IEEE PES SWITCHGEAR COMMITTEE MAIN COMMITTEE BUSINESS MEETING AGENDA Thursday, April 22, 2021

Thursday, April 22, 2021 10:00 AM - 12:00 PM (CDT)

Item	Description	Presenter
1	Call Meeting to Order	Keith Flowers – Chair
	Meeting was called to order by the chair at 10:02AM.	
2	Attendance and Quorum Check	Donnie Swing - Secretary
	Total attendance was 128 participants with 75 of 103 members present. Attendees names and affiliations into the chat window.	were asked to type their
3	Agenda Review and Approval	Keith Flowers
	The agenda was sent to all members and guests via email prior to the meeting, and it was creen for an additional review opportunity. Motion by Ted Burse to approve the agenda. - Seconded by Neil Hutchins. - No discussion. - Approved by consent.	vas posted on the meeting
4	Approval of Fall 2020 Minutes	Keith Flowers
	The minutes of the Fall 2020 meeting were sent out to members and guests via email was held. A link to the meeting minutes was also provided in the agenda for this meeting posted on the meeting screen for an additional review opportunity. Motion by Ron Hartzel to approve the Fall 2020 minutes. - Seconded by Paul Leufkins. - No discussion. - Approved by consent.	
5	Chairman's Report	Keith Flowers
	Concern was raised about attendance ability. Question was asked about extending ments session is virtual - Point was made that extending into another week would put a perhaps unmaniparticipants. See Chair's Report attachment (S21MCa1REV0.pdf)	
6	Switchgear Committee Financial Report	Donnie Swing
	Donnie Swing reports that the committee is in good shape. There has not been much no face-to-face meetings. Thanks to IEEE MCE for helping us avoid cancellation fees.	financial activity due to
7	Standards Coordinator's Report	Michael Wactor
	See Standards Coordinator's Report attachment (S21MCa2REV0.pdf).	

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IEEE PES SWITCHGEAR COMMITTEE MAIN COMMITTEE BUSINESS MEETING AGENDA

Thursday, April 22, 2021 10:00 AM - 12:00 PM (CDT)

Item	Description (TOPO)	Presenter
8	Technical Committee Program Coordinator (TCPC)	Kevin Sippel
	 2021 PES GM Virtual event – July 25 – 29 (no longer Washington, DC) Supersession Tracks Grid Reliability and Resiliency Distribution System and Grid Edge Resource and Transmission for Future Power Systems Emerging Technologies and Education SWGR was offered 1 panel session, max 4 hours – but have no submed 2022 PES GM Denver, CO - July 17-21 2022 Supersession Tracks:	
	Please advise if you wish to submit or explore submitting papers for poster session co	nsideration
9	Registrar's Report	Jeremy Hensberger
	Registration: - Attendees: 230 - Newcomers: 31 Affiliation by exception: - Carl Reigart Hubbell Power Systems - Edgar Dullni G&W Electric/ABB AG	
	Subcommittee Reports	
10	Administrative (ADSCOM)	Doug Edwards
	Nothing to report.	
11	Education, Recognition & Publications (ERP)	Paul Sullivan
	Paul Sullivan reported that the group is working on a couple of IEEE Fellow nominatio Invitations will be sent out to increase participations. Awards have become backlogged to-face meetings, but all outstanding awards are scheduled to be handed out in Reno. IEEE has seemingly changed its position on qualification. Kirk shares that one paper vand Edgar on arcing damage in vacuum interrupters.	d due to the lack of face- PDH's are in limbo as
12	High Voltage Fuses (HVF)	James Wenzel
	James Wenzel reported that the subcommittee met with 9 member 8 guests present. (that the effort continues to combine C37.41 and C37.42.	
13	High Voltage Switches (HVS)	Bill Hurst

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IEEE PES SWITCHGEAR COMMITTEE MAIN COMMITTEE BUSINESS MEETING AGENDA

Thursday, April 22, 2021 10:00 AM - 12:00 PM (CDT)

Item	Description	Presenter
	Bill Hurst reported that HVS currently has three (3) active working groups: - C37.30.1 (in comment resolution, PAR expires 12/2022) - C37.30.6 (evolving draft, planning a ballot after the fall 2021 meeting) - C37.30.7 (draft in preliminary stages)	
14	High Voltage Circuit Breakers (HVCB)	Victor Hermosillo
	Victor Hermosillo reported that the subcommittee met with a quorum and a total 65 paractions: - Working groups for 37.017 and C37.102a were disbanded 62271-37-013 was completed and sent to IEC for a one-month reviewafter when 62271-37-082 for sound pressure levels will go to ballot soon, but IEC must be a ln C37.01, the working group's review of components and chapters continues can C37.04 and C37.09 corrigenda have completed initial ballots and recirculation and PAR study groups for C37.04 and C37.09 have been assembled to discuss noted that the paractic property is a paractic property of the working group for C37.012 was held A PAR study group has been formed for C37.010 C37.10 working group plans to ballot the document by the end of this year C37.11 ballot passed, and comment resolution has been completed.	nich it will be balloted. e contacted for validity. as are in process.
15	Low Voltage Switchgear Devices (LVSD)	Dan Hrncir
	Dan Hrncir reported that LVSD currently has four (4) active projects: - C37.13 - C37.17 - C37.14 PAR study group - C37.27	
16	Reclosers and Other Distribution Equipment (RODE)	Travis Johnson
	Frank DeCesaro reports for Travis. RODE had (20) of (26) members present at the standard Group Report a. IEEE C37.63 Overhead, Pad-Mounted, and Subm. Autom. Sectionalizers (Frank DeCesaro, 1. PAR approved to revise the standard. Will be submitted to IEEE this b. IEEE C37.66 Capacitor Switches (Harry Hirz) 1. Plan go out for recirculation ballot in May for 30 day vote. 2. Goal is to have standard out in December. c. IEEE C37.68 Distribution Controls (Paul Found) 1. This summer plan to go to sponsor ballot. Plan to resolve by fall meet 2. A recommendation on definitions for Submersible, temporary immersion immersion. C37.74 and C37.63 may also want these definitions 3. A taskforce was formed to make a recommendation on definitions for immersion, and prolonged immersion. Karla Trost is chair and France 4. Final resolution should be fall of 2022. 5. PAR expires this calendar year therefore they are asking for a 2 year 2023.	ank DeCesaro) week. ing. ion, and prolonged Submersible, temporary ois Soulard Vice-Chair. PAR until December of
	 d. IEEE C37.74 Subsurface, Vault, and Padmounted Switchgear (Kennedy Dark 1. PAR approved to form the working group and will be submitted. e. IEEE C37.75 Enclosure Integrity Anil Dhawan 	70)
	1. 2 year PAR extension approved and will be submitted to IEEE	
	Task Forces and Discussion group a. Recloser interface (Mark Feltis)	

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IEEE PES SWITCHGEAR COMMITTEE MAIN COMMITTEE BUSINESS MEETING AGENDA Thursday, April 22, 2024

Thursday, April 22, 2021 10:00 AM - 12:00 PM (CDT)

Item	Description	Presenter
	 This study group will output a report. The group will create an outline date for the report by the Fall 2021 meeting. They expect to meet mulbetween meetings. Report on status of visible break. Francois stated the report was submitted. It was to be reedited for editor ADSCOM needs at this point. Francois will follow up on this and te 	tiple times online in
17	Switchgear Assemblies (SA)	Tom Hawkins
	See Switchgear Assemblies subcommittee meeting minutes.	
18	Technology and Innovation Subcommittee (TI)	Nenad Uzelac
	Nenad reported that the group met with 40 attendees of which 12 were members. T&I participation for: - 200% open gap continuous voltage - switchgear for special applications not currently covered by standards - switchgear asset management and end-of-life	is currently soliciting
	<u>Liaison Reports</u>	
19	Accredited Standards Committee C37	John Webb
	See ASC37 attachment (SP21MCa3REV0.pdf)	
20	Short Circuit Test Liaison of the Nations of the Americas (STLNA)	Victor Savulyak
	No meeting held. Online meeting to be held at a later date.	
21	CIGRÉ	Nenad Uzelac
	Nenad Uzelac reported that the main focus of CIGRE at the moment is whether their will be all virtual or a hybrid. There is a symponsium occurring in Slovenia Nov 20-24 in is planned but will probably be moved to virtual. The next CIGRE meeting will be held all virtual. The CIGRE US National Committee is planning to meet October 17-20 in Pr	-person, and one in India August 18-27 and will be
	Old Business	
22	Maintain your AMS profile https://www.123signup.com/profile?Org=IPSC2	Keith Flowers
	Please let us know of changes of status – retirement, new job, etc.	
	Please keep your profile up to date.	
23	SCC21	Keith Flowers
	Challenges were discussed for the switchgear-committee-related products to comp documents, specifically voltage tolerances. From low voltage perspective, we have an SCC 21 to find out what is driving the changes in tolerances and attempt to resolve. If due to reduced face-to-face meetings.	ad hoc that will work with

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IEEE PES SWITCHGEAR COMMITTEE MAIN COMMITTEE BUSINESS MEETING AGENDA Thursday, April 22, 2024

Thursday, April 22, 2021 10:00 AM - 12:00 PM (CDT)

Item	Description	Presenter
24	SCC14	Doug Edwards
	This committee studies questions involving quantities, measurements, et cetera. SI10 Doug solicited input and participation and noted that this is a great opportunity for gain with the standards development process. This effort is all virtual, so there is no associa	ing entry-level experience
	New Business	
25	Quorum Verification	Donnie Swing
	Quorum was verified.	
26	PES Liaisons	Keith Flowers
	Open opportunities for liaison positions: - Renewable Systems Integration Coordinating Committee - P2969, Guide for Continuous Thermal Monitoring of Switchgear and Motor Co	ntrol Centers up to 52 kV
27	Entity Working Group Policies and Procedures	Doug Edwards
	See attachments S21MCa4REV0.pdf and S21Mca5REV0.pdf	
28	Entity PAR: Guide for the Application of Alternating Current (AC) High-voltage (Rated above 72.5 kV) Short-circuit-current-restricting Circuit Breakers	Keith Flowers

Concern was raised that we need more expertise in this type of technology in order to facilitate our oversight of this effort. Suggestion was made to produce a Technical Report with recommendations before delving into producing a Guide. The effort could possibly be integreated into the new HVDC document C37.01. Fair consideration should be given to allowing the document to proceed via the entity method.

Motion by Pat DiLillo for the switchgear committee to take ownership of this effort. John Webb seconds.

- Discussion ensued regarding what steps would be taken following taking ownership takes place. For now taking ownership does only just that. What may come of the effort, whether new document or incorporating into existing, is a decision for later.
- Discussion of possible technologies related to this effort took place. Objection was made on basis of not knowing what the method of current restriction is.
- Suggestion was made to indicate our interest, create a PAR study group under ADSCOM to directly engage the PAR submitter, and developmore details.
- Note was made that this is only to be a Guide whereas we already have standards in place.
- The question was called.
 - o YEA: 54
 - o NAY: 0
 - Abstain: 1 (Ted Burse)

See attachments S21MCa6REV0.pdf and S21Mca7REV0.pdf

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IEEE PES SWITCHGEAR COMMITTEE MAIN COMMITTEE BUSINESS MEETING AGENDA

Thursday, April 22, 2021 10:00 AM - 12:00 PM (CDT)

Item	Description	Presenter
29	Entity PAR: Guide for Internet of Things (IoT) Switchgear Terminals (52 kV and below)	Keith Flowers

Concern was raised about this work not falling under the scope of the switchgear committee. Another issue raised was that due to the verbiage used the document may end up as a specification rather than a guide. Mention was also made that remote terminal units governed by IEC 61850 are in use now.

Keith Flowers showed version of the PAR that has been modified by the switchgear officers. Concern was raised about use of the word "covers" in a guide. Concern was raised about IoT specifically referring to things connected to the internet, and this document seems to be applicable to devices not necessarily connected to the internet.

Motion by Ted Burse for the switchgear committee to not accept this PAR as written based on scope.

- Seconded by John Hall.
- Discussion:
 - o Point was raised that many manufacturers are currently working to improve ways to communicate data to customers.
 - Concern was raised that if we do not accept this, then it may move forward otherwise without our supervision or input.
 - The rest of the Technical Committees have already passed on this opprtunity, so if we do not accept, then it will go to CAG
 - What can the entity group create if we do not accept?
 - Ted Burse suggested that the PAR as presented should be rejected, and then send it back to the submitter for editing.
 - o Call the question:
 - YEA: 39
 - NAE: 0
 - Abstain: 0
- Motion carries.

Motion by John Webb that the switchgear committee form an ad hoc to develop and offer a counter proposal to the PAR, draft of which is shown on screen at this time.

- Seconded by Ron Hartzel.
- Discussion:
 - Question as to whether the document should be modified today online or if an ad hoc or tak force should be formed to handle the counter-proposal off line.
 - O John Hall informed the group of the existence of IEEE 2413, and that the proposed document may encroach upon their material.
 - Friendly amendment proposed by Mike Lafond: form an ad hoc to handle this task off line due to amount of work.
 - Question: If we reject the PAR as written and request modification by the submitter, can the submitter reject the request for modification and move forward past us?
- Call the question:
 - o YEA: 36
 - o NAE: 1
 - o Abstain: 0
- Motion carries.

A call for participation will be sent out soon.

See attachments S21MCa8REV0.pdf and S21MCa9REV0.pdf

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Item	Description	Presenter
	Future PES Meetings of Interest	
30	Refer to:	Keith Flowers
	https://www.ieee-pes.org/meetings-and-conferences/conference-calendar	
	Refer to the PES calendar link above.	
	Future Switchgear Committee Meetings	
	Fall 2021 (10 Oct – 14 Oct), Peppermill Resort Hotel, Reno, NV	
	Spring 2022, TBD (In negotiation)	
31	Fall 2022, TBD (in negotiation)	Keith Flowers
	Spring 2023, TBD (in negotiation)	result lowers
	Fall 2023 (08 Oct – 13 Oct), Catamaran Resort, San Diego, CA	
	Spring 2024, TBD (in negotiation) The second TBD (in negotiation)	
	Fall 2024, TBD (in negotiation)	
	Keith Flowers thanked everyone for responding to the survey that was sent recently ab ability to attend. Doug Edwards stated that another survey will be sent out in a few we gathered from the hotel regarding what the experience may be like with COVID restrict spacing, food. Please plan to respond to this. Fall of 2022 has been confimed at the H	eks after more details are tions, i.e. rooms, meeting
32	Adjourn	Keith Flowers
	At 12:02 Keith asked if there was any objection to extending the meeting time by 30 mass voiced. At 12:36pm meeting adjourned with items 29, 30, and 31 still not covered scheduled an auxialliary meeting to cover these topics, and that meeting took place or The remaining items were fully covered in the auxiliary session, and the actions are document in the appropriate sections.	d. The committee officers Thursday May 20, 2021.

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Role	Last Name, First Name	Company	5/2/2019	10/10/2019	5/7/2020	10/8/2020	4/22/2021	5/20/2021
Chair	Flowers, Keith	Siemens Industry, Inc.	Х	х	Х	х	х	Х
Vice-Chair	Edwards, Doug	Siemens Industry, Inc.	Х	Х	Х	Х	Х	Х
Secretary	Swing, Donald	Powell Industries	Х	Х	Х	Х	Х	Х
Past Chair	Burse, Ted	Powell Industries, Inc		Х	Х	Х	Х	Х
Past Chair	Edwards, Kenneth	Consultant	Х	х	Х			
Past Chair	Irwin, Todd	GE Grid Solutions	Х	х	Х	х	х	Х
Past Chair	Sigmon, Dean	Eaton Corporation	Х	х	Х	х	Х	
Past Chair	Sullivan, Paul	DuPont	Х	х	Х	Х	х	Х
Member	Ambrose, Chris	Federal Pacific (Div. of Electro- Mechanical Corp.)	х	х	х	х	Х	X
Member	Angelis, John	Consultant				Х		
Member	Barnhart, Paul	Underwriters Laboratories	Х	Х	Х	Х	Х	Х
Member	Boles, Brett	Southern Company		Х		Х	Х	
Member	Borck, Christopher	Eaton's Power Systems Division	Х	Х	Х	Х	Х	Х
Member	Bosma, Anne	Hitachi ABB Power Grids				Х		
Member	Boyce, Russell	Eaton	Х	х	Х	Х	Х	
Member	Bufi, Arben	Meiden America Switchgear, Inc.	Х	Х	Х	Х		
Member	Byron, Eldridge	Schneider Electric	Х	х	Х	Х	Х	Х
Member	Carne, Clint	Schneider Electric	Х	Х	Х	Х	Х	Х
Member	Chen, Steven	Eaton Corporation	Х	Х	Х	Х	Х	Х
Member	Cochran, Sterlin	Oak & Shield LLC	Х	Х	Х	Х	Х	
Member	Cohn, Robert	Powercon Corp.	Х	Х	Х	Х		
Member	Darko, Kennedy	G&W Electric Co		Х	Х	Х	Х	
Member	Dhawan, Anil	ComEd	Х	Х				
Member	Di Lillo, Patrick	Consolidated Edison Co. of NY, Inc.	Х	Х	Х	Х	Х	X
Member	Dunne, David	Schneider Electric	Х	Х	Х			
Member	Flores, Sergio	Schneider Electric Inc. USA	Х	Х	Х	Х	Х	Х
Member	Gingrich, Paul	AZZ Switchgear Systems	Х	Х	Х	Х	Х	Х
Member	Gohil, Sahadev	AZZ Switchgear Systems	Х	Х	Х	Х	Х	
Member	Grahor, Lou	Eaton Corporation	Х	Х	Х	Х	Х	Χ
Member	Hall, John	Tennessee Valley Authority	Х	Х	Х	Х	Х	Х
Member	Harley, John	FirstPower Group LLC	Х	Х	Х	Х	Х	Χ
Member	Hartzel, Ronald	Eaton Corporation	Х	Х	Х		Х	Х
Member	Hawkins, Tom	Siemens Industry, Inc.	Х	Х	Х	Х	Х	Х
Member	Haynes, Gary	ABB Inc.	Х	Х	Х	Х	Х	Х
Member	Hensberger, Jeremy	Mitsubishi Electric Power Products Inc.		х	х	х	х	х
Member	Hermosillo, Victor	GE Grid Solutions	Х	Х	Х	Х	Х	Χ
Member	Hines, Jared	Eaton Corp.	Х	Х	Х	Х	Х	

Role	Last Name, First Name	Company	5/2/2019	10/10/2019	5/7/2020	10/8/2020	4/22/2021	5/20/2021
Member	Hoss, Danny	Southern States	х	X	Х		Х	X
Member	Houston, James	Southern Company Transmission	X	X			X	
Member	Hrncir, Dan	Eaton	X	X	Х	Х	Х	Х
Member	Hunter, Jennifer	MEPPI	 ^		Х	X	X	
Member	Hutchins, Neil	Georgia Power Company	х		X	Х	X	Х
Member	Jarnigan, Christopher	Southern Company Services	X	Х		Х	Х	
Member	Johnson, Travis	Xcel Energy	X		Х	X		Х
Member	Kaminski, John	Siemens	X	Х	Х	Х	Х	
Member	Keels, Thomas	kEElectric Engineering	^	X		Х	Х	
Member	Khosravi, Amir	BC Hydro						х
Member	Lafond, Michael	ABB	х	Х	Х	Х	Х	X
Member	Lemmerman, David	PECO/Exelon	^		Х			
Member	Liu, Hua Ying	Southern California Edison		х	Х	Х	Х	
Member	Livshitz, Albert	CE Power Engineered Services	х	Х	Х		X	
Member	Lizardo, Alex	Cargill	X	Х	Х	Х	Х	
Member	Martin, Donald	G&W Electric Co.	X	Х	X	Х	X	
Member	McCord, Neil	KEC Precision	1	Х	Х	Х		
Member	Mizener, Jeff	Siemens Industry, Inc.	Х	Х	Х	Х	Х	Х
Member	Moser, Darryl	ABB	X	Х	Х	Х	X	X
Member	Neighbours, Terry	ABB Inc.	Х		Х		Х	Х
Member	Parks, Owen	ABB	X		Х	Х	X	
Member	Pellerito, Thomas	DTE Energy	Х	х	Х	Х	Х	Х
Member	Peterson, Alan	Utility Service Corporation			Х			
Member	Phouminh, John	PEPCO HOLDINGS, INC.	х	Х		Х	Х	
Member	Reigart, Carl	CDR Technical Services, LLC	х	х	Х	Х	Х	х
Member	Ricciuti, Anthony	Eaton Corporation	Х	Х	Х	Х	Х	Х
Member	Riley, Caryn	Georgia Tech/NEETRAC	х	х	Х	Х	Х	
Member	Rohr, Richard	Powell Electrical Systems	Х	Х	Х	Х		Х
Member	Rokser, Ian	Eaton Corp		Х	Х	Х	Х	Х
Member	Schiffbauer, Daniel	Toshiba International Corporation			Х		Х	Х
Member	Schneider, Carl	Schneider Electric	х		Х			
Member	Schuetz, Carl	American Transmission Company (ATC)	х	х	Х	Х	Х	
Member	Sharma, Devki	Entergy	Х	Х	Х	Х	Х	Х
Member	Shinde, Sushil	Hitachi ABB Power Grids		х	Х	Х		Х
Member	Sippel, Kevin	Eaton Electric	х	Х	Х	Х	X	Х
Member	Skidmore, Michael	AEP	х	Х		Х	X	
Member	Soulard, Francois	Hydro-Quebec	Х	Х	Х	Х	Χ	Х
Member	Stechschulte, Kyle	AEP						

Role	Last Name, First Name	Company	5/2/2019	10/10/2019	5/7/2020	10/8/2020	4/22/2021	5/20/2021
Member	Tailor, Chand	Eaton Corporation	Х	Х	Х	Х	Х	Х
Member	Trost, Karla	G&W Electric	X	X	X	X	X	X
Member	Uzelac, Nenad	G&W Electric	X	^	X	X	X	
Member	·		^	v			X	
	Wactor, Michael	Powell Industries, Inc		Х	X	X		
Member	Walter, William	We-Energies	\ ,,		X	X	X	
Member	Ward, Jeffrey	Doble Engineering Company	X	X	X	X	X	
Member	Webb, John	ABB	Х	Х	Х	Х	Х	Х
Member	Weisker, Jan	Siemens AG	Х	Х	Х			
Member	Wenzel, James	Eaton	Х	Х	Х	Х	Х	
Member	Woodyard, Terrance	Siemens Industry Inc.	X		Х	Х	Х	Х
Member	York, Richard	Mitsubishi Electric Power Products Inc.	х	х	х	х	х	
Member	Zhang, Wei	Hitachi T&D Solutions, Inc.	X	х	х	Х	Х	
Member	Zhu, Xi	GE Energy Management		Х		Х	Х	Х
Honorary Member	Alexander, Roy	RWA Engineering	х		х			
Honorary Member	Brunke, John	Dr. John H. Brunke, P.E.						
Honorary Member	DeCesaro, Frank	DeCesaro Consulting Services	х		х	х	х	х
Honorary Member	Dufournet, Denis	Retired						
Honorary Member	Dullni, Edgar	retired	х			х	х	
Honorary Member	Falkingham, Leslie	Vacuum Interrupters Limited						
Honorary Member	Farr, Lawrence	Eaton Electrical						
Honorary Member	Jankowich, Edward	Retired			х			
Honorary Member	Leach, John	Consultant	х	х	х	х	х	
Honorary Member	Long, Russell	Retired			х			
Honorary Member	Meiners, Steven	Retired						
Honorary Member	Mitchell, Dave	Mitch and Associates	х		х			

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			5/2/2019	0/10/2019	2020	10/8/2020	2021	2021
Role	Last Name, First Name	Company	2/5/2	10/10	5/7/2020	10/8/	4/22/2021	5/20/2021
Honorary	,							
Member	Smith, Robert	Retired	Х		х	х	х	
Honorary								
Member	Stone, David	DTS Technical Services	Х					
Guest	Aristizabal, Mauricio	Hitachi ABB Power Grids		х	х	х	х	
Guest	Arlund, Joshua	MacLean Power Systems				х		
Guest	Armstrong, Brad	Meramec Instrument Transformer Co.	x	x		x		
Guest	Ayers, Roy	Nashville Electric Service	1			Х	х	
Guest	Beauchemin, Francis	Hydro-Quebec		Х				
Guest	Becker, George	POWER Engineers Inc.		Х				
Guest	Beseda, David	S&C Electric Co.	х	Х		Х	Х	
Guest	Blake, Jacob	Hubbell Power Systems	 	Х	Х	Х	Х	
Guest	Bonner, Antone	PAS Consulting			Х	Х	Х	
Guest	Cary, Stephen	Eaton		Х	Х		Х	
Guest	Caverly, David	Trench Ltd.		Х	Х	Х	Х	
Guest	Christian, Michael	ABB	х	х				
Guest	Claxton, Matthew	Powell Industries		Х			Х	
Guest	Coletta, Justin	Powell Industries		Х				
Guest	Collette, Lucas	Duquesne Light	х	х	х	х	х	
Guest	Cooper, Jeramie	Eaton			х	х		
Guest	Copley, Ryan	Tampa Electric			х			
Guest	Crawford, Michael	Mitsubishi Electric	Х	Х	х	х	х	
Guest	Creach, Randall	AZZ Switchgear Systems	Х	х	х	х	Х	
Guest	Cunningham, Jason	Southern States, LLC	Х	х		х	х	
Guest	Delfino, Daniel	ABB		х		х	х	
Guest	Di Michele, Federico	CESI S.p.A.	Х	х	Х	х	Х	
Guest	Door, Jeffrey	The H-J Family of Companies			Х	х	Х	
Guest	Eftink, Emily	Burns & McDonnell	Х	х		х		
Guest	Ekpoudom, Assian	Southern States LLC					Х	
Guest	El khattabi, nadia	Hydro-Quebec	Х					
Guest	Fender, Karl	Southern States LLC	Х	х			Х	
Guest	Fentress, Philip	Memphis Light, Gas & Water Div				Х		
Guest	Found, Paul	BC Hydro			Х			
Guest	Frazier, Raymond	Ameren			Х	Х	Х	
Guest	French, Christopher	Eaton Corporation	Х	Х	Х	Х	Х	Х
Guest	Frye, Richard	Eaton		Х		Х		
Guest	Gamboa, Jose	The H-J Family of Companies					Х	
Guest	Gerzeny, Brian	Powell Electrical Systems Inc		Х		Х		

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Role	Last Name, First Name	Company	5/2/2019	10/10/2019	5/7/2020	10/8/2020	4/22/2021	5/20/2021
Guest	Glaesman, Peter	PCORE Electric Company, Inc.		х	х			
Guest	Glinsky, Ilya	Southern California Edison			х			
Guest	Guzman, Francisco	Southern California Edison		Х				
Guest	Hastreiter, Christopher	Eaton	Х		х	х	х	
Guest	Heiermeier, Helmut	ABB			х			
Guest	Hetzer, Matthew	PEPCO		х				
Guest	Hollander, Jason	CHA Consulting, Inc.		Х	х			
Guest	Hurst, Bill	GE	Х	х	х	х	х	
Guest	Jain, Rahul	S&C Electric Company		х	х	х	х	
Guest	Johnson, David	HVCB	Х		х		х	
Guest	Kelly, John	Beureau Of Reclamation			х			
Guest	Kennedy, Chad	Schneider Electric			х			
Guest	Kinner, Robert	FirstPower Group LLC					х	
Guest	Kohler, Thomas	Ameren						
Guest	Kurinko, Carl	ABB Inc.			х	х	х	
Guest	Lagree, James	Eaton					х	
Guest	Lavrinoff, Benedict	Kinectrics		х				
Guest	Leccia, Brad	Eaton				Х		
Guest	Leufkens, Paul	Power Projects Leufkens	Х		х	х	х	
Guest	Li, Wangpei	Eaton	Х		х			
Guest	Lopez, Leo	WIKA Instrument, LP	Х	Х		Х	х	
Guest	Luevano, Patrick	El Paso Electric Company				х		
Guest	Martinez, Abraham	ABB					х	
Guest	Marzec, Peter	S&C Electric Co.	Х	Х				
Guest	Mason, Douglas	ComEd	Х					
Guest	May, Steven	Southern Company	Х	Х		х	х	
Guest	McMullen, David	Georgia Power Company - Retired	Х					
Guest	Milnikel, Henning	Siemens					Х	Х
Guest	Moran, Ashley	IEEE Standards Association (IEEE-SA)			х			
Guest	Mulakken, Nikil	Facebook		Х				
Guest	Nelson, Jeffrey	Tennessee Valley Authority				Х	х	
Guest	Novak, Pavel	Schneider Electric				х		
Guest	Orosz, Miklos	Myers Controlled Power	Х	Х				
Guest	Palazzo, Mirko	ABB			Х			
Guest	Pattison, Mark	H-J Family of Companies					Х	
Guest	Peterson, Andrew	ABB	Х	Х		Х	Х	Х
Guest	Peterson, Mark	Xcel Energy	Х		Х			
Guest	Phan, Lise	Pacific Gas and Electric Company		Х				
Guest	Polchinski, Craig	MEPPI			Х	Х	Х	

Role	Last Name, First Name	Company	5/2/2019	10/10/2019	5/7/2020	10/8/2020	4/22/2021	5/20/2021
Guest	Pruitt, Al	The Durham Company	Х			Х	Х	
Guest	Rakus, Paul	Eaton	Х	Х	Х	Х	Х	
Guest	Reid, Laura	Hubbell Power Systems		х	х	Х	Х	
Guest	Reyes, Roman	Bechtel		Х				
Guest	Roberson, Mark	AZZ/Calvert	Х	Х	Х	Х		
Guest	Rostron, Joe	Southern States LLC	Х					
Guest	Santos, Leonel	Schneider Electric	Х	Х	Х	Х	Х	
Guest	Savulyak, Victor	DNV GL KEMA Laboratory	Х	Х	Х	Х	Х	
Guest	Scott, Jeff	Ameren				Х		
Guest	Sergeyenko, Oleksandr	Tavrida electric North america, Inc					Х	
Guest	Sims, Garett	Eaton Corp.	Х	Х	Х	Х	Х	Х
Guest	Slattery, Christopher	FirstEnergy	Х	Х	Х	Х	Х	
Guest	Smith, Joseph	FortisAlberta				Х		
Guest	Thomas, Christo	SCHNEIDER ELECTRIC USA INC					Х	
Guest	Trichon, Francois	Schneider Electric		х	х	Х		
Guest	Usner, Joseph	American Electric Power (AEP)				Х		
Guest	van de Ligt, Jim	Spark Power Corp.	Х	Х			Х	
Guest	Voyles, Adam	Ameren					Х	
Guest	Wen, Jerry	BC Hydro		Х				
Guest	Westerdale, Matt	Bureau of Reclamation			х	Х	Х	
Guest	Wilkie, William	Eaton	Х	Х	Х		Х	
Guest	Worthington, Charles	Hubbell Power Systems		Х			Х	Х
Guest	Young, Marcus	Mitsubishi Electric Power Products, Inc.	х		х	Х	Х	
Guest	Youssef, Mina	Eaton Corporation	1	Х	Х		Х	Х
Guest	Yu, Li	Eaton Corporation	Х		Х			
Guest	Zia, Danish	UL LLC	X				X	

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