



# 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



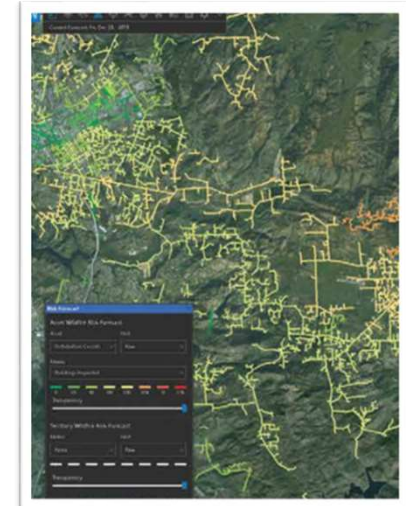
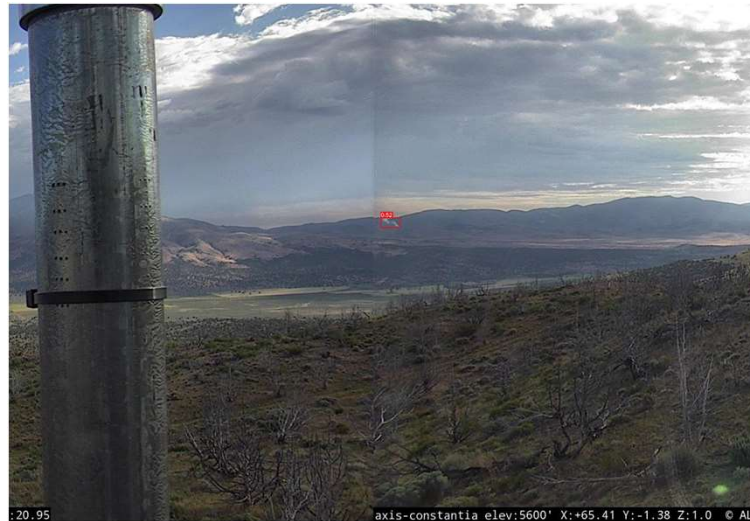
- **Emergency De-Energization**
  - **Definition:** NV Energy will de-energize equipment when an unpredictable and uncontrolled wildfire breaches pre-determined encroachment buffers. This applies to all NV Energy generation, transmission, and distribution facilities.
  - **Intention:** Reduce the potential 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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