Calif Botanical Habitat (I-8 Main

Powerlink environmental impacts, costs and overhead vs. underground AC and DC alternatives

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Ms. Jane L. Wiggans Right of Way Consultant Wiggans and Willett Inc. 5256 South Mission Road Suite 124 Bonsall, California 92003 760-806-1776



Sunrise Powerlink environmental impacts to our site and associated costs of overhead vs. underground AC and DC alternatives.

Dear Ms. Wiggans,

We received letters from Aspen Environmental and your company regarding construction of 500,000-volt high-power line towers, which would severely impact our property and projects. We are naturally trying to prevent the destruction of many decades of our work and investments in this valuable anthropological-nature preserve, which is also a significant viewshed component of two scenic highways in the eastern part of San Diego County.

This property is adjacent to the Anza-Borrego State Park to our east. Our project site extends contiguously east and west a distance of approximately 2 miles and 1.5 miles north and south, and provides visibility of over 3.25 miles of our boundaries and wilderness viewshed along Interstate 8, and over 4.25 miles of visibility of our boundaries and wilderness viewshed along Old Highway 80. The extraordinary geological formations of this nature preserve are visible by millions of visitors to this

Powerlink environmental impacts, costs and overhead vs. underground AC and DC alternatives area every year.<sup>1</sup> The value of this property can not be sustained by allowing it to be devastated or defaced by placing 160-foot tall steel pylons and extending cables from its mountain tops, nor by acquiring wilderness elsewhere, which can later be destroyed whenever it seems convenient based on an extrodionarily contrived economic theory and faulty engineering analysis, which simply eliminates the most significant issues from the review process.

Further we happen to provide protected habitat for threatened and endangered species and retain artifacts of prehistoric human presence and burial sites, along with educational research facilities. During February of 2007 is when we first heard of this 1000 megawatt Powerlink project and had only a vague idea that it might impact our site from the simple maps available. Nevertheless there are several alternatives that could avoid any devastating impacts to our nature preserve as well as the property of many others, some of which are enumerated as follows:

<sup>&</sup>lt;sup>1</sup> Over 6 million drivers and passengers on the two highways can see this nature preserve for approximately 30 million minutes per year or about 500,000 hours, which is incidentally a considerably greater viewership than all the museums in San Diego County, combined.

## I. Underground high-voltage AC segment along Route B:

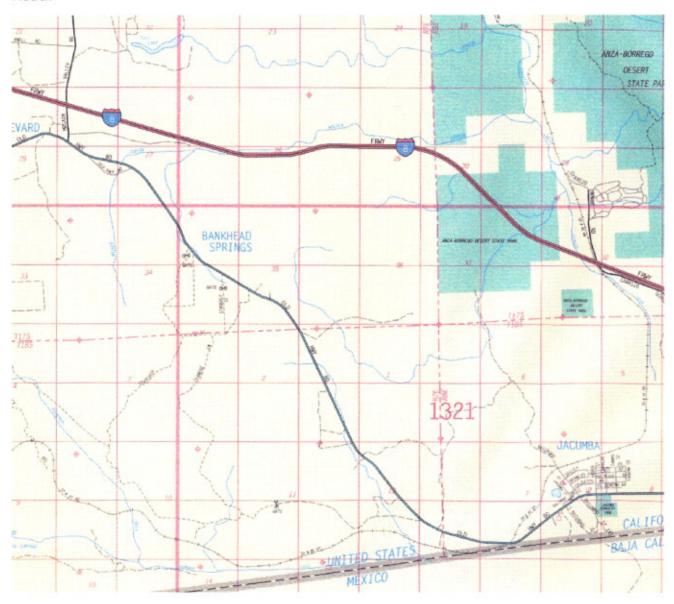
The Southwest Powerlink Alternatives map, shows "Route B" which can also carry power from a point near the Mexican border 5 miles north to connect to either the Interstate 8 route or the BCD alternative. Which does not mean extending power lines an additional 40 miles all the way to Julian, only 5 miles or less, which may be entirely underground. See Map A below with our project site shown as a red square which is bisected by the 500 kV high-voltage power lines.



Map A, Southeast corner of San Diego County, the red square near the center shows the area of the California Botanical Habitat anthropological-nature preserve, which would be divided and severely impacted. (Detail from the Southwest Powerlink Alternatives map, also referred to as figure 7)

## II. Underground high-voltage AC segment:

A 5 mile underground AC segment could be placed along our property under Old Highway 80, from a point west of Jacumba along the Mexican border, then heading northwest on Old Highway 80, to McCain Valley Road traveling under Interstate 8 to the north side of the Interstate where it could connect to the BCD or I8 routes, and not devastate the Bankhead Springs region between Boulevard and Jacumba. See Map B below, which shows this alternative route along Old Highway 80 and McCain Valley Road.



Map B, Southeast corner of San Diego County, showing Interstate 8, Old Highway 80 (to the south) and Bankhead Springs (in between) where our project and habitat area is located, adjacent to and west of the Anza-Borrego Desert State Park (green shaded area) from page 1300 Thomas Guide.

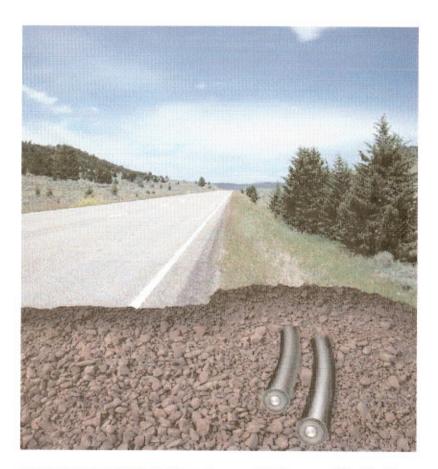
## III. Underground high-voltage DC:

We have suggested a high capacity 300,000 volt underground DC alternative which could deliver 1840 to 3680 megawatts in one 5 foot deep trench, 1 foot in width, for the full 150 mile course, with vastly less environmental or property damages, costing considerably less than the proposed overhead extra high-power lines, which can incidentally provide over 3.5 times the capacity of the 1000 megawatts proposed with the overhead AC power lines. Unfortunately the CPUC, the BLM, SDGE and Aspen Environment have not fairly reviewed this alternative, and have allowed erroneous conclusions to discredit a vastly more environmentally considerate, as well as an overall more economical alternative to avoid being realistically evaluated based on data, which measures long-term economic and environmental impacts along the 150-mile route for at least a mile on each side of the high power lines, with over 676 new steel towers which may extend well over 160 feet above the terrain and mountain tops.



Underground direct burial cables

In the report of March 16, 2007, titled: "CPUC/BLM Notice Regarding Conclusions on EIR/EIS Alternatives to the Proposed Sunrise Powerlink Project, Results of the Second Scoping Process", which says regarding the HVDC Light Underground Alternative, "This alternative would reduce impacts of the Proposed Project by avoiding Grapevine Canyon, but would increase project cost by at least \$500 million due to the high costs of the converter stations. ...the higher costs of this alternative make it infeasible... (Conclusion: This alternative has been eliminated)"



Underground DC cables along a highway - illustration (Greater depth and a reinforced concrete cap is typical)

The \$500 million converter station costs mentioned in the report are at least 4 times higher than what would be expected, and are apparently <u>not true</u>. Currently a 1000 MW converter station would cost about \$125 million in total and the difference in