Fall Engineering and Operations Workshop
New College Foundation Hall
Martinsville, Virginia

Wednesday October 9, 2024

8:00 a.m. **Breakfast**

8:30 - 8:45 a.m. **Welcome and Introductions**
Durwin Joyce, Electric Director, City of Martinsville

8:45 – 9:45 a.m. **ARC Flash Safety**
Wes Fleming, McGill Associates

In the Arc Flash Awareness, Safety, and Action presentation, we will discuss what arc flash is, the most common causes of arc flash, the consequences of arc flash from the perspective of safety as well as equipment loss, the regulations governing arc flash mitigation from OSHA to the NEC, and finally what we can all do to help protect ourselves and our staff from arc flash hazards.

10:00 – 11:00 a.m. **Security Focused design in OT Systems**
Charles Carroll, Engineering Manager II, Cyber Services-SEL Infrastructure Defense

Once a rare occurrence, the recent FrostyGoop malware attack on a Ukrainian power utility highlights a rapidly growing focus by malicious actors on compromising industrial control systems. Standard enterprise response measures focus on the lack of cryptographic in control systems; however, implementing fundamental methods of security purposely designed for industrial controls systems would have mitigated such an attack. The presenter will discuss the implementation of security-focused design in OT systems for resilient and malware-resistant critical infrastructure.

11:15 a.m. – 12:15 p.m. **The impact of Data Centers on the Electrical Grid in the US.**
Cole Stevenson, EATON
Jason Plane, EATON

12:15 – 1:15 p.m. **Lunch**

1:30 - 2:30 p.m. **Distributed Energy Resources**
Luke Booth, Application Engineer Schweitzer Engineering Laboratories

Distributed Energy Resources (DERs) are becoming increasingly prevalent as sources of electric energy. Solar, wind, and batteries are the most common with other forms being less known. Small DERs pose little concern to protecting and controlling distribution systems. However, the higher the capacity of the DER the more it supports the system surrounding it and the more important it is. This presentation will discuss considerations when DERs are connected to distribution systems with a particular focus on battery energy storage systems. Some of the considerations are open phase detection, grid-following or grid-forming, ride through requirements, real power ramping rate, and anti-islanding detection.

2:45- 3:45 p.m. **Integrating Solar Energy into Municipal Utility Distribution Systems: Strategies, Challenges, and Successes**

Craig Both, Senior Director, Origination-Distributed Generation
Deepesh Kandel, Senior Project Director-Distributed Generation

This session will cover an in-depth analysis of integrating solar energy into municipal utility distribution systems, with particular focus on different installation types and requirements, optimal sizes, and interconnection and permitting considerations. Join the session to gain valuable insights into the technical, financial, and community aspects of deploying solar energy solutions effectively within municipal utility distribution systems.

3:45 – 4:00 p.m. Daily Wrap up
Durwin Joyce, Electric Director, City of Martinsville

5:30 pm **Dinner TBA (not included in registration price but a group location will be announced for those who wish to attend)**

Thursday, October 10, 2024

8:00 a.m. **Breakfast**

8:30 - 9:30 a.m. **Oil Containment**

Bill Gannon, Solidification Products International
Scott Dillard, Harrisonburg Electric Commission

This joint presentation with the Harrisonburg Electric Commission (HEC) will cover a recent oil containment project that was done by SPI at their Maryland Ave substation. Additionally, the presentation will provide an overview of reasons to use oil containment.

9:45 - 10:45 a.m. **Disposal of Oil-Filled Electrical Property**

Jonathan Lefkovits, G&S Technologies
Gary Leighton, G&S Technologies

This presentation will delve into the environmental side of safe and proper disposal of oil-filled electrical equipment. The presentation will cover the history of PCBs in oil-filled electrical equipment, proper testing, handling and disposal of PCB equipment and oil, the pros and cons of Mineral Oil vs. FR3 oil, safe and proper disposal of miscellaneous items such as capacitors, breakers and PILC cable as well as other items, and walkthroughs of emergency response equipment decommissioning case studies.

11:00- 12:00 p.m. **Best Practices – Using Samsara GPS Fleet Monitoring System to Improve Safety, Operational Efficiency and Cost/Liability Exposure**

Cordell Mitchell, Flett Analyst
Kenny Perkins, Vice President of Safety

The Samsara driving system is pivotal in our safety program by empowering us to monitor and analyze driver behavior, vehicle performance, and operational efficiencies. Through real-time tracking and advanced analytics, we can proactively identify potential hazards, prevent accidents, and promote responsible driving habits among our employees. This state-of-the-art system enables us to monitor

various critical factors, including speeding, harsh braking, and excessive idle time, allowing us to address any concerns and swiftly implement corrective actions.

SAVE THE DATE

MEPAV Annual Conference

May 21- 23, 2025

Hilton Garden Inn, Virginia Beach