

## Safety Progress at PG&E

### Electric Ops

#### Drought Response Vegetation Management

#### New Technologies

#### Wires Down

#### Network Failures

#### 911 Call Response within 1 Hour

#### National Near Hit Reporting

**Drought Response - Vegetation Management:** PG&E is moving forward with a number of measures to decrease the risk of fires and improve detection and access

- Increased inspections
- Partnering with Cal Fire to fund remote camera detection devices, man lookout towers and clear access roads.
- Funding local Fire Safe Councils to conduct fuel reduction work, community safety programs and improve ingress/egress
- Using LIDAR in non-traditional ways and augmenting with demonstrations of other technologies, such as hyper-spectral imaging to detect tree conditions more efficiently than traditional methods.
- Employing non-traditional methods to reduce fuel loads around its power lines, including fire risk modeling, which uses slope, weather and other variables to pinpoint high fire risk areas. PG&E can target its tree work where fires are most likely to start and spread.

### New Technologies

- Venting Manhole Covers: One of first utilities in nation to use this new technology, which allows them to open a few inches but not eject during an outage incident. This allows any fumes to safely vent and prevents oxygen from rushing into vault and potentially igniting a fire. PG&E has installed approximately 2500 since 2011
- Mobile Technology for electric distribution troubleman for emergency dispatch and documentation of work performed and follow up work.
- Conversion of legacy Electric Transmission and Distribution mapping system to Geographic Information System (GIS)

## **Wires Down**

- Changed its pole inspection process and increased public awareness campaign
- From 2012 to 2013 PG&E reduced the number of wires down by 21% (from ~3,050 in 2012 to 2,400 in 2013)

## **Network Failures**

- Targeted asset replacements and improved maintenance practices have reduced the number of system failures from 11 in 2011 to 5 in 2013, a better than 50% improvement

## **911 Call Response within 1 Hour**

- Through May 2014 over 95% of 911 emergency response calls responded to within one hour YTD
- In 2013, over 92% of 911 emergency response calls were responded to within one hour; this is a 28% (or 20 percentage point) improvement from 2011 (the first year we measured this metric) performance of 72%

## **National Near Hit Reporting**

- PG&E is partnering with multiple electric organizations to develop an industry wide reporting system for the utility industry to provide visibility of safety and reliability incidents that have previously remained unreported. PG&E and Dominion are co-chairs. NATF, EEI and the IBEW are on the steering committee among others.
- The industry faces a challenge where a significant number of industrial incidents across the utility industry are not reported or captured systematically. This reduces the availability of valuable information and impedes the analysis of incidents, detection of systemic issues and the sharing of information and lessons learned throughout the industry which could improve safety and reliability.
- Analyzing these incidents and developing leading indicators to improve safety and reliability will provide insight allowing participants to share lessons learned and best practice operating practices across the utility industry. This learning will foster an industry culture of willingness to share and learn from individual experiences and ultimately reduce safety and reliability incidents.