

**IEEE C37.20.6 Working Group
Meeting Minutes
Online only (virtual)
October 13, 2021**

Attendance:

Role	First Name	Last Name	Company
Guest	Edwin	Almeida	Southern California Edison
Member	Chris	Ambrose	Federal Pacific (Div. of Electro-Mechanical Corp.)
Member	Paul	Barnhart	Underwriters Laboratories
Guest	David	Beseda	S&C Electric Co.
Member	Russell	Boyce	Eaton
Member	Ted	Burse	Powell Industries, Inc
Member	Michael	Christian	ABB
Member	Robert	Cohn	Powercon Corp.
Member	Randall	Creach	AZZ Switchgear Systems
Member	Federico	Di Michele	CESI S.p.A.
Member	Michael	Flack	Southern Company Services, Inc.
Member	Sergio	Flores	Schneider Electric Inc. USA
Member	Christopher	French	Eaton Corporation
Secretary	Paul	Gingrich	AZZ Switchgear Systems
Guest	Ilya	Glinsky	Southern California Edison
Guest	Andrea	Glynn	Xcel Energy
Member	Sahadev	Gohil	AZZ Switchgear Systems
Member	Bruce	Hack	Crown Electric Engineering & Manufacturing
Member	Robert	Hanna	ABB INC
Chair	Ronald	Hartzel	Eaton Corporation
Member	John	Kaminski	Siemens
Member	Brad	Leccia	Eaton
Member	Albert	Livshitz	CE Power Engineered Services
Guest	Russell	Long	Retired
Member	Colby	Lovins	Federal Pacific
Guest	Steven	May	Southern Company
Guest	Henning	Milnikel	Siemens
Member	Terry	Neighbours	ABB Inc.
Guest	Pathik	Patel	Duke Energy
Guest	Damian	Perrin	Entergy Services, LLC.
Guest	Mark	Peterson	Xcel Energy
Member	John	Phouminh	PEPCO HOLDINGS, INC.
Member	Anthony	Ricciuti	Eaton Corporation
Member	Jeffery	Ricker	SCHNEIDER ELECTRIC
Member	Garett	Sims	Eaton Corp.
Guest	Jordan	Snider	Pacific Gas & Electric Co.
Member	Jonathan	Wear	AZZ
Guest	James	Wenzel	Eaton
Member	Terrance	Woodyard	Siemens Industry Inc.

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Role	First Name	Last Name	Company
Guest	Li	Yu	EATON
Guest	Danish	Zia	UL LLC
Guest	Fang	Huang	AEP
Guest	Noel	Smith	Fortis Alberta

1. Call to Order

Meeting was called to order by Ron Hartzel, Chair, at 3:45 AM CDT.

2. Roll Call

This was an online meeting the participants recorded their name and affiliation in the MS Teams chat. Since this was the first official working group meeting, the participants were also asked to state their desired status as a member or guest. This was also recorded in the MS Teams chat. There was a total of 43 participants. 28 members and 15 guests.

3. Approval of Agenda

The meeting agenda was presented by the Chair. A motion to approve was made by Russell Boyce and seconded by Terry Woodyard. The motion passed with no objections.

4. Approval of PAR Review Meeting Minutes

The minutes of the PAR Review Meetings held on April 23 & July 14, 2021, were presented by the Chair. A motion to approve the minutes was made by Bob Cohn and seconded by Tony Ricciuti. The motion passed with no objections.

5. IEEE-SA Patent Policy

The Patent policy was addressed by the Chair. No claims or issues were raised.

6. IEEE-SA Copyright Policy & Working Group P&Ps

The Copyright Policy and Working Group P&Ps were addressed by the Chair.

7. Document Status

The revised PAR was approved by REVCOM & NESCOM on October 9, 2021.

8. Technical Topics

Draw-out Device Definition – The issue was raised that this definition is being investigated by an ad hoc committee from the C37.13 working group. Our working group will need to review our definitions to determine what changes need to be made to coordinate with the work of the C37.13 ad hoc committee.

Ground Connection System Definition – We formed an ad hoc committee, at the Spring 2021 PAR review meeting, to create a proposal for this definition. Ron Hartzel, Ted Burse, Terry Woodyard, Eldridge Byron, Sergio Flores, and Pat Di Lillo volunteered to participate on the ad hoc committee. Ted Burse send out a 1st draft for the committee to review after the Spring meeting. Some of the ad hoc members responded, so now the proposal needs to be cleaned up and submitted for review of the committee in the Spring.

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9. New Business

The Draft Standard PC37.20.6/D1 was sent to the group participants prior to this meeting. It was requested that the meeting attendees review the draft and send their comments to the working group Chair and Secretary by the end of January 2022. Also, it was requested that all comments be submitted using the Comment Form Excel spreadsheet that was sent to the group.

10. Next Meeting

The next working group meeting will be held during the Spring 2022 Switchgear Committee meetings.

11. Adjourn

The meeting was adjourned by the Chair at 4:15 PM CDT.

Reported by Paul Gingrich, WG Secretary

**IEEE C37.20.6 PAR Study Group
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July 14, 2021**

Attendance:

Requested Role	First Name	Last Name	Company
Member	Chris	Ambrose	Federal Pacific (Div. of Electro-Mechanical Corp.)
Member	Paul	Barnhart	Underwriters Laboratories
Member	Russell	Boyce	Eaton
Member	Ted	Burse	Powell Industries, Inc
Member	Michael	Christian	ABB
Member	Randall	Creach	AZZ Switchgear Systems
Member	Doug	Edwards	Siemens Industry, Inc.
Member	Sergio	Flores	Schneider Electric Inc. USA
Member	Christopher	French	Eaton Corporation
Secretary	Paul	Gingrich	AZZ Switchgear Systems
Chair	Ronald	Hartzel	Eaton Corporation
Member	Travis	Johnson	Xcel Energy
Member	Darryl	Moser	ABB
Member	John	Phouminh	PEPCO HOLDINGS, INC.
Member	Samala Santosh	Reddy	Powell Industries
Member	Richard	Rohr	Powell Electrical Systems
Member	Paul	Sullivan	DuPont
Member	Donald	Swing	Powell Industries
Member	Michael	Wactor	Powell Industries, Inc
Member	John	Webb	ABB
Member	Joseph	Wisnewski	UL LLC
Member	Mina	Youssef	Eaton Corporation
Guest	Xin	Zhou	Eaton

1. Call to Order

Meeting was called to order by Ron Hartzel, Chair, at 8:00 AM CDT.

2. Roll Call

Since this was an online meeting the participants recorded their name and affiliation in the MS Teams chat. There was a total of 23 participants.

3. Document Status

The PAR for C37.20.6 was rejected on Wednesday, June 16th at the IEEE Standards Board meeting. The Chair documented what was submitted, identified what issues the

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Standards Board had with our wording, drafted up some options to address the Standards Board rejection, see below.

Below is what we submitted.

5.2 Scope of proposed standard: This standard covers drawout-type, indoor, medium-voltage ground and test (G&T) devices for use in drawout metal-clad switchgear rated 4.76 kV through 48.3 kV as described in IEEE Std C37.20.2(TM). Four G&T device types are generally supplied for temporary circuit maintenance procedures for insertion in place of the circuit breaker as follows:

- a) Simple manual devices
- b) Complex manual devices
- c) Simple electrical devices
- d) Complex electrical devices

There may be more complicated G&T devices that may include current and/or voltage transformers, glow tubes, or other accessory components. These more complex devices are not within the scope of this standard. This standard can be used as a guide for their development but additional testing and interlocking may be required.

Manufacturers should be consulted for the availability and ratings of these types of devices.

Change to scope of proposed standard: This standard covers drawout-type, indoor, medium-voltage ground and test (G&T) devices for use in drawout metal-clad switchgear rated 4.76 kV through 48.3 kV as described in IEEE Std C37.20.2(TM). Four G&T device types are generally supplied for temporary circuit maintenance procedures for insertion in place of the circuit breaker as follows: a) Simple manual devices) Complex manual devices) Simple electrical devices) Complex electrical devices There may be more complicated G&T devices that may include current and/or voltage transformers, glow tubes, or other accessory components. These more complex devices are not covered **within the scope** by **of** this standard. Due **This standard can be used as a to guide** for their complexity, **development but** additional testing and interlocking are **may be** required , . and manufacturers **Manufacturers** should be consulted for the availability and ratings of these types of devices.

There was two points of major discussion:

1. The wording associated with using the standard as a guide to develop other products that don't fall within the scope of the standard. They accepted a minor wording change which made it acceptable to everyone.
2. They didn't like the last sentence. They felt that IEEE shouldn't be telling the users of the IEEE standards what to do with respect to buying products or finding

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entities that may be willing to manufacture products. Their recommendation was to strike the last sentence, because that information is implied for all standards.

Here are the proposed resolution to the two objections:

1. This standard can be used as a guide to provide guidance in for their development but additional testing and interlocking may be required.
2. This sentence must be deleted. ~~Manufacturers should be consulted for the availability and ratings of these types of devices.~~

The meeting attendees approved (by no objections) the wording in the “proposed resolution”.

The chair will resubmit the PAR, with the rewording of the “proposed resolution” to NesCom prior to their meeting that is scheduled for August 13th.

4. Next Meeting

The first working group meeting will be held during the Fall 2021 switchgear committee meetings.

5. Adjourn

The meeting was adjourned by the Chair at 9:45 AM CDT.

Reported by Paul Gingrich, Secretary

**IEEE C37.20.6 PAR Study Group
Meeting Minutes
Online only (virtual)
April 23, 2021**

Attendance:

Requested Role	First Name	Last Name	Company
Member	Chris	Ambrose	Federal Pacific (Div. of Electro-Mechanical Corp.)
Member	Paul	Barnhart	Underwriters Laboratories
Member	Russell	Boyce	Eaton
Member	Ted	Burse	Powell Industries, Inc
Member	Eldridge	Byron	Schneider Electric
Member	Michael	Christian	ABB
Member	Randall	Creach	AZZ Switchgear Systems
Guest	Patrick	Di Lillo	Consolidated Edison Co. of NY, Inc.
Member	Federico	Di Michele	CESI S.p.A.
Member	Doug	Edwards	Siemens Industry, Inc.
Member	Sergio	Flores	Schneider Electric Inc. USA
Member	Christopher	French	Eaton Corporation
Secretary	Paul	Gingrich	AZZ Switchgear Systems
Member	Sahadev	Gohil	AZZ Switchgear Systems
Chair	Ronald	Hartzel	Eaton Corporation
Guest	Dan	Hrcir	Eaton
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Guest	Robert	Lau	nVent Hoffman
Member	Albert	Livshitz	CE Power Engineered Services
Member	Darryl	Moser	ABB
Member	John	Phouminh	PEPCO HOLDINGS, INC.
Member	Samala Santosh	Reddy	Powell Industries
Member	Jeffery	Ricker	SCHNEIDER ELECTRIC
Member	Richard	Rohr	Powell Electrical Systems
Member	Paul	Sullivan	DuPont
Member	Donald	Swing	Powell Industries
Member	Chand	Taylor	Eaton Corporation
Guest	Christo	Thomas	SCHNEIDER ELECTRIC USA INC
Member	Michael	Wactor	Powell Industries, Inc
Member	John	Webb	ABB
Member	Joseph	Wisnewski	UL LLC
Member	Terrance	Woodyard	Siemens Industry Inc.
Member	Mina	Youssef	Eaton Corporation
Guest	Xin	Zhou	Eaton

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April 23, 2021**

1. Call to Order

Meeting was called to order by Ron Hartzel, Chair, at 8:00 AM CDT.

2. Roll Call

Since this was an online meeting the participants recorded their name and affiliation in the MS Teams chat. The participants were also asked to state their desired status as a member or guest of the future working group. This was also recorded in the MS Teams chat. There was a total of 35 participants. 29 requested membership.

Note: After the meeting the SASC Chair informed us that this is still a PAR Study Group. An additional request for members and guests will be made at the first working group meeting.

3. Approval of Agenda

The meeting agenda was presented by the Chair. A motion to approve was made by Paul Barnhart and 2nd made by John Webb. The motion passed with no objections.

4. Approval of PAR Review Meeting Minutes

The minutes of the PAR Review Meeting held on March 24, 2021 were presented by the Chair. A motion to approve was made by Paul Barnhart and 2nd made by Dave Gohil. The motion passed with no objections.

5. IEEE-SA Patent Policy

The Patent policy slides were presented by the Chair. No claims or issues were raised.

6. IEEE-SA Copyright Policy

The copyright policy was presented by the Chair.

7. Document Status

The revised PAR was submitted to SA by the Chair on April 22, 2021.

Revision Comments – The Chair stated that after the PAR is approved by REVCOM/NESCOM we should receive a MS Word version of the standard which will be sent to all members of C37.20.6 for comment. He requested for comments to be sent to him and the secretary by email prior to the next working group meeting.

8. Technical Topics

Draw-out Device Definition – The issue was raised that this definition is being investigated by an ad hoc committee from another working group. Our working group will need to coordinate with this ad hoc committee.

Ground Connection System Definition – We formed an ad hoc committee to create a proposal for this definition. Ron Hartzel, Ted Burse, Terry Woodyard, Eldridge Byron, Sergio Flores and Pat Di Lillo volunteered to participate on the ad hoc committee. Ted Burse will send out a 1st draft for the committee to review.

9. Next Meeting

The next working group meeting will be held during the Fall 2021 switchgear committee meetings.

10. Adjourn

The meeting was adjourned by the Chair at 9:30 AM CDT.

Reported by Paul Gingrich, WG Secretary