



A  Sempra Energy utility®

TPP 2021-22 CAISO Stakeholder Presentation



September 2021

Proposed projects

- Friars – Doublet Tap Reconductor
- New 500kV Miguel-Suncrest
- Appendix



<u>Project Title:</u> Friars – Doublet Tap Reconductor	<u>District:</u> Metro	<u>Original ISD:</u> XXXX	<u>2020 ISD:</u> XXXX	<u>ISD:</u> 6/1/2022	<u>Project:</u> 2021-2378
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Driving Factors:

- During Peak Load Maximum generation, P7 N-2 Contingency will cause an overload on TL13810A (Friars – Doublet Tap) by 6% in 2026
- During heavy north bound flow at SO, P7 N-2 Contingency will cause a higher overload on TL13810A (Friars – Doublet Tap) as of today

Scope:

- Upgrade TL13810A to its full line capacity from 150 MVA to 204 MVA by reconductoring 9620 ft of 400 CU wire with 636 ACSR

Cost:

- \$5.5 Million (ISD 2022)

Alternative:

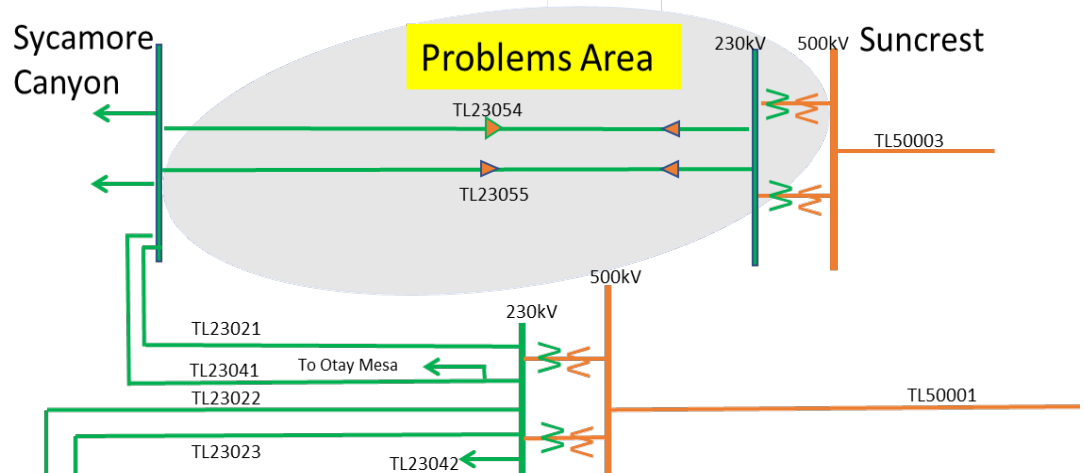
- Rearrange TL23013 and TL6959
 - Cost: \$19 Million (ISD 2026)

Benefits:

Optimize the TL13810A circuit capacity and minimize the RAS action tripping generation in Otay Mesa area. Improve Operation flexibility

New 500kV Miguel-Suncrest

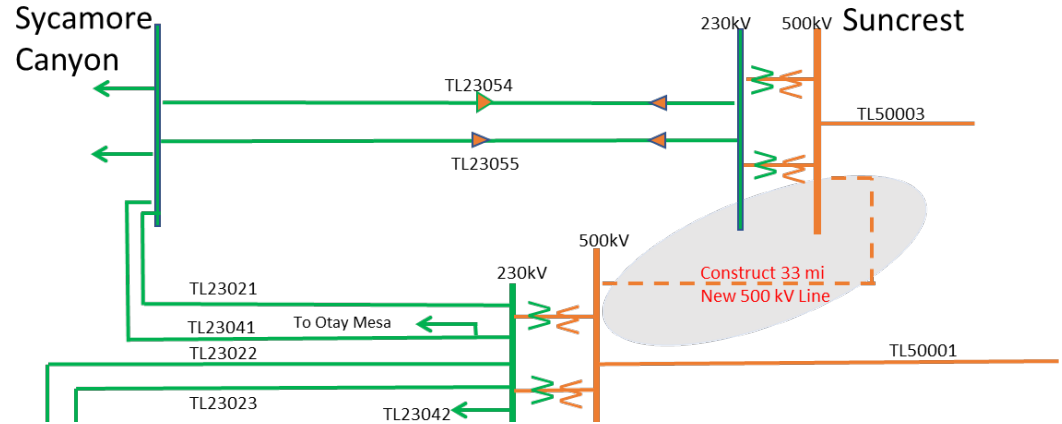
- Existing NERC reliability overloads on TL 23054 and TL 23055¹
- A RAS has been established to mitigate these overloads, however the RAS is not effective
- During Peak Load, P3 (PEN gen and ECO-ML) Contingency will cause an overload on TL 23054 and TL23055 by 105% in 2023
- During Peak Load Heavy Renewable, P1 (ECO –ML 500kV) Contingency will cause an overload on TL 23054 and TL23055 by 115% in 2023



1) P1, and P3. See Summary table for overload details in the CAISO's Market Participant Portal.

Solution

- Construct a new 33 miles 500kV line between Miguel and Suncrest (\$335M - \$600M)¹
 - \$200M - \$370M for Tx
 - \$75M - \$125M for the Sub
 - \$60M - \$100M Land/ROW (~30% of Tx)
- Key features include:
 - Reinforce import Path
 - Provide a second 500kV connection to Miguel and Suncrest
 - Improve system reliability by eliminating SOL violation on TL23054 & TL23055
 - Increase operational flexibility
 - Provide economic benefits by reducing import congestion



Thank you

Please email dstekeste@sdge.com for more information