

Energized Downed Conductor - High-Impedance Fault



- Electric Utility with 110+ years in service
- 5,000+ employees
- 4MM+ customers

Business Need	Challenge	Solution & Results
<ul style="list-style-type: none">• Directed by PUC (Public Utilities Commission) to develop technologies to reduce the probability of public fatalities• Cost of incident• Public reputation	<ul style="list-style-type: none">• New technology using AMI data• Competing for resources allocated to other methods• Limited number of verified EDC cases• Pilot required upload of new configuration to all meters• Very large data set to analyze• Analytics needed to address multiple classes of EDCs, including: load site, source side, and compound incidents• Pilot integration with the Utility's systems to include electrical connectivity model	<ul style="list-style-type: none">• Tools developed to analyze data• New meter configuration uploaded to all meters to enable meters to provide real-time data• Identified new analytics to include pattern analytics and increase confidence• Methods developed to reduce false positives• Regression showed analytics identified a high percentage of EDCs, as well as the precise location and an accurate confidence level