



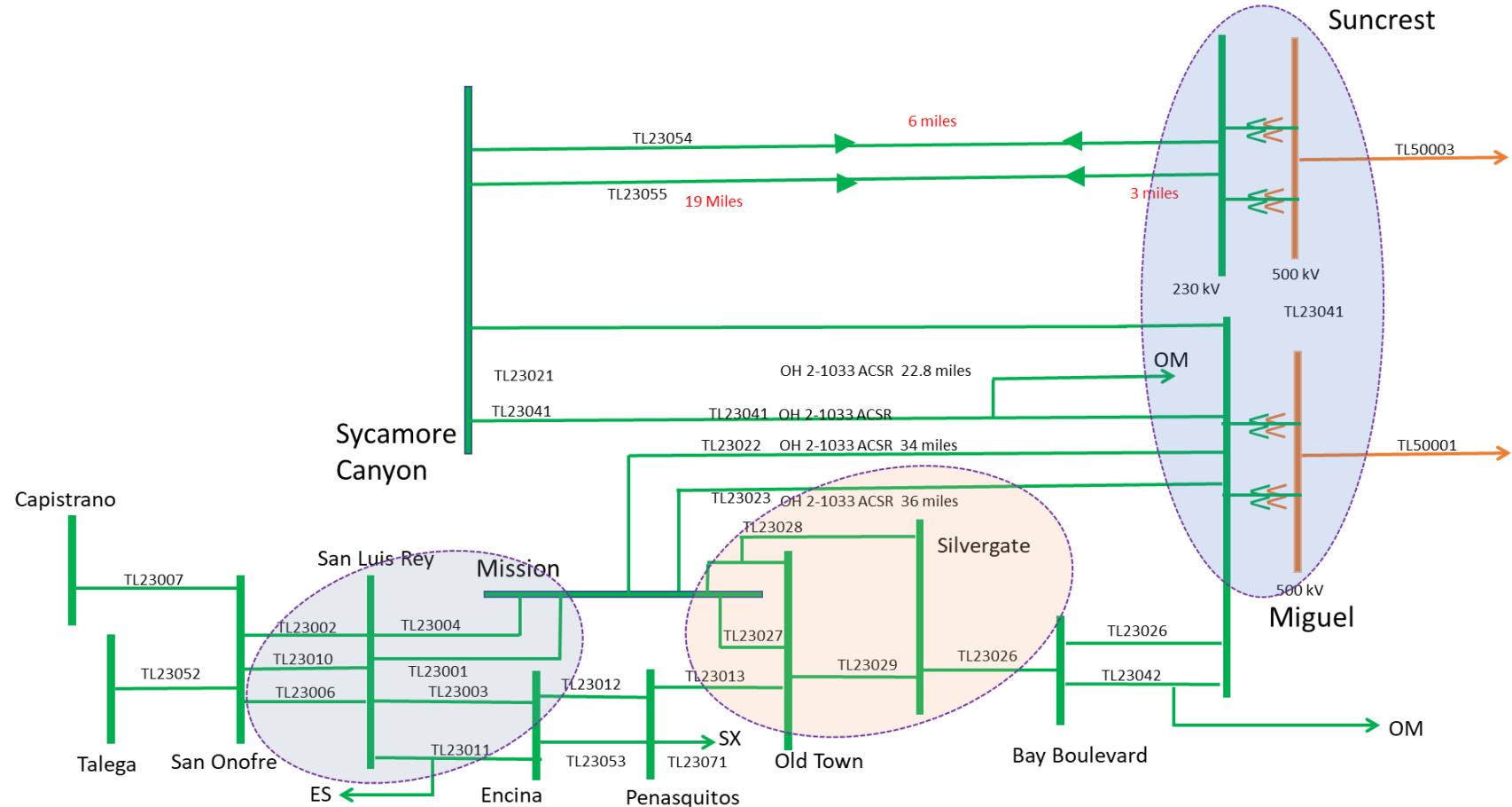
**2022-23 TPP- SDG&E  
BES Project Proposal**



# Transmission Constraints

## Driver:

- Reliability
- Policy-driven



# Transmission Constraints

## Reliability Issues:

### Suncrest and Miguel areas:

- P-6 (N-1-1) – overlapping outage of TL50001 and TL23054 or TL TL23055 overload TL230055 or TL23054
- P-6 (N-1-1) – overlapping outage of TL50001 and SCR 500/230kV overload the remaining bank
- P-6 (N-1-1) – overlapping outage of TL50003 and ML 500/230kV overload the remaining bank

### Old Town, Mission and Silvergate areas:

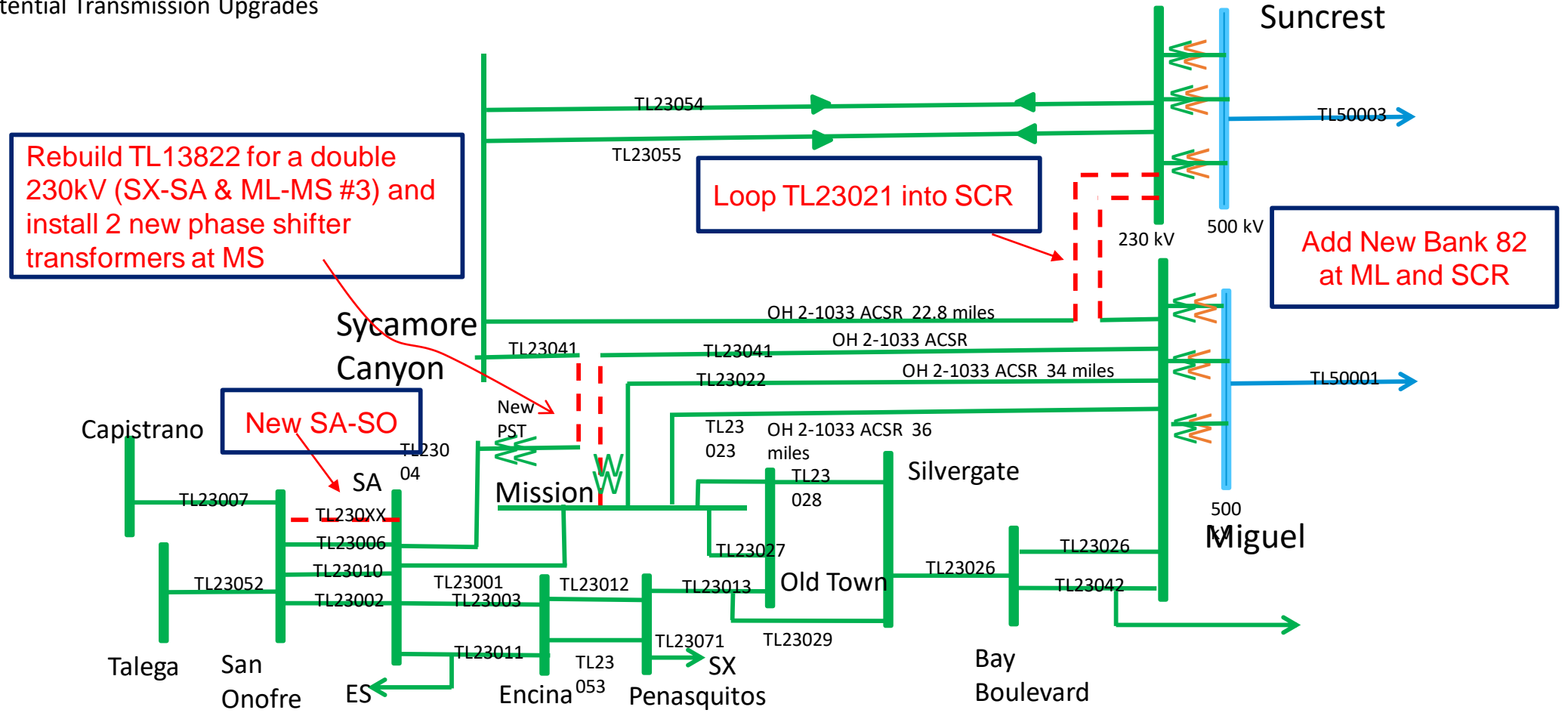
- P-7 (N-2) - Outage of TL23022 & TL23023 Overload TL23026
- P-7 (N-2) - Outage of TL23028 & TL23029 Overload TL23027
- P-7 (N-2) - Outage of TL23028 & TL23027 Overload TL23029

### Encina, San Luis Rey and San Onofre areas:

- P-1 (N-1) - Outage of TL23003 Overload TL23011
- P-1 (N-1) - Outage of TL23011 Overload TL23003
- P-7 (N-2) - Outage of TL23002 & TL23010 Overload TL23006

# Transmission Mitigations

Holistic view of Potential Transmission Upgrades



# Summary

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## Benefits:

- Maximize Existing import capability from Imperial Valley area
- Improve system reliability by eliminate the 230kV violation at Suncrest, Miguel, Old Town and San Luis Rey as results of adding 230kV lines and 500/230kV banks
- Provide a new 230kV connection between Miguel and Suncrest
- Increase operational flexibility by adding two new 230kV connections at Suncrest
- Provide potential economic benefit by reduce import congestion
- Provide benefit by supporting the deliverability of resources in the SDG&E area by removing the east of Miguel, the Silvergate and Old Town, and the Encina and San Luis Rey deliverability constraints

# Proposed Project Scope

**ISD: 2032**

## **Scope:**

Proposed projects in Suncrest / Miguel area (Cost \$275 – 375 M)

- Loop TL23021 into Suncrest and install 2 new 500/230 kV banks at Suncrest and Miguel.

Project Alternative: (Cost \$350 – 650 M)

- New 500kV line (Miguel-Suncrest) and install new 500/230kV bank at Miguel.

Proposed projects in Old Town / Silvergate area (\$620 - \$750M)

- Rebuild TL13822 for a double 230kV for looping TL23041 into Mission
- Reconductor (TL23022 & TL23023) and (TL23001 & TL23004)
- Install (2) new Phase Shifter transformers at Mission 230kV

Project Alternative: (Cost :Pending)

- New 230kV line (Silvergate-Old Town #2)
- New 230kV line (Old Town-Mission #2)
- New 230kV line (Encina-San Onofre)

Proposed projects in San Luis Rey/ San Onofre area (\$110 - \$150M)

- Upgrade TL23006 to form a new 230kV lines (San Luis Rey-San Onofre #4)

Project Alternative: (Cost: \$200 - \$260M)

- New 230kV line (Encina-San Onofre)

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# Thank you

Please email [dstekeste@sdge.com](mailto:dstekeste@sdge.com) for more information