

Horizon West Transmission, LLC Wildfire Mitigation Plan

**R.18-10-007: CPUC Informational Workshop &
WMP Presentations**

February 18, 2020

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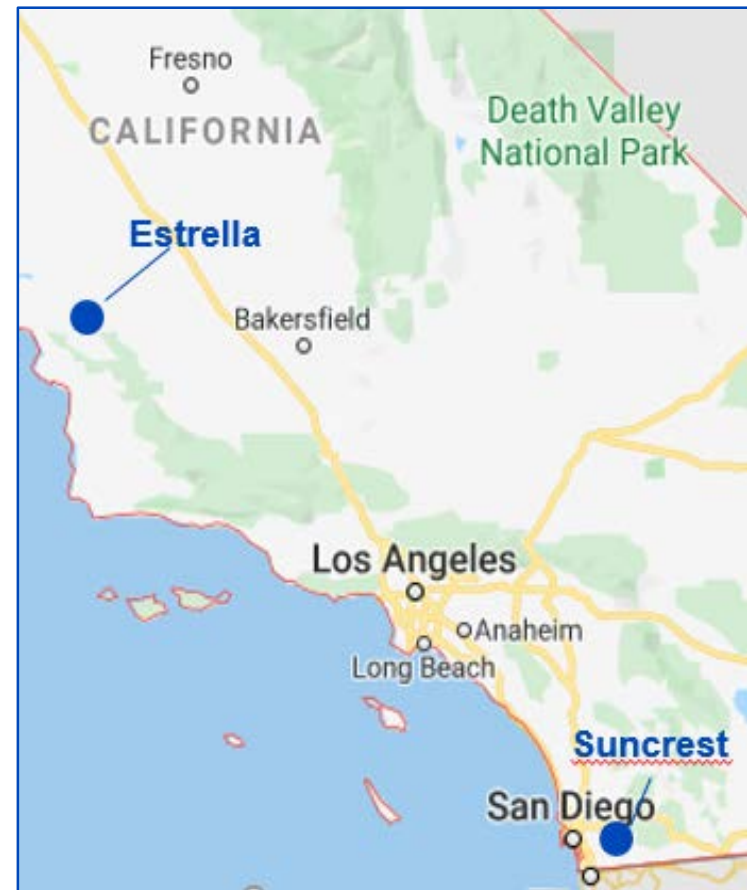
Agenda

- **Horizon West Transmission Overview**
 - Background
 - Facilities (Suncrest SVC Project)
- **Metrics**
- **Strategy Summary**
- **Objectives**
- **Efforts to Date**

Horizon West Transmission, LLC (HWT) is a newly certificated public utility and electrical corporation in California (U-222E)

HWT Background

- **Transmission-only utility**
- **First non-incumbent to be awarded two competitive projects by CAISO**
 - Suncrest SVC Project
 - Estrella Substation Project (currently in permitting)
- **Actively pursuing FERC Order 1000 and other opportunities in the CAISO region**



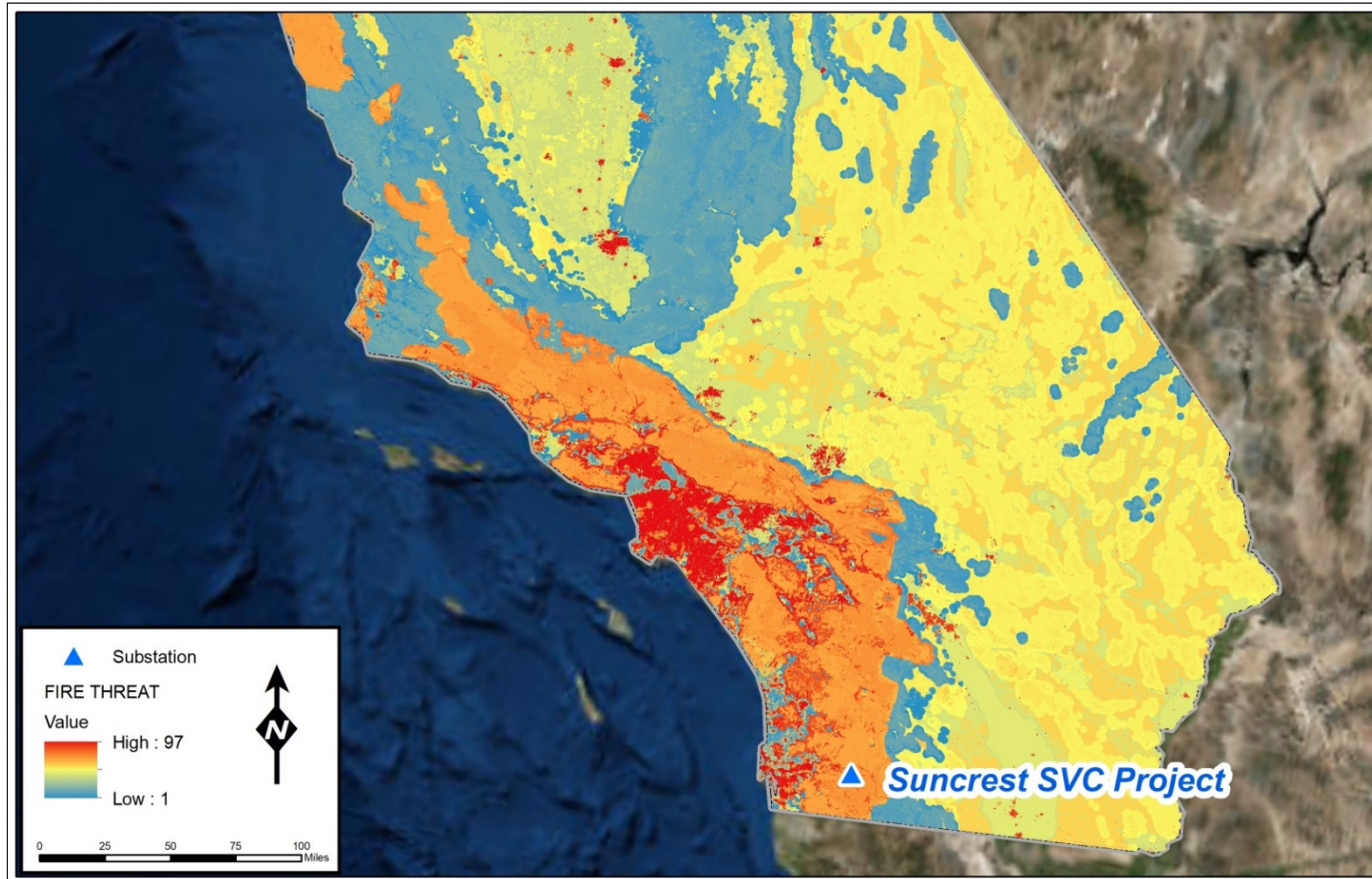
HWT is currently developing its first project, the Suncrest SVC Project, expected to be operational by March 2020

Suncrest SVC Project

- **Commenced construction in February 2019**
- **Expected to be in service by March 2020**
- **The 230 kV Suncrest SVC Project consists of:**
 - +300/-100 MVar SVC substation
 - Approximately one-mile 230 kV transmission line installed underground
 - Above ground infrastructure includes:
 - One riser pole and one intermediate pole
 - 115 feet overhead span between the riser and intermediate poles
 - Interconnects to SDG&E-owned Suncrest Substation via 185 feet overhead line, also owned by SDG&E
- **Provides voltage support to:**
 - Increase delivery of renewable generation from the Imperial Valley
 - Additional system resilience

The Suncrest SVC Project is located ~30 miles east of San Diego in a High Fire Threat District area (HFTD)

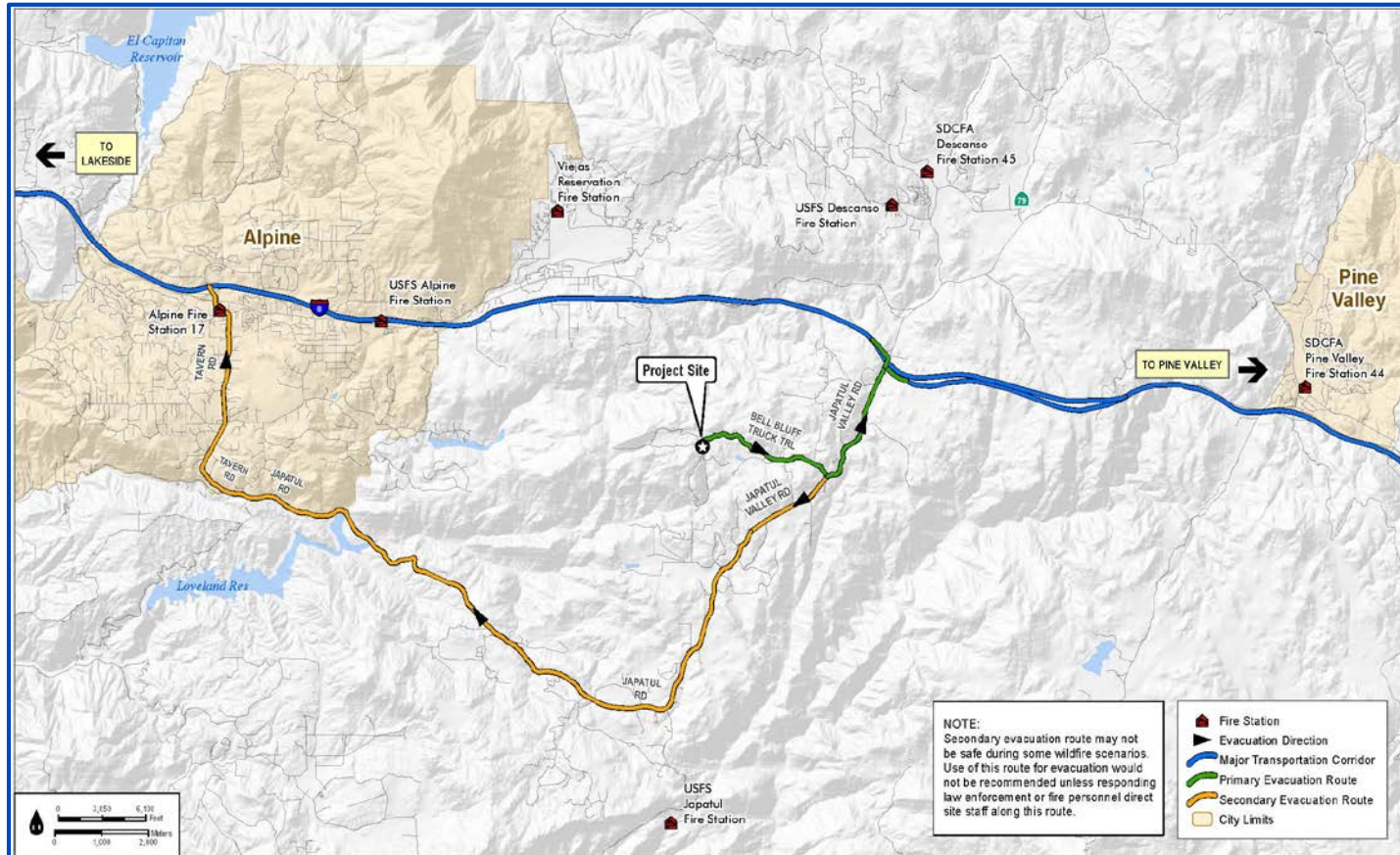
Suncrest SVC Project Location



Source: California Department of Forestry and Fire Protection (CalFire).

The Suncrest SVC Project is built in unincorporated San Diego County on a previously disturbed 6-acre site

Suncrest SVC Project Location (continued)



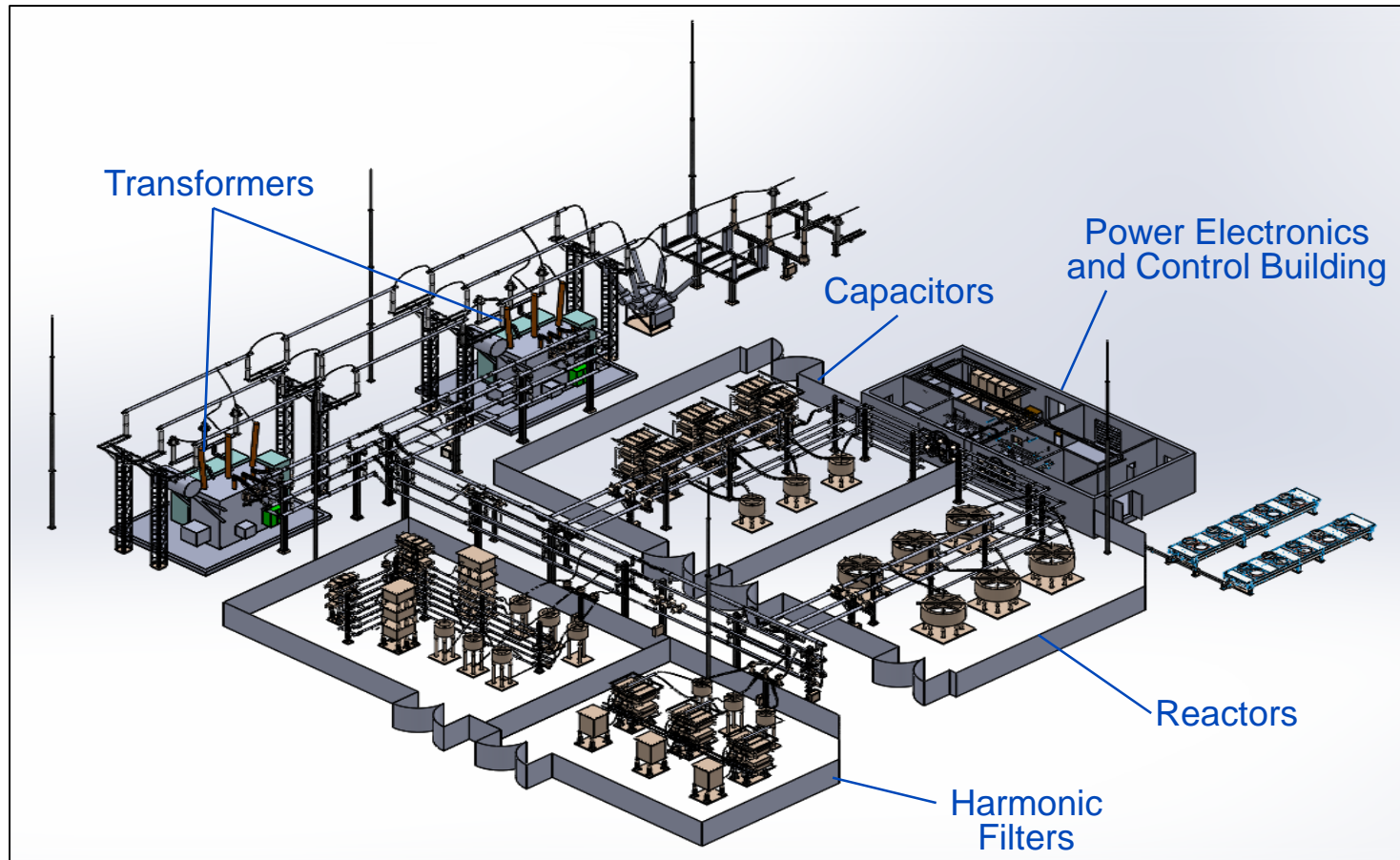
The Suncrest SVC Project consists of 230 kV SVC substation and one-mile underground interconnection line

Suncrest SVC Project Location (continued)



The Suncrest SVC substation consists of transformers, reactors, capacitors, harmonic filters and power electronics

Suncrest SVC Project Rendering



Because HWT's facilities are new, HWT does not have prior Operations performance data; 2019 WMP targets achieved

HWT WMP Performance Metrics and Monitoring

HWT Wildfire Prevention Performance Metrics			
Category	Metric	Responsible	Frequency
Design and Construction	<ul style="list-style-type: none"> Number of reportable ignition incidents on RFW days (Zero incidents occurred in 2019 and 2020 YTD during Suncrest SVC site construction) 	Engineering and Construction Project Manager	Monthly (during construction)
Inspection and Maintenance	<ul style="list-style-type: none"> Vegetation Caused Ignitions in HFTD on Elevated or higher FPI Vegetation Caused Outages in HFTD on Elevated or higher FPI Equipment Caused Ignitions in HFTD on Elevated or higher FPI Overhead Faults on Circuits in HFTD on Elevated or higher FPI Energized Wire Down events in HFTD on Elevated or higher FPI 	Senior Director HWT Operations	Monthly
Operations	<ul style="list-style-type: none"> Number of Non-CAL FIRE Rated Fuse Operations within the HFTD on elevated or higher FPI 	Senior Director HWT Operations	Monthly
Situational Awareness	<ul style="list-style-type: none"> Number of undetected ignition incidents when Fire Potential Index (FPI) – elevated or higher 	Senior Director HWT Operations	Monthly

HWT assesses wildfire risk and implements site-specific wildfire prevention strategies and programs

Wildfire Prevention Strategy Summary

- **HWT's strategy includes the application of a fire risk assessment and reduction methodology**
 - Asset-level risk assessment process focused on fire probability, severity and detection, and implementation of effective risk reduction measures
- **Develop site-specific Fire Prevention Plans in close coordination with local fire authorities**
 - San Diego County Fire Authority (SDCFA) and CAL FIRE reviewed and approved Suncrest SVC's Fire Prevention Plans prior to construction
- **HWT's WMP incorporates fire prevention strategies and measures in the following primary categories:**
 - (1) Facility Design and Construction
 - (2) Inspection and Maintenance
 - (3) Operational Practices
 - (4) Situational/Condition Awareness
 - (5) Response and Recovery

HWT's WMP overarching objective is to build, operate, and maintain its facilities to minimize wildfire risk

HWT Wildfire Mitigation Plan Objectives

- **Comply with applicable provisions of SB 901 and CPUC's Wildfire Safety Division Guidelines**
- **Before the Next WMP Plan Filing:**
 - Build, operate, and maintain Suncrest SVC Project per established fire prevention procedures and strategies
 - Evaluate and implement identified fire-hardening measures at Suncrest SVC Project (e.g. additional undergrounding, site-perimeter wall)
- **Within the Next Three Years:**
 - Build, operate and maintain HWT's facilities according to established fire prevention procedures and strategies to minimize wildfire risk
 - Identify, evaluate and implement wildfire mitigation measures in HWT facilities, as applicable (e.g. Estrella)
 - Evaluate new technologies, materials, and methods for further reducing fire risk at HWT facilities
 - Achieve planned level of Wildfire Mitigation Maturity

HWT's WMP long-term objective is to be a world class standard in wildfire safety for the protection of ratepayers

HWT Wildfire Mitigation Plan Objectives (continued)

- **Within the Next Ten Years:**
 - Achieve and sustain the highest applicable level of Wildfire Mitigation Maturity, and world class performance in wildfire protection
 - Leverage new wildfire safety technologies as determined applicable and necessary to HWT facilities for the protection of California ratepayers
 - Sustained collaboration with relevant industry groups and stakeholders
 - HWT is committed to the ongoing achievement and continuous improvement of its wildfire prevention goals

To date, HWT has implemented appropriate fire safety measures during construction of the Suncrest SVC Project

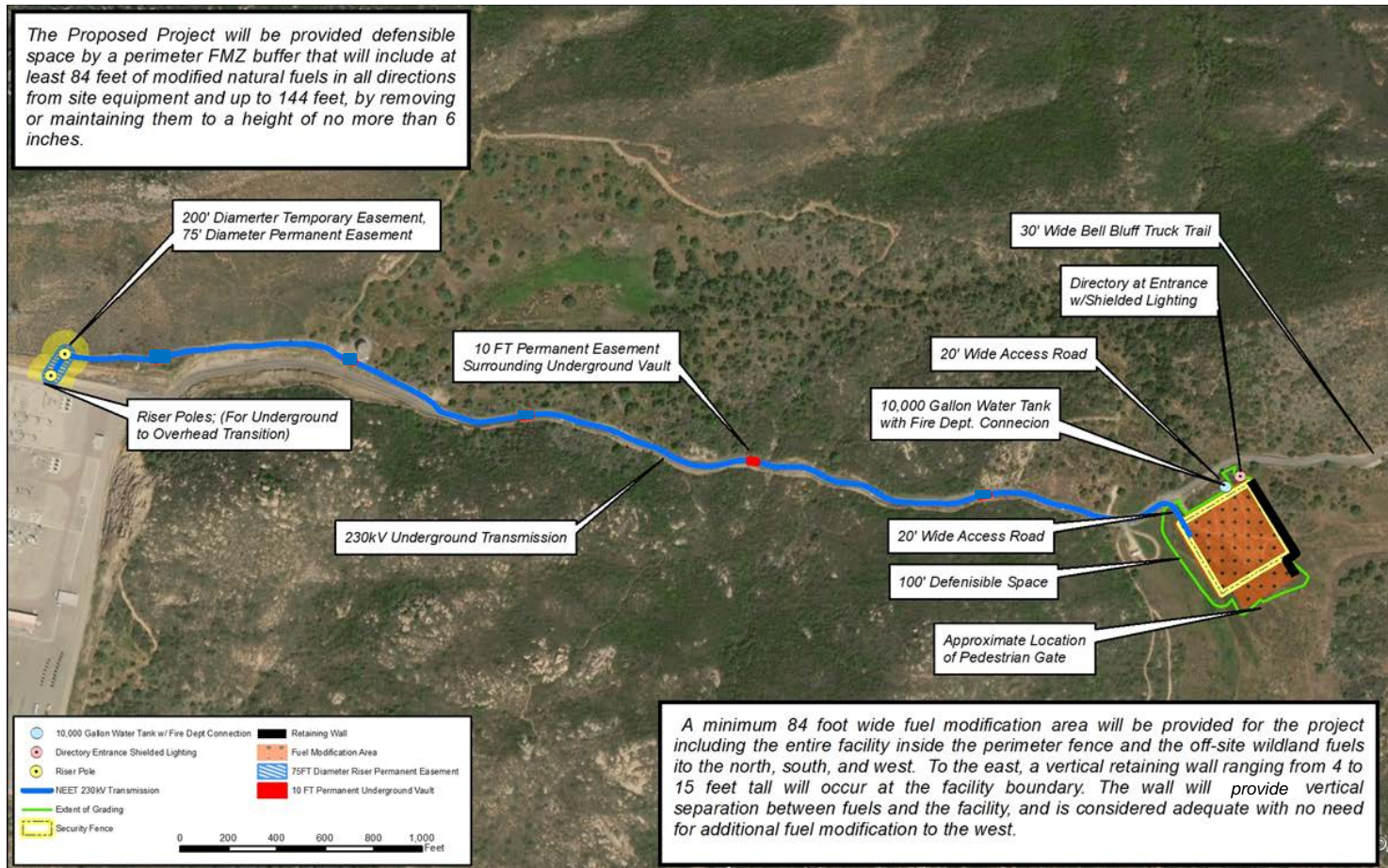
Implemented Strategies and Measures

(1) Facility Design and Construction

- Facility hardening during design, including through the use of:
 - Steel poles
 - Undergrounding transmission lines in High Fire Threat District areas
 - Fuel-free vegetation setbacks
 - Mechanical connectors instead of weld joints where possible
- Project located on previously disturbed site with minimal shrub fuels
- Early installation of on-site water tank with Fire Department connection
- Contracted fire support (fire-brigade services and fire engine)
- Third-party compliance monitor on-site during construction
- No smoking allowed on site during construction
- Red Flag Warning (RFW) protocol limit activities during RFW days
- Hot Work fire safety program
- Fire safety training for all personnel on site, including contractors

Suncrest SVC substation includes multiple design measures to minimize wildfire risk

Suncrest SVC Site Design Measures



HWT has operational measures in place to limit wildfire risks once the Suncrest SVC site is in service

Implemented Strategies and Measures (continued)

(2) Inspection and Maintenance

- Maintenance plan includes 24/7 real-time monitoring
- Monthly inspections of facility, equipment, and fuel modification areas
- Bi-annual vegetation patrols (ground and/or aerial)
 - Includes removal of all vegetation within perimeter fenced area
 - Establishment of modified fuel zone outside fence
- Annual fuel modification inspection by third party
- Maintenance practices will be approved and audited by CAISO

(3) Operational Practices

- RFW protocol limits activities during RFW days
- Hot Work fire safety program
- Monthly operations meetings will include WMP oversight and review
- Fire safety training for all personnel, including contractors

HWT has situational awareness and emergency response measures in place to limit wildfire risks at Suncrest SVC

Implemented Strategies and Measures (continued)

(4) Situational/Condition Awareness

- Site security cameras and 24/7 remote monitoring with automatic alerts
- Periodic inspections of equipment condition
- On-site personnel during site inspections and maintenance periods
- Ongoing weather monitoring

(5) Response and Recovery

- Training for local fire agency (SDCFA) and CAL FIRE and HWT personnel
- Implement Emergency Response Plan during emergency
- Private Industrial Fire Brigade exclusive for the Suncrest SVC Project
- Stakeholder communications during emergencies
 - HWT does not serve direct, end-use customers
 - Defined communications protocols with stakeholders (CAISO, CPUC, SDG&E, SDCFA, and CAL FIRE)
- Public safety power shut-off protocol

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