

Training For Industry Executives

QualityLogic offers Executive Workshops for managers and leaders responsible for guiding the strategic planning and development for integrating and deploying products into the grid. It is critical for senior managers to have a working knowledge of the interoperability standards and their current adoption and maturity.

INTRODUCTION TO COMMUNICATION STANDARDS FOR VEHICLE-TO-GRID INTEGRATION

This 4-hour Executive Workshop will review applicable standards by electric vehicle use-case for Vehicle-Grid Integration (VGI). This includes V1G managed charging (EV charging optimized for both EV owner/operator and grid operations), V2G-DC (where the bi-directional inverter is on the EVSE) and V2G-AC (where the bi-directional inverter is on the EV itself).

Who Should Attend?

The 4-hour workshop is ideal for senior executives or managers in charge of developing products that are part of the EV charging infrastructure. You will walk away from this training with a better understanding of the different communication protocols in use and how they will impact your plans.

What You Will Learn

This workshop will summarize:

- The key Vehicle-to-Grid (VGI) use cases and communications standards for each;
- The key communications protocols at a high level along with the strengths and weaknesses of each;
- The various standardization activities on VGI, including work in process by the Society of Automotive Engineers, Underwriter's Lab, Charln, and the SunSpec Alliance;
- Challenges of standardizing V2G in the context of NEVI, NACS, and EU/ISO Standards
- Key policy initiatives in leading states that are or will impact the adoption of communication protocols;
- Available as a live online class, or in-person.

INTRODUCTION TO IEEE 2030.5 FOR DER AND EV INTEGRATION

If your company is planning or starting to develop or test Common Smart Inverter Profile (CSIP) based DER systems, you can jump-start your efforts with QualityLogic's executive training on IEEE 2030.5, CSIP, and Rule 21 technical requirements. This 4-hour Executive Workshop will introduce attendees to the deliverables necessary to meet the CA Rule 21 IEEE 2030.5 requirements for DER and EV integration.

Who Should Attend?

The 4-hour workshop is ideal for senior executives or managers responsible for overseeing the development of products or initiatives requiring IEEE 2030.5 certification. At the end of the workshop, you will have a deeper knowledge of the protocol and its relationship to EV integration plans.

What You Will Learn

This workshop will summarize:

- Conceptual and practical understanding of IEEE 2030.5
- Overview of CA Common Smart Inverter Profile for IEEE 2030.5 (CSIP)
- Overview of SAE J3072 IEEE 2030.5 Profile for EVSE to EV communication
- Understanding the certification landscape and requirements

INTRODUCTION TO IEEE 1547-2018 INTEROPERABILITY

This Executive Workshop will educate attendees on the most current IEEE 1547.1 Interoperability requirements. Specifically, our goal is to:

- Help key decision-makers and influencers understand what is/is not included in certified UL 1741 SB products vis-à-vis interoperability;
- Provide guidance on the implications of the new Interoperability requirement for utilities, regulators, and vendors;
- Suggest strategies for leveraging the game-changing inverter technology;
- Available as a live online class, or in-person.

Over the 4-hour course, you will learn about the fundamental challenges in integrating inverter-based DERs into grid operations and the significant changes being implemented by inverter vendors to enable more scalable interoperability between all systems in the Grid-DER management infrastructure.

Who should attend?

The 4-hour workshop is aimed at senior executives, product managers, engineers, software developers, system architects, manufacturers, test labs, utilities, regulators and staff, and IT professionals making strategic and financial decisions about DER integration infrastructure architecture and technology. Attendees should have a working knowledge of DER products and capabilities as defined by IEEE 1547-2018. Experience with DER interconnection requirements and management of DERs would be beneficial but not required.

What You Will Learn

- The new IEEE 1547-2018 and IEEE 1547.1 Standard and Interoperability requirements
- Help the audience understand certified UL 1741 SB products vis-à-vis interoperability
- A high-level overview of the three IEEE 1547 Interop Protocols (IEEE 2030.5, SunSpec Modbus, and DNP3) and the differences between each
- Guidance on the implications of the new Interoperability requirement for utilities, regulators, and vendors
- Use Cases and implementation architectures for DER management

INTRODUCTION TO OPENADR FOR DEMAND MANAGEMENT

This 4-hour Executive Workshop will provide attendees with a background on the origins of OpenADR, followed by a high-level discussion of all the key aspects of the OpenADR standard, including supported transports and security mechanisms.

Who Should Attend?

The 4-hour workshop is ideal for senior executives and IT managers making strategic and financial decisions or leading the integration of products or programs involving the OpenADR 2.0 specification a flexible way to prepare for development and implementation.

What You Will Learn

This workshop will provide you with:

- The origins of OpenADR and a high-level overview of its features and functions
- A solid conceptual understanding of how OpenADR works
- An understanding of the aspects of OpenADR required to implement a demand management program
- OpenADR best practices