



Wildfire Safety & Resilience

Overview



- Fire risk
- Wildfire protocols
 - Fire season operational mode (FTFM)
 - Expanded PSOM
 - Emergency de-energization for wildfire
- What you can do

Power Safe NV (NDPP) Overview



- Major components of the Natural Disaster Protection Plan include:
 - **Prevention:**
 - Vegetation management
 - System hardening and grid resilience
 - Inspections and patrols
 - **Detection:**
 - Fire cameras and weather stations
 - Risk assessment and fire spread models
 - Meteorology staff
 - **Protection:**
 - Fast trip fire mode
 - PSOMs
 - Emergency de-energization



Increased Wildfire Risk



- Climate change effects are here
- Wildfire risk has increased in the West over time.
- Wildfire risk is no longer contained to Western states, but is a nation-wide issue
 - Texas
 - Hawaii
- Wildfire mitigation is a number one priority to utilities across the country.



Hawaii



Texas



Nevada

Fire Season Operational Mode



- **Fast trip fire mode (FTFM)**
 - **Definition:** FTFM is activated on our equipment when fire risk conditions are elevated. These settings are used with devices to de-energize the lines when a fault is detected, reducing the chance of a potential fire ignition.
 - **Intention:** Adjust system settings to be more responsive, almost instantaneous, to reduce spark when the system perceives a fault
 - **Impact:** Will have little impact on public agencies but may result in more frequent power outages
 - **Communication:** Proactive education with customers and stakeholders



FTFM DISABLED



FTFM ENABLED

PSOM (Expanded PSOM)



Public Safety Outage Management (PSOM)

- **Definition:** NV Energy may de-energize power lines as a preventative measure during periods of the greatest wildfire risk, through a measure known as Public Safety Outage Management (PSOM).
- **Intention:** Eliminate the potential of fire ignition based on forecasted conditions
- **Impact:** Historical actual weather indicates a very infrequent occurrence
- **Communication:** Proactive communication with customers and stakeholders

*If conditions are met, NV Energy will PSOM in *any* zone within our service territory.*



Emergency De-Energization



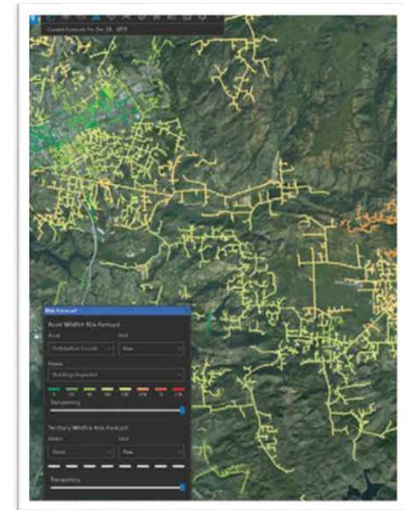
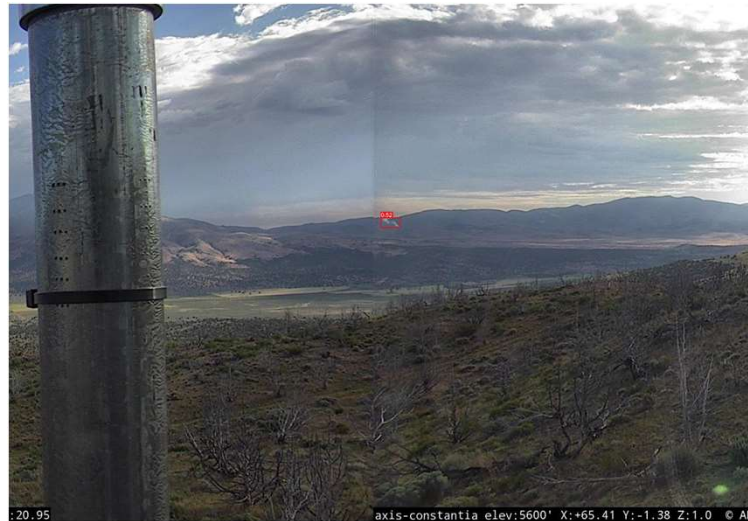
- **Emergency De-Energization**
 - **Definition:** NV Energy will de-energize equipment when an unpredictable and uncontrolled wildfire breaches pre-determined encroachment buffers. This applies to all NV Energy generation, transmission, and distribution facilities.
 - **Intention:** Reduce the potential of creating additional ignitions or exacerbating an existing fire when fires encroach safety boundaries – thereby creating potential for the existing fire to contact energized lines
 - **Impact:** Will cause more frequent large and prolonged outages. Historical actual fire ignitions indicate could be frequent
 - **Communication:** Proactive (when time allows) and reactive communication with customers and stakeholders
 - **Criteria:** Location, size and speed of the fire is a determining factor. Fire danger index and wind speed determine if de-energization is required and to what extent. Includes a one-hour impact assessment period.

Criteria is non-negotiable, controlled by NV Energy but **allows for public safety partners to request, in writing by fire, police or highest-ranking elected official, consideration for re-energization**

Emergency De-Energization



- Determining factors:
 - Fire danger index (determined by the National Forest Service)
 - Temperature
 - Humidity
 - Fuels
 - Wind speed (measured from the weather station closest to the fire)
- These factors are monitored by weather and fire experts using state-of-the-art monitoring technology.



Emergency De-energization Communication



- Communication plans follow established emergency processes and the utilization of the customer operations automated outage communication system
- Customers will receive notifications from NV Energy...
 - Before de-energization (if time allows)
 - After lines have been de-energized
 - During the de-energization (determined by the outage duration)
 - When it has been determined safe to re-energize
 - When power has been fully restored

Re-energization



- Fire containment and/or complexity related to system re-energization will influence outage duration.
- Outage duration will be estimated as short-term or long term through consultation with System Operations, Electric Operations and emergency responders managing the fire.



What You Can Do



Sign up for alerts on MyAccount

What You Can Do



- **Residential:**
 - Sign up for MyAccount notifications
 - Hard copy of contact information
 - Know about the hazards in your area
 - Emergency meeting place
 - Insurance and medical information
 - Emergency contacts
- **Business:**
 - Sign up for MyAccount notifications
 - Consider backup power options
 - Consult a licensed electrician to assess your power need
 - Know about the hazards in your area
 - Reach out to local public safety partners for more resources





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