Thank you for joining us this evening.

This meeting is being recorded.

Please note, your camera, microphone, and reactions are disabled for this meeting.

To add closed captioning, please click the three dots found at the top right of the tool bar. In the dropdown menu, select turn on live captions.

To submit a question, use the **Q&A window** throughout the session.

Please only submit questions that are relevant to the presentation and topics being presented.
Our Commitment to California
Keeping our communities safe from wildfires
HOW TO SUBMIT A QUESTION

You can submit a question using the **Q&A window** throughout the session.

Please only submit questions that are relevant to the presentation and topics being presented.
Kelly Hubbard  
Director  
Emergency Management  
Santa Barbara County

Rudolph Gonzales  
Principal Manager  
Government Relations  
Local Public Affairs

Shinjini Menon  
Vice President  
Asset Management & Wildfire Safety

Sunny Chu  
Principal Manager  
Wildfire Operations

Katie Sloan  
Vice President  
Customer Programs & Services
AGENDA

• 2021 Wildfire Season
• SCE’s Wildfire Mitigation Plan
• Public Safety Power Shutoffs
• Reducing the Need for PSPS
• Customer Care Programs
• Engaging Our Communities
• Resources
• Q&A
An emergency can happen at any time.

Have a Plan & Make a Kit
You can help your family be prepared for any emergency situation with a safety preparedness plan, an emergency kit with some basic supplies and advance planning. Whether a storm, an earthquake, a wildfire or a flood comes our way, preparedness will help everyone cope better and stay safer. Learn more at [sce.com/beprepared](http://sce.com/beprepared).

Santa Barbara County Links:
[https://readysbc.org](https://readysbc.org)

[www.SBCFire.com/wildfire](http://www.SBCFire.com/wildfire)
California experienced another year of extreme wildfire activity, exacerbated by intensifying drought. Dry vegetation and strong winds continue to threaten our communities during year-round fire season.

6 of the 7 Largest California Wildfires Have Happened Since 2020*

*Source: https://www.fire.ca.gov/media/4jandlhh/top20_acres.pdf
REDUCING WILDFIRE RISK IN OUR COMMUNITIES

- Situational awareness, weather modeling and fire spread modeling
- Public Safety Power Shutoff criteria: Fire weather and PSpS conditions include strong winds, very dry vegetation and low humidity
- Aerial Fire Suppression
- Undergrounding
- Hazard Tree Management Program
- Critical Care Back-up Battery program and rebates on portable power stations, generators and battery storage
- Equipment Inspections
- Vegetation Management
- Pole Brushing
- Live Clearing
- Covered Conductor
- System hardening and advanced technologies: covered conductor, fire-resistant poles and cross arms, fast-acting fuses, sectionalizing devices and new technologies such as Rapid Earth Fault Current Limiter (REFCL)
- Microgrids
Covered conductor is a very valuable tool to expeditiously and cost-effectively reduce wildfire risk specific to SCE.

Undergrounding considered for certain locations based on risk profile.

### Geography
Contact from vegetation and other objects is a key risk factor in much of SCE’s area.
Covered conductor is very effective in mitigating these risks.

### Cost to Implement
Covered conductor installation costs significantly lower than undergrounding.
Undergrounding costs vary depending on construction methods, locational, and operational factors.

- **Cost per mile**: $ in Millions
  - ~5.5

### Execution Speed
Covered conductor can be deployed within 16–24+ months, and sometimes faster.
Undergrounding generally takes 25–48+ months.

- **Actual installed miles of covered conductor** vs. hypothetical undergrounded miles

### Unique Factors
Undergrounding is considered where there is:
- High burn frequency
- Limited egress
- Wind speeds exceeding covered conductor PSPS thresholds
- Exceptionally high potential consequence (>10,000 acres)

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1. Based on data provided in SCE’s 2022 WMP Update
2. Through March 31, 2022
3. Undergrounded miles is a hypothetical approximation of underground lines that could have been constructed through March 31, 2022, based on SCE’s assumptions and experience with planning and executing undergrounding projects.

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Covered conductor is one of the most effective measures to reduce wildfire & PSPS risks in SCE’s service area.
REDUCING WILDFIRE RISK & PSPS IMPACTS – BY THE NUMBERS

SCE estimates its wildfire mitigation and PSPS measures have reduced the risk of damage from catastrophic wildfires by **65% to 70%**, relative to pre-2018 levels.

<table>
<thead>
<tr>
<th>ONGOING WILDFIRE MITIGATION EFFORTS</th>
<th>IMPROVED PSPS EXECUTION &amp; CUSTOMER SUPPORT</th>
<th>AERIAL FIRE SUPPRESSION SUPPORT</th>
</tr>
</thead>
<tbody>
<tr>
<td>~34% of overhead wire in high fire risk areas replaced with covered conductor²</td>
<td>73% reduction in PSPS outage time in 2021 on frequently impacted circuits³</td>
<td>Contributed $18 million for the creation of the quick reaction force of the world’s largest helitankers</td>
</tr>
<tr>
<td>Suite of mitigations include system hardening, annual equipment inspections, vegetation management and situational awareness measures</td>
<td>81,000 customers removed from scope from exceptions and switching protocols</td>
<td>Used on more than 50 fires in 2021, helping to suppress fires in its early stages</td>
</tr>
</tbody>
</table>

1. A wildfire directly causing one or more deaths, damaging or destroying more than 500 structures, or burning more than 140,000 acres of land
2. Though March 31, 2022
3. Based on 2021 weather and fuel conditions
PUBLIC SAFETY POWER SHUTOFFS

- A tool of last resort used during dangerous fire conditions (weather and fuels)
- De-energizing lines to prevent a spark from our equipment starting a significant wildfire
- Primarily impacts circuits in high fire risk areas
- Use of multiple methods to notify customers and partners in affected areas before, during and after a PSPS event
- In 2021, continued PSPS improvements and reduced frequency, scope and duration of PSPS
HOW TO SUBMIT A QUESTION

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**REDUCING THE NEED FOR PSPS**

**2021 ACHIEVEMENTS AND 2022 PLANS**

### Covered Conductor
Replaced an additional 1,500 miles of bare wire with covered conductor; 700 miles of expedited grid hardening to raise PSPS threshold prior to peak wind season. Plan to replace 1,100 miles in 2022.

### Segmentation
Installed 23 additional remote-controlled sectionalizing devices to segment and isolate circuits during PSPS. Plan to add 15 devices in 2022.

### Weather Stations
Installed 400 additional weather stations for improved forecasting and accuracy of PSPS operations. Plan to add 150 weather stations in 2022.

### Switching Protocols
Removed 81,000 customers from PSPS scope through exceptions and switching protocols.

### Operational Protocols
Utilized up-to-date information on ground conditions (e.g., lack of vegetation) to assess wildfire threat and the need for PSPS.
## 2021 PSPS EVENTS

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Customers Interrupted</th>
<th>Circuit Interruptions</th>
<th>Customer Minutes of Interruption</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020 Fire Season</td>
<td>~348K</td>
<td>~584</td>
<td>~388M</td>
</tr>
<tr>
<td>2021 Fire Season</td>
<td>~85K</td>
<td>~124</td>
<td>~105M</td>
</tr>
<tr>
<td>Delta</td>
<td>↓76%</td>
<td>↓79%</td>
<td>↓73%</td>
</tr>
</tbody>
</table>

73% reduction in customer minutes of interruption service area wide.

No PSPS events in Santa Barbara County in 2020-2021.
### Wildfire Mitigation Activities

**SANTA BARBARA COUNTY**

**2021 Year-End Progress Report**

Data as of 12/31/21

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SCE tracks wildfire initiative progress by SCE districts and extrapolates to the county level as a reasonable approximation. There may be additional circuit miles of covered conductor installed due to fire restoration work.

---

#### Completed

<table>
<thead>
<tr>
<th></th>
<th>2021</th>
<th>SINCE 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DISTRIBUTION EQUIPMENT INSPECTIONS</strong></td>
<td>5,866 inspections</td>
<td>27,718 inspections</td>
</tr>
<tr>
<td><strong>TRANSMISSION EQUIPMENT INSPECTIONS</strong></td>
<td>926 inspections</td>
<td>3,914 inspections</td>
</tr>
<tr>
<td><strong>COVERED CONDUCTOR</strong></td>
<td>7 circuit miles installed</td>
<td>27 circuit miles installed</td>
</tr>
<tr>
<td><strong>FAST-ACTING FUSES</strong></td>
<td>7 fuses installed or replaced</td>
<td>492 fuses installed or replaced</td>
</tr>
<tr>
<td><strong>SECTIONALIZING DEVICES</strong></td>
<td>0 devices installed</td>
<td>0 devices installed</td>
</tr>
<tr>
<td><strong>HAZARD TREE MANAGEMENT</strong></td>
<td>3,788 trees assessed</td>
<td>4,242 trees assessed</td>
</tr>
<tr>
<td><strong>WEATHER STATIONS</strong></td>
<td>11 weather stations installed</td>
<td>68 weather stations installed</td>
</tr>
<tr>
<td><strong>HIGH-DEFINITION WILDFIRE CAMERAS</strong></td>
<td>3 cameras installed</td>
<td></td>
</tr>
<tr>
<td><strong>COMMUNITY RESOURCE CENTERS</strong></td>
<td>5 sites available</td>
<td></td>
</tr>
<tr>
<td><strong>COMMUNITY CREW VEHICLES</strong></td>
<td>8 vehicles available throughout SCE's service area</td>
<td></td>
</tr>
</tbody>
</table>

---

SCE's service area covers about **23%** of Santa Barbara County. About **57,300** customer accounts are served by circuits in high fire risk areas.

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**Map 1. High Fire Risk Areas**

- Tier 2 – Elevated Fire Threat
- Tier 3 – Extreme Fire Threat
- SCE Service Area
- County Lines
PSPS COMMUNICATIONS

Notifications
- SCE provides PSPS notifications through various communication channels
  - SCE Account Holders (email, text, and voice call)
  - Address Level Alerts
- Sign up to stay informed before, during and after a PSPS event

SCE Outage Map
- Consolidated outage map that incorporates PSPS outages at sce.com/outagemap
SCE CUSTOMER PROGRAMS & RESOURCES

CUSTOMER RESOURCE CENTERS & COMMUNITY CREW VEHICLES

- Services offered: information, charging of mobile devices, assistive technology/medical devices, PSPS outage alert enrollment support, access to water, light snacks, ice and ice vouchers, restrooms, and small insulated bags to keep medication cool
- Translations services for over 120 languages including American Sign Language (ASL)

CUSTOMER PROGRAMS

- Partnered with 211 to help customers with Access and Functional Needs (AFN) develop a resiliency plan and enroll in eligible assistance programs
- 211 provides specialized referrals for customers with AFN experiencing PSPS. Services include connecting customers to shelf-stable food, hot meal delivery, transportation and/or temporary shelter
- SCE will improve communication methods, including videos utilizing ASL for marketing and PSPS notifications

CUSTOMER RESILIENCY EQUIPMENT

- Critical Care Backup Battery program and the In-Event Battery Loan pilot provide eligible customers with a portable backup battery to power assistive technology/medical devices during a PSPS event
- Rebates on portable batteries and generators for customers residing in high fire risk areas on marketplace.sce.com
• Visit our website to learn more about our wildfire safety efforts and Public Safety Power Shutoffs (PSPS)
• Provide feedback through the survey

• PSPS alerts
• SCE’s Medical Baseline program
• SCE programs and rebates

• Be prepared with a safety preparedness plan, some basic supplies and advance planning
• Power outage tips

Website: sce.com/wildfire
Energized by Edison Stories & Videos: edison.com/wildfire-safety
Email: wildfireoutreach@sce.com
Social Media: @SCE on Twitter & Facebook
SCE Customer Support: 1-800-655-4555
HOW TO SUBMIT A QUESTION

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THANK YOU

Website: sce.com/wildfire
Energized by Edison Stories & Videos: edison.com/wildfire-safety

Email: wildfireoutreach@sce.com
Social Media: @SCE on Twitter & Facebook
SCE Customer Support: 1-800-655-4555
ADDITIONAL RESOURCES
Wildfire Mitigation Activities

SERVICE AREA

2021 Year-End Progress Report

Data as of 12/31/21

- **Distribution Equipment Inspections**
  - 2021 Completed/Target: 179,600/163,000 inspections
  - Completed Since 2018: 764,000+ inspections
  - 110% completed

- **Transmission Equipment Inspections**
  - 2021 Completed/Target: 20,800/16,800 inspections
  - Completed Since 2018: 106,900+ inspections
  - 124% completed

- **Insulated Wire (Covered Conductor)**
  - 2021 Completed/Target: 1,500/1,000 circuit miles installed
  - Completed Since 2018: 2,900+ circuit miles installed
  - 150% completed

- **Fast-Acting Fuses**
  - 2021 Completed/Target: 350/330 fuses installed or replaced
  - Completed Since 2018: 13,300+ fuses installed or replaced
  - 106% completed

- **Hazard Tree Management**
  - 2021 Completed/Target: 131,400/120,000 trees assessed
  - Completed Since 2018: 359,900+ trees assessed
  - 110% completed

- **Weather Stations**
  - 2021 Completed/Target: 400/375 weather stations installed
  - Completed Since 2018: 1,460+ weather stations installed
  - 107% completed

- **High-Definition Wildfire Cameras**
  - Cameras currently provide visibility to about 90% of our high fire risk areas (HFRA) and the planned additional cameras in 2022 and beyond will increase coverage to nearly all of HFRA
  - Completed Since 2018: 106 cameras installed

- **Aerial Fire Suppression Resources**
  - SCE contributed $18 million to support the creation of a quick reaction force of aerial firefighting assets across counties in SCE’s service area to coordinate and reach wildfires in their early stages. These unique water and fire retardant dropping helicopters have the capability to operate day and night.

- **Critical Care Backup Battery**
  - 2021 Completed: 6,000/3,600 batteries provided to eligible customers
  - Completed Since July 2020: 6,740+ batteries provided to eligible customers
  - 167% completed

- **Community Resource Centers**
  - 64 sites available

- **Community Crew Vehicles**
  - 8 vehicles available
Wildfire Mitigation Activities
SANTA BARBARA COUNTY

2021 Year-End Progress Report
Data as of 12/31/21

Weather Stations:
68 weather stations installed.
Visit sce.com/weatherstations for real-time weather data.

HD Wildfire Cameras:
3 high-definition wildfire cameras installed.
Visit alertwildfire.org to view the live camera feeds.

Map 2. Situational Awareness
- Weather Stations
- HD Wildfire Cameras
- Tier 2 – Elevated Fire Threat
- Tier 3 – Extreme Fire Threat
- SCE Service Area
- County Lines

Features depicted herein are intended for informational purposes only. Distances and locations may be distorted and icons may be overlapping at this scale.
VIDEO: INSTALLING COVERED CONDUCTOR AERIALLY