Southern California Edison
2020 PSPS Performance
Wildfire Prevention Occurs Prior to PSPS

Speaker: Phil Herrington - CPUC Issue No. 1 – Transparency of PSPS Decision-Making Process

Prior to peak fire season:

- Continued grid hardening in the highest-risk areas
- Inspected from the air and ground every distribution and transmission structure in the highest-risk areas
- Focused on areas impacted by 2020 drought
Protocols ensure PSPS is a measure of last resort and reduce PSPS frequency and impact:

- Customers notified based on forecasts – de-energized only based on real-time conditions
- Circuit segmentation plans created for all 1,100 circuits in high fire risk areas
- Pre-event patrols conducted for every circuit at least 48 hours in advance to remediate problems that require de-energization
- Perform switching and reconfiguration to remove customers in scope for PSPS where available
- Identify critical COVID-19 sites (hospitals, vaccine storage), conduct outreach, move to other circuits when possible

Additional actions prior to event:

- Weather forecasts performed daily for each circuit for fuel conditions (fire potential index), wind speeds
- Threshold alert levels established based on known risks
PSPS is Used as Measure of Last Resort

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During Event:

- Trained, dedicated team specific to PSPS response
- Live observations by field personnel on the ground
- Validating hazardous conditions - each circuit segment monitored for actual conditions
- Weather stations and handheld weather devices used
- Meteorology and Fire Science review and confirm
- Every effort made to de-energize only where actual hazards exist
- Public Safety Partners engaged for feedback (e.g., fire, water, telecom, hospitals, COVID-19 sites)
- Restoration - hundreds of field crews
SCE is Committed to Further Reduce PSPS and Enhance Transparency in Decision-Making

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Challenges and Gaps
• Better stakeholder understanding of PSPS decision points
• Need to further refine thresholds

Committed to Improve
• Additional grid hardening to increase wind thresholds
• Accelerating grid hardening work in highly impacted communities
• Continued refinement of thresholds based on additional weather, fuel and circuit data
• Improving engagement with CPUC, CAL FIRE, Cal OES and local, state and tribal governments to provide better understanding of decision-making
• Reflect changes into corrective action and post-event reports
Customer Notifications – Recent Progress and Current Issues

Speaker: Jill Anderson - CPUC Issue No. 2 – Execution of the Notification Process

Current process & recent progress
- Replaced 2019 static website with interactive map in 2020
- Expanded communications channels: ZIP code alerts, targeted social media

Improvement opportunities
- Potentially confusing: often caused by customers receiving information from multiple communication channels or changes to which customers are in scope for an event
- Notification fatigue: not all customers who receive warnings are de-energized because they are notified based on forecasts to ensure they can prepare
- No notice: usually due to rapid weather shift or missing contact information
Customer Notifications – Action Plan for Further Improvement

Speaker: Jill Anderson - CPUC Issue No. 2 – Execution of the Notification Process

- Redesign notification process and coordinate with CPUC to improve clarity
  - Rationalize the number of notices customers receive per event
    - Residential customers can get six notifications in a single day (initial notification, imminent de-energization, power shutoff, imminent re-energization, power on, all-clear)
  - Consider use of estimated restoration times based on current field conditions

- Improve accuracy by aligning imminent de-energization notice process with customer locations based on circuit segments, noting that we will continue to issue warnings based on forecasts and de-energize based on actual conditions

- Reach more customers by leveraging contact information from other sources
Customer Notifications – Reaching Our Most Vulnerable Customers

Speaker: Jill Anderson - CPUC Issue No. 4 – Identification and Notification of Medical Baseline and Access and Functional Needs Customers

- Enhance scope of delivery confirmation
  - Currently prioritize most critical with ~96% success
  - Developing plan to scale confirmation of notice delivery to broader Medical Baseline population

- Share information with public entities
  - Currently provided manually during events
  - Evaluating an online portal for easier access

- Increase enrollment in Medical Baseline
  - Will continue to optimize outreach and enrollment approach, achieved 14% enrollment increase in 2020
  - Integrating outreach into other customer program campaigns and expanding partnerships to reach customers
Customer Care and Resiliency

Speaker: Jill Anderson – CPUC Issue No. 4 – Identification and Notification of Medical Baseline and Access and Functional Needs Customers

- Encourage customer resiliency
  - Initial slow adoption in 2020 Critical Care Backup Battery (CCBB), reached 33% of eligible customers
  - Expanding CCBB from ~2,500 to ~12,000 eligible Medical Baseline customers in 2021
  - Additional rebates added for portable power

- Provide local care during events
  - Community Resource Centers expanded from 13 to 56 in 2020

- Build community resiliency
  - Resiliency zones underway in Agua Dulce & Cabazon
  - Microgrid operational in San Jacinto and others planned
Coordination with Government Agencies & Public Safety Partners is Crucial

Speaker: Steve Powell - CPUC Issue No. 3 – Coordination with State and Local Governments

• Coordination occurs throughout year with Local Governments, State and County Emergency Management and Public Safety Partners
  • Identify critical facilities and PSPS circuits serving local/tribal governments
  • Share detailed information with critical infrastructure providers on potential facility impacts during PSPS events

• PSPS managed as emergency using Incident Command System to align with agencies and partners to protect public safety
  • Dedicated team with more than 40 trained professionals
  • Duty Manager as emergency contact for fast issue escalation

• Separate daily coordination calls through the duration of the event

• Statewide Executive Briefing, County Operational Briefing, Critical Infrastructure Briefing
Improving Coordination with State, Local and Tribal Governments

Speaker: Steve Powell - CPUC Issue No. 3 – Coordination with State and Local Governments

Progress and improvement areas:

• Identified proper participants to improve Operational and State Executive Briefings

• Currently working with Cal OES and California State Warning Center to better align communication and reporting formats for timely and accurate information sharing

• Engaging impacted communities (e.g., Acton, Agua Dulce, Simi Valley, etc.) and will determine appropriate means to collect additional input and disseminate community-specific information

• Refining opportunities for feedback (e.g., after-action reviews, comments to post-event reports, working group/advisory boards, coordination calls, etc.) on PSPS performance to achieve more effective public safety partner engagement
Quality of PSPS Post-Event Reporting

Speaker: Steve Powell - CPUC Issue No. 5 – Quality of PSPS Post-Event Reports

- Reports include timeline of events, notifications, coordination with public safety partners, circuit de-energization/re-energization and more
- Significant detail and data about each event dependent on manual data collection and validation
  - Submitted reports can exceed 300 pages
  - Multiple periods of concern bundled into single event
  - Back-to-back events complicate simultaneous data validation and event management
Quality of PSPS Post-Event Reporting

Speaker: Steve Powell - CPUC Issue No. 5 – Quality of PSPS Post-Event Reports

• SCE is committed to delivering accurate, clear and timely post-event reports

• Internal efforts will improve manual data processes and targeted automation

• Work with CPUC for additional alignment on expectations
  • Report content: wildfire risk assessment, de-energization benefits vs. public safety risk, impacts to customers, deviations from protocols
  • Event duration and bundling
  • Appropriate timelines for submission per event