

**Sempra USGP Stakeholder Comments:
CAISO 2013-2014 Draft Transmission Plan
February 12, 2014 Stakeholder Meeting**

| Submitted by | Company | Date Submitted |
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| <i>Shawn Bailey</i> sbailey@SempraUSGP.com (619) 696-2962 | <i>Sempra US Gas and Power</i> | <i>February 26, 2014</i> |

Sempra US Gas and Power (Sempra USGP) appreciates this opportunity to provide the following comments on the CAISO Draft 2013-2014 Transmission Plan and stakeholder meeting held 2/12/2014 at the CAISO. The comments relate to the economic analysis of the Delaney-Colorado River upgrade.

The CAISO has continually assessed the economics of upgrading the Palo Verde to California path (Path 49) over at least the last three transmission planning cycles. In the 2011-2012 CAISO Transmission Plan, the CAISO found the upgrade of the Colorado to Valley segment of the path to be needed for renewable procurement policy reasons. However, in assessing the economic benefits of the Delaney-Colorado River upgrade, the final remaining segment of the path, the CAISO found the upgrade the Delaney-Colorado River segment was uneconomic based on costs totaling \$319mm and benefits totaling \$237mm¹. It should be noted that Arizona Public Service and Electric Transmission America filed comments on February 28, 2012 estimating the cost of the upgrade to be \$256mm using the CAISO methodology.

In the 2012-2013 CAISO Transmission Plan, the CAISO estimated the total cost of the upgrade to be \$471mm, but due to modeling concerns indicated that the benefits of the project required further study and consideration for approval at a future CAISO board meeting². Now in the 2013-2014 CAISO Draft Transmission Plan, the CAISO staff have again assessed the Delaney-Colorado River upgrade, and found the upgrade to be economic based on an estimated total cost of \$498mm, and benefit to cost ratios of between 1.04 and 1.53³. Despite an over 50% increase in the estimated cost from the 2011/2012 plan, the CAISO staff finds the

¹ CAISO 2011/2012 Transmission Plan dated March 23, 2012, page 407.

² CAISO 2012/2013 Transmission Plan dated March 20, 2013, pages 8 and 356.

³ CAISO Draft 2013/2014 Transmission Plan dated February 2, 2014, page 261

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upgrade to be economic, and is recommending Delaney-Colorado River for approval by the CAISO board.

The economic, reliability and renewable integration benefits of the upgrade combine to make the Delaney-Colorado River a compelling upgrade for California. This conclusion is underscored with the recent retirement of roughly 2,200MW of baseload generating capacity in southern California associated with the San Onofre Nuclear Generating Station, an event which had not occurred at the time of the 2012/2013 plan. The Delaney-Colorado River upgrade provides for an increase in expected flow on the corridor by 30%, and an approximately 1200MW increase in non-simultaneous import capability into California from the largest concentration of modern flexible and efficient combined cycle generation in the West; resources that are critical to integrating intermittent renewable generation required to meet California's 33% renewable portfolio standard. Delaney-Colorado River also increases system reliability by providing an additional line for flow in the event of an N-1 contingency of either the existing Palo Verde-Devers #1 500kV line or the Hassayampa-Hoodoo Wash 500kV line, and thereby reduces overloads on the northern East-of-River path into the SCE and LADWP areas (i.e. El Dorado-Lugo 500kV, Mohave-Lugo 500kV, Lugo-Victorville 500kV). The upgrade also enhances San Diego local area reliability by reducing overloads due to loss of the Southwest Power Link (i.e. IV to Miguel 500kV segments). In addition, the upgrade contributes to California's renewable policy goals, by increasing renewable deliverability from the Imperial Valley area. Given the overall benefits of the upgrade to the California system and San Diego local area reliability, access to flexible generation capacity in Arizona, enhanced access for renewable development in the Imperial Valley, and reduced east to west congestion, now is the time for California to support the upgrade of this final segment of Path 49.

However, despite this conclusion, Sempra USGP remains concerned that the import capacity assigned to the project in the economic analysis is underestimated. The CAISO staff indicated in the February 12 stakeholder meeting that downstream constraints in the San Diego system could limit the import capacity of the upgrade to only 200 to 300MW. Sempra USGP suggests that the CAISO reevaluate the nature of the downstream constraints, and determine whether downstream upgrades to meet local San Diego reliability needs should be included in the base case of the economic analysis.

Sempra USGP appreciates the CAISO staff's effort to assess the benefits of Delaney-Colorado River, and supports the staff's recommendation to the board for approval.