



## Case Study: Vegetation Encroachment Risk Assessment

### CUSTOMER

TIER ONE IOU WITH MILLIONS OF ELECTRIC AND GAS CUSTOMERS

### PROJECT

DISTRIBUTION NETWORK VEGETATION ENCROACHMENT AND RISK ASSESSMENT

### ISSUES, CHALLENGES & GOALS

- Fire threat risk is high across large parts of the electric service territory
- No information on actual vegetation encroachment and fuel load rating (FLR) of ground cover
- Tree trimming is based on route miles, not prioritized where it's needed the most

### SOLUTION DESCRIPTION

- Capture 360° imagery and LiDAR along overhead distribution lines based on threat level
- Perform data analytics to extract poles and conductors with critical attributes
- Run automated process to determine vegetation encroachment to conductors and ground FLR

### IMPACT & BENEFITS

- 20,000+ miles of accurate, detailed encroachment & FLR results that were previously unavailable
- Fine-grained data points (every 3 ft) aggregated as risk vectors along spans with severity
- Identified over 180,000 high fire threat (4 ft or closer) encroachments