2023 Workshop on SF₆ Emission Reductions and Alternatives

July 25–26 | Salt Lake City, Utah

Agenda and Program



SF₆ Emission Reduction Partnership for Electric Power Systems

National Electrical Manufacturers Association

SF₆ & ALTERNATIVES COALITION

U.S. EPA

Agenda at a glance

MONDAY JULY 24

2pm – 8pm: Registration open, 2nd floor, Parley's 1&2

6pm – 10pm: Opening Reception (independently sponsored event by Meiden America Switchgear), 2nd floor, Parley's 1&2

TUESDAY JULY 25

All-day: vendor tabletop exhibits

8am – 9am: Breakfast provided, 2nd floor, Wasatch ballroom foyer

9am – 12:30pm: Session 1, Considerations for Transitioning from SF_6 to Alternatives

12:30pm – 1:30pm: Lunch provided, 2nd floor, Wasatch ballroom foyer

1:30pm – 5:30pm: Product Education Sessions, 2nd floor breakout rooms

6pm – 9pm: Dinner (independently sponsored event by DILO), Christophers Prime & Sonoma Wine Bar

WEDNESDAY JULY 26

All-day: vendor tabletop exhibits

8am – 9am: Breakfast provided, 2nd floor, Wasatch ballroom foyer

9am – 12:30pm: Session 2, Considerations to Meet Regulations and Reporting Requirements

12:30pm – 1:30pm: Lunch Provided, 2nd floor, Wasatch ballroom foyer

1:30pm – 4:30pm: Session 3, Best Practices for Emission Reductions

Tuesday, July 25, 2023

- 9:00am Lauren Aepli: Welcome and Opening Remarks
- 9:15am Vacuum and Clean Air Technologies Panel
- 10:15am Break
- 10:30am Alternative Gas Technologies Panel
- 11:30am Neil Gwinnutt: Insulating Gas Analysis
 Considerations for Transitioning from SF₆ to Alternatives
- 12:00pm Bob Laverne: SF₆ Supply Chain Overview and Status

Vacuum and Clean Air Technologies Panel Moderated by Lauren Aepli, US EPA



Arben S. Bufi, Ph.D. Senior Principal Engineer Meiden America Switchgear



Naeem Siddiqui Head of Offer Management, Switchgear Americas

Siemens Energy



Paul Hatala Marketing and Product Manager, HVSD Mitsubishi Electric Power Products, Inc.

Fluorinated Gas Technologies Panel Moderated by Jonathan Stewart, NEMA



Mauricio Aristizabal Technology Center Manager North America Hitachi Energy



Billy Lao General Manager DILO Company / DILO Direct



Phil Fahey

Senior Director Business Development Metal-Enclosed Switchgear

S&C Electric



Todd Irwin

Business Development Manager – HVCB

GE Grid Solutions

Session 1 Speakers



Lauren Aepli Program Manager US EPA

Neil Gwinnutt VP Global Sales & Technical Service Energy Maintenance Technologies Ltd





Tuesday, July 25, 2023

In these 50-minute sessions, workshop participants will be able to attend up to four vendor-sponsored breakouts to learn about and discuss emission reductions and SF_6 -alternative technologies.

| Time | Red Butte | Millcreek | Parley's 1 | Parley's 2 |
|--------|------------|-----------|----------------------|-------------------|
| 1:30pm | MEPPI | S&C | DILO | Hitachi Energy |
| 2:30pm | RH Systems | Schneider | GE Grid Solutions | G&W |
| 3:30pm | MEPPI | S&C | DILO | Hitachi Energy |
| 4:30pm | RH Systems | Schneider | GE Grid Solutions | G&W |

The U.S. Environmental Protection Agency does not endorse the products, services, or enterprises of non-federal entities, including those in this workshop.

Session 2, Considerations to Meet Regulations & Reporting Requirements

Wednesday, July 26, 2023

- 9:00am Debbie Ottinger: SF₆ Emission Trends, A Refresher on the Mass Balance Approach, and Review of Proposed Amendments to the Greenhouse Gas Reporting Program
- 10:15am Break
- 10:30am Jonathan Stewart: Review of State and Industry Activities related to SF₆ and Gas Alternatives
- 11:00am Cindy Parsons: Feedback on Implementation of the New GIE Nameplate Adjustment Procedure
- 11:30am Rafael Derencio: Online Monitoring for Preventive/Predictive Maintenance on Alternative Gas Systems
- 12:00pm Dan Schiffbauer: Update on Industry Standards

Session 2, Considerations to Meet Regulations & Reporting Requirements

Session 2 Speakers



Debbie Ottinger Fluorinated GHG Emissions Analyst US EPA

Jonathan Stewart Managing Director, Utility Systems National Electrical Manufacturers Association



Cindy Parsons Environmental Affairs Los Angeles Department of Water and Power

Session 2, Considerations to Meet Regulations & Reporting Requirements

Session 2 Speakers, continued



Rafael Derencio Product Manager WIKA



Dan Schiffbauer. P.E. Technology Executive Toshiba

Session 3, Best Practices for Emission Reductions

Wednesday, July 26, 2023

- 1:30pm Mark Christensen: Advancements in SF₆ Emission Reductions
- 2:15pm Chris Barrett: Reshaping The Grid Through Gas Stewardship: How Insulating Gas Reconditioning and Recycling Can Lower Your Carbon Footprint
- 3:00pm Break
- 3:15pm Linus Farias: Lessons Learned from a Utility Program to Minimize Leakage and Eliminate SF₆ Gas Use in Gas Insulated Equipment
- 4:00pm Jonathan Stewart: Closing Remarks

Session 3, Best Practices for Emission Reductions

Session 3 Speakers



Mark Christensen Manager Apparatus and Maintenance Southern California Edison

Chris Barrett Regional Sales Manager-Northwest USA DILO Company / DILO Direct



Session 3, Best Practices for Emission Reductions

Session 3 Speakers, continued

Linus Farias Principal Net Zero Strategies



Tom Rak Principal Engineer Net Zero Strategies



Tabletop Exhibitors

