both accepted as poster presented in August at the IEEE PES General Meeting to be held in in Atlanta, Georgi	sessions and will be
	The call for papers for the 2020 IEEE PES T&D Conference and Exposition has been "Electrifying the Future". The submission site opens July 8, 2019. All papers must be s 2019. The theme's focus is to highlight the future state while focusing on challenges the achieve the current state of the power and energy industry. For details, including key the https://www.ieeet-d.org/IEEE20/CUSTOM/2020CallForPapers.pdf.	submitted by August 5, nat have been solved to
12	Registrar's Report	Todd Irwin (for Jeremy Hensberger Registrar)
		<u> </u>

See: Registrar's Report included with Main Committee minutes (IEEE PES Switchgear minutes – Spring 2019)

Shirts:

- There was a pre-ordering process. Opportunity until 5/3/2019 to place order via 123Signup for Shirts.
- Shirt orders are 123Signup, then Website redirect.
- Shirt will be delivered in San Diego
- Will be a couple of years before we do another a shirt order.

Roster Location Check

IEEE/PES SWITCHGEAR COMMITTEE MAIN COMMITTEE BUSINESS MEETING MINUTES

Burlington, VT USA Thursday, May 2, 2019 10:00 AM – 12:00 PM (EDT)

· · · · · · · · · · · · · · · · · · ·			
Item	Description	Presenter	
	Subcommittee Reports		
13	Administrative (ADSCOM)	Keith Flowers – Vice-Chair	

See: AdsCom Subcommittee Spring 2019 Minutes (IEEE PES Switchgear minutes – Spring 2019)

- Forming TF for Aging of Lubrication.
 - o 1st meeting in Fall.
 - o Doug Edwards to chair.
- Maximum Voltages
 - o IEEE 1547 has been updated, increasing from 5% to 10% above nominal.
 - Additional IEEE SCC21 documents being revised.
 - o ANSI C84.1 in process of update which will include Public review period.
 - o General concerns across all of electrical equipment.
 - Suggesting appropriate to comment to NEMA concerning C84.1.
 - o Providing alert that IEEE 1547.1 is forming Ballot pool invitation closed May 10.
 - o AdsCom drafting a Position Paper for MC review and ballot (via e-Ballot).
 - Subsequent to meeting, IEEE PES Switchgear Position Paper approved via an electronic ballot and submitted to NEMA on June 4, 2019.
 - For copy of IEEE PES Switchgear Position Paper, see: Main Committee Spring 2019
 Minutes (IEEE PES Switchgear minutes Spring 2019)
- C37.100.1 PAR Study Group
 - o PAR Study Group was formed.
 - o Goal is a PAR draft for review at San Diego meeting.

R4 (2019-09-13) Page 3 of 12

Thursday, May 2, 2019 10:00 AM - 12:00 PM (EDT)

Item	Description	Presenter
14	 Education, Recognition & Publications (ER&P) Updates Thursday presentation – "HV Fuse Tutorial and Application Guide or how I learned to stop worrying and love the fuse protection" – Dr. John Leach Box lunches (for those who purchased in advance) The Committee is seeking volunteers to speak at upcoming meetings for Tuesday luncheon and Thursday technical presentations. 	Allan Morse

Thursday, May 2, 2019 10:00 AM – 12:00 PM (EDT)

ltem	Description	Presenter

See: ER&P Subcommittee Minutes

(IEEE PES Switchgear minutes - Spring 2019)

Monday: Two (2) Training sessions for P&P, O&P, WG P&P were conducted.

Tuesday IEEE PES Resource Center Training Presentation provided by Dean Fiorino (IEEE Staff)

Forming a Fellows Nomination Task Force. Soliciting leader for TF.

Thursday Technical Presentation: HV Fuse Tutorial and Application Guide or how I learned to stop worrying and love the fuse protection by Dr. John Leach

Presentations: ERP always seeking and welcomes volunteers to speak at upcoming meetings for Tuesday luncheon and Thursday technical presentations.

Awards provided to 12 WG's:

- C37.010
- C37.11
- C37.12
- C37.12.1
- C37.13.1
- C37.20.10
- C37.21
- C37.27
- C37.30.1a
- C37.30.5
- C37.41
- C37.60

Recognize Honorary Members

- Frank DeCesaro
- Edgar Dullni
- John Leach
- Steve Meiners
- Dave Mitchell
- Ted Olsen
- Tim Royster
- Dave Stone

Recognize new Main Committee members

- Brett Boles
- Chris Borck
- Bob Cohn
- Roy Hutchins
- Brad Lewis
- David McMullen
- Richard Rohr

Paper Review Coordinators

- TCPC (conference papers): Alex Lizardo
- HV Papers Coordinator: Kirk Smith
- LV Papers Coordinator: Kevin Sippel

Encourage you to write papers.

Encouraged those who are not already Senior Members to pursue Senior Membership.

IEEE/PES SWITCHGEAR COMMITTEE MAIN COMMITTEE BUSINESS MEETING MINUTES

Burlington, VT USA Thursday, May 2, 2019 10:00 AM – 12:00 PM (EDT)

Item	Description	Presenter		
15	High Voltage Fuses (HVF)	James Wenzel		
	See: HVF Subcommittee Minutes (<u>IEEE PES Switchgear minutes – Spring 2019</u>)			
	IEEE continues to work to make corrections with C37.40, C37.43, C37.46, and C37.47 are superseded but continue to be misreported on IEEE websites.			
	C37.48 approved for ballot.			
	PAR Study group being formed for combining C37.41 & C37.42.			
16	High Voltage Switches (HVS)	James Houston		
	See: HVS Subcommittee Minutes (<u>IEEE PES Switchgear minutes – Spring 2019</u>)			
	 C37.31 – Out for ballot, in process. Submitted PAR concerning Motor Operator Guide. Formed Study Group for HV DC Switches HVS is separating C37.30.3 & C37.30.4. Two (2) members identified to support T&I. 			
17	High Voltage Circuit Breakers (HVCB)	Victor Hermosillo		
	See: HVCB Subcommittee Minutes (IEEE PES Switchgear minutes – Spring 2019) New Secretary – Carl Schuetz Documents approved by RevCom included: PC37.04, PC37.09, PC37.011, PPC37.12.1, and PC37.016. PAR Study Group formed for C37.10 PAR Study Group formed for C37.016 C37.11 – PAR Amendment to add Aux Switches requirements C57.16 Task Force – Coordinate revisions C57.16 Task Force to have circuit breaker and systems studies participants Task force to review need for HVDC standard	C37.10.1, PC37.12,		
18	Low Voltage Switchgear Devices (LVSD)	Dave Dunne		
	See: LVSD Subcommittee Minutes (IEEE PES Switchgear minutes – Spring 2019) C37.13 TF: Title being updated to add voltage details C37.17: In process of updates. Identified three (3) members to T&I.			
19	Reclosers and Other Distribution Equipment (RODE)	Francois Soulard		
	See: RODE Subcommittee Minutes (IEEE PES Switchgear minutes – Spring 2019) • IEEE C37.60/IEC 62271-111 Dual Logo document was published. • Secretary appointed Travis Johnson.			

IEEE/PES SWITCHGEAR COMMITTEE MAIN COMMITTEE BUSINESS MEETING MINUTES

Burlington, VT USA Thursday, May 2, 2019 0:00 AM – 12:00 PM (EDT

Item	Presenter	
20	Switchgear Assemblies (SA)	Tom Hawkins
	See: SA Subcommittee Minutes (<u>IEEE PES Switchgear minutes – Spring 2019</u>)	
	 Corrigendum C37.24 was published. Active PAR's – 5 documents: C37.20.1a, C37.20.2a, C37.21a, C37.20.3, C37. 2019 Ballot Activity – 4 documents: C37.20.1a, C37.20.2a, C37.21a, C37.121 Upcoming PAR Activity – 5 documents: C37.20.1, C37.20.2, C37.20.6, C37.20. Not Active – 5 documents: C37.20.9, C37.20.10, C37.24, C37.81, C37.82 	
21	Technology and Innovation (T&I) Subcommittee	Nenad Uzelac
	See: T&I Subcommittee Minutes (<u>IEEE PES Switchgear minutes – Spring 2019</u>)	
	 Various S/C representative did participate. Reviewing IEEE Std 1547, writing White Paper. Inverter Based Technologies Discussed Will be holding Panel Session/Workshops – 1st on Inverter Based Technologies 	hnologies in San Diego.
	Roster Location Check	
	<u>Liaison Reports</u>	
22	Accredited Standards Committee C37	John Webb

See: Accredited Standards Committee C37 Liaison Report (IEEE PES Switchgear minutes – Spring 2019)

- NEMA SG4 was extended to end of 2020 pending completion of C37.04 (should be published in May 2019).
- C37.50 published. Includes type test. There are discussions for consideration of addressing the Type Tests and potentially moving C37.13.
- C37.51 published
- C37.54 will be revised to harmonize with updated C37.09
- C37.55 in process
- C37.57 in process
- C37.58 in progress of submittal for publication.
- C37.85 Typos. Will correct and recirculate. .

23	Short Circuit Test Liaison of the Nations of the Americas (STLNA)	Victor Hermosillo
	See: STLNA Liaison Report (IEEE PES Switchgear minutes – Spring 2019)	
24	CIGRÉ	Nenad Uzelac

- Deadline for sending the abstracts for CIGRÉ 2020 was end of April.
- Deadline (now) for papers to CIGRE conference in August.
- CIGRÉ symposium for UHV was held in Hakodate, Japan, the week before switchgear meeting. There was number of papers on DC circuit breakers.
- If someone is interested to learn more about CIGRÉ activities, let me or Albert Livshitz know. Albert is now US representative of CIGRÉ A3 Study Committee and I am the chair of A3.

R4 (2019-09-13) Page 7 of 12

Thursday, May 2, 2019 10:00 AM - 12:00 PM (EDT)

Item	Description	Presenter			
item	Old Business	riesentei			
	Procedural Manuals for Switchgear Committee				
0.5	P&P – Training	Paul Sullivan			
25	• O&P	Reported by Todd Irwin			
	WG P&P				
	See: Policies & Procedures webpage				
	For training, see: ER&P Report Minutes: OPPPWGPP Training (IEEE PES Switchge	<u>ar minutes – Spring 2019</u>)			
	Training was conducted with 112 attendees.				
	WG P&P				
	 WG P&P review is in process. The next IEEE-SA AudCom review is June 11, Panama. 	2019, Panama City,			
	 Subsequent to this meeting, the PES Switchgear WG P&P were approved by Board. 	the IEEE-SA Standards			
	The PES Switchgear Committee WG P&P will be posted on the PES Switchge	ear Website.			
26	Maintain your AMS profile https://www.123signup.com/profile?Org=IPSC2	Todd Irwin			
	Please let us know of changes of status – retirement, new job, etc.				
	Reminder provided.				
	Roster Location Check				
	New Business				
27	Quorum Verification	Doug Edwards			
	Quorum was confirmed.				
28	Future PES Meetings of Interest	Todd Irwin			
	Refer to: https://www.ieee-pes.org/meetings-and-conferences/conference-calendar				
29	Future Switchgear Committee Meetings	Todd Irwin			
	 Fall 2019 (06 Oct – 10 Oct), Catamaran Resort, San Diego, CA Spring 2020 (04 May – 08 May), Peppermill Resort, Reno, NV Fall 2020 (04 Oct – 08 Oct), Sheraton Sundance Square, Fort Worth, TX Spring 2021 (18 April – 23 April), Hilton Charlotte University Place, Charlotte, NC 				
30	Adjourn	Todd Irwin			
	The meeting adjourned at 11:37 am.				

Thursday, May 2, 2019 10:00 AM - 12:00 PM (EDT)

Attendance (as recorded in 123Signup):

Name: Last, First	Role	Company	5/2/2019
Irwin, Todd	Chair	GE Grid Solutions	X
Flowers, Keith	Vice-Chair	Siemens Industry, Inc.	Х
Edwards, Doug	Secretary	Siemens Industry, Inc.	Х
Edwards, Ken	Past Chair	FirstEnergy Corp.	Х
Sigmon, Dean	Past Chair	Eaton Corporation	Х
Ambrose, Chris	Member	Federal Pacific (Div. of Electro-Mechanical Corp.)	Х
Barnhart, Paul	Member	Underwriters Laboratories	Х
Borck, Christopher	Member	Eaton's Power Systems Division	Х
Boyce, Russell	Member	Eaton	Х
Bufi, Arben	Member	Hitachi T&D Solutions, Inc.	Х
Byron, Eldridge	Member	Schneider Electric	Х
Carne, Clint	Member	Schneider Electric	Х
Chen, Steven	Member	Eaton Corporation	Х
Cochran, Sterlin	Member	Hubbell Power Systems	Х
Cohn, Robert	Member	Powercon Corp.	Х
DeCesaro, Frank	Member	Eaton's Power Systems Division	Х
Dhawan, Anil	Member	ComEd	Х
Di Lillo, Patrick	Member	Consolidated Edison Co. of NY, Inc.	Х
Dunne, David	Member	Schneider Electric	Х
Flores, Sergio	Member	Schneider Electric Inc. USA	Х
Gingrich, Paul	Member	AZZ Switchgear Systems	Х
Gohil, Sahadev	Member	AZZ Switchgear Systems	Х
Grahor, Lou	Member	Eaton Corporation	Х
Hall, John	Member	Tennessee Valley Authority	Х
Hawkins, Tom	Member	Siemens Industry, Inc.	Х
Haynes, Gary	Member	ABB Inc.	Х
Hermosillo, Victor	Member	GE Grid Solutions	Х
Hoss, Danny	Member	Southern States	Х
Houston, James	Member	Southern Company Transmission	Х
Hrncir, Dan	Member	Eaton	Х
Hutchins, Roy	Member	Southern Company Services	Х
Johnson, Travis	Member	Xcel Energy	Х
Lafond, Michael	Member	ABB	Х
Livshitz, Albert	Member	CE Power Engineered Services	Х
Lizardo, Alex	Member	Cargill	Х
Martin, Donald	Member	G&W Electric Co.	Х
Mitchell, Dave	Member	Retired	Х
Mizener, Jeff	Member	Siemens Industry, Inc.	Х
Morse, Charles	Member	Siemens Industry, Inc.	Х

Thursday, May 2, 2019 10:00 AM - 12:00 PM (EDT)

Moser, DarrylMemberABBPellerito, ThomasMemberDTE EnergyReigart, CarlMemberCDR Technical Services, LLCRicciuti, AnthonyMemberEaton CorporationSchneider, CarlMemberSchneider ElectricSchuetz, CarlMemberAmerican Transmission Company (ATC)Sharma, DevkiMemberEntergySkidmore, MichaelMemberAEPSoulard, FrancoisMemberHydro-QuebecSullivan, PaulMemberDuPontTailor, ChandMemberEaton CorporationTrost, KarlaMemberG&W ElectricUzelac, NenadMemberG&W ElectricWebb, JohnMemberABBWoodyard, TerranceMemberSiemens Industry Inc.York, RichardMemberMitsubishi Electric Power Products Inc.Alexander, RoyHonorary MemberRWA EngineeringLeach, JohnHonorary MemberConsultantSmith, RobertHonorary MemberRetiredStone, DavidHonorary MemberDTS Technical ServicesArmstrong, BradGuestMeramec Instrument Transformer Co.Beseda, DavidGuestS&C Electric Co.Boulus, MichaelGuestABBCollette, LucasGuestDuquesne Light	X X X X X X X X
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Christian, Michael Guest ABB	Х
	X
Collette, Lucas Guest Duquesne Light	Х
	Х
Crawford, Michael Guest Mitsubishi Electric	Х
Creach, Randall Guest AZZ Switchgear Systems	Х
Cunningham, Jason Guest Southern States, LLC	Х
Di Michele, Federico Guest CESI S.p.A.	Х
Dullni, Edgar Guest retired	Х
Eftink, Emily Guest Burns & McDonnell	Х
El khattabi, nadia Guest Hydro-Quebec	Х
Fender, Karl Guest Southern States LLC	Х
French, Christopher Guest Eaton Corporation	Х
Hanna, Robert Guest ABB INC	Х
Harley, John Guest FirstPower Group LLC	Х
Hartzel, Ronald Guest Eaton Corporation	Х
Hastreiter, Christopher Guest Eaton	Х
Hester, Edward Guest Entergy	Х
Hines, Jared Guest Eaton Corp.	Х
Hurst, Bill Guest GE	

R4 (2019-09-13) Page 10 of 12

Thursday, May 2, 2019 10:00 AM - 12:00 PM (EDT)

Name: Last, First	Role	Company	5/2/2019
Hyjek, Katarzyna	Guest	DTE	Х
Jarnigan, Christopher	Guest	Southern Company Services	X
Johnson, David	Guest	HVCB	Х
Kaminski, John	Guest	Siemens	X
Leufkens, Paul	Guest	Power Projects Leufkens	Х
Leufkens, Paul	Guest	Power Projects Leufkens	Х
Li, Wangpei	Guest	Eaton	Х
Lopez, Leo	Guest	WIKA Instrument, LP	Х
Mannarino, Antonio	Guest	PSE&G	Х
Marzec, Peter	Guest	S&C Electric Co.	Х
Mason, Douglas	Guest	ComEd	Х
May, Steven	Guest	Southern Company	X
McMullen, David	Guest	Georgia Power Company	Х
Neighbours, Terry	Guest	ABB Inc.	Х
Orosz, Miklos	Guest	Myers Controlled Power	Х
Parks, Owen	Guest	ABB	Х
Peterson, Andrew	Guest	ABB	Х
Peterson, Mark	Guest	Xcel Energy	Х
Phouminh, John	Guest	PEPCO HOLDINGS, INC.	Х
Pruitt, Al	Guest	The Durham Company	Х
Rakus, Paul	Guest	Eaton	Х
Riffe, Dave	Guest	Westinghouse Electric Company	Х
Riley, Caryn	Guest	Georgia Tech/NEETRAC	Х
Roberson, Mark	Guest	AZZ/Calvert	Х
Rohr, Richard	Guest	Powell Electrical Systems	Х
Rostron, Joe	Guest	Southern States LLC	Х
Salinas, Alex	Guest	Director of Operations	Х
Santos, Leonel	Guest	Schneider Electric	Х
Savulyak, Victor	Guest	DNV GL KEMA Laboratory	Х
Shook, Michael	Guest	Hubbell Power Systems	Х
Sicker, Robert	Guest	FirstEnergy Corp	Х
Sims, Garett	Guest	Eaton Corp.	Х
Sippel, Kevin	Guest	Eaton Electric	Х
Slattery, Christopher	Guest	FirstEnergy	Х
Swing, Donald	Guest	Powell Industries	Х
Tuveson, Lars	Guest	Burns & McDonnell	Х
van de Ligt, James	Guest	CANA High Voltage Ltd.	Х
Ward, Jeffrey	Guest	Doble Engineering Company	Х
Weishuhn, William	Guest	ABB	Х
Weisker, Jan	Guest	Siemens AG	Х
Wenzel, James	Guest	Eaton	Х

R4 (2019-09-13) Page 11 of 12

Thursday, May 2, 2019 10:00 AM - 12:00 PM (EDT)

Name: Last, First	Role	Company	5/2/2019
Wilkie, William	Guest	Eaton	Х
Young, Marcus	Guest	Mitsubishi Electric Power Products, Inc.	Х
Yu, Li	Guest	Eaton Corporation	Х
Zhang, Wei	Guest	Hitachi T&D Solutions, Inc.	Х
Zhong, Jim	Guest	American Transmission Company	Х
Zia, Danish	Guest	UL LLC	Х

R4 (2019-09-13) Page 12 of 12