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## **Control Center Visualization**

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### **Abstract**

Distribution Control Centers face new challenges as Outage Management (OMS) and the Smart Grid Distribution Management (DMS) are being integrated. The Smart Grid SCADA / DMS / OMS solution must integrate the detail of static visualization previously provided by GIS/OMS, with the dynamic colorization and network adaptability of DMS to support real-time network changes. The extremely complex graphical displays with the enormous quantity of dynamic elements must support the expectations of the Control Center operator for performance and real-time functions. In many control centers various levels of mapping detail is needed and used by the operator. The network modeling issues, maintenance requirements and operational visualization advancements will be discussed based on one of the nation's largest utilities in the north east USA.