



SOUTHERN CALIFORNIA
EDISON[®]

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Senate Informational Hearing: Wildfire Safety

November 18, 2015

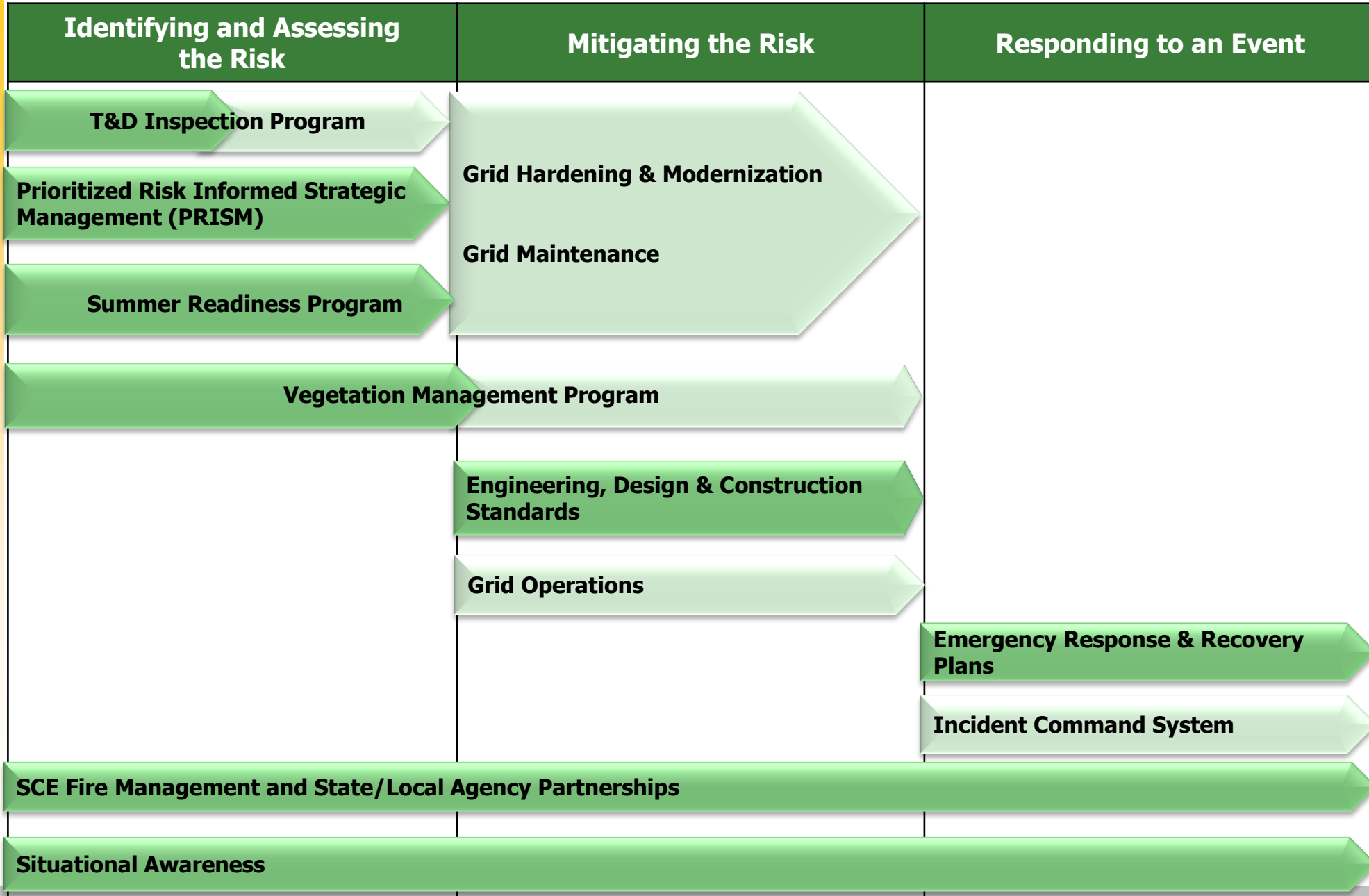
SCE Highlights

- One of the nation's largest electric utilities:
 - Nearly **14 million** residents in service territory
 - Approximately **5 million** customer accounts
 - **50,000** square-mile service area
- **~75%** of our territory in SCE's designated High Fire Areas
- **1.5 million** wood poles
 - **330,000** (20%) poles in High Risk Areas (High Fire and High Fire/High Wind)
- **1.5 million** trees in our service territory
 - **640,000** (42%) trees located in High Fire Areas
- **5,800** circuits
 - **993** (17%) circuits in High Fire Areas



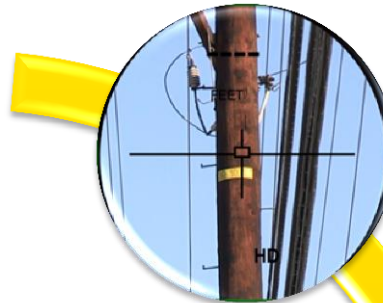
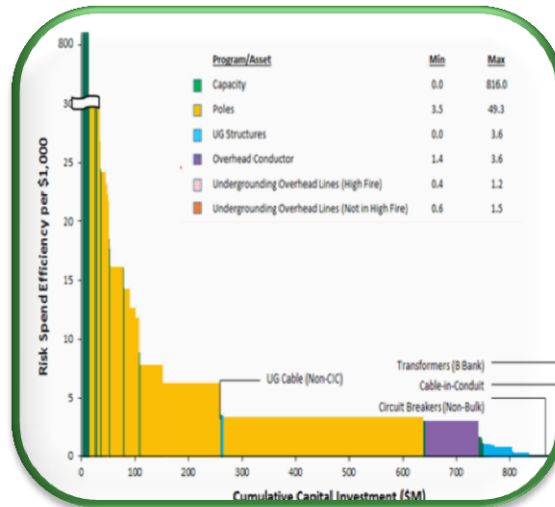
■ SCE Service Territory

SCE's Multi-track Strategy to Mitigate Wildfire Risk



Identifying and Assessing the Risk

Prioritized Risk Informed Strategic Management (PRISM)



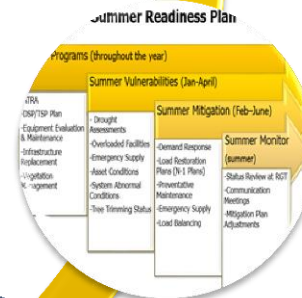
T&D Inspection Programs

- Meets or exceeds requirements



Vegetation Management Program

- Annual and mid-cycle patrols in HFAs
- Quarterly patrols in Priority HFAs



Summer Readiness Program

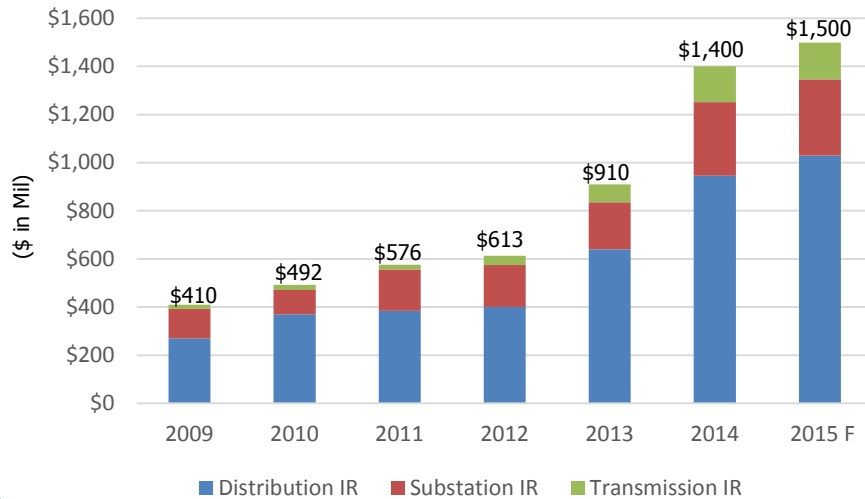
- Annual program
- Reliability assessments
- Drought assessments



SCE/Fire Agency Partnerships and Situational Awareness

- Patrols
- Weather reports
- Red Flag Warnings
- Operation Santa Ana
- Flame and smoke detection

Mitigating the Risk – Grid Hardening and Modernization

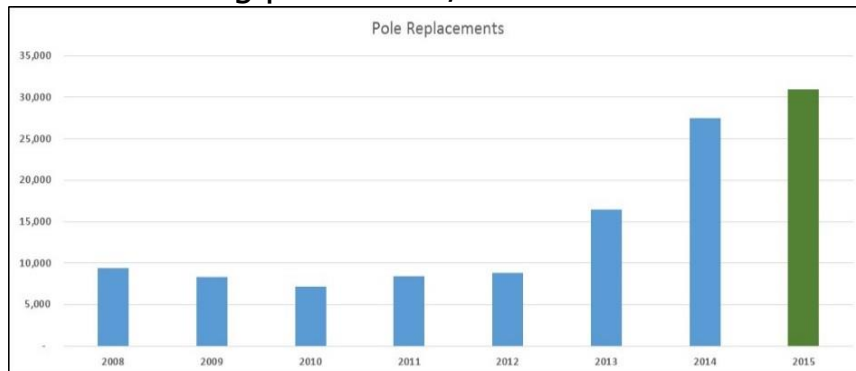


Strengthening our grid

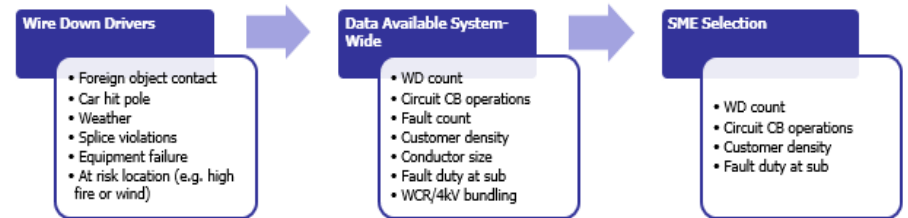
- Poles/Towers
- Conductors
- Cables
- Circuit breakers
- Transformers
- Grid modernization
 - Substation & circuit automation

Pole Assessment and Remediation Program

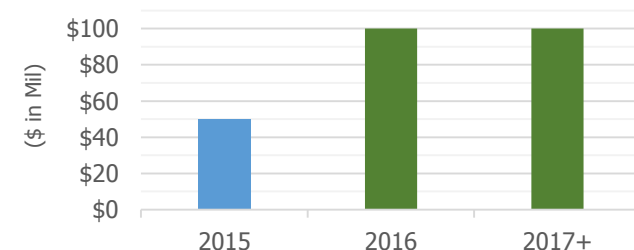
- All 1.5M Poles
- 12 year assessment and remediation
- Prioritizing poles in HF/HW Areas



Overhead Conductor Program



Output: OCP Rankings that prioritize 4,500+ SCE circuits using a risk informed process



Mitigating the Risk



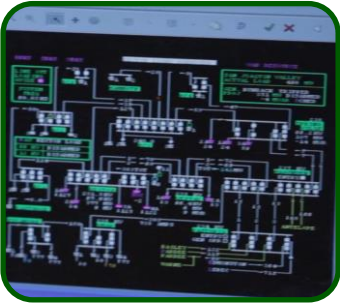
Engineering, Design & Construction Standards

- Engineering standards include improved automated equipment to detect line faults and isolate circuit segments
- Design standards include enhanced wind load criteria for wood poles in SCE High Fire Areas and known High Wind areas
- Overhead construction standards include enhanced pole setting depths, replacement of small diameter copper wire, reduced number of wire splices



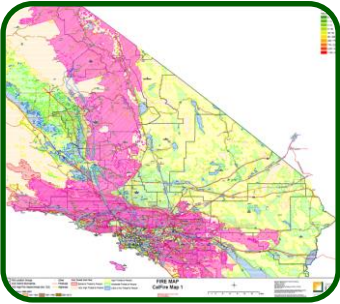
Vegetation Management

- Annual and semi-annual patrols
- Dead tree removal program
- Tree trimming exceeds minimum requirement



Grid Operations

- System Operating Bulletin 322 – *Operation of Distribution Voltage Lines Traversing High Fire Hazard Areas*
- Patrols & Fire Watchers



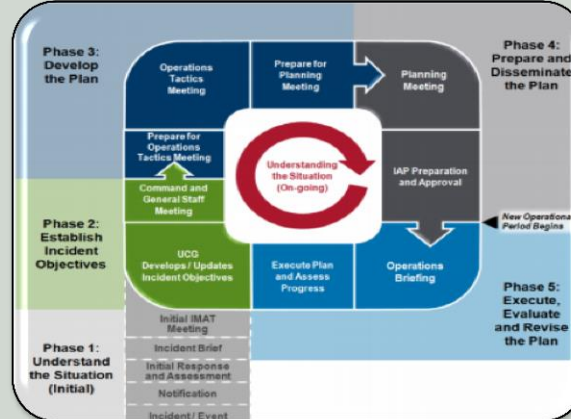
Situational Awareness

- Emergency Fire Maps
- Patrols

Responding to an Event



Corporate
Emergency
Response
Plans



Incident
Command
System
(ICS)



SCE and
State/Local
Agency
Partnerships

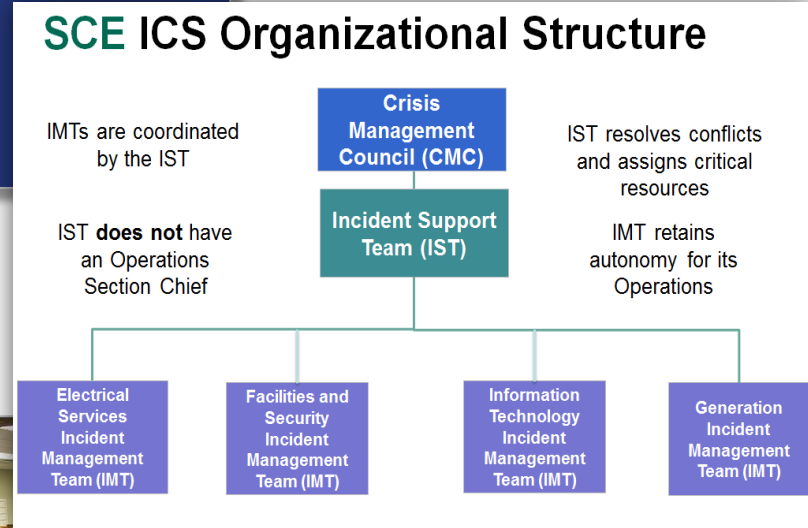
Responding to an Event: SCE Adopts the Incident Command System

Since January 2014:

- ✓ Established **14** Incident Support and Incident Management Teams (309 members)
- ✓ **125** ICS training classes
- ✓ **1,216** trained & qualified members of:
 - Crisis Management Council
 - Incident Support Team
 - Incident Management Team
- ✓ Completed **86** exercises using Homeland Security Exercise Evaluation Program
- ✓ Conducted **123** Electrical Safety training classes for **3,193** fire agency 1st responders



NATIONAL INCIDENT MANAGEMENT SYSTEM



Fire Agency Resources and Assets Supporting SCE



County-Area Fire Agency

- **8,100** Personnel
- **547** Stations
- **600** Engines
- **34** Aircraft



CAL FIRE & USFS

- **17,350** Personnel
- **850** Stations
- **1,180** Engines
- **59** Aircraft

Summary

- SCE uses a multi-track strategy to identify, assess and mitigate wildfire risks and respond to events
- A number of existing practices have been enhanced and new activities adopted since 2007 to further improve SCE's ability to manage wildfire risk
- A significant part of SCE's strategy is its close collaboration local, county and state fire agencies