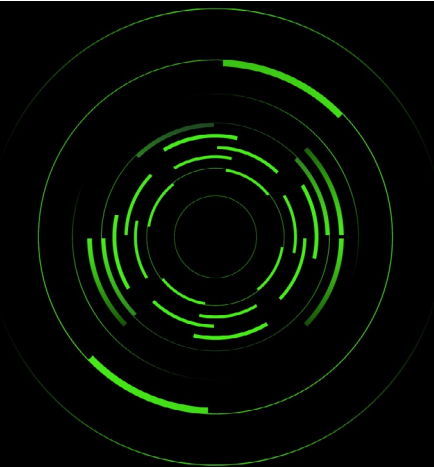


Enabling Secure Distributed Energy Resource Adoption

March 2025



Cybersecurity risks associated with Distributed Energy Resources (DERs) are different from other connected field devices

Factors such as cloud and internet connections, third-party interactions, logical location, and connection type are just some of the differences between DERs and traditional field devices. State and local regulations like Federal Energy Regulatory Commission (FERC) 2222 are driving DER adoption and connections, triggering organizations to prioritize the need to promptly connect, so security should be complementary and not a roadblock to DER adoption.

Failure to securely deploy DERs today may increase the likelihood of a cybersecurity event, negatively impacting the electric power grid and potentially resulting in significant resources to mitigate such events.

Considerations when Developing a DER Security Approach



Digital interconnections are required for visibility and control
Identify new platforms required to consistently manage and secure assets in the field



DER communication is often reliant on internet/cloud connectivity
Preserve the security perimeter of your organization from third parties & independently managed DERs & enable secure cloud transport



States & federal entities are releasing requirements to facilitate more rapid & equitable DER adoption
Develop a flexible design that incorporates industry leading practices and anticipates federal and state connectivity and security requirements



Varying vendor security services agreements create inconsistency across deployments
Standardize solution configurations and security baselines of vendor DER solutions



Securing DER deployments requires an increased need for collaboration
IT and security groups should collaborate with business groups to build security into DER initiatives at the forefront of project planning

DER Security Project Case Study

Deloitte was engaged by a large utility provider to assess the cybersecurity impacts of connecting to DERs. Deloitte was then asked to develop the methodology and cost estimate to address the cybersecurity and operational impacts discovered and create a business case for project authorization. After achieving project authorization, Deloitte was contracted to lead the planning and design phase of the new DER security project. Deloitte provided subject matter proficiency and acted as the centralizing force to bring over a dozen stakeholder groups together to mitigate security and operational risks posed by connecting to DERs.

How Deloitte Has Helped

- We have collaborated with our clients to provide DER security services such as:
- ▶ Developing DER deployment strategies
 - ▶ Assessing cybersecurity posture for DERs
 - ▶ Developing policies and standards for DER security governance within utility organizations and regulators
 - ▶ Building cost estimates and business cases for authorization of DER security implementation
 - ▶ Designing architectures to mitigate DER security risks and enable DER connections with internal and external systems
 - ▶ Leading system integration to drive towards unified project implementation and testing

Contacts



David Nowak
Principal
Deloitte & Touche LLP
danowak@deloitte.com



Sam Icasiano
Managing Director
Deloitte & Touche LLP
saicasiano@deloitte.com



Apoorva Dasari
Senior Manager
Deloitte & Touche LLP
apdasari@deloitte.com

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