



Grid Modernization

Upfront Cybersecurity & Controls Considerations

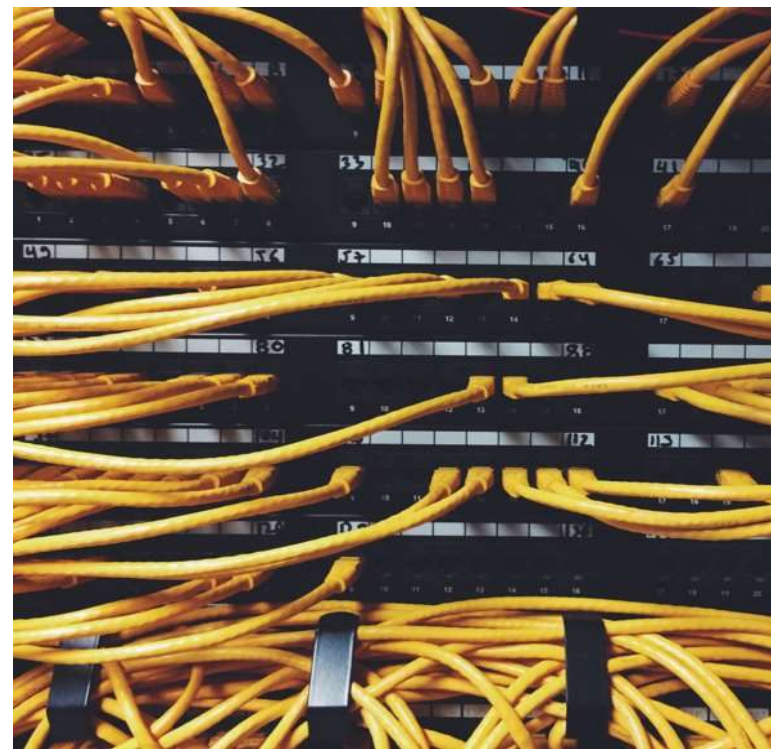
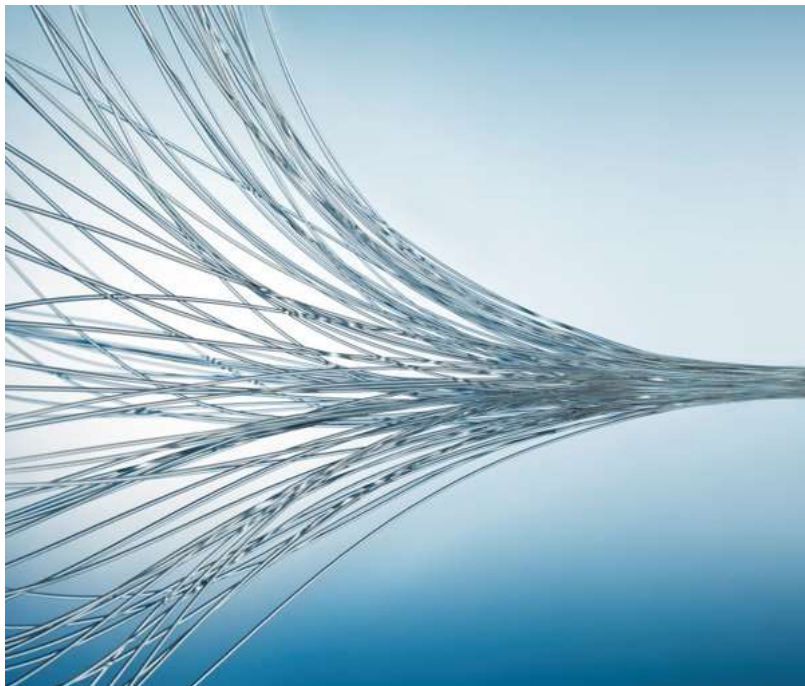
**AEG DMV 23Q3
Grid Modernization Action
Challenge**

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System Wide Vulnerabilities

- Grid Modernization Efforts are Multi-Vendor, Multi-Platform
 - Multiple control platforms and communications
 - Isolated networks
- Decentralized grid = increased number of interconnections



Systems of Systems Coordination

Defense in Depth and Breadth
Multi-Disciplinary Cybersecurity



Cybersecurity Engineers
Cyber Competency



Supply Chain Security Management
SBOMs, Supplier Security Practices



Continuous Monitoring
Real-time Alerts and Periodic
Vulnerability Assessments

Benefits of System Wide Security

- Secondary controls can provide local control and automation for distributed energy resources
 - Ability to leverage behind-the-meter assets
- Remote access to power equipment
 - Monitor device health
 - Aggregate Data



There is no Resiliency without Cybersecurity



Regarding Grid Modernization, to achieve DC/DMV climate, health & equity goals, a critical obstacle to collectively overcome in 12 months is ensuring cybersecurity competency at every stage and level to ensure integrated systems have a minimal combined attack surface, are closely monitored, and quickly recoverable.

