## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



June 27, 2007

Mr. Kevin O'Beirne San Diego Gas & Electric Company 8830 Century Park Court – CP32D San Diego, CA. 92123

## Re: Data Request #15 for the SDG&E Sunrise Powerlink Transmission Project, Application No. 06-08-010

Dear Mr. O'Beirne:

The California Public Utilities Commission's (CPUC) Energy Division has reviewed the documents and materials that SDG&E has provided including the Proponent's Environmental Assessment (dated August 4, 2006), the Application Supplement Materials (dated September 1, 2006), and SDG&E's Responses to Data Requests No. 1 through 14. During the analysis of the aforementioned materials and in our preparation of EIR/EIS sections, we have identified additional items that require information from SDG&E. Additional data requests may be necessary to address alternatives and other CEQA/NEPA topics. This letter constitutes Data Request No. 15.

We would appreciate your prompt response to this request, as it could have a substantial effect on our current EIR/EIS schedule. We request that the response to these requests be provided to us by July 5, 2007.

**Please submit one set of responses to me and one to Susan Lee at Aspen in San Francisco, in both hard copy and electronic format.** Any questions on this data request should be directed to me at (415) 703-2068.

Sincerely,

Billie C. Blanchard, AICP, PURA V Project Manager for Sunrise Powerlink Project Energy Division, CEQA Unit

cc: Sean Gallagher, CPUC Energy Division Director Ken Lewis, CPUC Program Manager Steve Weissman, ALJ Traci Bone, Advisor to Commissioner Grueneich Nicholas Sher/Jason Reiger, CPUC Legal Division Lynda Kastoll, BLM Susan Lee, Aspen Environmental Group

## Sunrise Powerlink Transmission Line Project Data Request No. 15

Alternatives -- ALT-85

**Background**. This data request seeks information on SDG&E's plans for future transmission system expandability with regard to the 500 kV transmission system. We have received information on "expandability" summarized in items 1 through 5 below: [Reviewers: is all this info relevant? I tried to include everything as background but I'm not sure how useful it all is.]

1. SDG&E's CPCN Application (August 4, 2006), Purpose and Need, Volume 2, Chapter VI, Alternatives states the following:

The TCS selected both the Full Loop and the Sunrise Powerlink as the two alternatives for further study. Both were studied in depth by SDG&E during the plan of service analysis. Although performing adequately—technically and economically—the Full Loop was not selected as the preferred alternative. The main reasons were its higher cost, the low probability of operation by 2010 and the need for a Full Loop could not be justified today, under the ISO's grid reliability criteria or for economic reasons. The July 28th CAISO report concurred with SDG&E's findings, but noted it is in the process of further evaluating the Full Loop proposal. If upon further evaluation a Full Loop option is justified in the future, SDG&E would seek appropriate approvals for transmission facilities for the Full Loop and conduct any requisite environmental review of such facilities at that time. (page VI-15)

2. SDG&E's response to Energy Division Data Request ALT-20 contained the discussion of the future "Expandability" of the SDG&E transmission system that would be facilitated if Sunrise were constructed:

Beyond the specifics about import capability into the San Diego area, SDG&E has serious concerns about this alternative, chief of which is expandability. The high level design goal for the Sunrise Powerlink project is to bring a single 500 kV line as close to the SDG&E load center as is reasonably practicable, then to use 230 kV lines to distribute the power to major 230 kV load-serving substations within the San Diego load center.

Based on SDG&E's current construction standards, it takes four 230 kV lines to match the capacity of one 500 kV line. Therefore, under an ultimate design for an all-lines-in-service condition there could be at least four 230 kV circuits coming out of Central substation. However, in order to maintain transfer capability on the 230 kV circuits equivalent to the transfer capability of the 500 kV portion of the project for an N-1 or a credible N-2 outage of the 230 kV circuits, there should be really be five or six 230 kV circuits coming out of Central substation. The design and layout of Central substation is such that it can accommodate up to six 230 kV lines. ... Although this ultimate build out may not be needed for decades, *at least one or two additional 230 kV circuits are possible within the first decade* [emphasis added] following completion of the Sunrise Powerlink in 2010.

3. Energy Division Data Request No. 4 (December 6, 2006) in ALT-63 requested that SDG&E describe in detail the future circuits that might ultimately be constructed west and northwest from the proposed Central East Substation (beyond those proposed to be built in the Sunrise Powerlink Project). SDG&E's response to ALT-63 (December 13, 2006) told us the following:

At this time, the exact locations and timing of future 230 kV circuits out of Central East Substation—in addition to the two planned 230 kV lines between Central East Substation and Sycamore Canyon substation—are not known. SDG&E has always anticipated that there would eventually be additional circuits emanating from Central East Substation; connecting to various locations within the San Diego load center. Possible connection points for these additional circuits could include Sycamore Canyon, Penasquitos (with or without tying into Sycamore Canyon), Escondido, Mission and Los Coches (assuming a 230 kV bus is added to this substation).

Note: As a result of this information, an analysis of the 230 kV "Future Transmission System Expansion" will be presented in the EIR/EIS.

4. In its Rebuttal Testimony (Exhibit 7) filed on June 15, 2007, UCAN filed SDG&E's comment letter to the Department of Energy on the "Considerations for Transmission Congestion Study and Designation of National Interest Electric Transmission Corridors". In this letter (page 9), SDG&E Senior Vice President James Avery states:

Not only would a transmission line in the proposed corridor meet the area's critical need for reliability, and reduce excessive congestion and RMR costs, adding transmission through this corridor also creates the opportunity for expansion at a later date by connecting with the 500 kV system to the north, completing a loop that will add further reliability.

The SDG&E letter also presents a map (page 10) entitled "Imperial Valley-Central-Serrano/Valley (completing the 500 kV loop)".

5. In its testimony filed with the CPUC on June 15, 2007, SDG&E's "Prepared Rebuttal Testimony Of Linda P. Brown On Behalf Of San Diego Gas & Electric Company", Ms. Brown states the following:

A related alternative to the "SWPL 2" concept raised by UCAN has been called the "Southern Route". The Southern Route would entail constructing new 500 kV transmission from Imperial Valley westward along the route of the existing SWPL, construction of a new 500/230 kV substation between Imperial Valley and Miguel, and construction of underground 230 kV transmission into SDG&E's system. From a system performance and planning standpoint, the Southern Route is superior to a second Imperial Valley-Miguel 500 kV line, as it avoids paralleling SWPL for the entire route, but it is inferior to the Northern Route as proposed for the Sunrise project. The Northern Route [Proposed SRPL Project] provides for future expansion in a way that the Southern Route does not - instead of a 500 kV "dead end" substation similar to Miguel, the proposed Northern Route permits future interconnections at 230 and 500 kV to SCE or IID. The 500/230 kV substation envisioned as part of the Southern Route would be landlocked by public and tribal lands, and thus unavailable for future 500 kV interconnections [emphasis added]. The Northern Route also avoids the costs and constraints imposed by undergrounding key parts of the 230 kV circuits. In contrast, the Southern Route parallels the existing SWPL to a point (where the fire concern is minimal), but then essentially stops and relies on underground 230 kV transmission to carry power into SDG&E's system. Thus, the Southern Route alternative does not have the system benefit and system performance of a northern routing which includes optionality for the future, a greater potential for upgrades and better asset utilization, and a more effective linkage to the existing network. These benefits have been a matter of study that has gone on for years by SDG&E, the CAISO and many other participants, based on the established reliability criteria, planning

standards and other factors, and discussed in forums such as STEP, the Imperial Valley Study Group, and the CSTRP.

While the 500 kV Full Loop has been addressed in a variety of contexts as shown above, in this testimony, SDG&E addresses a 500 kV component of "future expansion" in a manner that implies that this the 500 kV system is also a foreseeable consequence of constructing the Sunrise Powerlink Project. As a result, the Energy Division must consider whether the construction of such a transmission line must be disclosed and analyzed as a foreseeable consequence of the Sunrise Powerlink Project. In order for us to make this determination, please provide responses to the questions presented below.

## Data Request ALT-85

a. Please provide maps showing the most likely routes that illustrate the future 500 kV line that would connect with either SCE or IID. Information should include substation mid-points and endpoints.

b. Describe the estimated timeframe for construction of a 500 kV transmission line between the proposed Central East Substation and the SCE and/or IID systems (e.g., Serrano/Valley Substations).

c. Describe the factors affecting the location and timeframe for the additional 500 kV circuits.