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Via e-mail

U.S. Department of Energy

**Re: COMMENTS OF SAN DIEGO GAS AND ELECTRIC COMPANY ON 2009
CONGESTION STUDY**

Pursuant to notice¹ published by the Department of Energy (“Department”), San Diego Gas and Electric (“SDG&E”) submits these comments on the Department’s 2009 National Electric Transmission Congestion Study (“Study”). In general, SDG&E concurs with the Study’s conclusions, and we offer below comments providing more context to the Southwest Corridor designation, and suggesting that a more accurate data source would indicate higher Southern California congestion costs than those indicated in the Study.

Note that these comments are submitted three days later than the comment date provided in the Department’s notice. Because these comments do not attempt to reply to any other party’s comments, SDG&E asks that the Department accept these comments out-of-time.

**I. THE SOUTHWEST CORRIDOR DESIGNATION HAS BEEN HELPFUL TO
SITING NEW TRANSMISSION IN THE CORRIDOR**

The Study notes (at 83) that the California Public Utilities Commission (“CPUC”) in December 2008 approved SDG&E’s application to build the 500 kV Sunrise Powerlink, scheduled to begin operations in year 2012. This 118-mile transmission project lies entirely within the Southwest National Electric Transmission Corridor and within the CAISO² balancing authority. In addition to reducing congestion and energy costs, the project will provide the vast renewable energy potential of Imperial Valley and environs with access to California electricity markets. The CPUC adopted SDG&E’s \$1.883 billion cost estimate for the project.

¹ 75 Fed. Reg. 22770 (April 20, 2010).

² California Independent System Operator Corporation

The project also crosses land subject to the jurisdiction of the Bureau of Land Management (“BLM”) and of the U.S. Forest Service. The BLM has approved the project, and the Forest Service could issue its decision on the project this summer.

SDG&E first applied to the CPUC for approval of the project in December 2005. The Scoping process for the project under the National Environmental Policy Act began in August 2006. The Department’s 2007 designation of the Southwest Corridor has been important to demonstrating to the regulators with siting authority over the project that the Sunrise Powerlink is needed to address congestion and reliability issues in the region.

II. IN CONCLUDING THAT ECONOMIC COSTS OF CONGESTION IN SOUTHERN CALIFORNIA ARE “RELATIVELY LOW,” THE STUDY RELIES ON A DISCARDED MARKET DESIGN THAT MAY UNDERSTATE SUCH COSTS.

The Study (at 87) concludes that “...the economic costs of transmission congestion in Southern California are relatively low...” This conclusion, however, is based on “Congestion Revenue” data provided by the CAISO for the years 2007 and 2008, a period of time which pre-dates implementation of the CAISO’s Market Redesign and Technology Upgrade (“MRTU”) project (*see, e.g.*, Figure 5-9 at 85). Congestion revenues represent the increase in variable production costs as a result of congestion; *i.e.*, congestion *revenues* can be considered to be congestion *costs* from the perspective of market efficiency, but does not include the capacity-related costs which have been reclassified.

Prior to April 1, 2009, the CAISO managed day-ahead congestion on an inter-zonal basis only; it managed *intra*-zonal congestion in real-time. This market structure yielded infeasible day-ahead schedules causing *intra*-zonal congestion, which in turn required real-time adjustment to mitigate the congestion attributable to such infeasible day-ahead schedules, often at a high cost to consumers. The Study references *intra*-zonal congestion (*see, e.g.*, Figure 5-10 at 86), but does not estimate the associated impact on market efficiency.

Beginning April 1, 2009, the CAISO implemented a nodal, rather than zonal, market mechanism in connection with the start-up of its MRTU project. The CAISO’s market software now provides feasible day-ahead schedules, minimizing the instances where congestion must be managed in real-time. This has helped contain congestion costs; managing congestion in or near real-time is expensive. As evidence, the CAISO’s April 30, 2010 report on the *Revenue*

Adequacy of Congestion Revenue Rights states (at 10) that “during the first year of operation with the LMP-based market, congestion rents in the integrated forward market totaled \$141 million.” These congestion revenues only reflect the energy-related aggregate congestion costs generated from the CAISO’s management of congestion at all locations on the CAISO-controlled grid.

Note that the congestion revenues discussed in the CAISO’s report do not include the above-market minimum load generation costs and incremental capacity-related costs imposed on the system as a result of the CAISO’s procedures to mitigate the exercise of local market power by generators within transmission-constrained load pockets. If the CAISO determines an otherwise uneconomic generating unit must start-up and operate in order to address a transmission constraint, the CAISO compensates the generator for any minimum load production costs that exceed the LMP-based market revenues that the generator receives. These incremental costs are passed on to consumers and are not reflected in congestion revenues.

The CAISO has established Local Capacity Requirements (“LCR”) for certain transmission-constrained load pockets and load-serving entities within those areas must contract with enough local generation to meet the LCR. The incremental increase in contract capacity prices that local generators can extract as a result of being insulated from the full competitive pressures of a constraint-free capacity market is a congestion-related cost not reflected in the cited CAISO report.

Similarly, the CAISO occasionally uses its Residual Unit Commitment and Exceptional Dispatch procedures to order local generators on-line that, absent transmission constraints, would not be economic to operate. The capacity-related costs incurred by the CAISO to compensate these generators are also not reflected in the CAISO’s reported congestion revenues.

The foregoing considerations suggest that the use of CAISO congestion data beginning April 2009 would yield a much more accurate picture of congestion costs, and that such costs may not, in fact, be “relatively low.” SDG&E believes that congestion costs (including capacity-related costs) have remained relatively unchanged since the previous Congestion Study.

III. CONCLUSION

SDG&E appreciates the opportunity to comment, and asks that these comments be accepted out-of-time. For the reasons described in the Study and in the comments above,

SDG&E asks that the Department maintain its designation of the Southwest Area National Corridor as a National Interest Electric Transmission Corridor.