Utility Wildfire Mitigation Strategy

September 18, 2019



Discussion questions: Metrics

- What is the set of appropriate metrics to understand the drivers and risks of utility-related wildfires?
- What metrics can be used to evaluate the effectiveness of WMPs and/or can assist in future learning and adaptation of WMPs?
- What additional metrics or metric categories could complete the Sept. 6 submission?



Summary of proposed metrics from Sept. 6 submission

Capabilities

1. Lessons learned and incorporated due to failings in detections, coordination, and/or equipment
2. Training of personnel, including “live drills”
3. Accuracy of software and measurements to detect high-risk wildfire conditions

Exposure drivers

1. Wind speed associated with outage, wire-down, and vegetation events
2. # of National Fire Danger Rating System “Very Dry” &“Dry” days; # of FPI "Elevated" & "Extreme" days

Frequency drivers

Within HFTD/other areas [when FPI is rated as very-high or higher]:

1. # of [energized] wire down events
2. # of vegetation caused outages
3. # of equipment failure/other/ animal caused outages
4. # of faults on HFTD circuits associated with contact from object or equipment failures
5. # of conventional blown fuse events

Triggering events

Within HFTD/other areas [when FPI is rated as very-high or higher]:

1. # of utility equipment caused ignitions
2. # of vegetation caused ignitions
3. # of other/animal caused ignitions

Response

1. Response time to ignitions
2. Response time to wildfires
3. Response time to coordination with local agencies
4. Time to deployment of firefighters or relevant personnel

Outcome



Discussion questions:
Data collection and reporting

- What data can be collected, measured, and reported accurately today?
- What other data might be important to collect and share?
- How should metric requirements be incorporated into ongoing reporting?



Data and Map Product Catalogues from July 30 submission

SCE	PG&E	SDG&E	Liberty	PacifiCorp
All ignitions	Ignition data	Ignitions	Outage Log	Power Line Fires in PacifiCorp's Service Territory
Atmospheric Data Solutions (ADS)	Distribution inspection tag information	CMP/intrusive inspections	GO 165 Inspection Program	Potential ignition sources
CPUC reportable ignitions	Distribution outage data	Electric reliability	Pole Test and Treat	Events recorded with fire reference
Fulcrum	Incident investigation data	PowerWorkz	Covered Wire Pilot Program	Events recorded with fire reference: damage fire, equipment fire, pole fire
Wire down database	Incident Logging and Information System (ILIS)	Wire downs	Expulsion Limiting Fuse Locations	Wire down risks
Outage database and reliability metrics system	PG&E weather station data	Weather	Weather Station Database	Wire down event trend
	Transmission outage data	Transmission outages	Weather Station Locations	Utility fire history
	Transmission inspection tag information		Substation Inspections	Utility fire environmental characteristics
	Utility Fire Potential Index (FPI)		Mobile Mapping	
	Vegetation management outage investigations		Vegetation Management System Tree Inventory	
	VM inspections, projects and points			