

IEEE IAS Electrical Safety Committee Meeting Minutes

March 4, 2024

El Conquistador Tucson
Tucson, AZ, USA

1. Call to order
 - a. The meeting was called to order by Dennis Hill, ESafC Chair.
2. Roster
 - a. Attendance sheets were circulated and signed by those present. A total of 79 people were recorded at the meeting, including 20 of 32 voting members.
 - b. The current list of voting members was reviewed.
 - c. Quorum was established.
3. Meeting Agenda Review
 - a. The meeting agenda was reviewed. A motion was made to approve the agenda by Lanny Floyd. René second the motion. The motion passed unanimously.
4. 2023 ESafC Meeting Minutes
 - a. The draft meeting minutes of the 2023 ESafC meeting had been distributed. There were no recommended changes to the minutes.
 - b. Daniel Roberts made a motion to approve the minutes. Kevin Lippert seconded the motion. The motion passed unanimously.
5. Report from ESafC Chair
 - a. The Chair reported on the IAS Safety Lecturer Program and IEEE Smart Village. Refer to presentation slides later in this document for that information.
 - b. The Chair presented the nomination from the ESafC Advisory & Nominations Subcommittee the candidate of Eva Clark as the next ESafC Secretary. The nomination was passed unanimously.
6. Reports from Subcommittee Chairs
 - a. The ESafC Chair then provided a brief introduction for the remaining portion of the meeting, which was reports from ESafC subcommittees. The presentation slides later in this document provide the main items discussed.
 - b. There was no report from the IAS Committee Liaison.
7. Executive Subcommittee Report
 - a. An update was provided concerning the ESafC Executive Subcommittee activities.
 - b. Jay Prigmore was highlighted as the Chair for 2024 ESW and thanked for his work to prepare for the conference.
 - c. Zarheer Jooma was highlighted as the Chair for 2025 ESW.
 - d. Michael Kovacic was highlighted as the Chair for 2026 ESW.
 - e. Many of the ESafC subcommittees were meeting following the ESafC meeting. That meeting schedule was displayed for review.
8. Adjournment
 - a. At the conclusion of the subcommittee presentations, Steve Wilson made a motion to adjourn the meeting. Lloyd Gordon seconded the motion. The motion passed unanimously.



IEEE IAS Electrical Safety Committee Annual Meeting – @ESW March 4, 2024

Establishment of Quorum



- Requires over 50% of the voting members attending or connected
- **Note**: if you would like to become a 'voting member', please contact the ESafeC Chair

Electrical Safety Committee

- Voting Members



Eric Campbell

Eva Clark

George Cole

D Ray Crow

Payman Dehghanian

Daniel Doan

Paul Dobrowsky

Mike Doherty

Thomas Domitrovich

Nehad El-Sherif

Lanny Floyd

Jeff Glenney

Lloyd Gordon

Rene' Graves

Al Havens

Dennis Hill

Matt Hussey

Zarheer Jooma

Kevin Lippert

Afshin Majd

Daleep Mohla

David Pace

Jay Prigmore

Daniel Roberts

Tim Rohrer

Mark Scott

Scott Seaver

Arthur Smith

Paul Sullivan

Frank Tyler

Marcelo Valdes

Stephen Wilson

IEEE IAS Electrical Safety Committee Executive Subcommittee Meeting Agenda



1. Call to order
2. Roster – check for Quorum
3. Review Agenda
4. Approval of Minutes from 2023 Meeting
5. Report from Chair, with motion
6. Introduction and Summary Reports from Subcommittee Chairs
7. Business from Executive Subcommittee Meeting
8. 2024 ESW Introduction – Jay Prigmore
9. 2025 ESW Announcement – Jacksonville, FL, USA – Zarheer Jooma
 - a. Call for Papers, Presentations, and Tutorials
10. 2026 ESW Announcement – Location TBD – Michael Kovacic
11. New Business
12. Motion to Adjourn

Subcommittee meetings to follow – see EventMobi for details

Approval of 2024 Meeting Agenda



- Motion
- 2nd

Approval of 2023 Meeting Minutes



- Motion
- 2nd

Report from Chair



IAS Safety Lecturer Program



- Approved by IAS Board with annual budget
- To be administered by Electrical Safety Committee
- Program details and forms complete
- Sent to IAS for review/approval
- Looking for volunteer individual or team to run the program

IEEE Smart Village



- Safety, Quality, Reliability, and Standards Subcommittee (SQRS)
- S/C Chair Bruno Lequesne, many int'l attendees
- Attending this S/C to contribute as needed for electrical safety
- If interested, please get involved!



Incoming Committee Secretary

- Nominated by the Advisory & Nominations S/C:

Eva Clark

- For Voting Members: Vote to Approve

Subcommittee Reports



1. ESW
2. International Development
3. Academic Development
4. Construction
5. Early Career Development
6. Government, Regulators, Inspectors & Labs
7. IAS Committee Relations
8. Industry Segment Development
9. Occupational Health & Safety
10. Ad Hoc Shock Culture
11. Standards
12. Paper Review
13. Technical Program
14. Awards & Recognition
15. Facilities & Finance
16. Historical & Records
17. Publicity & Media
18. A&N

ESW Subcommittee



Chair: Scott Seaver

Vice Chair: Zarheer Jooma

Vice Chair: Michael Kovacic

Secretary: Rene' Graves

Scope:

- Plans, organizes, and runs the annual ESW.
- Specific duties of the ESW Subcommittee and its members are outlined in the ESW Operating Manual.

Open format:

Past Chairs:

ESW Subcommittee



Activities in 2023:

- Review/Update Manual
- Best of show award - Expo
- Future Locations
- Decorator
- Meeting Planner

Plan for 2024:

- Advertisements for Media Partners and supports
- Roadmap for future Chairs
- 2025 Theme-Organizational Safety Cultural Change

International Development Subcommittee

Chair: Marcelo Valdes

Vice Chair: Mario Aleman (South & Central America)

Vice Chair India: Shahid Jamil

Vice Chair Africa: Nehad El Sherif & Zarheer Jooma

Secretary: Thomas Domitrovich

Scope:

- Engage individuals worldwide to be involved in all aspects of electrical safety.
- Implement initiatives to increase the value of the ESW for them.
- Seek out new and useful information and knowledge related to electrical safety from all regions.
- Disseminate this information to committee members.
- Encourage the participation of individuals and companies worldwide in activities of the Electrical Safety Committee.



International Development Subcommittee



Activities in 2023:

1. Discussions with volunteers in Colombia regarding an ESW there...
2. Responded to call for help with a speaker for an IEEE conference held November 2023. Connected with Dr. Lloyd Gordon → keynote speaker for the conference speaking on DC safety.

Plan for 2024:

ESW 2024 Colombia. Planned for Bogota Colombia September 26 & 27th, 2024. Local Committee leadership and venue secured, MOU with IEEE in process. Calls with US parties scheduled. Aleman helping local committee through the IEEE conference process



International Development

For 2025 and beyond: Where else?

- Europe?
Needs IEC content... Forum to discuss Arc flash publicly (controversial)
- Middle East?
Would probably need to involve Aramco. Contact so far have not come up with interest.
- Africa?
ES activity at IEEE Power Africa the last few years... Enough?
- India? :
Has held them in the past... Need a local champion. May have found one
- Elsewhere in South America?
Mario Aleman floated the idea of a periodic electrical safety conference that ships among a set of countries in South America

Regardless the place a local champion and US champion needs to be identified. Local connections needed and a core of US participants will and able to go wherever is needed.

ESW Colombia 2024

Conference Chair: Prof. Santiago Arias Guzman
(saariasgu@unal.edu.co)

Conference Vice Chair: Prof. Gustavo Ramos
(gramos@uniandes.edu.co)



IEEE Electrical Safety International Development Subcommittee

Chair: Marcelo E Valdes (marcelo.e.valdes@ieee.org)

Vice Chair for South America (Region 9): Mario Aleman (alemani@ieee.org)

ESW Colombia 2024

Dates: September 25th seminars. September 26th & 27th main conference

Location: University of Colombia, Bogota Colombia



Conference Chair:

Prof. Santiago Arias Guzman
(saariasgu@unal.edu.co)

Conference Vice Chair:

Prof. Gustavo Ramos
(gramos@uniandes.edu.co)

Liaison to US ESW:

Marcelo Valdes & Mario Aleman



ESW Colombia 2024

Why Colombia?

For the educated among us:

Birthplace & home of Gabriel Garcia Marquez

For the rest of us:

Shakira and Sofia Vergara!

Population 52MM+, 7MM+ in Bogota

Spanish and over 60 other languages

Formerly part of Gran Colombia [1830]
(Venezuela + Colombia + Ecuador + Panama
[1903])



International Development

IEEE ESW BRAZIL



ELECTRICAL ENGINEERING AND OCCUPATIONAL SAFETY

IEEE – South Section Brazil, IAS, is proud to hold the IEEE ESW Brazil – Electrical Safety Workshop Brazil, the only event dedicated to electrical safety in Brazil. Since 2003, held bi-annually, the XI edition will be held at USP's IEE premises between October 17 and 19, 2023, once again in partnership with Abracopel – Brazilian Association for Awareness of the Dangers of Electricity.

The Congress is composed of technical papers presented by experienced professionals and invited experts, providing an excellent environment with full participation of the participants.

The event's objective is to promote a "safety culture around the electrical hazard", to make society aware that electricity must be treated responsibly and seriously.

IEEE ESW Brazil, seeks to include in the program not only works by prominent professionals in the Brazilian scenario, but also renowned foreign speakers specialized in Electrical Safety and related topics. Papers presented at IEEE ESW Brazil may have previously been published abroad.

These characteristics make IEEE ESW Brazil an International event at the highest level.

Academic Development Subcommittee



- Chair: Afshin Majd
- Vice Chair: Payman Dehghanian
- Secretary: Jay Prigmore

- # of members: 9
- Typical # of meetings/year: 1-2

2023 Activities

- **Chair:** Student mentorship. Mentoring 2 junior engineers
Review of an Arc Flash related paper.
- **Prof. Dehghanian:** ESW 2023 Student Program Chair
- **Prof. Dehghanian:** Hosting several IEEE IAS Webinars
- **Prof. Lee:**
 - Arc Flash lab tests.
 - Li-ion battery resistance study due to an external short circuit using a zero bouncing circuit and its comparison to cyclic ageing”, Accepted for the publication on IEEE Transactions on Industry Applications
 - Curriculum of Arc-flash Analysis for College Students, Accepted for the publication on IEEE IAS Magazine
- **Dr. Prigmore:**
- Our team had Several group exchanges on activity topics

Construction Subcommittee



Officers:

- Eric Campbell – Chair
- Robert Spang - Vice Chair
- Terry McKinch – Vice Chair
- Mark Wallace - Secretary

Staff Augmentation

- Robert LeRoy – Communications WG Leader
- Michael J. Powers – Working Group Leader at Large
- Scott Mitchell - Working Group Leader at Large
- Jason Wolf – Working Group Leader at Large
- Frank Foote - Outreach

Construction Subcommittee



Scope:

- Engage individuals involved in construction activities from all disciplines and industries to get individuals from these organizations involved in all aspects of electrical safety.
- Communicate the advantages of proactive, positive, engaged and participation at the Electrical Safety Workshop by all segments of the construction industry.
- Promote the inclusion of leading edge abstracts for papers, focus sessions and tutorials across a very wide range of construction sectors using today's best practices.

Construction Subcommittee



2023 Activities

- Quarterly meetings with committee officers
 - Refinement of communication – Outlook Group emails
 - Mentoring for authors
- Tutorial Development: None during 2023
- Paper Development: 2-3

2024 Initiatives

- Regular and consistent communication with committee officers with clearly defined goals
- Maintain mailing list for ease of communication with members
- Promote development of 'Abstracts' and reinforce peer/mentor circles for authors
- For each ESW, Industry outreach specific to region.

Early Career Development Subcommittee



Chair: Jay Prigmore

Vice Chair: TBD

Secretary: TBD

Scope:

- Develop and implement methods to increase and maintain participation in committee activities by individuals who are students or Charter - are early in their professional careers.
- Provide guidance for improvements to the overall effort for future years.
- Develop methods to encourage this audience to attend and become involved in the ESW.
- Work in conjunction with the Academic Development Subcommittee.

Early Career Development Subcommittee



Activities in 2023:

- First Time Attendee Social At ESW 2023
- 3-4 meetings throughout the year
- Developed the ESW First Time Attendee Guide and uploaded to the website.
 - Will rebrand this document to “How to Get the Most Out of ESW Guide”

Plan for 2024:

- Appoint Vice Chair and Secretary
- Recruit more members
- Implement at least one event/product gear toward early career members.
 - Ideas include mentoring, POC meetings, Ask me questions

Government, Regulator, Inspectors and Laboratory Subcommittee



Chair: Lloyd Gordon

Vice Chair: Shorty Esch

Secretary: Jennifer Martin

Scope:

- Engage with individuals, groups or organizations in governments, regulators, inspectors and laboratories for the purpose of increasing the reach and influence of the committee.
- Get these sectors involved in all aspects of electrical safety.
- Encourage and solicit the participation of individuals from these groups and organizations from all regions of the world in activities of the Electrical Safety Committee.

Government, Regulator, Inspectors and Laboratory Subcommittee



Activities in 2023:

- Worked to recruit UL
- Working on a unified electrical safety program in DOE's NNSA (LANL, LLNL, SNL, NNSS)
- Currently meeting once per year

Plan for 2024:

- Charter and goals of this subcommittee, what is the primary focus?
- Invite UL to the meeting
- Discuss interchange of Best Practices and methods among IEEE and Government/Labs
- Discuss level and method to engage Regulators and Inspectors

IAS Committee Liaison



Industry Segment Development Subcommittee



Chair: Jeff Glenney

Vice Chair: Diana Jones

Secretary: Kristin Zaloudek

Scope:

- Engage individuals from all disciplines in all segments of industry to get individuals from these organizations involved in all aspects of electrical safety.
- Implement initiatives designed to increase the value of the ESW for these organizations.
- Seek out new and useful information and knowledge related to electrical safety in different industry segments.
- Select Papers to reuse as IEEE-IAS webinars

Industry Segment Development Subcommittee



Activities in 2023: ~ 6 meetings a year.

Try to do 3 webinars

Plan for 2024: Safety Shares with ESW information

Collect more of these from all attendees and add them to our website.

Recent Presentation from IEEE was extremely well attended.

MODELING DC ARC PHYSICS AND APPLICATIONS FOR DC ARC
FLASH RISK ASSESSMENT- Llyod Gordon Jan 17th



What? Grinder engaged in bolt bag

Significance? Employee sustained a laceration to their lower right abdominal area.



Preliminary Incident Summary

Employee loaded their tool bag with a grinder and other tools at the end of shift. When the employee threw the bag on his shoulder to go down the stairs the grinder trigger was compressed, turning the grinder on.

Investigation Findings

- Employee failed to de-energize grinder (remove the battery) which allowed it to turn on and cause the injury.
- The safety feature on the trigger was functioning properly and we believe it was compressed by another tool in the bag

Thought Provoking Questions

- Is the tool properly stored when traveling with their power tools?
- Why wouldn't we remove the battery pack to ensure complete de-energization?

Corrective Actions

- Instructed all employees that if using an approved battery-operated tool, then all batteries shall be removed during transportation.
- Reinspected all grinders to ensure all safety mechanisms are in proper working order
- Stand down safety meeting with all employees and sub-contractors.
- Discussions on tool energy sources and being diligent in transporting tools to and from job.

OHS Subcommittee



Subcommittee Officers

- Chair: Jeremy Presnal, CSP
- Vice Chair: Rene' Graves, CSP
- Secretary: George Cole, CESCO

Subcommittee Composition

- Approx. 65 members:
- 14 new 2023, 51 existing
- Typical # of meetings/year: 4 – 5

Scope / Objectives:

- Engage occupational safety and health professionals from all disciplines and industries.
- Develop mechanisms to broaden the electrical knowledge of those working in the occupational safety and health profession.
- Seek out new and useful information and knowledge related to electrical safety from all industry segments.

Activities in 2023



J. Presnal and R. Graves presented at the 2023 ASSP conference promoting electrical safety and the ESW



J. Presnal and G. Cole presented at the 2023 VPP conference promoting electrical safety and the ESW

Facilitated 4 meetings in 2023, Q1-24 meeting (in person) at ESW

2024 Plan & Priorities

Meeting

Annual OHS Subcommittee Meeting:

- Location: 3:00PM
- Joshua 1 Room
- All are welcome 😊

Agenda / Objectives:

- Subcommittee Plan / Priorities
- Member Engagement
- Knowledge Sharing
- Networking Opportunities



Standards Subcommittee

Chair-Arthur Smith, Vice-Chair-Lloyd Gordon,
Secretary-Thomas Domitrovich



Standards Subcommittee Status:

1. *ESafeC Standards Subcommittee Policies and Procedures for Standards Development remain valid until December 31, 2026.*
2. *IEEE SA financial certification form for the Electrical Safety Committee Standards Subcommittee submitted and approved*

New Standards Development:

Proposed Project Authorization Request Pre-PAR Exploratory Meeting:

Electrical Safety Risk Assessment - *The purpose of this meeting is to explore interest in developing a PAR Study Group on this topic - Lloyd B. Gordon*

Stationary Battery Bank Risk Assessment - *The purpose of this meeting is to explore interest in developing a PAR Study Group on this topic – Dan Doan and Lloyd B. Gordon*

Electrical Vehicle Risk Assessment - *The purpose of this meeting is to explore interest in developing a PAR Study Group on this topic - Lloyd B. Gordon, Mike Brock, and Andrew Olsen*

Standards Working Groups Meeting at Monday morning before ESW:

1. **1584.2** - *Guide and Checklists for the Data Collection for Performing an Arc-Flash Hazard Calculation Study in Accordance with IEEE Std. 1584™ and IEEE Std.1584.1™ for Systems Operating at Three-Phase 50/60 Hz Alternating Current (AC) 1000 V and below*
2. **P1683** - *IEEE Guide for Motor Control Centers Rated up to and including 600 V AC or 1000 V DC with Recommendations Intended to Help Reduce Electrical Hazards*
3. **P1814** - *Recommended Practices for Electrical System Design Techniques to Improve Electrical Safety*
4. **P2969** - *Guide for Cont. Thermal Monitoring of Switchgear and Motor Control Centers up to 52 kV*

2024 Voting Members – 11

2023 ESW Attendance - 37

Typical # of meetings/year: 1

Paper Review Sub-committee

(02/05/2024)



Members

- Chair: Zarheer Jooma
- Associate Editors: Paul Sullivan, Al Havens, Ernst Esch

Purpose

Oversee the technical review of information presented at the ESW, for the purpose of evaluating the accuracy and the value as reference or source material in the future. (may support other conferences)

Recommend the selection of the various materials and information for publication and recognition.

Report

- Numbers (ESW-2023)
 - Main Conference – 25
 - Focus Sessions – 6
 - Student Posters (to papers) – 6
- Presented Status
 - Invited to Submit – 37
 - Manuscripts Received – 27
 - Manuscripts with Final Decisions – 24 (19 accepted, 5 rejected)
 - Manuscripts in Process – 3

Paper Review Sub-committee

(02/05/2024)



○ 2023 Reflections

- Normal challenges with reviewers (numbers of reviewers, time, poor response)
- Associate Editors performed outstanding – special thanks to Al and Paul
- 20%-30% change is somewhat difficult on heavy-data-driven papers
- 2022 of increasing submittals through interactions – worked very well!
- 100% Student paper submittals!
- Tom Nondahl retiring, Kashem Muttaqi selected as the 2024 TIA Editor-in-Chief

○ 2024 Goals

- Continue to interact with authors during conference
- Increase reviewers through networking by creating awareness (Event Mobi!)

Technical Program Subcommittee



Chair: Mark Scott

Vice Chair: Al Havens

Secretary: Lloyd Gordon

Scope:

- Oversee the solicitation, development, selection and presentation of technical information presented at the ESW.
- Provide guidance for improvements of the overall effort for future years.
- Ensure that tutorials, focus sessions and technical presentations complement each other.
- Ensure that the technical program of the ESW fulfills its mission.

Technical Program Subcommittee



Activities in 2023:

- Mentorship of authors and presenters
- Future topic development
 - Driving significant increase in EV and renewable energy technologies ESW participation
- Body of Knowledge database
- ESW powerpoint template

Plan for 2024:

- Mentorship
- Future topic development
- Body of Knowledge database

Awards and Recognition Subcommittee



Chair: Kevin Lippert

Vice Chair: Scott Seaver

Secretary: Open

Scope:

- Manage the presentation of awards and recognition of individuals and groups at the annual ESW.
- Engage members of the committee to nominate worthy individuals for the committee awards.
- Work with the ESW committees to determine individuals who should be recognized for their presentations at the previous ESW.

Awards and Recognition Subcommittee



Activities in 2023:

Recognized individuals at the 2023 ESW, including
Numerous Published Papers, Incoming/Outgoing Chairs,
(3) 2022 ESW Prize Papers, Prize Student Poster,
(5) Committee Awards

Solicited nominations for 2024 Awards

Plan for 2024:

Recognize individuals at the 2024 ESW, including
Numerous Published Papers, Incoming/Outgoing Chairs,
(4) 2023 ESW Prize Papers, Prize Student Poster,
(4) Committee Awards

Solicit nominations for 2025 Awards

Fill the Subcommittee Leadership positions

Facilities and Finance Subcommittee



Chair: Steve Wilson

Vice Chair: Rene' Graves

Members: Jay Prigmore, Zarheer Zooma, Mike Kovacic

Scope:

- Oversee the logistics and financial matters related to hotels, meeting/eating/sleeping spaces, for the current year workshop.
- Negotiate contracts for meeting planners and registration.
- Develop and manage logistics and financial matters for future workshops.
- Manage and coordinate financial issues with IEEE and IAS.
- Encourage local IEEE sections to become involved in the ESW when it is in their geographical areas.

Facilities and Finance Subcommittee



Activities in 2023:

- Completed financial report for 2023 ESW and submitted for auditing
- Signed contract for RNA to replace Glass & Associates
- Developed contracts for 2024 ESW
- Participated in ESW Subcommittee
- Continued training for new treasurer
- Participated in IEEE Conference Finance Committee
 - Reviewing and commenting on new finance and contract applications

Assisted 2023 & 2024 ESW Chair – finance, contracts

Facilities and Finance Subcommittee



Plan for 2024:

- Assisted 2024 & 2025 ESW Chair – finance, contracts
- Complete financial items for 2024 ESW
- Submit financial statements to IEEE for Audit
- Participate in IEEE Conferences Finance Committee as Chair
- Participate in IEEE Conferences Committee
- Open bank account for 2025 ESW
- Develop contracts for 2025 ESW
- Finalize plans for 2026 ESW location and complete conference application process

Historical and Records Subcommittee



Lanny Floyd – Chair

David Pace – Vice Chair

Recent Activities

1. Updated Awards History
2. Compiling ESW News and Electrical Safety column articles from IAS Magazine

Plans

1. Compile list of best papers

Publicity and Media Subcommittee



Chair: Nehad El-Sherif

Vice Chair: Tim Rohrer

Secretary:

Scope:

- Develop methods to promote and advertise the committee and the ESW through various media outlets, social media and other avenues available.
- Engage others with promotional structures in place for other purposes to develop partnerships to realize mutual benefit for both organizations.
- Maintain the committee website and oversee the ESW website.

Publicity and Media Subcommittee



Activities in 2023:

- Promotions of ESW from:
 - Power Sources Manufacturers Association
 - Electrical Business magazine
 - eHazard
 - EC&M magazine
 - NETA
 - Energy Business Review
 - Engineers Outlook
- Article on ESW Highlights published in the Industry Applications Magazine
- A geofenced digital ads in Canada and the US
- ESW 2024 email signature badge
- Promoting ESafeC and ESW on social media

Publicity and Media Subcommittee



Plan for 2024:

- Kristy is working on the following initiatives:
 - Step and repeat
 - Asking attendees to post with #esw2024
 - Video interviews and live streams (if possible)
- Passing the buck
 - Time for leadership transition
 - The subcommittee should continue running smoothly under Tim Rohrer's leadership

Business from Executive Subcommittee Meeting



- Paper Reviews

- Scholar One Reviews
- ESW 20XX Draft Papers

- All ESafeC Committee Members should plan to provide one ScholarOne Review or more per year.

ESW 2024



Jay Prigmore

March 4 – 8, 2024

El Conquistador Tucson, AZ

ESW 2025



Zarheer Jooma

March 3 – 7, 2025

Hyatt Regency Riverfront

Jacksonville, FL

Call for Proposals

ESW 2026



Michael Kovacic

Date: TBD

Location: TBD

New Business

- ???





- Next “in-person” meeting
Monday March 3, 2025, Hyatt Regency
Jacksonville Riverfront, Jacksonville, FL, USA



- Motion to Adjourn

- 1st
- 2nd



TIME						
	Agava I & II	Joshua I	CORONADO BALLROOM	Joshua II	Agava III	Palo Verde
13:00			Electrical Safety Committee Dan Doan			
13:30						
14:00						
14:30						
15:00	Construction Subcommittee Eric Campbell	Occupational Safety and Health Subcommittee Rene' Graves	Standards Development Subcommittee Arthur Smith	Technical Program Subcommittee Mark Scott	Academic Development Afshin Majd	IAS Relations Matthew Hussey
15:30						
16:00		Industry Segment Development Subcommittee Jeff Glenney	Government, Regulator, Inspectors and Laboratory Subcommittee Lloyd Gordon	Paper Review Subcommittee Zarheer Jooma	Early Career Development Subcommittee Jay Prigmore	International Subcommittee Marcelo Valdes
16:30						



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Electrical Safety Committee

- Voting Members



Eric Campbell

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Lanny Floyd

Jeff Glenney

Lloyd Gordon

Rene' Graves

Al Havens

Dennis Hill

Matt Hussey

Zarheer Jooma

Kevin Lippert

Afshin Majd

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Approval of 2023 Meeting Minutes



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Report from Chair



IAS Safety Lecturer Program



- Approved by IAS Board with annual budget
- To be administered by Electrical Safety Committee
- Program details and forms complete
- Sent to IAS for review/approval
- Looking for volunteer individual or team to run the program

IEEE Smart Village



- Safety, Quality, Reliability, and Standards Subcommittee (SQRS)
- S/C Chair Bruno Lequesne, many int'l attendees
- Attending this S/C to contribute as needed for electrical safety
- If interested, please get involved!



Incoming Committee Secretary

- Nominated by the Advisory & Nominations S/C:

Eva Clark

- For Voting Members: Vote to Approve

Subcommittee Reports



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Vice Chair: Zarheer Jooma

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- Future Locations
- Decorator
- Meeting Planner

Plan for 2024:

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- Roadmap for future Chairs
- 2025 Theme-Organizational Safety Cultural Change

International Development Subcommittee

Chair: Marcelo Valdes

Vice Chair: Mario Aleman (South & Central America)

Vice Chair India: Shahid Jamil

Vice Chair Africa: Nehad El Sherif & Zarheer Jooma

Secretary: Thomas Domitrovich

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International Development

For 2025 and beyond: Where else?

- Europe?
Needs IEC content... Forum to discuss Arc flash publicly (controversial)
- Middle East?
Would probably need to involve Aramco. Contact so far have not come up with interest.
- Africa?
ES activity at IEEE Power Africa the last few years... Enough?
- India? :
Has held them in the past... Need a local champion. May have found one
- Elsewhere in South America?
Mario Aleman floated the idea of a periodic electrical safety conference that ships among a set of countries in South America

Regardless the place a local champion and US champion needs to be identified. Local connections needed and a core of US participants will and able to go wherever is needed.

ESW Colombia 2024

Conference Chair: Prof. Santiago Arias Guzman
(saariasgu@unal.edu.co)

Conference Vice Chair: Prof. Gustavo Ramos
(gramos@uniandes.edu.co)



IEEE Electrical Safety International Development Subcommittee

Chair: Marcelo E Valdes (marcelo.e.valdes@ieee.org)

Vice Chair for South America (Region 9): Mario Aleman (alemani@ieee.org)

ESW Colombia 2024

Dates: September 25th seminars. September 26th & 27th
main conference

Location: University of Colombia, Bogota Colombia



Conference Chair:

Prof. Santiago Arias Guzman
(saariasgu@unal.edu.co)

Conference Vice Chair:

Prof. Gustavo Ramos
(gramos@uniandes.edu.co)

Liaison to US ESW:

Marcelo Valdes & Mario Aleman



ESW Colombia 2024

Why Colombia?

For the educated among us:

Birthplace & home of Gabriel Garcia Marquez

For the rest of us:

Shakira and Sofia Vergara!

Population 52MM+, 7MM+ in Bogota

Spanish and over 60 other languages

Formerly part of Gran Colombia [1830]
(Venezuela + Colombia + Ecuador + Panama
[1903])



International Development

IEEE ESW BRAZIL



ELECTRICAL ENGINEERING AND OCCUPATIONAL SAFETY

IEEE – South Section Brazil, IAS, is proud to hold the IEEE ESW Brazil – Electrical Safety Workshop Brazil, the only event dedicated to electrical safety in Brazil. Since 2003, held bi-annually, the XI edition will be held at USP's IEE premises between October 17 and 19, 2023, once again in partnership with Abracopel – Brazilian Association for Awareness of the Dangers of Electricity.

The Congress is composed of technical papers presented by experienced professionals and invited experts, providing an excellent environment with full participation of the participants.

The event's objective is to promote a "safety culture around the electrical hazard", to make society aware that electricity must be treated responsibly and seriously.

IEEE ESW Brazil, seeks to include in the program not only works by prominent professionals in the Brazilian scenario, but also renowned foreign speakers specialized in Electrical Safety and related topics. Papers presented at IEEE ESW Brazil may have previously been published abroad.

These characteristics make IEEE ESW Brazil an International event at the highest level.

Academic Development Subcommittee



- Chair: Afshin Majd
- Vice Chair: Payman Dehghanian
- Secretary: Jay Prigmore

- # of members: 9
- Typical # of meetings/year: 1-2

2023 Activities

- **Chair:** Student mentorship. Mentoring 2 junior engineers
Review of an Arc Flash related paper.
- **Prof. Dehghanian:** ESW 2023 Student Program Chair
- **Prof. Dehghanian:** Hosting several IEEE IAS Webinars
- **Prof. Lee:**
 - Arc Flash lab tests.
 - Li-ion battery resistance study due to an external short circuit using a zero bouncing circuit and its comparison to cyclic ageing”, Accepted for the publication on IEEE Transactions on Industry Applications
 - Curriculum of Arc-flash Analysis for College Students, Accepted for the publication on IEEE IAS Magazine
- **Dr. Prigmore:**
- Our team had Several group exchanges on activity topics

Construction Subcommittee



Officers:

- Eric Campbell – Chair
- Robert Spang - Vice Chair
- Terry McKinch – Vice Chair
- Mark Wallace - Secretary

Staff Augmentation

- Robert LeRoy – Communications WG Leader
- Michael J. Powers – Working Group Leader at Large
- Scott Mitchell - Working Group Leader at Large
- Jason Wolf – Working Group Leader at Large
- Frank Foote - Outreach

Construction Subcommittee



Scope:

- Engage individuals involved in construction activities from all disciplines and industries to get individuals from these organizations involved in all aspects of electrical safety.
- Communicate the advantages of proactive, positive, engaged and participation at the Electrical Safety Workshop by all segments of the construction industry.
- Promote the inclusion of leading edge abstracts for papers, focus sessions and tutorials across a very wide range of construction sectors using today's best practices.

Construction Subcommittee



2023 Activities

- Quarterly meetings with committee officers
 - Refinement of communication – Outlook Group emails
 - Mentoring for authors
- Tutorial Development: None during 2023
- Paper Development: 2-3

2024 Initiatives

- Regular and consistent communication with committee officers with clearly defined goals
- Maintain mailing list for ease of communication with members
- Promote development of 'Abstracts' and reinforce peer/mentor circles for authors
- For each ESW, Industry outreach specific to region.

Early Career Development Subcommittee

Chair: Jay Prigmore

Vice Chair: TBD

Secretary: TBD



Scope:

- Develop and implement methods to increase and maintain participation in committee activities by individuals who are students or Charter - are early in their professional careers.
- Provide guidance for improvements to the overall effort for future years.
- Develop methods to encourage this audience to attend and become involved in the ESW.
- Work in conjunction with the Academic Development Subcommittee.

Early Career Development Subcommittee



Activities in 2023:

- First Time Attendee Social At ESW 2023
- 3-4 meetings throughout the year
- Developed the ESW First Time Attendee Guide and uploaded to the website.
 - Will rebrand this document to “How to Get the Most Out of ESW Guide”

Plan for 2024:

- Appoint Vice Chair and Secretary
- Recruit more members
- Implement at least one event/product gear toward early career members.
 - Ideas include mentoring, POC meetings, Ask me questions

Government, Regulator, Inspectors and Laboratory Subcommittee



Chair: Lloyd Gordon

Vice Chair: Shorty Esch

Secretary: Jennifer Martin

Scope:

- Engage with individuals, groups or organizations in governments, regulators, inspectors and laboratories for the purpose of increasing the reach and influence of the committee.
- Get these sectors involved in all aspects of electrical safety.
- Encourage and solicit the participation of individuals from these groups and organizations from all regions of the world in activities of the Electrical Safety Committee.

Government, Regulator, Inspectors and Laboratory Subcommittee



Activities in 2023:

- Worked to recruit UL
- Working on a unified electrical safety program in DOE's NNSA (LANL, LLNL, SNL, NNSS)
- Currently meeting once per year

Plan for 2024:

- Charter and goals of this subcommittee, what is the primary focus?
- Invite UL to the meeting
- Discuss interchange of Best Practices and methods among IEEE and Government/Labs
- Discuss level and method to engage Regulators and Inspectors

IAS Committee Liaison



Industry Segment Development Subcommittee



Chair: Jeff Glenney

Vice Chair: Diana Jones

Secretary: Kristin Zaloudek

Scope:

- Engage individuals from all disciplines in all segments of industry to get individuals from these organizations involved in all aspects of electrical safety.
- Implement initiatives designed to increase the value of the ESW for these organizations.
- Seek out new and useful information and knowledge related to electrical safety in different industry segments.
- Select Papers to reuse as IEEE-IAS webinars

Industry Segment Development Subcommittee



Activities in 2023: ~ 6 meetings a year.

Try to do 3 webinars

Plan for 2024: Safety Shares with ESW information

Collect more of these from all attendees and add them to our website.

Recent Presentation from IEEE was extremely well attended.

MODELING DC ARC PHYSICS AND APPLICATIONS FOR DC ARC
FLASH RISK ASSESSMENT- Llyod Gordon Jan 17th



What? Grinder engaged in bolt bag

Significance? Employee sustained a laceration to their lower right abdominal area.



Preliminary Incident Summary

Employee loaded their tool bag with a grinder and other tools at the end of shift. When the employee threw the bag on his shoulder to go down the stairs the grinder trigger was compressed, turning the grinder on.

Investigation Findings

- Employee failed to de-energize grinder (remove the battery) which allowed it to turn on and cause the injury.
- The safety feature on the trigger was functioning properly and we believe it was compressed by another tool in the bag

Thought Provoking Questions

- Is the tool properly stored when traveling with their power tools?
- Why wouldn't we remove the battery pack to ensure complete de-energization?

Corrective Actions

- Instructed all employees that if using an approved battery-operated tool, then all batteries shall be removed during transportation.
- Reinspected all grinders to ensure all safety mechanisms are in proper working order
- Stand down safety meeting with all employees and sub-contractors.
- Discussions on tool energy sources and being diligent in transporting tools to and from job.

OHS Subcommittee



Subcommittee Officers

- Chair: Jeremy Presnal, CSP
- Vice Chair: Rene' Graves, CSP
- Secretary: George Cole, CESCP

Subcommittee Composition

- Approx. 65 members:
- 14 new 2023, 51 existing
- Typical # of meetings/year: 4 – 5

Scope / Objectives:

- Engage occupational safety and health professionals from all disciplines and industries.
- Develop mechanisms to broaden the electrical knowledge of those working in the occupational safety and health profession.
- Seek out new and useful information and knowledge related to electrical safety from all industry segments.

Activities in 2023



J. Presnal and R. Graves presented at the 2023 ASSP conference promoting electrical safety and the ESW



J. Presnal and G. Cole presented at the 2023 VPP conference promoting electrical safety and the ESW

Facilitated 4 meetings in 2023, Q1-24 meeting (in person) at ESW

2024 Plan & Priorities

Meeting

Annual OHS Subcommittee Meeting:

- Location: 3:00PM
- Joshua 1 Room
- All are welcome 😊

Agenda / Objectives:

- Subcommittee Plan / Priorities
- Member Engagement
- Knowledge Sharing
- Networking Opportunities



Standards Subcommittee

Chair-Arthur Smith, Vice-Chair-Lloyd Gordon,
Secretary-Thomas Domitrovich



Standards Subcommittee Status:

1. *ESafeC Standards Subcommittee Policies and Procedures for Standards Development remain valid until December 31, 2026.*
2. *IEEE SA financial certification form for the Electrical Safety Committee Standards Subcommittee submitted and approved*

New Standards Development:

Proposed Project Authorization Request Pre-PAR Exploratory Meeting:

Electrical Safety Risk Assessment - *The purpose of this meeting is to explore interest in developing a PAR Study Group on this topic - Lloyd B. Gordon*

Stationary Battery Bank Risk Assessment - *The purpose of this meeting is to explore interest in developing a PAR Study Group on this topic – Dan Doan and Lloyd B. Gordon*

Electrical Vehicle Risk Assessment - *The purpose of this meeting is to explore interest in developing a PAR Study Group on this topic - Lloyd B. Gordon, Mike Brock, and Andrew Olsen*

Standards Working Groups Meeting at Monday morning before ESW:

1. **1584.2** - *Guide and Checklists for the Data Collection for Performing an Arc-Flash Hazard Calculation Study in Accordance with IEEE Std. 1584™ and IEEE Std.1584.1™ for Systems Operating at Three-Phase 50/60 Hz Alternating Current (AC) 1000 V and below*
2. **P1683** - *IEEE Guide for Motor Control Centers Rated up to and including 600 V AC or 1000 V DC with Recommendations Intended to Help Reduce Electrical Hazards*
3. **P1814** - *Recommended Practices for Electrical System Design Techniques to Improve Electrical Safety*
4. **P2969** - *Guide for Cont. Thermal Monitoring of Switchgear and Motor Control Centers up to 52 kV*

2024 Voting Members – 11

2023 ESW Attendance - 37

Typical # of meetings/year: 1

Paper Review Sub-committee

(02/05/2024)



Members

- Chair: Zarheer Jooma
- Associate Editors: Paul Sullivan, Al Havens, Ernst Esch

Purpose

Oversee the technical review of information presented at the ESW, for the purpose of evaluating the accuracy and the value as reference or source material in the future. (may support other conferences)

Recommend the selection of the various materials and information for publication and recognition.

Report

- Numbers (ESW-2023)
 - Main Conference – 25
 - Focus Sessions – 6
 - Student Posters (to papers) – 6
- Presented Status
 - Invited to Submit – 37
 - Manuscripts Received – 27
 - Manuscripts with Final Decisions – 24 (19 accepted, 5 rejected)
 - Manuscripts in Process – 3

Paper Review Sub-committee

(02/05/2024)



○ 2023 Reflections

- Normal challenges with reviewers (numbers of reviewers, time, poor response)
- Associate Editors performed outstanding – special thanks to Al and Paul
- 20%-30% change is somewhat difficult on heavy-data-driven papers
- 2022 of increasing submittals through interactions – worked very well!
- 100% Student paper submittals!
- Tom Nondahl retiring, Kashem Muttaqi selected as the 2024 TIA Editor-in-Chief

○ 2024 Goals

- Continue to interact with authors during conference
- Increase reviewers through networking by creating awareness (Event Mobi!)

Technical Program Subcommittee



Chair: Mark Scott

Vice Chair: Al Havens

Secretary: Lloyd Gordon

Scope:

- Oversee the solicitation, development, selection and presentation of technical information presented at the ESW.
- Provide guidance for improvements of the overall effort for future years.
- Ensure that tutorials, focus sessions and technical presentations complement each other.
- Ensure that the technical program of the ESW fulfills its mission.

Technical Program Subcommittee



Activities in 2023:

- Mentorship of authors and presenters
- Future topic development
 - Driving significant increase in EV and renewable energy technologies ESW participation
- Body of Knowledge database
- ESW powerpoint template

Plan for 2024:

- Mentorship
- Future topic development
- Body of Knowledge database

Awards and Recognition Subcommittee



Chair: Kevin Lippert

Vice Chair: Scott Seaver

Secretary: Open

Scope:

- Manage the presentation of awards and recognition of individuals and groups at the annual ESW.
- Engage members of the committee to nominate worthy individuals for the committee awards.
- Work with the ESW committees to determine individuals who should be recognized for their presentations at the previous ESW.

Awards and Recognition Subcommittee



Activities in 2023:

Recognized individuals at the 2023 ESW, including
Numerous Published Papers, Incoming/Outgoing Chairs,
(3) 2022 ESW Prize Papers, Prize Student Poster,
(5) Committee Awards

Solicited nominations for 2024 Awards

Plan for 2024:

Recognize individuals at the 2024 ESW, including
Numerous Published Papers, Incoming/Outgoing Chairs,
(4) 2023 ESW Prize Papers, Prize Student Poster,
(4) Committee Awards

Solicit nominations for 2025 Awards

Fill the Subcommittee Leadership positions

Facilities and Finance Subcommittee



Chair: Steve Wilson

Vice Chair: Rene' Graves

Members: Jay Prigmore, Zarheer Zooma, Mike Kovacic

Scope:

- Oversee the logistics and financial matters related to hotels, meeting/eating/sleeping spaces, for the current year workshop.
- Negotiate contracts for meeting planners and registration.
- Develop and manage logistics and financial matters for future workshops.
- Manage and coordinate financial issues with IEEE and IAS.
- Encourage local IEEE sections to become involved in the ESW when it is in their geographical areas.

Facilities and Finance Subcommittee



Activities in 2023:

- Completed financial report for 2023 ESW and submitted for auditing
- Signed contract for RNA to replace Glass & Associates
- Developed contracts for 2024 ESW
- Participated in ESW Subcommittee
- Continued training for new treasurer
- Participated in IEEE Conference Finance Committee
 - Reviewing and commenting on new finance and contract applications

Assisted 2023 & 2024 ESW Chair – finance, contracts

Facilities and Finance Subcommittee



Plan for 2024:

- Assisted 2024 & 2025 ESW Chair – finance, contracts
- Complete financial items for 2024 ESW
- Submit financial statements to IEEE for Audit
- Participate in IEEE Conferences Finance Committee as Chair
- Participate in IEEE Conferences Committee
- Open bank account for 2025 ESW
- Develop contracts for 2025 ESW
- Finalize plans for 2026 ESW location and complete conference application process

Historical and Records Subcommittee



Lanny Floyd – Chair

David Pace – Vice Chair

Recent Activities

1. Updated Awards History
2. Compiling ESW News and Electrical Safety column articles from IAS Magazine

Plans

1. Compile list of best papers

Publicity and Media Subcommittee



Chair: Nehad El-Sherif

Vice Chair: Tim Rohrer

Secretary:

Scope:

- Develop methods to promote and advertise the committee and the ESW through various media outlets, social media and other avenues available.
- Engage others with promotional structures in place for other purposes to develop partnerships to realize mutual benefit for both organizations.
- Maintain the committee website and oversee the ESW website.

Publicity and Media Subcommittee



Activities in 2023:

- Promotions of ESW from:
 - Power Sources Manufacturers Association
 - Electrical Business magazine
 - eHazard
 - EC&M magazine
 - NETA
 - Energy Business Review
 - Engineers Outlook
- Article on ESW Highlights published in the Industry Applications Magazine
- A geofenced digital ads in Canada and the US
- ESW 2024 email signature badge
- Promoting ESafeC and ESW on social media

Publicity and Media Subcommittee



Plan for 2024:

- Kristy is working on the following initiatives:
 - Step and repeat
 - Asking attendees to post with #esw2024
 - Video interviews and live streams (if possible)
- Passing the buck
 - Time for leadership transition
 - The subcommittee should continue running smoothly under Tim Rohrer's leadership

Business from Executive Subcommittee Meeting



- Paper Reviews

- Scholar One Reviews
- ESW 20XX Draft Papers

- All ESafeC Committee Members should plan to provide one ScholarOne Review or more per year.

ESW 2024



Jay Prigmore

March 4 – 8, 2024

El Conquistador Tucson, AZ

ESW 2025



Zarheer Jooma

March 3 – 7, 2025

Hyatt Regency Riverfront

Jacksonville, FL

Call for Proposals

ESW 2026



Michael Kovacic

Date: TBD

Location: TBD

New Business

- ???





- Next “in-person” meeting
Monday March 3, 2025, Hyatt Regency
Jacksonville Riverfront, Jacksonville, FL, USA



- Motion to Adjourn

- 1st
- 2nd



TIME						
	Agava I & II	Joshua I	CORONADO BALLROOM	Joshua II	Agava III	Palo Verde
13:00			Electrical Safety Committee Dan Doan			
13:30						
14:00						
14:30						
15:00	Construction Subcommittee Eric Campbell	Occupational Safety and Health Subcommittee Rene' Graves	Standards Development Subcommittee Arthur Smith	Technical Program Subcommittee Mark Scott	Academic Development Afshin Majd	IAS Relations Matthew Hussey
15:30						
16:00		Industry Segment Development Subcommittee Jeff Glenney	Government, Regulator, Inspectors and Laboratory Subcommittee Lloyd Gordon	Paper Review Subcommittee Zarheer Jooma	Early Career Development Subcommittee Jay Prigmore	International Subcommittee Marcelo Valdes
16:30						