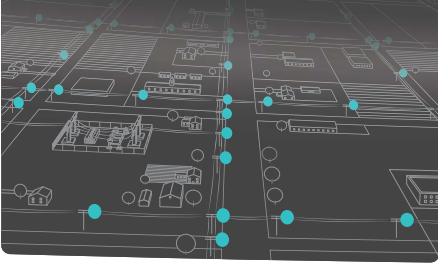


Co-op System Data

The proliferation of smart grid components and platforms over the past decade is giving co-ops unprecedented visibility into and control over their systems. It's also delivering enormous quantities of system data on everything from equipment status to outages to member use patterns back to the co-op. New analytics software and machine learning capabilities are helping utilities makes sense of all this information and present it in ways that improve member service, reliability and safety. Here some of the many sources of data that co-ops rely on to run their operations.

Geographic Information System (GIS)

Shows where system assets are and how they're connected.



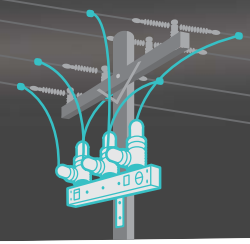
Advanced Metering Infrastructure (AMI)

Used for remote meter reading, billing, outages, and ratemaking.



Supervisory Control and Data Acquisition (SCADA)

Monitoring and control of high-voltage equipment.



Outage Management System (OMS)

Tracking, responding to, and informing members about outages.



Engineering Analysis (EA)

Data from GIS and AMI used for studies on system expansion, interconnection, etc.



Distributed Energy Resource Management System (DERMS)

Controlling DERs to improve system performance.

