# **Pacific Palisades**

Three Troubled DWP Circuits
January 28, 2016





## We all want

safe,
sustainable,
affordable,
quality,
& reliable

power.

### Situation in Pacific Palisades

- Load is growing
- Delayed construction of a new distributing station
- Three existing troubled circuits are:
  - Outage prone
  - Overloaded

Troubled Circuits 29-03 and 29-06

### Troubled Circuit 29-05

## **Outage Statistics**

1/1/2013 to 1/8/2016									
Feeder	Outage Date	Cause	Outage Duration						
029-03	11/22/2013	Palm Frond/Lines down	6.5 hrs						
	11/25/2013	Undetermined	1 min						
	9/15/2014	Undetermined/Lines down/Extreme Heat	12 hrs 25 min						
	11/12/2014	Tree/lines down	3 hrs 27 min						
	12/27/2014	Splices in MH 17026 W. Sunset Bl failed	11 hrs						
	3/25/2015	Ground Search	10 sec						
	9/9/2015	Lines Down	3 hrs 23 min						
	9/28/2015	UG 25 kVA Xfmr Overloaded & OCO failed	13 hrs 38 min						
		029-03 carrying portion of 029-07 at the time							
029-05	10/29/2013	Ground Search - Cable failed in 029-05	45 sec						
	1/17/2014	Ground Search	40 min						
	1/7/2016	Palm Frond - Rain	2 hrs 14 min						
029-06	10/29/2013	Failed cable between Xfmr -138 & -139	13 hrs 20 min						
S.1	12/3/2014	Trees/Lines down	4 hrs 33 min						
S.1	9/12/2015	Failed conductor - Extreme Heat	1 hrs 15 min						

## **Overload Statistics**

Circuit	2009	2010	2011	2012	2013	2014	2015
029-03	104%	123%	85%	101%	90%	101%	118%
029-05	109%	121%	93%	94%	86%	101%	123%
029-06	93%	138%	93%	94%	93%	105%	114%



#### Solutions

- Continue various miscellaneous repairs and replacements per October 21, 2015 letter
- Short term solution is to split the three circuits with two pole top distribution stations (PTDS) to form five circuits
- Long term solution is to build a new distributing station

Troubled Circuits 29-03 and 29-06

Split Two Circuits 29-03 and 29-06 into Three Circuits

Troubled Circuit 29-05

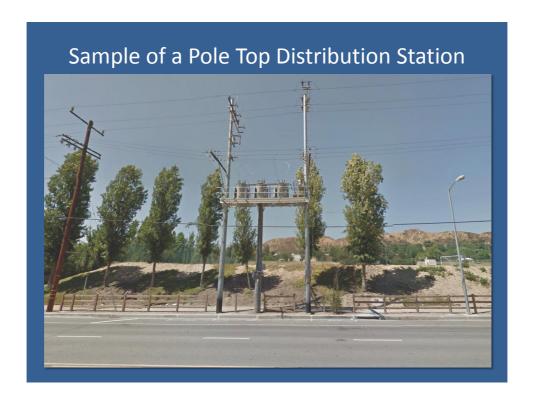
Split One Circuit 29-05 into Two Circuits

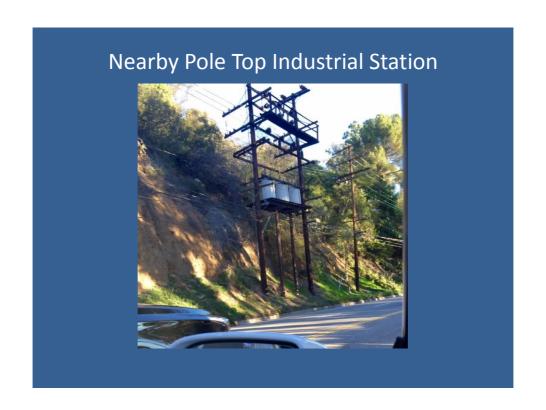
#### **Benefits & Limitations**

- Relieve the overloaded circuits
- Improve power quality and reliability
- Limitations compared to a new distribution station:
  - Fused, no backup supply, no backup transformer, no regulation, OH exposure, minimal remote monitoring and control









### **Design & Construction Attributes**

- LADWP Overhead Power Distribution Construction Standards,
   Pole Top Distribution Station, C633-16, Issued 2/2/12
- Design complies with: ADA, GO-95, GO-165, Cal-OSHA, Title 8, LADWP Rules Governing Water & Electric Service, and LADWP Safety Rule Book
- Right to install per California Streets & Highways Code, Sections 5100 – 5105
- Complies with Power Distribution Division Construction Standards, Transformer Pad Location Requirements for Ambient Sounds Levels In Residential Zones, C721-018; and City of LA Noise ordinances
- EMF Prudent Avoidance Policy
- 34 existing citywide PTDSs

#### Schedule

- Construction will begin in March
- 4 weeks construction for each PTDS
- In-service before summer
- Will remain until a new permanent DS is built
  - CEQA NOP soon to come for a permanent DS
- More PTDSs will be needed; perhaps within a year

## We all want

safe,
sustainable,
affordable,
quality,
& reliable

power.

