

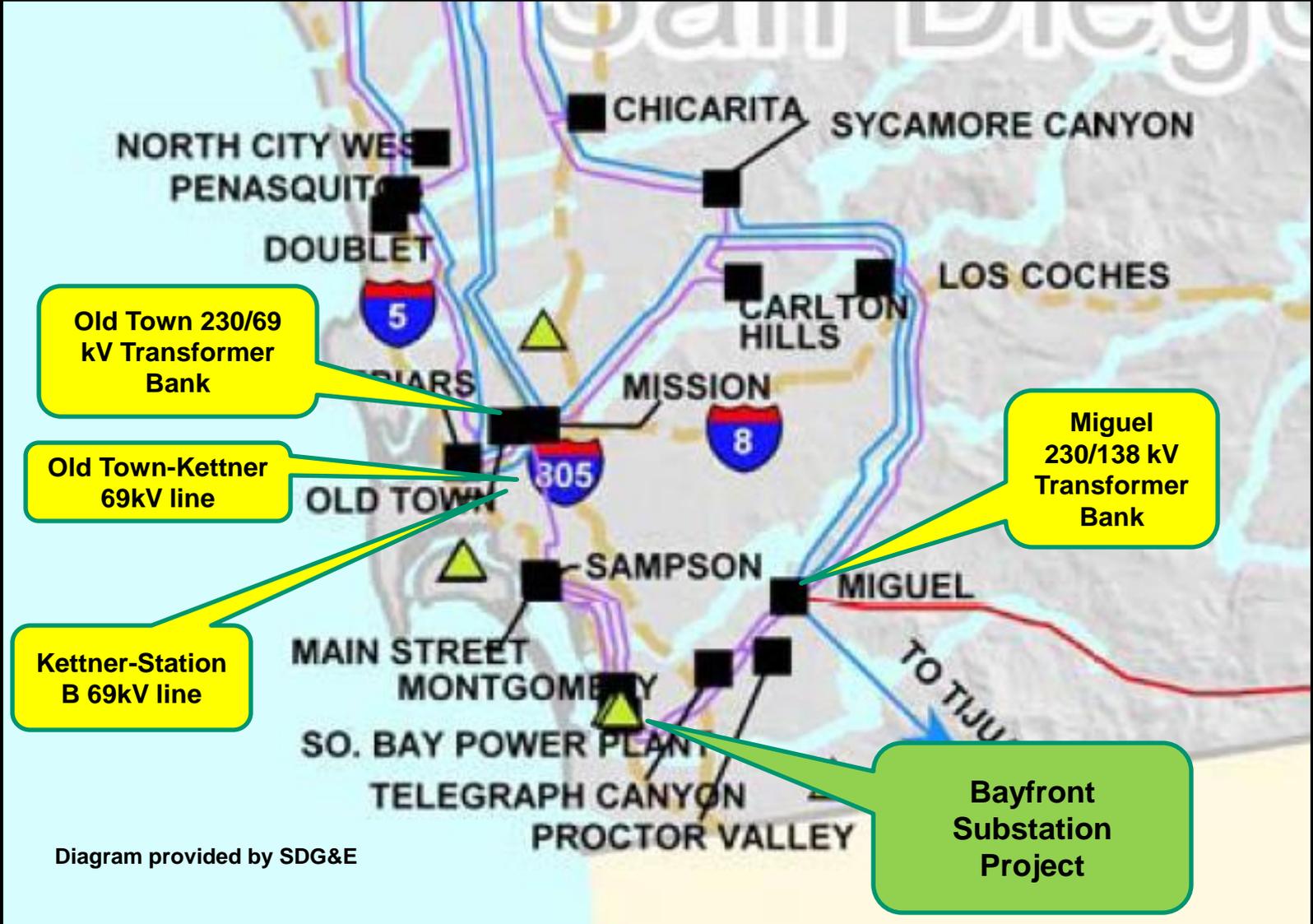


Decision on Bayfront Substation Transmission Project

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Location of transmission facility loading concerns in relation to location of the project.



New Bayfront substation is needed to address overloading of SDG&E transmission associated with South Bay retirement.

- Miguel 230/138 kV transformer bank # 2
 - Will exceed its load-carrying capability under a transformer outage condition (summer 2012)
 - Interim solution – Utilizes transformer’s emergency rating until Bayfront Project is completed (12/2012)
- Old Town 230/69 kV transformer banks
 - Will exceed its load-carrying capability under a line and transformer outage condition (summer 2010)
 - Interim solution - Utilizes transformer’s emergency rating until Bayfront Project is completed (12/2012)

New Bayfront substation is needed to address overloading of SDG&E transmission associated with South Bay retirement.

- Kettner – Station B 69 kV line
 - Will exceed its load-carrying capability under an outage of Silvergate transformer bank with Southwest Powerlink (SWPL) 500 kV line out-of-service (summer 2019)
- Old Town – Kettner 69 kV line
 - Will exceed its load-carrying capability under an outage of Silvergate bank with SWPL line out-of-service (summer 2019)

The recommended Bayfront project has the following elements and costs:

■ Project elements

- 230/69 kV substation
- Two 224 MVA transformers
- Connecting to existing Miguel – Silvergate 230 kV line
- 69 kV lines transferred from South Bay
- Re-configuration of existing 138 kV lines

■ Project costs

- \$129.2 million
 - \$57.2 million – 230 kV upgrades
 - \$60.8 million – 69 kV and 138 kV related construction
 - \$11.2 million – cost of borrowing funds until completion of project

One alternative was considered but rejected.

1 – Transmission alternative: Rebuild South Bay 138/69 kV substation in a different location and upgrade identified overloaded facilities

- Higher cost than recommended project (\$140.6 million)
- Not a robust transmission option since load curtailment is still required for outages involving two transmission facilities

The recommended project will provide these benefits:

- Mitigates identified loading concerns on four transmission facilities associated with South Bay generation retirement
- Provides needed 230 kV source into the area
- Replaces aging South Bay substation
- Enables SDG&E to meet an agreement with City of Chula Vista to relocate existing South Bay substation