

Comments Received from State, Local, and Federal Agencies

Part 2

Powers Engineering

February 10, 2010

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California Public Utilities Commission
c/o Dudek
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Subject: EIR/EIS Scoping Comments for SDG&E ECO Substation Project

Dr. Mr. Fisher:

The purpose of this letter is to request that the solar photovoltaic (PV) generation alternative be evaluated in detail in the California Public Utilities Commission/Bureau of Land Management (CPUC/BLM) EIR/EIS that will be prepared for San Diego Gas & Electric's (SDG&E) ECO Substation project. SDG&E asserts that the ECO substation is needed to 1) interconnect renewable generation in southeastern San Diego County and 2) to improve the reliability of the existing transmission system in the Mountain Empire region of San Diego County. The reasons why distributed solar PV generation in San Diego is an economically and environmentally superior alternative to the proposed \$270 million ECO substation and connected actions, the Energia Sierra Juarez Generator-Tie Line Project (ESJ Project) and Tule Wind Project, are documented in this letter. The intent of this documentation is to provide a framework for the solar PV alternative analysis in the EIR/EIS.

I. Qualifications

I am a registered professional mechanical engineer in California with over 25 years of experience in the energy and environmental fields. I have permitted five 50 MW peaking turbine installations in California, as well as numerous gas turbine, microturbine, and engine cogeneration plants around the state. I organized conferences on permitting gas turbine power plants (2001) and dry cooling systems for power plants (2002) as chair of the San Diego Chapter of the Air & Waste Management Association. I am the author of the October 2007 strategic energy plan for the San Diego region titled "San Diego Smart Energy 2020." The plan uses the state's Energy Action Plan as the framework for accelerated introduction of local renewable and cogeneration distributed resources to reduce greenhouse gas emissions from power generation in the San Diego region by 50 percent by 2020. I am the author of several 2009 articles in Natural Gas & Electricity Journal on use of large-scale distributed solar photovoltaics (PV) in urban areas as a cost-effective substitute for new gas turbine peaking capacity.

II. Rooftop PV Is at the Top of the California Energy Action Plan Loading Order and Must Be Evaluated as a Project Alternative

The California Energy Commission (CEC) and the CPUC developed the "Energy Action Plan" in 2003 to guide strategic energy decisionmaking in California. The Energy Action Plan establishes the energy resource "loading order," or priority list that defines how California's

energy needs are to be met. Energy Action Plan I was published in May 2003.¹ Energy Action Plan I describes the loading order in the following manner (p. 4):

The Action Plan envisions a “loading order” of energy resources that will guide decisions made by the agencies jointly and singly. First, the agencies want to optimize all strategies for increasing conservation and energy efficiency to minimize increases in electricity and natural gas demand. Second, recognizing that new generation is both necessary and desirable, the agencies would like to see these needs met first by renewable energy resources and distributed generation. Third, because the preferred resources require both sufficient investment and adequate time to “get to scale,” the agencies also will support additional clean, fossil fuel, central-station generation. Simultaneously, the agencies intend to improve the bulk electricity transmission grid and distribution facility infrastructure to support growing demand centers and the interconnection of new generation.

Energy Action Plan I, Under “Optimize Energy Conservation and Resource Efficiency,” states (p. 5):

Incorporate distributed generation or renewable technologies into energy efficiency standards for new building construction.

Energy Action Plan I identifies rooftop PV as a de facto energy efficiency measure with this statement. Energy Action Plan I also states, under “Promote Customer and Utility-Owned Distributed Generation,” (p. 7):

Distributed generation is an important local resource that can enhance reliability and provide high quality power, without compromising environmental quality. The state is promoting and encouraging clean and renewable customer and utility owned distributed generation as a key component of its energy system. Clean distributed generation should enhance the state’s environmental goals. This determined and aggressive commitment to efficient, clean and renewable energy resources will provide vision and leadership to others seeking to enhance environmental quality and moderate energy sector impacts on climate change. Such resources, by their characteristics, are virtually guaranteed to serve California load. With proper inducements distributed generation will become economic.

- Promote clean, small generation resources located at load centers.
- Determine system benefits of distributed generation and related costs.
- Develop standards so that renewable distributed generation may participate in the Renewable Portfolio Standard program.

Energy Action Plan I prioritizes rooftop PV as the preferable renewable resource, but indicates obliquely that it is costly and that in any case distributed PV is not eligible to participate in the Renewable Portfolio Standard (RPS) program. Therefore investor-owned utilities have no incentive to develop distributed PV resources. Since Energy Action Plan I was approved in 2003, PV cost has dropped dramatically. Commercial distributed PV is half the cost it was in 2003 and

¹ Energy Action Plan I: http://www.energy.ca.gov/energy_action_plan/2003-05-08_ACTION_PLAN.PDF

costs continue to drop. Residential PV is following quickly behind. Distributed PV is also now eligible for the RPS program.²

Energy Action Plan II was adopted in September 2005.³ The purpose of Energy Action Plan II is stated as (p. 1): “EAP II is intended to look forward to the actions needed in California over the next few years, and to refine and strengthen the foundation prepared by EAP I.” Energy Action Plan II reaffirms the loading order stating (p. 2):

EAP II continues the strong support for the loading order – endorsed by Governor Schwarzenegger – that describes the priority sequence for actions to address increasing energy needs. The loading order identifies energy efficiency and demand response as the State’s preferred means of meeting growing energy needs. After cost-effective efficiency and demand response, we rely on renewable sources of power and distributed generation, such as combined heat and power applications. To the extent efficiency, demand response, renewable resources, and distributed generation are unable to satisfy increasing energy and capacity needs, we support clean and efficient fossil-fired generation.

The CEC’s December 2009 Integrated Energy Policy Report (IEPR) underscores the integration of building PV as a critical component of “net zero” energy use targets for new residential and commercial construction, under the heading “Energy Efficiency and the Environment,” explaining:⁴

With the focus on reducing GHG emissions in the electricity sector, energy efficiency takes center stage as a zero emissions strategy. One of the primary strategies to reduce GHG emissions through energy efficiency is the concept of zero net energy buildings. In the 2007 IEPR, the Energy Commission recommended increasing the efficiency standards for buildings so that, when combined with on-site generation, newly constructed buildings could be zero net energy by 2020 for residences and by 2030 for commercial buildings.

A zero net energy building merges highly energy efficient building construction and state-of-the-art appliances and lighting systems to reduce a building’s load and peak requirements and includes on-site renewable energy such as solar PV to meet remaining energy needs. The result is a grid-connected building that draws energy from, and feeds surplus energy to, the grid. The goal is for the building to use net zero energy over the year.”

The EIR/EIS must identify rooftop/distributed PV as the preferred renewable energy resource for meeting California’s RPS targets.

² CPUC Press Release – Docket A.08-03-015, *CPUC Approves Edison Solar Roof Program*, June 18, 2009. “The energy generated from the project will be used to serve Edison’s retail customers and the output from these facilities will be counted towards Edison’s RPS goals.”

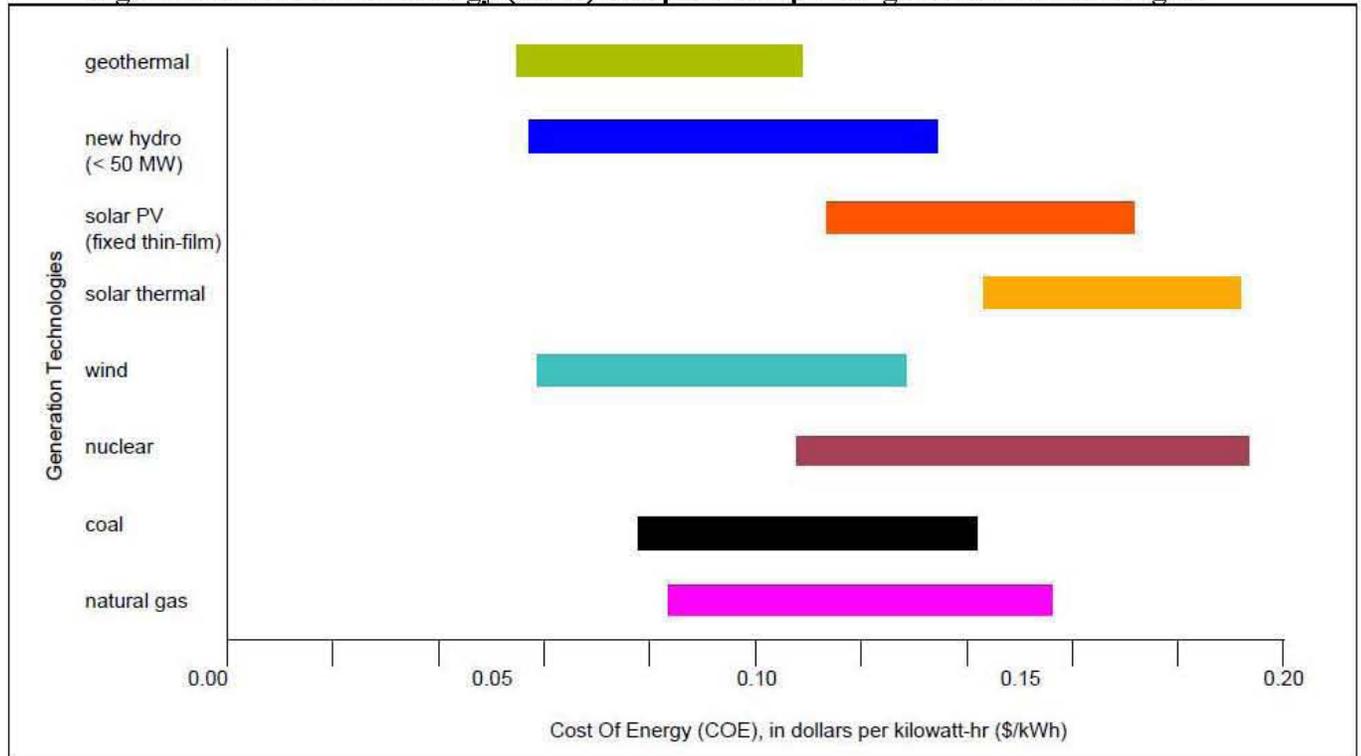
³ Energy Action Plan II: http://www.energy.ca.gov/energy_action_plan/2005-09-21_EAP2_FINAL.PDF

⁴ CEC, *2009 Integrated Energy Policy Report (IEPR) – Final Committee Report*, December 2009, p. 56.

A. Distributed PV Is a More Cost-Efficient Renewable Energy Resource than East County Wind

Figure 1 shows the current cost range for each of the major renewable, fossil, and nuclear generation technologies. No carbon tax is assumed in the cost-of-energy (COE) ranges shown for new coal and natural gas fired power plants.

Figure 1. 2009 Cost-of-Energy (COE) comparison - power generation technologies



a. COE for new natural gas, new coal, and new nuclear: *Moody's Corporate Finance, New Nuclear Generating Capacity: Potential Credit Implications for U.S. Investor-Owned Utilities*, May 2008, Table 9, p. 15.
 b. COE for renewable energy generation except thin-film solar PV: *RETI Phase 1A Final Report*, August 2008, Table 1-1, p. 1-8.
 c. COE for thin-film solar PV: *RETI Phase 1B Final Report*, January 2009, p. 6-24.

The COE from state-of-the-art distributed PV is incrementally higher than wind power as shown in Table 1. However, when the transmission cost associated with East County wind power is taken into account, the COE of distributed PV is comparable to wind. The solar resource is very productive during the summertime on-peak demand period when the price of power is much higher than at other times of the year. In contrast, little wind power is produced during the summertime on-peak demand period. As a result, the value of distributed PV energy, in terms of net benefits to the utility and ratepayers, is in the range of 40 percent greater than the net benefit of remote wind power.

The availability of wind resources during summer on-peak conditions is being used by some utilities and peaking gas turbine developers as justification to build a new generation of natural gas-fired peaking gas turbines for the explicit purpose of “backing-up” relatively unavailable wind power in the summertime. See the Gas Turbine World summary of the Desert Hot Springs 800 MW peaking gas turbine plant for example of this phenomenon.⁵

⁵ Gas Turbine World, September 2009, p. 9.

Table 1. COE & “value of power” comparison: distributed PV, remote solar thermal, remote wind

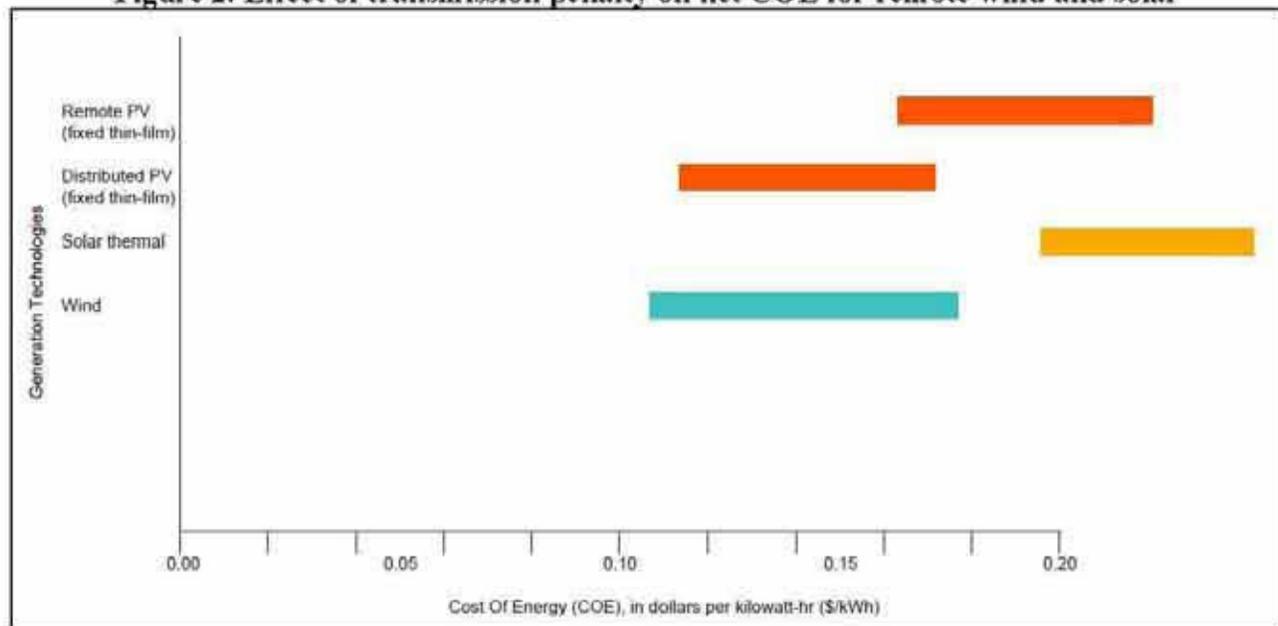
Source of data	Cost-of-energy, distributed fixed thin-film PV (\$/MWh)	Cost-of-energy, remote solar thermal (\$/MWh)	Cost-of-energy, remote onshore wind (\$/MWh)
RETI Phase 1A (Table 1-1) and Phase 1B final (Table 6-3) reports	114 to 176	143 to 192	59 to 128
Transmission penalty for remote generation ¹	+0	+46	+46
COE of distributed PV and remote solar thermal and remote wind adjusted for transmission penalty	114 to 176	189 to 238	105 to 174
Net COE including transmission penalty	~ same as wind	50% higher than DG PV or wind	~same as DG PV
Relative value of solar power vs. wind power based on utility time-of-delivery tariffs ²			
Factor for solar developed by SCE, cited in SCE Application A.08-03-015, <i>Solar Photovoltaic (PV) Program Supplemental Rebuttal Testimony</i> , October 14, 2008, p. 3, footnote 2.	1.39	1.39	1.0
Relative value	39% better revenue-to-cost than wind, 50% better revenue-to-cost than solar thermal	same time-of-delivery value as DG PV, but 50% higher net costs	same net costs as DG PV, but lower average revenue due to high proportion of off-peak time-of-delivery

1) The June 2009 CPUC preliminary assessment of cost to reach 33% by 2020 assumes \$1.27 billion in additional levelized annual transmission capital expense (beyond the new transmission needed to reach 20%) to add 36,870 GWh/yr of remote renewable resources by 2020. This equals a transmission penalty of $\$1,270,000,000/36,870,000 \text{ MWh} = \$34.45/\text{MWh}$. However, the transmission expense is levelized over 40 years while renewable generation cost is levelized over 20 years. In reality, both generation and transmission should/will last 40 years or more. A project's useful lifetime and its financing term are not directly linked. 40 years is not the only financing term used for transmission projects. The one merchant transmission line in California, the Transbay Cable, is being financed over 30 years. When the transmission finance period is adjusted to 20 years using the E3 RPS Calculator, a necessary step to allow a direct comparison of the annualized transmission and generation costs in 2020, this increases the annual cost factor from 0.1246 to 0.1676, a 34.5% increase in the annualized cost of transmission. As a result, the transmission penalty must be adjusted upward by an equivalent amount. The adjusted transmission penalty is $\$34.45/\text{MWh} \times (0.1676/0.1246) = \$46.34/\text{MWh}$.

2) This comparison assumes that the annual average value of wind power is equal to the average value of electricity over the course of the year. This assumption works in favor of wind power, as it is typically less available in SoCal during summer peak demand periods (when electricity prices are highest) than in off-peak periods when electricity prices are at their lowest.

The effect of the \$46/MWh transmission penalty on remote wind and solar generation relative to distributed PV is shown in Figure 2. The wind power net COE becomes approximately equal to the distributed PV COE, while the COE for solar thermal rises to a level approximately 50 percent higher on average than the COE for distributed PV.

Figure 2. Effect of transmission penalty on net COE for remote wind and solar



B. Distributed PV Alternative Is Feasible and Has No Environmental Impacts

SDG&E stated in its August 2006 application to the CPUC to build the 1,000 MW Sunrise Powerlink transmission line that the line would be used to transmit “up to 900 MW” of dish Stirling solar power located in Imperial County to San Diego.⁶ Dish Stirling technology was identified as non-commercial by SDG&E only one month before SDG&E signed contracts with the developer for up to 900 MW of capacity.^{7,8} The contract signed by SDG&E requires that 300 MW of dish Stirling capacity be online by 2010.⁹ The technology is now at a pilot stage. The technology owner, Tessler, inaugurated a 1.5 MW pilot plant in Arizona in January 2010.¹⁰

Pilot plants typically must operate for a few years before scale-up to full commercial size is warranted or attempted. The mandatory online dates in the contracts signed in 2005 by SDG&E with the Tessler predecessor company can not be met, and 900 MW of solar capacity touted by SDG&E for San Diego will not occur.

⁶ CPUC Application No. 05-12-014, *Sunrise Powerlink Transmission Project Purpose and Need – Volume 2*, August 4, 2006, p. 1-19.

⁷ *Potential for Renewable Energy in the San Diego Region*, San Diego Regional Renewable Energy Study Group, August 2005. Tom Bialek of SDG&E is co-author of the solar energy sections of this report. See: <http://www.renewables.org/docs/Web/AppendixE.pdf>, p. 2. “Current (parabolic dish) systems have not demonstrated the level of reliability considered necessary for commercial system.”

⁸ Stirling Energy Systems press release, *Stirling Energy Systems Signs Second Large Solar Deal In California - Solar Installation To Produce 300-900 Megawatts*, September 7, 2005.

⁹ CPUC Application No. 05-12-014, *Sunrise Powerlink Transmission Project Purpose and Need – Volume 2*, August 4, 2006, p. 1-19.

¹⁰ Tessler Solar press release, *Tessler Solar and Stirling Energy Systems Unveil World’s First Commercial - Scale SunCatcher Plant, Maricopa Solar, with Utility Partner Salt River Project*, January 22, 2010. “Maricopa Solar is comprised of 60 SunCatcher dishes and will provide 1.5 megawatts of renewable energy to SRP customers in Greater Phoenix, Arizona.”

At a minimum, the dish Stirling contracts show SDG&E is willing to pursue large-scale solar deployments. SDG&E has proposed a small distributed solar PV project, in the range of 50 MW, one-tenth the size of the SCE and PG&E distributed PV projects. However, there is no technical or economic reason that SDG&E can not build distributed PV at the same scale as SCE and PG&E. It is instructive to review highlights of the SCE distributed PV application, as it sheds light on how straightforward the utility perceives the addition of potentially 1,000s of MW of rooftop solar to be.

SCE expressed confidence in its March 2008 application that it can absorb 1,000s of MW of distributed PV without additional distribution substation infrastructure, stating “SCE’s Solar PV Program is targeted at the vast untapped resource of commercial and industrial rooftop space in SCE’s service territory”¹¹ and “SCE has identified numerous potential (rooftop) leasing partners whose portfolios contain several times the amount of roof space needed for even the 500 MW program.”¹²

SCE stated it has the ability to balance loads at the distribution substation level to avoid having to add additional distribution infrastructure to handle this large influx of distributed PV power.¹³ SCE explains:

SCE can coordinate the Solar PV Program with customer demand shifting using existing SCE demand reduction programs on the same circuit. This will create more fully utilized distribution circuit assets. Without such coordination, much more distribution equipment may be needed to increase solar PV deployment. SCE is uniquely situated to combine solar PV Program generation, customer demand programs, and advanced distribution circuit design and operation into one unified system. This is more cost-effective than separate and uncoordinated deployment of each element on separate circuits.¹⁴

As SCE states, “Because these installations will interconnect at the distribution level, they can be brought on line relatively quickly without the need to plan, permit, and construct the transmission lines.”¹⁵ This statement was repeated and expanded in the CPUC’s June 18, 2009 press release regarding its approval of the 500 MW SCE urban PV project:¹⁶

Added Commissioner John A. Bohn, author of the decision, “This decision is a major step forward in diversifying the mix of renewable resources in California and spurring the development of a new market niche for large scale rooftop solar applications. Unlike other generation resources, these projects can get built quickly and without the need for expensive new transmission lines. And since they are built on existing structures, these projects are extremely benign from an environmental standpoint, with neither land use, water, or air emission impacts. By authorizing both utility-owned and private development of these projects we hope to get the best from both types of ownership structures, promoting competition as well as fostering the rapid development of this nascent market.”

Rooftop PV arrays are exempt from CEQA and NEPA. This is a major reason why rooftop PV can be deployed rapidly.

¹¹ SCE Application A.08-03-015, *Solar Photovoltaic (PV) Program Application*, March 27, 2008, p. 6.

¹² SCE Application A.08-03-015, *Solar Photovoltaic (PV) Program Testimony*, March 27, 2008, p. 44.

¹³ SCE Application A.08-03-015, *Solar Photovoltaic (PV) Program Application*, March 27, 2008, pp. 8-9.

¹⁴ *Ibid.*, p. 9.

¹⁵ *Ibid.*, p. 6.

¹⁶ CPUC Press Release – Docket A.08-03-015, *CPUC Approves Edison Solar Roof Program*, June 18, 2009.

C. Recent Dramatic Reduction in Cost of Distributed PV Is Game Changer

The August 2008 Renewable Energy Transmission Initiative (RETI) Phase 1A report states that distributed PV at a then current state-of-the-art installed capital cost of \$3.70/watt_{ac} can provide two-thirds of what California needs going forward to reach 33 percent renewable energy by 2020:

The results of this sensitivity run are dramatic. More importantly, the cost-competitive in-state (distributed PV resources) increase by more than 20 times to about 45,000 GWh/yr. This figure is over two-thirds of the net short requirement [then assumed to be ~65,000 GWh/yr]. The large majority of these (distributed) resources are 20 MW solar PV projects assumed to connect to the distribution system.

RETI explained the genesis of the \$3.70/watt_{ac} thin-film PV capital cost as:¹⁷

An “alternate scenario” was proposed in the report (Section 3.8) to test lower future solar costs. Black & Veatch will run this scenario for thin film photovoltaic systems with a capital cost of \$2,700/kW_{ac} to \$3,500/ kW_{ac}. This is based on module costs of \$1,500/ kW_{ac} to \$1,700/ kW_{ac} and “balance of system” costs of \$1,200/ kW_{ac} to \$1,800/ kW_{ac}. These module costs are based on First Solar’s 2010 target production cost of \$0.90/watt_{dc}. Balance of system includes inverters, installation, mounting systems and site costs.”

First Solar states its average panel production cost in the third quarter of 2009 was \$0.85/watt_{dc}, somewhat less than the \$0.90/watt_{dc} price basis used by Black & Veatch to establish a \$2,700/ kW_{ac} to \$3,500/ kW_{ac} price range for thin-film PV in the RETI process. Therefore use of a \$3.70/watt_{ac} capital cost is conservative for thin-film PV in 2009. This PV capital cost is expected to continue dropping in 2010 and subsequent years.

Sempra Energy, SDG&E’s parent company, advertises that its 10 MW thin-film PV installation in Boulder City, Nevada produces the lowest cost solar power in the world.¹⁸ The output from this plant is being sold under long-term PPA to PG&E. Sempra announced on April 15, 2009 that it will add an additional 48 MW of PV at the same site by 2010.¹⁹

D. There Is 2,600 MW of Distributed Commercial-Scale PV Potential in San Diego County

Black & Veatch is the engineering contractor preparing the RETI reports. Energy & Environmental Economics, Inc. (E3) is the engineering contractor that prepared the June 2009 CPUC preliminary analysis of the cost to reach 33 percent renewable energy by 2020. These two firms now lead the CPUC’s renewable distributed generation (“Re-DEC”) working group process. The presentation of E3 and Black & Veatch at the December 9, 2009 initial meeting of the Re-DEC Working Group included an estimate of over 2,600 MW_{ac} of ground-mounted and

¹⁷ RETI, *Phase 1A Final Report*, August 2008, Appendix B, p. 5-5.

¹⁸ *Sempra Solar Energy Project Makes Advances in Costs*, Los Angeles Times, January 5, 2009.

¹⁹ Sempra Energy press release, *Sempra Generation Proposes New 48-Megawatt Solar Energy Plant - Planned Project Would Become the Largest Operational Photovoltaic Solar Installation in North America*, April 15, 2009.

commercial rooftop PV in SDG&E service territory.²⁰ No estimate of commercial parking lot PV potential is included in the Re-DEC distributed PV estimate for SDG&E service territory. Available estimates indicate the commercial parking lot PV potential should be greater than the commercial rooftop potential of approximately 1,800 MW.

E. Worldwide PV Panel Manufacturing Capacity Is Large and Underutilized

More than 5,000 MW of PV was installed worldwide in 2008.²¹ Worldwide thin-film PV production capacity reached 3,600 MW per year in 2008. Thin-film PV manufacturing capacity is projected to reach 7,400 MW per year in 2010. First Solar alone manufactured and shipped more than 1,000 MW of thin-film panels in 2009.²²

Worldwide conventional polycrystalline silicon PV production capacity reached 13,300 megawatts a year in 2008.²³ It is projected to reach 20,000 megawatts a year in 2010. The 2010 projections were made just as the economic slump began in late 2008. It is likely there will be some scale-back on the 2010 capacity additions due to the state of the world economy. Nonetheless, there is a tremendous amount of available worldwide PV manufacturing capacity.

PV panel manufacturing capacity has greatly expanded worldwide in the last 2 to 3 years. The current estimated oversupply of PV panel manufacturing capacity for 2010 is 8,000 MW.²⁴ As a result of this oversupply, the cost of conventional polycrystalline PV panels has dropped precipitously and is approaching the cost of thin-film PV panels. The *Wall Street Journal* recently reported that conventional solar panel prices have fallen by \$2 a watt since 2008, due to too much solar manufacturing capacity chasing too few solar projects.²⁵

California added 158 MW of distributed PV in 2008. California is a relatively minor player on the world PV stage. Spain added approximately 2,500 MW of primarily distributed ground-mounted PV resources in 2008.²⁶ Spain has a smaller economy than California. Germany, approximately the same size as California and with considerably lower solar intensity, added approximately 1,500 MW of distributed PV resources in 2008 and will add at least 2,000 MW in 2009.²⁷

²⁰ The Dec. 9, 2009 Re-DEC presentation arbitrarily estimated (p. 33) that only one-third of inventoried commercial roof space would be available for PV deployment. When the commercial roof capacity (p. 34) is adjusted from one-third potential (598 MW) to full potential (1,794 MW), the total SDG&E potential increases to 2,601 MW. The 1,794 MW adjusted commercial rooftop PV estimate in the Re-DEC presentation is consistent with the August 2005 SDG&E commercial rooftop PV estimate of

²¹ Schreiber, D. - EuPD Research, *PV Thin-film Markets, Manufacturers, Margins*, presentation at 1st Thin-Film Summit, San Francisco, December 1-2, 2008.

²² First Solar press release, *First Solar Becomes First PV Company to Produce 1GW in a Single Year*, December 15, 2009.

²³ Schreiber, D. - EuPD Research, *PV Thin-film Markets, Manufacturers, Margins*, presentation at 1st Thin-Film Summit, San Francisco, December 1-2, 2008.

²⁴ B. Murphy – Fulcrum Technologies, Inc., *The Power and Potential of CdTe (thin-film) PV*, presented at 2nd Thin-Film Summit, San Francisco, December 1-2, 2009.

²⁵ Wall Street Journal, *Darker Times for Solar-Power Industry*, May 11, 2009.

²⁶ PV Tech, *Worldwide photovoltaics installations grew 110% in 2008, says Solarbuzz*, March 16, 2009.

²⁷ PV Tech, *German market booming: Inverter and module supplies running out at Phoenix Solar*, November 15, 2009.

F. SDG&E Can Readily Develop the 2,600+ MW of Commercial Distributed PV Potential in its Service Territory with Minimal Interconnection Cost

The CPUC has also calculated, for the entire inventory of approximately 1,700 existing investor-owned utility (IOU) substations, the amount of distributed PV that could be accommodated with minimal interconnection cost based on the following reasoning:²⁸

Rule 21 specifies maximum generator size relative to the peak load on the load at the point of interconnection at 15%. So, for example, if a generator is interconnected on the low side of a distribution substation bank with a peak load of 20 MW, the maximum Rule 21 interconnection criteria would allow a 3 MW system ($3 \text{ MW} = 15\% * 20 \text{ MW}$).

However, the 15% criterion, which is established for all generators regardless of type, was adjusted to 30% for the purposes of determining the technical potential of PV. The 15% limit is established at a level where it is unlikely the generator would have a greater output than the load at the line segment, even in the lowest load hours in the off-peak hours and seasons (such as the middle of the night and in the spring). Since the peak output for photovoltaics is during the middle of the day, PV is unlikely to have any output when loads are lowest. Therefore, a 30% criterion was used for technical interconnection potential estimates. The discussion was held with utility distribution engineers, however, we did not consider formal engineering studies or Rule 21 committee deliberation since the purpose of the analysis was only to define potential.

The CPUC assumes that larger PV arrays will be connected directly to the substation low-side (12 kV) load bank. SDG&E estimated that the cost of a 10 MW feeder is \$0.6 million per mile.²⁹ The cost of a 3-mile long dedicated feeder from multiple rooftop PV arrays with a combined capacity of 10 MW to the low-side bus of the substation would be less than \$2 million based on SDG&E's cost estimate.

The current capital cost for state-of-the-art commercial rooftop PV is approximately \$3,700/kW_{ac}. The gross capital cost of 10 MW of rooftop PV at current prices would be $\$3,700/\text{kW} \times (1,000 \text{ kW}/\text{MW}) \times 10 \text{ MW} = \37 million . The cost to construct a dedicated feeder to interconnect 10 MW of rooftop PV would be approximately 5 percent of the gross project capital cost. This is a relatively minor cost and represents no financial impediment to developing urban rooftop PV resources.

An upgrade at the substation would be necessary to accommodate the higher powerflows in cases where distributed PV, concentrated on clusters of large rooftops, could provide up to 100 percent of a single substation's peak load. A typical 12 kV/69 kV substation can be upgraded to allow two-way powerflows for up to 100 MW of interconnected distributed PV. SDG&E estimates the

²⁸ CPUC Rulemaking R.08-08-009 – California RPS Program, Administrative Law Judge's Ruling on Additional Commission Consideration of a Feed-In Tariff, *Attachment A - Energy Division FIT Staff Proposal*, March 27, 2009, p. 15.

²⁹ Application No. 06-08-010, Matter of the Application of San Diego Gas & Electric Company (U-902-E) for a Certificate of Public Convenience and Necessity for the Sunrise Powerlink Transmission Project, *Chapter 5: Prepared Rebuttal Testimony of SDG&E in Response to Phase 2 Testimony of Powers Engineering*, March 28, 2008, p. 5.20.

cost to build a new 12 kV/69 kV substation is \$25 million.³⁰ The upgrades necessary to allow problem-free two-way powerflow across an existing substation should cost considerably less than a new substation. However, even the cost of a new substation, at \$25 million, is less than 10 percent of the gross capital cost of 100 MW of state-of-the-art PV at 2009 prices. The substation upgrade cost would be relatively minor compared to the gross capital cost of 100 MW of PV arrays, and would not present a substantive financial hurdle to developing a 100 MW distributed PV resource concentrated in an area served by a single existing substation.

G. CEC Has Already Determined Distributed PV Can Compete Cost-Effectively with Other Forms of Generation

The CEC denied an application for a 100-megawatt natural-gas-fired gas turbine power plant, the Chula Vista Energy Upgrade Project (CVEUP), in June 2009 in part because rooftop solar PV could potentially achieve the same objectives for comparable cost.³¹

This June 2009 CEC decision implies that any future applications for gas-fired generation in California, or any other type of generation including remote utility-scale renewable energy generation like ISEGS that require public land and new transmission to reach demand centers, should be measured against using urban PV to meet the power need. The CEC's final decision in the CVEUP case stated:³²

Photovoltaic arrays mounted on existing flat warehouse roofs or on top of vehicle shelters in parking lots do not consume any acreage. The warehouses and parking lots continue to perform those functions with the PV in place. (Ex. 616, p. 11.)...Mr. Powers (expert for intervenor) provided detailed analysis of the costs of such PV, concluding that there was little or no difference between the cost of energy provided by a project such as the CVEUP (gas turbine peaking plant) compared with the cost of energy provided by PV. (Ex. 616, pp. 13 – 14.)...PV does provide power at a time when demand is likely to be high—on hot, sunny days. Mr. Powers acknowledged on cross-examination that the solar peak does not match the demand peak, but testified that storage technologies exist which could be used to manage this. The essential points in Mr. Powers' testimony about the costs and practicality of PV were uncontroverted.

The CEC concluded in the CVEUP final decision that PV solar arrays on rooftops and over parking lots may be a viable alternative to the gas turbine project proposed in that case, and that if the gas turbine project proponent opted to file a new application a much more detailed analysis of the PV alternative would be required. This conclusion is even more applicable to wind turbines than gas turbines, as wind turbines provide almost no peak demand reliability compared to distributed PV.

³⁰ Ibid, p. 5.21.

³¹ CEC, Chula Vista Energy Upgrade Project - Application for Certification (07-AFC-4) San Diego County, *Final Commission Decision*, June 2009.

³² Ibid, pp. 29-30.

III. Use of the Two CFE 230 kV Lines Passing Through ESJ Wind Development Area Must be Evaluated as Alternative to ECO Substation

The Mexican utility monopoly Comision Federal de Electricidad (CFE) has stated publicly that it has 800 MW of spare capacity on its existing two 230 kV lines that pass through the ESJ wind development area, and that CFE can wheel the ESJ wind power to the US.³³ These two lines are interconnected to WECC Path 45 and join the SDG&E system at two points, Imperial Valley and Tijuana. The two lines are shown as two green lines running parallel to the border in Figure 3 below. CFE powerflows through Path 45 to SDG&E prevented blackouts during the late October 2007 firestorms in San Diego County that simultaneously disabled SDG&E's two main transmission corridors.³⁴

The existing CFE 230 kV lines can also be reconducted with composite cables to increase capacity by at least a factor of two. Reconducting in this manner would assure sufficient capacity on the CFE 230 kV lines to move all of the 1,250 MW wind energy potential identified by SDG&E as the primary justification for the ECO substation. It would be the responsibility of Sempra Energy to reach a financial agreement with the CFE on reconducting if and when such a project would be necessary. Reconducting is discussed in more detail in the next section of this comment letter.

Use of these existing 230 kV lines to move ESJ wind power would also avoid the CPUC and BLM granting a de facto monopoly on Baja California wind power exports to the California. Sempra has requested a DOE Presidential Permit for a 1,250 MW generator-tie. Granting such a generator-tie to a 1,250 MW natural-gas fired power plant, like Sempra's 1,250 MW Mesquite Plant in Arizona, would be understandable. However, in this case, the DOE will effectively be granting Sempra exclusive "gatekeeper" control over 1,250 MW of dispersed wind resources in Baja California that have yet to be built and may never be built.

Also, the guaranteed income that SDG&E will receive by ratebasing the \$270 million ECO substation project will more than offset the investment in transmission infrastructure in Baja California necessary to interconnect the wind turbines to the substation. This is an insurmountable economic advantage in favor of Sempra over wind competitors in Baja California that can not hedge risk by building complementary regulated utility infrastructure. This will eliminate competition in the Baja California wind resource area, and accentuate Sempra's already dominant presence in Baja California energy markets.

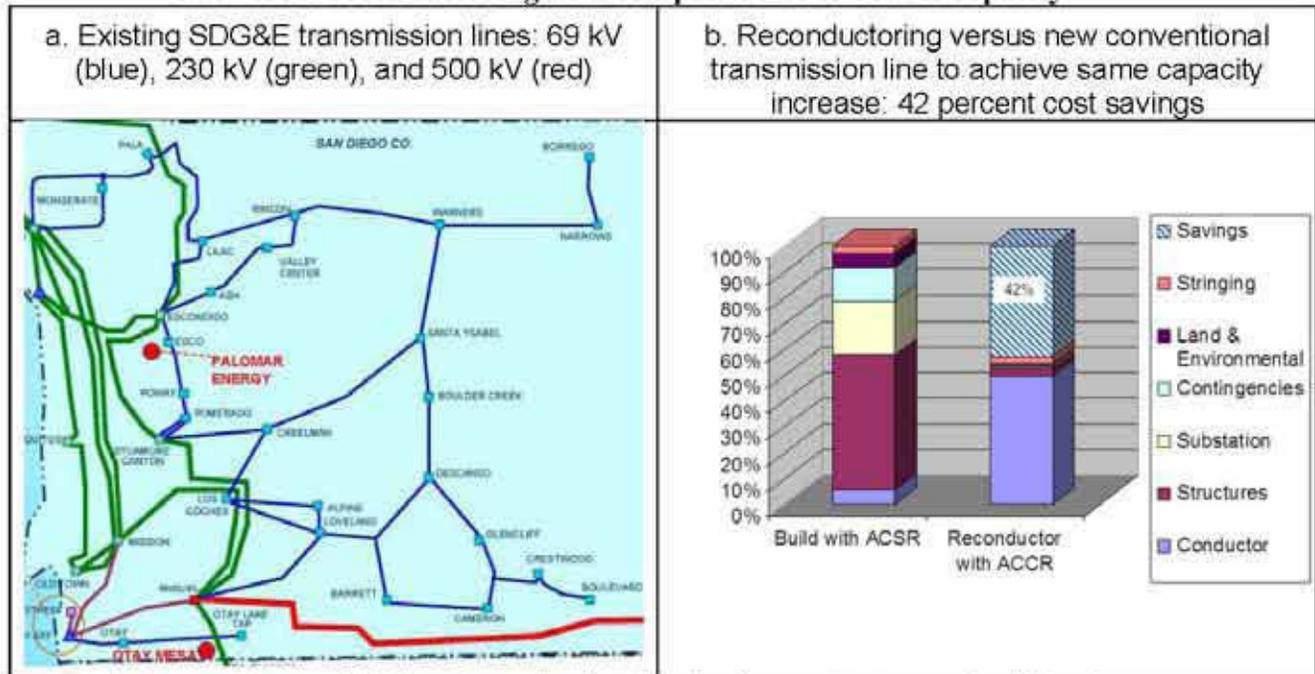
³³ California Energy Markets, *Mexico Could Be Wind Hotspot If Wires, Border Issues Are Solved*, June 17, 2008.

³⁴ San Diego Union Tribune, *Local plants filling power need*, October 24, 2007. "Beyond the county resources, SDG&E said, power officials in Mexico have authorized exports to San Diego County that are meeting about 10 percent of the region's demand."

of single 69 kV could be increased by nearly 150 MW by reconductoring with composite conductors.³⁵ Use of 138 kV lines would increase transmission capacity further.

One type of high temperature, low sag composite conductor is manufactured by 3M Company. SDG&E has a test section of the 3M high temperature, low sag conductor on a section of a 69 kV line.³⁶ According to data provided by 3M, it is significantly less expensive to replace the wire on an existing 69 kV line with this type of composite conductor than to build a new 69 kV line. The relative cost of reconductoring an existing 69 kV line compared to a new 69 kV line is shown in Figure 4b.

Figure 4. Existing SDG&E 69 kV grid and relative cost of a new stand-alone transmission line versus reconductoring with composite line to double capacity^{37,38}



ACSR: aluminum conductor steel reinforced (conventional); ACCR: aluminum conductor composite reinforced

³⁵ As shown in Figure 4a, there are four existing 69 kV corridors in the eastern section of San Diego County. According to SDG&E direct testimony by Richard Sheaffer on April 14, 2006 in CPUC proceeding A.06-04-018 that the 69 kV rating of SDG&E's Escondido to Felicita 69 kV line will be increased to 137 MW using a standard steel reinforced conductor. "Acceleration of the reconductoring of the Escondido to Felicita 69 kV line. . . The project would increase the rating of the 69 kV line from 97.5 MVA to 137 MVA using a single 1033 kCMIL aluminum conductor steel reinforced ("ACSR") conductor or equivalent." 137 MVA is equivalent to 137 MW. Assuming the MW capacity of an aluminum conductor composite reinforced ("ACCR") standard 69 kV line could be increased from 137 MW to at least 275 MW if it is reconductored with a high temperature, low sag line.

³⁶ CPUC A.05-12-014, Sunrise Powerlink, SDG&E application for Certification of Public Convenience and Necessity, SDG&E data response to Data Request Number 1, Submittal 3 of 3, November 17, 2006, p. 13. "In July 2005, SDG&E installed three spans (total of approximately 910 ft.) of ACCR conductor on an existing 69 kV transmission line as part of this research project."

³⁷ SDG&E PowerPoint, *Transmission Constraints to Geothermal Resource Development*, CEC IEPR Committee Workshop, April 11, 2005, p 7.

³⁸ 3M aluminum conductor composite reinforced (ACCR) website, Benefits – Save Money, http://solutions.3m.com/wps/portal/3M/en_US/Energy/Advanced/Materials/Industry_Solutions/MMC/ACCR/Benefits/ROI

V. EIR/EIS Must Evaluate the Environmental Viability and Cost-Competitiveness of Baja California Wind Power and Make a Determination whether Significant Amounts of Baja Wind Power will Serve the California Power Market

The CEC is actively studying the possibility that the Sempra-owned Costa Azul liquefied natural gas (LNG) import terminal near Ensenada could serve as a hub of natural gas-fired generation to serve Southern California. Figure 3 shows the new transmission requirements of this scenario. The October 2008 CEC study states:

“Export of 8,500 MW of generation from Baja to the U.S. would require substantial investment in electric transmission infrastructure on both sides of the border. Furthermore, since the Southern California load centers immediately adjacent to the border with Mexico (these are, San Diego and the Imperial Valley) do not have sufficient demand to absorb 8,500 MW of exports from Baja, the electric transmission plan of service must extend to the greater Los Angeles load center. It is anticipated that if such an infrastructure were to be built, the resulting new generation would displace older, less efficient generation as well as support demand growth in California.”

Sempra to date has invested no money in Baja California wind developments, despite the CFE stating it has 800 MW of available transmission capacity on the 230 kV lines that pass through the ESJ wind resource area and connect directly to the SDG&E grid via Path 45. On the other hand, Sempra has invested somewhere between \$1.5 and 2 billion in a LNG import terminal and associated natural gas pipelines in Baja California. The October 2008 CEC study cited above definitely implies that both the state and Sempra continue to evaluate options available to fully utilize its LNG import capability and power/natural gas transmission capacity. Sempra states in its Presidential Permit application to the DOE that if the ECO substation is built to accept wind power from Baja California, then the 1,000 MW Sunrise Powerlink transmission line must be built to move power that will be displaced by the wind energy.

These competing objectives raise the fundamental question as to whether any significant amount of wind energy will flow into the ECO substation from Baja California, for reasons unrelated to the availability of transmission access. Unless the CPUC intends to require only renewable energy on the generator-ties interconnecting to the ECO substation, then the EIR/EIS must evaluate a scenario where related projects include a substantial increase in gas-fired generation in Baja California flowing north over border transmission lines to Southern California load centers.

Mexico has no investment tax credit or production tax credit for renewable energy.³⁹ It is the investment tax credit and the production tax credit that have made wind energy cost-competitive in the US. Also, Baja wind project bids received by SDG&E indicate a wind resource with significantly less intensity than comparable sites north of the border.⁴⁰ It is not clear whether export wind development is even economically viable in Baja California due to the lack of tax

³⁹ California Energy Markets, *Mexico Could Be Wind Hotspot If Wires, Border Issues Are Solved*, June 17, 2008. “In addition, Mexican renewables are ineligible for U.S. tax credits, which for wind equate to about 3 cents/kWh in levelized value. And in bids received by San Diego Gas & Electric, La Rumorosa developers have quoted capacity factors of 30 percent compared to the 35 to 40 percent touted by U.S. wind companies.”

⁴⁰ *Ibid.*

credits available to wind energy producers in Mexico and the lower wind intensity. This calls into question the legitimacy of Sempra's claims that cross-border transmission to the proposed ECO substation is needed for wind energy.

Another complicating factor is the difficulty in determining whether wind energy development in Baja California can meet or will meet CEQA requirements. The CEC's December 2009 Integrated Energy Policy Report states (p. 77):

"Another eligibility issue is the delivery of renewable generation from out-of-state generators. Generation from a renewable power plant located outside of California is eligible for the state's RPS if the facility began operating after January 1, 2005, can demonstrate delivery of energy into California, and does not cause or contribute to any violation of a California environmental quality standard or requirement within California. As of September 2009, the Energy Commission has certified only 24 out-of-state renewable facilities as eligible for the RPS, compared to more than 576 eligible in-state facilities."

It is this requirement that resulted in SCE withdrawing the power purchase agreement with Sempra for 250 MW of Baja wind power.

VI. EIR/EIS Must Evaluate a Micro-Grid Alternative to Reinforcement of Transmission Infrastructure in Mountain Empire

The Mountain Empire has a population of approximately 7,000 people, in approximately 2,500 households.⁴¹ The average electricity demand per household in California is 7,200 kilowatt-hours (kWh) per year.⁴² This level of average household demand can be completely met by a 4 kW rooftop PV system. The approximate total PV capacity necessary to supply 100 percent of the annual electricity needs of the Mountain Empire is: 4 kW/household x 2,500 households = 10,000 kW (10 MW). The net installed cost of a 10 MW PV system would be less than \$20 million when the 30 percent investment tax credit and accelerated depreciation are taken into consideration. The cost would be incrementally higher if the PV were located on individual rooftops. However, if the PV were located on individual rooftops, it would completely eliminate the need for any reinforcement of the existing 69 kV system or distribution feeders currently serving Mountain Empire households and businesses. It would also convert Mountain Empire into a 100 percent clean energy region on a net basis.

SDG&E is currently developing a micro-grid project for Borrego Springs.⁴³ This cutting-edge project has been lauded by SDG&E's former CEO Debra Reed as the wave of the future.⁴⁴ SDG&E states that "*Borrego offers SDG&E an opportunity to be the leader in the micro-grid area, with the possibility of being able to island an entire substation with peak load of over 10*

⁴¹ See: <http://www.city-data.com/city/Mountain-Empire-California.html>. Mountain Empire population July 2007, 6,793. Average household size, 2.8 per household. Total households: 6,973/2.8 = 2,490 households.

⁴² The CEC's 2007 Integrated Energy Policy Report states there are 12.5 million households in California (p. 36, Figure 2-1). It also states the residential electric consumption in 2006 was 90,000 GWh (Figure 2-3, p. 38). Dividing the second by the first gives average consumption per household of 7,200 kWh/yr in California.

⁴³ Tom Bialek – SDG&E, SDG&E Microgrid Projects - EPRI Smart Grid Advisory Meeting, PowerPoint presentation, October 13, 2009.

⁴⁴ San Diego Union Tribune, *Smart power use among issues facing SDG&E boss*, January 4, 2010. "One of the things we're doing, as part of the smart-grid pilot that we're doing, is the microgrid out in Borrego right now."

MW,” and that the micro-grid concept is “*extendable to (the) service territory.*” The Mountain Empire is in SDG&E service territory, is isolated like Borrego Springs, and has a population and electric load comparable to Borrego Springs.⁴⁵ The EIR/EIS must evaluate the cost and feasibility of a micro-grid alternative to the proposed conventional transmission reinforcement approach for the Mountain Empire.

Please feel free to call me at (619) 295-2072 or e-mail at bpowers@powersengineering.com if you have any questions about this comment letter.

Best regards,

Bill Powers, P.E.

Bill Powers, P.E.
Powers Engineering
4452 Park Blvd., Suite 209
San Diego, CA 92116

tel: 619-295-2072
fax: 619-295-2073
cell: 619-917-2941

⁴⁵ The year-round population of Borrego Springs is approximately 3,000. The seasonal population is more than 10,000. See: <http://www.borregospringschamber.com/library.html>

CPUC/Dudek Reps.

Please see the attached comment letter regarding the referenced East County Substation Project for which Dudek is handling the responses to public comments to the NOP.

Thank you.

William Vandivere, P.E.
President, Rasayana
& Principal: Clearwater Hydrology
2974 Adeline St.
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(510)841-1610 (fax)

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Rasayana

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Feb. 10. 2010

Iain Fisher
California Public Utilities Commission
c/o Dudek
605 Third Street
Encinitas, CA 92024

**RE: Response to NOP for Proposed SDGE East County Substation and
Transmission Line Project**

Dear CPUC Staff and Dudek,

I hold the office of President and am a Director of Rasayana, a 501(c)(3) non-profit religious and educational organization. Rasayana's principal office is located in Berkeley, CA. Our non-profit, corporate purpose is to own land, buildings and supporting infrastructure for the religious and educational use of other non-profit organizations in furthering the teachings of schools of spiritual wisdom, including but not exclusive to: Yoga, Kaishmir Shavism, Taoism, Tantric Buddhism, Bon and Sufism. In so doing, Rasayana's supports the communities that practice and live the teachings of the various spiritual traditions of our planet.

Rasayana holds contracts for sale or owns three parcels (#659 030 04, #659 030 11 00, and #612 120 53 00) comprising a total of 160 acres off Jewel Valley Road in Boulevard. Two residences and related structures occupy the parcels with street addresses of 1585 and 1521 Jewel Valley Road. The combined residences and the surrounding parcel lands also comprise a residential retreat and training center which offers daily free yoga, free food, and free spiritual instruction to the public. The residences house full-time residents/staff associated with long-time tenant, The New Being Project, an IRS-designated 501(c)(3) non-profit church. The New Being Project (NBP) has leased these properties with the assistance of friend and community member Luke Gordon since 1994. (Mr. Gordon has also submitted a letter in response to the project NOP.) It has done so solely due to the land's seclusion and the absence of urban influences, the natural beauty of the terrain, the availability of potable groundwater and arable land for the development of sustainable agriculture, and its proximity to the coastal metropolitan areas of San Diego and Los Angeles and Orange Counties.

The proposed route for the 138kV transmission lines extending northward from the border to the ECO Substation would pass through and essentially dissect our property. Since the three parcels together are utilized for a single undissectable purpose (spiritual training, residential retreat and sustainable living), this massive physical and electromagnetic intrusion (i.e. electromagnetic field) would have a significant and adverse impact on both Rasayana's ability to maintain the properties for their intended function/purpose and the economic value of the property, should it be necessary to sell it at diminished market value.

Environmental Impact Concerns Related to Transmission Line Construction/Operation

Based on the Significance Criteria cited in the NOP checklist, Rasayana has the following concerns regarding the project's environmental impacts on the subject property:

- 1) Aesthetics/Visual Impact- The 150 ft-high transmission towers and electrical lines would dominate the landscape of the parcels and have a significant and unavoidable impact on the existing, visual beauty of the terrain and on scenic vistas from the property's granitic mountain outcrops. Given the use of the properties as a residential retreat and training center for sustainable living, the impact would be doubly egregious.
- 2) Agricultural Resources- The construction of improved access road(s) to the tower sites and any impervious surfaces associated with the tower foundations would likely convert arable land to non-agricultural use in perpetuity. The current lessee, NBP, cultivates some of the property for onions, and additional land for vegetables for consumption by the NBP community as part of NBP's sustainable living program. Their objective, supported fully by Rasayana, is to expand the current acreage in cultivation to include most of the parcels forded by the proposed towers. The areal extent of project-related conversion would depend on the extent and positioning of these impervious surfaces on the land.
- 3) Hazardous Materials and Water Quality- The NOP indicated that some hazardous materials would be used in conjunction with tower construction, operation and maintenance. The alluvial aquifer that underlies the 1585 Jewel Valley Road property supplies 95-99 percent of the potable water used by the retreat center. Introduction of hazardous materials into surface soils, abetted by infiltration and percolation of rainfall, will over time reach the water supply aquifer- as no impermeable strata overlie it. If such unintended contamination of surface soils were to occur as the result of tower and related facilities construction, operation or maintenance, the impact on groundwater quality could be significant.
- 4) Hydrology- The construction of impervious surfaces associated with tower foundations and access roadways would potentially decrease the area of groundwater recharge for the drinking water aquifer. The areal extent of this impact would depend on the actual area occupied by such impervious surfaces.

During the recent drought, groundwater levels in the two on-site wells that supply potable water to the property's storage tanks have receded seasonally to levels that have begun to affect well pumping capacities. Thus, small decreases in recharge become more significant.

Another potential hydrologic impact related to construction-related excavations (e.g. for foundation piers) and road reconstruction is the presence of a relatively shallow potable water line that crosses the existing unimproved access road and links the on-site water wells with the storage tanks just east of the roadway. Damage to this water line during construction could cut-off water supplies to both residences and cut-off the delivery of irrigation water to the cultivated portions of the parcels until repairs were completed.

- 5) **Geology and Soils-** The construction of the transmission towers and support infrastructure will denude portions of the property. Subsequent winter rains could increase site erosion and downslope sedimentation. Regeneration of desert vegetation takes more time than does vegetation in wetter climates. Thus, the period of susceptibility will be longer without appropriate measures to revegetate the site and control soil erosion.
- 6) **Electromagnetic Field-** The EMF impact of above-ground transmission towers and lines would be as significant and unavoidable as the visual impact to those involved in spiritual residency/training, studies and sustainable living pursuits (agricultural and animal husbandry). One of the benefits of meditation and related spiritual practices is the resulting refinement of one's ability to sense/feel and perceive the natural world. The EMF created by high-voltage transmission would negate the benefits gained through these spiritual practices for existing and prospective residents- and make it impossible for Rasayana to fulfill its non-profit purpose.

Potential Mitigations for Identified Environmental Impacts

To reduce the significance of the impacts identified above, Rasayana recommends the following:

Visual/Aesthetics: As indicated in the letter from J. Freeburn, representing lessee NBP, I concur that two possible mitigations are available for reducing this impact to a less than significant level:

Mitigation 1a- Preferred Mitigation: Reroute the transmission towers and lines to points far enough removed from the Rasayana/L. Gordon properties to eliminate them from any sight lines available on the property.

Mitigation 1b- Lesser Preferred Mitigation: Bury the segment of the lines that would pass through our properties. While it would likely be more costly to implement than

the proposed above-ground alignment, it would allow Rasayana and lessee, NBP, to continue to utilize the land for their shared purpose. (Also, see relation to EMF impact mitigation.)

Agricultural Resources:

Mitigation 2: The impact on agricultural resources would be mitigated in full or in part by implementation of Mitigation 1a or Mitigation 1b, respectively.

Hazardous Materials and Water Quality:

Mitigation 3- Apply Best Management Practices (CA. Stormwater Quality Manual- Construction Activity) during construction for on-site transport, handling and source controls of hazardous materials. Provide for inspection of construction activities by a County inspector, water quality inspector/specialist from the Regional Water Quality Control Board, or other oversight agency to ensure compliance. Provide evidence of post-project sequestration of potential hazardous materials leakage from transmission tower facilities from surrounding soils. This will also facilitate possible cleanup operations/maintenance should unanticipated leakage/spills occur.

Hydrology: Groundwater Recharge and Water Line Disturbance

Mitigation 4a- Use porous pavement in place of regular asphalt pavement for any segments of access road reinforcement. This would allow for infiltration of rainfall and reduce the local impact on groundwater recharge to the potable water aquifer underlying the property to a level of insignificance.

Mitigation 4b- Contact Rasayana and NBP representatives prior to the start of any construction so that the existing water line alignment can be flagged and avoided/protected during construction.

Geology and Soils:

Mitigation 5- Prepare an erosion control and long term revegetation plan for all areas disturbed by grading, tower construction and line installation. This plan should include plant species, specifications for installation, short-term irrigation for establishment and any physical measures to protect soils prior to the establishment of the near-ground canopy of desert vegetation.

Electromagnetic Field:

Mitigation 6- Impacts from EMF can be fully mitigated by implementing Mitigation 1a above, or can be mitigated to an acceptable degree by implementing Mitigation 1b.

Rasayana joins respondents Jim Freeburn (NBP) and Luke Gordon in asking that we collectively be contacted and enjoined in the process of mitigating the impacts of the ECO Substation and Transmission Line project on our properties.

Yours truly,



William Vandivere, P.E.
President/Director, Rasayana
& Principal, Clearwater Hydrology
2974 Adeline St.
Berkeley, CA 94703
(510)421-1756
(510)841-1610 (fax)



U.S. House of Representatives
Washington, DC 20515-0552

February 11, 2010

Mr. Michael Peevey
President, California Public Utilities Commission
505 Van Ness Ave, Room #5213
San Francisco, CA 94102

Mr. Thomas Zale
Project Manager, El Centro Field Office
U S Bureau of Land Management
1661 S. 4th St
El Centro, CA 92243

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EL CENTRO, CA

Dear Mr. Peevey and Mr. Zale:

I am writing regarding the environmental review currently taking place by the California Public Utilities Commission (CPUC) and Bureau of Land Management (BLM) on the impacts of the proposed Tule wind energy generation project and the San Diego Gas and Electric (SDG&E) Sunrise Powerlink transmission line project in East San Diego County. While the goal to create renewable energy projects to reduce reliance on foreign fossil fuels is a worthy one, I continue to have significant reservations regarding these projects, a large portion of which are located within my congressional district.

As a whole, the cost of these projects to taxpayers and the suitability of the route sites are of utmost importance, especially taking into consideration that not all alternatives have been thoroughly reviewed and considered. Concerns continue to be raised by local property owners and industry experts that these projects are too expensive, environmentally destructive, pose public safety concerns and will substantially adversely affect the quality of life and character of East San Diego County.

For example, the proposed Tule wind energy generation project is a \$400 million effort, 30 percent of which is being provided in federal stimulus funds to Iberdrola Renewables, a Spanish corporation. If approved, American taxpayer dollars that were to be specifically utilized for the creation of American jobs will instead be used to provide opportunities to a foreign-owned company to invest and build energy infrastructure that it will then use to charge and profit off of American customers. Unfortunately, this has occurred elsewhere throughout the country. The *San Diego Union Tribune* recently reported that of the \$2 billion the federal government has provided thus far to spur the national economy and create government-energy jobs, more than 75 percent has gone to foreign-owned companies. While some may describe this as part of the effort to pursue a "green energy future," I call it irresponsible.

Aside from the cost, I am concerned with the closure of public lands that will occur as a result of these projects. It is my understanding that the Tule Wind Project will require 15,000 acres of public lands and the Sunrise Powerlink will affect public lands all throughout my district, including the McCain Valley National Land and Wildlife Conservation Area, the Cleveland National Forest, Lake Jennings, Lark Canyon OHV Park, Cottonwood Campground and various parks and trails in the El Monte Valley area. This represents thousands of acres in East San Diego County that are significantly utilized by my constituents no longer being accessible, appealing, or safe for a wide variety of recreational uses.

Additionally, these projects pose an increased threat of wildfire from lightning strikes, malfunctioning turbines, substations, underground vaults, and related infrastructure. As you know, this region has been devastated by massive wildfires twice in the past six years where mandatory evacuations were implemented, many lives were lost and millions of dollars in property were completely destroyed. It simply is not prudent to introduce new projects into an area that is already prone to wildfire and will also reduce the ability of fire fighting agencies and other first-responder emergency personnel to perform their responsibilities. Additionally, the Tule Wind and Sunrise Powerlink projects will undoubtedly increase the cost of property insurance to homeowners who could be impacted by increased fire threat and other related property damage from self-destructing turbines and new power lines and substations.

Again, I fully understand and support the need to implement alternative energy solutions for our nation, particularly in San Diego County which is highly reliant upon imported energy resources. I firmly believe becoming energy independent would substantially increase our national security, create American jobs and improve our environment and natural resources. I also believe, however, that all options must be fully researched and exhausted so that we can ensure that the final decision is one that is best both in meeting our goals and serving our community.

Studies indicate that the potential exists to generate 5,000 megawatts (MW) of energy through solar by utilizing San Diego roof tops and parking lots. Urban projects can avoid the lengthy environmental review and legal delays that large remote projects frequently entail. Southern California Edison has already recently approved large solar roof projects and, when you take into consideration the potential that exists through large structures such as our local military bases, university and college campuses and hospital complexes, it is easy to see how the developing of on-site renewable energy projects will produce great results, not just in reducing reliance on the power grid, but in keep our community safe and pristine.

Another area that promises great potential and has yet to be fully explored is nuclear, which I believe is a safe and effective way to produce electricity. There are currently 104 nuclear reactors operating in the U.S. and they provide nearly 20 percent of our nation's energy. Nuclear power is our leading source of emission-free electricity, yet the U.S. has not built a new nuclear power plant in over 12 years. Unlike fossil fuels, nuclear fuel is relatively inexpensive. Further, there is promising research in recycling nuclear waste so that it may be used again to produce even more energy and, at the same time, reduce its toxicity. Small nuclear reactors for both fission and fusion energy production are also being developed to provide reliable 5- 50 MW of energy for 10-30 years without refueling.

As the CPUC and the BLM continue to consider these projects, I respectfully request that these concerns be taken into full consideration before any final decision is reached. I believe we have the opportunity to make San Diego County the leader in urban alternative energy production by maximizing our potential through available resources such as solar and nuclear. Focusing our efforts on utilizing what we already have instead of pursuing projects that require expensive new transmission infrastructure and the acquisition and disruption of public and private properties will help move our region, and nation as a whole, toward energy independence and decreasing our reliance on foreign energy sources.

Thank you for allowing me the opportunity to submit these comments regarding this very important issue. If you have any questions, or require additional information, please do not hesitate to contact me directly, or have your staff contact Michael Harrison in my office at (619) 448-5201.

With best wishes

Sincerely,

A handwritten signature in black ink, appearing to read "Duncan Hunter". The signature is fluid and cursive, with a large initial "D" and "H".

Duncan Hunter
Member of Congress

DH/mrh



County of San Diego

ERIC GIBSON
DIRECTOR

DEPARTMENT OF PLANNING AND LAND USE

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February 12, 2010

Iain Fisher
California Public Utilities Commission
c/o Dudek
605 Third Street
Encinitas, CA 92024

Comments for the Notice of Preparation and Notice of Intent for the East County Substation and Connected Actions (Tule Wind, and ESJ U.S. Transmission)

Mr. Fisher:

The County of San Diego has reviewed the Public Notices for the projects referenced above. As a Responsible/Cooperating Agency, the County concurs with the scope of environmental issue areas and potential issues or impacts that were identified in the NOP/NOI for the projects. In addition to those environmental issue areas and potential issues referenced, the County would like the CPUC and the BLM to consider the following comments in preparation of the EIR/EIS:

1. The County concurs that a joint EIR/EIS is the appropriate document to be prepared under the California Environmental Quality Act and National Environmental Policy Act.
2. The County will act as a Responsible Agency under CEQA but will also review and comment on all aspects of the proposed project that may pose impacts to lands under the County's jurisdiction.
3. Project alternatives are vital to the evaluation, public review, and judicial decisions for the three projects being analyzed. The environmental documents provide the public and the various jurisdictions with the analysis needed to make informed decisions. The projects are all located within unincorporated communities, therefore, the County requests that our agency be consulted during project alternative development.

4. The County desires that potential environmental impacts to County jurisdictional areas be evaluated using the County of San Diego Guidelines for Determining Significance, which are available online at the following web page: <http://www.sdcounty.ca.gov/dplu/procguid.html#guide>.
5. The Notice of Preparation states that no potential impacts to Agricultural Resources were identified. This may be true for the project as proposed; however, the A-3 Substation Site Alternative may potentially affect an area designated as Agricultural Preserve by the County. All alternatives should be carefully reviewed for any potential impacts that differ from the proposed project.
6. Proposed project facilities should be evaluated for potential impacts from lighting using the County's significance guidelines for Dark Skies and Glare and conformance with the County's Light Pollution Code.
7. Potential impacts from operations, emergency generators, and blasting should be evaluated using the County's significance guidelines for Noise and conformance with the County's Noise Ordinance.
8. Attachment A of the NOP does not appear to indicate that an evaluation of Greenhouse Gas Emissions / Climate Change will be conducted. This issue should be evaluated in light of recent amendments to the CEQA Guidelines pursuant to SB97. Related to this issue, the EIR/EIS should fully discuss how the ESJ Gen-Tie would be required to transmit only renewable energy, as stated in the project description.
9. The County intends for the area surrounding Boulevard and Jacumba where the project is proposed to remain rural in character. The proposed project must be reviewed for consistency with the County's General Plan goals and policies (including those of the General Plan Update, which is in process). In addition, adequate analysis must be conducted to allow the County to evaluate whether findings can be made for the issuance of Major Use Permits for the ESJ Gen-Tie and Tule Wind Projects.
10. The projects are located in rural communities, which are dependent upon groundwater resources. The EIR/EIS should analyze any potential groundwater usage for all three projects including construction. Water consumption must identify volumes and source. The groundwater demands for the project should be fully described and evaluated using the County's significance guidelines for Groundwater Resources.
11. Any increase in fire risk from the projects must be considered. Increases in direct ignition sources, maintenance activities, and impacts to the ability of firefighters to battle wildfires needs to be evaluated.

12. The EIR/EIS should evaluate the potential visual impact of facilities and infrastructure associated with the projects. Windmills, substation facilities, maintenance roads, and power lines could have potentially significant impacts to the scenic natural resources. In addition, this infrastructure may detract from the rural community character of the surrounding area and could alter panoramic views of ridgelines, the skyline, and the undeveloped natural landscape.
13. The EIR/EIS should analyze any permanent and or temporary impacts to the County maintained road network. Any proposed modification to a County maintained road should comply with the County of San Diego Public Road Standards.
14. Lands within the El Centro BLM boundaries have contributed to the development and viability of the County's Multiple Species Conservation Program (MSCP). Future acquisitions, habitat management, and monitoring of sensitive species within the BLM will further contribute to the implementation of the County's MSCP by protecting sensitive plants, animals, and their habitats. In May 2007, the County and the BLM formally entered into a Memorandum of Understanding to coordinate conservation planning efforts for the purpose of developing the preserve design for the MSCP Plan for East County (ECMSCP). The ECMSCP Plan is currently in the draft preserve design phase. The County would like to continue to coordinate with the BLM to protect and enhance habitat for Big Horn Sheep and Quino Checkerspot Butterflies as well as the 153 sensitive species that are proposed for coverage in the ECMSCP Plan. These 153 species can be viewed online at www.sdcounty.ca.gov/dplu/mscp/ec_species.html. The project should evaluate consistency with the draft ECMSCP. The preliminary draft map can be found at: <http://www.sdcounty.ca.gov/dplu/mscp/ec.html>.
15. The Tule Wind project is in the immediate vicinity of a Focused Conservation Area, which is important for connectivity and wildlife movement between public lands and preserve areas for ECMSCP. The Tule Wind project could threaten the County's ability to assemble a preserve and provide for linkages between core habitat conservation areas for the proposed East County Plan.
16. Wildlife movement is a concern, particularly with respect to the draft East County Plan and its preserve design. The preliminary preserve design for the East County Plan includes important habitat linkages that may be impacted by the Tule Wind project. Wildlife movement in the area of Tule Wind project should be studied. If proposed infrastructure and/or the alignment of the wind turbines are crossing wildlife corridors or linkages, alternatives should be examined such as clustering of towers, increased spacing between towers, reduced project footprint, and/or creating gaps between towers and infrastructure to allow for wildlife movement.
17. Biology studies should address other sensitive species, in particular, the Arroyo Toad.

18. Information about the Tule Wind project has referred to a radar program used in Texas for an Iberdrola wind farm that shuts down the turbines for birds. However, this technology is for migratory birds, and is not pertinent for resident birds, particularly golden eagles. If the Tule Wind project is relying on this technology, it would need to address how this technology will apply to other species of birds in this area. Delaying turbine start-up until wind speed reaches a certain threshold level which would reduce the duration of operation has been another method mentioned to reduce avian mortality which should be explored.
19. The environmental documents should assess whether new roads to turbines and infrastructure will increase trespass, including OHV use, which could adversely impact resources.
20. Biology studies need to include habitat assessments or surveys for Quino Checkerspot Butterfly in all areas where infrastructure, transmission lines, roads, construction staging areas, etc. are proposed, in addition to surveys for other sensitive species. Since the Quino Checkerspot Butterfly surveys can only be conducted during the adult butterflies' flight season and the number of butterflies each year is highly variable, surveys should be conducted over several years and must be conducted by biologists with appropriate U.S. Fish and Wildlife Service permits.
21. Research for the East County Plan has indicated that Peninsular Big Horn Sheep are in the vicinity of the Tule Wind project. The environmental document needs to address potential impacts to Peninsular Big Horn Sheep.
22. Regarding avian surveys, golden eagle(s) may be nesting in area of McCain Valley and should be adequately addressed in the biology studies and environmental documents. The biology studies and the draft EIR/EIS should fully evaluate the potential adverse impacts to species such as raptors, bats, and avian species from wind turbines.
23. The Tule Wind project consultants have stated that it is estimated that less than 1% of nocturnal birds passing by would be killed by the turbines but scientific evidence to support this statement would need to be provided before such conclusions could be drawn in the document. It appears that all avian surveys were done during the day, none at night. Night surveys should be conducted to determine which and how many nocturnal birds could be affected.
24. Biological technical studies and reports for some species, such as Tecate Tarplant, may not be completed by the time the draft EIR/EIS is available for public comment. Disclosing the results of biological resources surveys after the draft EIR/EIS has finished public review does not allow for full review of potential impacts, including those that could impact East County Plan, by the County and the public. It is recommended that the draft EIR/EIS not be released for public review until all studies and analyses are available for review.

25. Any proposed use of groundwater should also analyze the potential impacts to biological resources, both plant and animal, that may rely on the local water source.
26. The County of San Diego Department of Parks and Recreation oversees the County Trails Program and the Community Trails Master Plan (CTMP). The County Trails Program is developing a system of interconnected regional and community trails and pathways and communities participating in the CTMP are doing so because they have reached a consensus on the importance of recreational trails in their area and have expended considerable time and effort in formulating community trails plans. The Boulevard Community Trails and Pathways Plan identifies an existing community trail network and proposed trail/pathway corridors within the vicinity of the proposed projects. It is recommended that the EIR/EIS include an analysis of any potential conflicts with or impacts to the recreational use of these existing and proposed trails. For additional information regarding trail locations or to discuss any potential impacts, please contact the County Trails Program Coordinator, Maryanne Vancio at (858) 966-1372, maryanne.vancio@sdcounty.ca.gov.
27. The County of San Diego owns and manages several properties near the proposed project alignments. The proposed project may potentially affect the following County Preserves: In-Ko-Pah Preserve and Mountain Springs Preserve. The EIR/EIS should fully disclose and analyze all potential impacts of the projects and project alternatives to these properties.
28. CEQA requires the analysis of cumulative impacts. This cumulative analysis needs to include the existing and proposed turbines on Campo reservation.

The County looks forward to working with the CPUC and BLM to adequately address the environmental impacts from these projects. If you have any questions please contact the County Project Manger Patrick Brown at (858) 694-301, or by email at: Patrick.Brown@sdcounty.ca.gov.

Sincerely,



for ERIC GIBSON, Director
Department of Planning and Land Use

Email cc: Donna Beddow, Planning Manager, Department of Planning and Land Use
Brian Baca, Chief, Department of Planning and Land Use
Patrick Brown, Project Manager, Department of Planning and Land Use
William Taylor, Senior Deputy County Counsel, Office of County Counsel
LeAnn Carmichael, Department of Planning and Land Use
Jessica Norton, Department of Parks and Recreation



February 12, 2010

Iain Fisher
California Public Utilities Commission
c/o Dudek
605 Third Street
Encinitas, California 92924

Greg Thomsen
BLM California Desert District Office
22835 Calle San Juan de Los Lagos
Moreno Valley California 92553-9046

Re: Scope of Environmental Review of the Tule Wind Project

Dear Gentlemen,

I submit this letter on behalf of Pacific Wind Development LLC, a wholly-owned subsidiary of Iberdrola Renewables, Inc. (IBR). IBR requests that the topics discussed herein be included within the scope of the joint Environmental Impact Statement and Environmental Impact Report being prepared by the California Public Utilities Commission and the Bureau of Land Management for the Tule Wind Project proposed by Pacific Wind Development LLC, the East County Substation project proposed by San Diego Gas & Electric, and the Gen-Tie Project proposed by Energia Sierra Juarez, LLC.

The scope of the combined EIS/EIR must be sufficient to allow review of the Tule project by all permitting agencies to rely upon such review as a basis for their respective determinations. In addition to the lead CEQA agency (CPUC) and the lead NEPA agency (BLM), some of the permitting agencies making decisions based on the document include the Bureau of Indian Affairs, the County of San Diego and the California State Lands Commission. It is possible that other state or federal agencies may also be involved.

The project map included with the Notice of Preparation did not show the 138 kV transmission line proposed to connect the Tule Wind Project with the Boulevard substation. This transmission line, along with its alternate proposed routes should be evaluated in the EIS/EIR. The proposed project features, and associated alternatives are depicted in the enclosed map labeled "Project Alternatives."

It is important that the EIS/EIR evaluate the potential impact of a range of turbines sized from 1.5 MW to 3.0 MW. Because the timeline for the regulatory process is uncertain, and many other factors contribute to the purchase of turbines, the choice of turbine will be limited to those that can be economically available in the marketplace at the time of project construction. Accordingly, the impacts should assume the largest turbines (3.0

MW layout) would be installed in all potential locations (1.5 MW layout). This approach will represent maximum impact for purposes of evaluating environmental effects in a conservative manner. In addition to analyzing the aforementioned range of turbine sizes, the enclosed Project Alternatives map presents a reasonable range of alternatives to be considered related to the Tule Wind Project. These alternatives relate to transmission options, substation locations (which necessitate alternate overhead and underground collector designs), and operations and maintenance (O&M) building locations.

An alternative to the expansion of the Boulevard Substation should be evaluated in the EIS/EIR in the location indicated on the enclosed Project Alternatives map. This alternative 138-kV substation would reduce the total miles of transmission lines required to be built. This alternate location could also serve other renewable energy projects thereby minimizing the addition of new transmission lines in close proximity to the community of Boulevard. For example, at least two energy projects are in the early stages of development: 1) a proposal by Invenergy to develop a wind project on lands of the Campo Tribe, and 2) a proposal by Hamman Companies to develop a solar generating facility on private land. Both of these developments are in close proximity to the Tule site and to this alternative substation. In addition to reducing total impacts, developing the interconnection facilities on or near the Tule site meets SDG&E's PEA Objective 6 to maximize the use of existing utility ROWs because the alternate route is partially parallel to the Sunrise Powerlink Line.

Finally, Iberdrola commends the decision of the CPUC and BLM to evaluate these projects in a combined review, which addresses potential cumulative impacts of these projects to the extent they are interrelated.

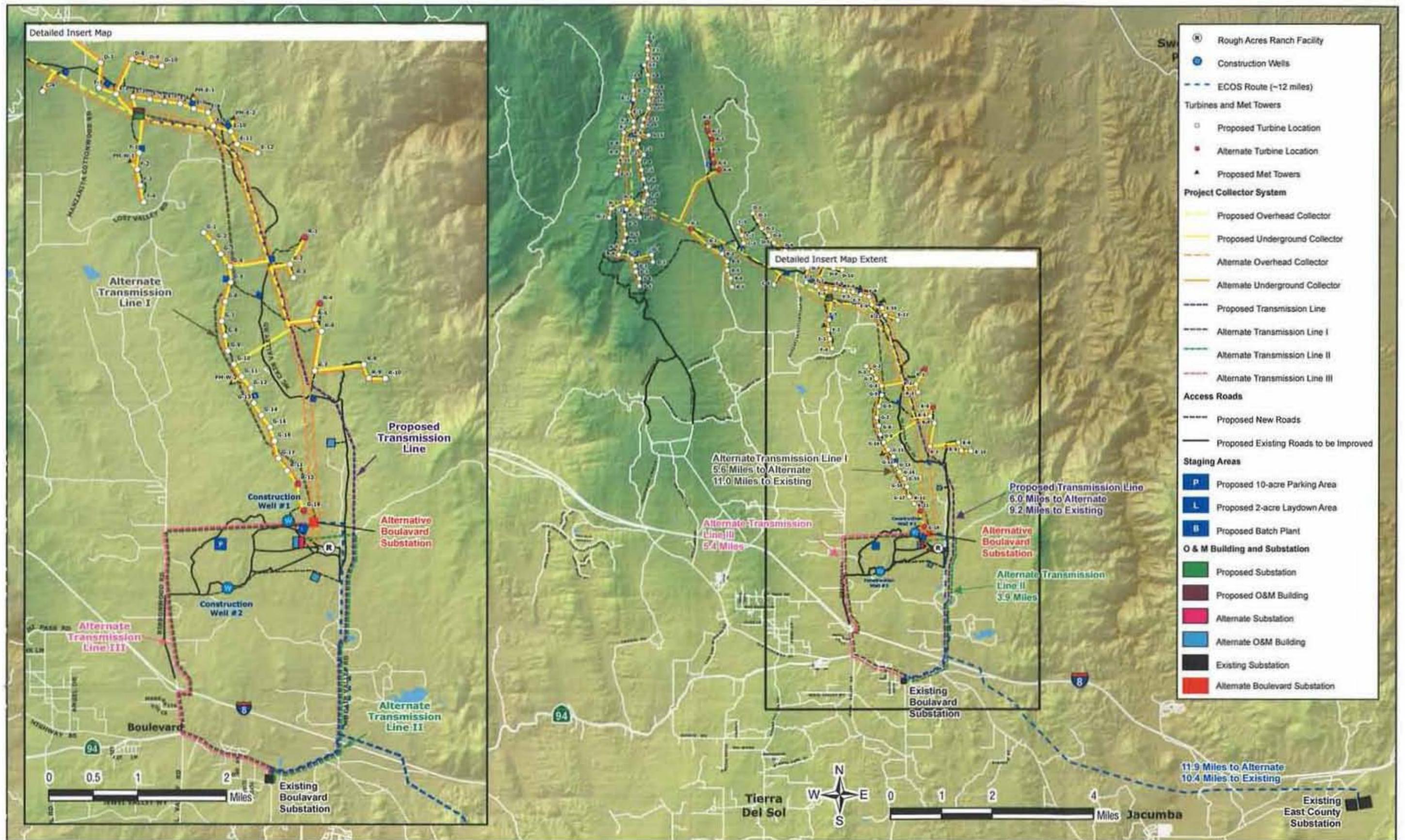
Thank you for your consideration of the foregoing.

Best regards,



Jeffrey Durocher
Wind Permitting Manager
Iberdrola Renewables, Inc.
1125 NW Couch Street, Suite 700
Portland, Oregon 97209

Encl.





DIANNE JACOB

SUPERVISOR, SECOND DISTRICT
SAN DIEGO COUNTY BOARD OF SUPERVISORS

February 14, 2010

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Attention: Iain Fisher
California Public Utilities Commission
c/o Dudek
605 Third Street
Encinitas, CA 92024

RE: EIR/EIS Scoping Comments for SDG&E's East County (ECO) Substation Project (A.09-08-003) including the Energia Sierra Juarez Generator Tie Line Project (ESJ) and the Tule Wind Project, proposed by Iberdrola Renewables, Inc.

As Supervisor of the Second District of the County of San Diego, I represent more than 2,000 square miles of the eastern portion of the County, including the communities of Boulevard, Campo, Jacumba, Tierra del Sol and the McCain Valley area, all of which would be severely impacted by the three interrelated projects (and alternatives) now being addressed by the Commission.

I agree that a joint Environmental Impact Report/Environmental Impact Statement (EIR/EIS) is the appropriate document to be prepared under the California Environmental Quality Act and National Environmental Policy Act. I anticipate that the Commission will conduct a thorough environmental analysis with ample opportunity for public comment. I very strongly urge the Commission to place great emphasis on its obligation to notify property owners and residents in areas impacted by the projects.

I have five overarching concerns about the impacts of the projects: 1. Fire danger; 2. Visual blight and damage to community character; 3. Impacts to groundwater; 4. Impacts to roads; and 5. Impacts to the County's award-winning open space program, including public trails. In addition, I respectfully request that the Commission address critical public policy questions surrounding the three projects.

1. Fire Danger: As evidenced by the horrific 2003 Cedar Fire and firestorms of 2007, wildfire can have catastrophic impacts on lives and property. The risk of fire is significant in all of San Diego County, but particularly Eastern San Diego County where unique winds, brush and terrain combine with very little rainfall to create a fire threat which is rare on this earth.

Energy infrastructure, especially malfunctioning wind turbines and downed power lines, present a significant new source of ignition in areas with rugged and inaccessible terrain. Cal Fire has classified the project areas as "Very High Hazard," the highest classification possible. Any increase in human activity, including construction, maintenance and operation of turbines, lines, substations and access roads will increase the potential for wildfire. For this reason, the EIR/EIS must carefully analyze the fire threat posed by the project.

2. Visual Blight and Damage to Community Character: Turbines, substations, maintenance roads and power lines have significant impacts to scenic natural resources. In addition, this infrastructure will detract from the rural character of the surrounding communities and alter panoramic views of ridgelines, the skyline, and the undeveloped natural landscape forever. The area proposed for the Tule Wind Project, McCain Valley, is of high scenic quality and among the most pristine in the region.

I strongly concur with comments submitted by the County of San Diego which request that the projects be reviewed for consistency with the County's General Plan goals and policies. The Commission should be advised that the areas in question are proposed to remain rural in character.

3. Groundwater: The proposed projects are located in areas dependent upon groundwater. As the CPUC is currently experiencing with the EIR/EIS for SDG&E's Sunrise Powerlink, groundwater in these areas is limited. Securing alternative water sources can prove problematic. I very strongly urge the Commission to ensure that the EIR/EIS identify specific sources and volumes for the projects. It is distressing that the Sunrise Powerlink EIR/EIS did not contain thorough information about the project's water usage. This must not happen again.

4. Roads: I agree with comments submitted by the County of San Diego that the EIR/EIS should analyze any permanent and or temporary impacts to the County maintained road network. Any proposed modification to a County maintained road should comply with the County of San Diego Public Road Standards.

5. Impacts to the County's Award-winning Open Space Program and public trails: San Diego County has been nationally-recognized for its innovative open space program, which strikes a delicate balance between preserving precious natural resources while respecting the rights of property owners. The EIR/EIS must consider and respect the County's East County Multiple Species Conservation Plan which is now in draft form.

The plan can be found at: <http://www.sdcounty.ca.gov/dplu/mscp/ec.html>.

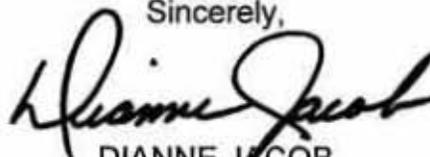
Similarly, the Commission must respect the County Trails Program and Community Trails Master Plan. The County Trails Program has spent considerable time and effort working with communities to formulate a system of interconnected trails. The Boulevard Community Trails and Pathways Plan identifies an existing and proposed trail and pathway corridors in the vicinity of the proposed project. I concur with comments submitted by the County of San Diego that state the EIR/EIS should include an analysis of any potential conflicts to the recreational use of these existing and proposed trails.

Finally, I respectfully urge the Commission to address important public policy considerations in the EIR/EIS. The Commission must ask whether rooftop photovoltaic systems are a safer, more cost effective alternative to the projects in question. Distributed generation— namely, rooftop PV on existing facilities close to demand centers— is infinitely more desirable than costly and remote infrastructure that will profoundly mar rural landscapes and increase the risk of fire in areas already susceptible to catastrophic wildfire. Given the fire risks in the areas in question, the EIR/EIS must prove that the Tule Wind Project and ESJ are less expensive, more reliable and, above all, safer than installing commercial solar on urban rooftops.

I appreciate the opportunity to address my concerns. I look forward to receiving future environmental documents related to the projects and being afforded the opportunity to express my thoughts again in order to preserve the rural backcountry and alleviate any significant impacts to our sensitive and protected lands.

If you have any questions regarding these comments, please don't hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Dianne Jacob", written in a cursive style.

DIANNE JACOB

Supervisor, Second District

BACKCOUNTRY AGAINST DUMPS

PO BOX 1275, BOULEVARD, CA 91905

Iian Fisher,

CPUC Project Manager

Greg Thomesen,

BLM Project Manager

John Rydzik,

BIA Chief of Environmental and Cultural Resources

Via: ecosub@dudek.com , catulewind@blm.com & john.Rydzik@bia.gov

RE: ECO Substation, Tule Wind and Energia Sierra Juarez joint EIR/EIS scoping comments

Dear Mr. Fisher, Mr. Thomsen and Mr. Rydzik,

These comments are submitted on behalf of myself as an individual and on behalf of our non-profit grassroots group, BAD, that is based in Boulevard, CA.

BAD has been actively defending our rural community and resources from environmentally threatening projects for over two decades. We also do public outreach to educate local property owners and residents, and other interested parties, on the issues and their opportunities to get involved in the decision process. We have been involved in opposing the three energy/transmission projects noted above along with the underlying approvals for the related Sunrise Powerlink and VRM downgrades in the Eastern San Diego County Resource Management Plan. The unwarranted VRM downgrades allowed for the industrialization of and loss of much of our beloved East County wildlands, landscapes and recreation areas. BAD and me as an individual are appellants/plaintiffs in the federal complaint that challenges the legality of the BLM's ROD approvals for the Sunrise Powerlink and the Eastern San Diego Resource Management Plan and the Amendment to that plan.

BAD strongly objects to these three projects and those they rely on. The need for them has not been proven. Better less destructive distributed generation alternatives are available.

Our concerns include the significant and cumulative impacts from these projects, existing projects and proposed projects in the general area which has already been scientifically identified, in the Las Californias Binational Conservation Initiative, as globally significant and rare transitional Mediterranean mosaic with abundant and diverse wildlife, habitat, and critical binational wildlife corridors.

We hereby incorporate by reference the current and previous comments submitted on these projects and related projects by myself as an individual, by our own group, and those submitted by the Boulevard Planning Group, Bill Powers, the Law Offices of Stephan Volker and the County of San Diego

Remove David Hayes from decision making and project influence:

There are also major concerns with the fact that Deputy Secretary of Interior, David Hayes, is a former lobbyist for Sempra and SDG&E who reportedly worked on transmission and other related projects and issues for them. The two major transmission projects pursued by Sempra and SDG&E are the 500 kV Sunrise Powerlink and the 500 kV cross-border Energia Sierra Juarez project.

Mr. Hayes should be removed from any decision making position, and/ or position of influence over BLM and other decision makers, for any and all decisions on these projects due to his previous employment and potential bias towards his former clients and their projects. An article that appeared in the San Diego Reader, regarding Mr. Hayes and his former lobbying activities, is attached. He is just too close to these projects to avoid having it influence his actions. This places our rural communities and resources in a position to have our legitimate concerns and requests brushed off in order to benefit former clients and projects.

No Compromise. No mitigation acceptable.

Where we differ from some of the groups noted above is our no compromise position. What is right is right and what is wrong is wrong. There is no amount or type of mitigation that can or will reduce the number of, the significance of, or the cumulative damage to our rural community character, our quality of life, our natural, biological, historic, cultural, visual, scenic, recreation and other priceless resources. We will do what we can to stop these wrongheaded projects and to redirect efforts towards less expensive and destructive distributed generation projects at or near the point of use.

Regards,

/s/

Donna Tisdale, President

Stephan C. Volker
 Joshua A. H. Harris
 Shannon L. Chaney
 Alexis E. Krieg
 Stephanie L. Abrahams

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February 15, 2010

VIA EMAIL, FAX AND U.S. MAIL

Greg Thomsen,
 BLM California Desert District Office
 22835 Calle San Juan de Los Lagos
 Moreno Valley, California 92553-9046
catulewind@blm.gov
 Fax: (951) 697-5299

Iain Fisher
 California Public Utilities Commission c/o Dudek
 605 Third Street
 Encinitas, California 92024.
ecosub@dudek.com
 Fax: (800) 371-8854

Re: Scoping Comments of Backcountry Against Dumps, The Protect Our Communities Foundation, East County Community Action Coalition and Donna Tisdale on the East County (ECO) Substation Project, the Energia Sierra Juarez Generator Tie-Line Project, and the Tule Wind Project

Dear Officials:

In accordance with the public notices provided by the California Public Utilities Commission ("CPUC") and the Bureau of Land Management ("BLM") (collectively "reviewing agencies"), Backcountry Against Dumps, The Protect Our Communities Foundation, East County Community Action Coalition and Donna Tisdale (hereinafter "Conservation Groups") submit the following Scoping Comments on the East County ("ECO") Substation Project, the Energia Sierra Juarez Generator Tie-Line Project ("ESJ Project"), and the Tule Wind Project (collectively, "ECO/ESJ/Tule Project" or the "project").

Out the outset, Conservation Groups wish to express their opposition to this project as an unnecessary industrialization of pristine desert wilderness areas. Echoing a growing chorus of opinions on this subject, Conservation Groups suggest as an alternative to the proposed project widespread non-fossil fuel distributed generation ("DG") projects near demand centers in already-disturbed areas.¹ The Environmental Impact Report/Environmental Impacts Statement ("EIR/EIS") should

¹ Distributed generation has been recently referred to by the CPUC as electricity provided by "non-centralized electricity power production facilities less than 20 MW interconnected at the distribution side of the electricity system. DG technologies include solar, wind and water-powered energy systems; and renewable and fossil-fueled internal combustion (IC) engines, small gas turbines, micro-turbines and fuel cells." *Impacts of Distributed Generation, Final Report*, California Public Utilities Commission, January 2010, p. 3-3, available at: http://www.cpuc.ca.gov/NR/rdonlyres/750FD78D-9E2B-4837-A81A-6146A994CD62/0/Impacts_ofDistributedGenerationReport_2010.pdf

provide a robust analysis of DG alternatives that would obviate the need for all three components of the project.

Additionally, Conservation Groups believe that this environmental review process will not adequately address impacts because it has been improperly segmented from the environmental reviews of other energy development and transmission projects, including, most notably, the Sunrise Powerlink Transmission Line ("Powerlink") EIR/EIS, which was approved by the CPUC on December 18, 2008 and by BLM on January 20, 2009. The projects here are intimately linked to the Powerlink project and other large-scale energy development projects in the works, and thus all of these should be addressed together in a single EIR/EIS process. Conservation Groups therefore ask the reviewing agencies to prepare a comprehensive, programmatic-level EIR/EIS that will reveal all of the intense, wide-spread impacts of the near-future industrial development of desert areas of Eastern San Diego County and Imperial County. In further expression of these two major concerns, Conservation Groups offer the following scoping comments.

I. Project Purpose and Need

The reviewing agencies must discuss and take a hard look at the purpose of and need for the ECO/ESJ/Tule project in the EIR/EIS. 40 C.F.R. § 1502.13; *see also Colorado Environmental Coalition v. Dombeck*, 185 F.3d 1162, 1175 (10th Cir. 1999) (the permitting agency retains the ultimate "responsibility for defining the objectives of [and need for the] action"). Among other things, the CPUC and BLM must analyze where the electricity transported by the project would be used and whether there is in fact an existing or projected capacity shortfall or other condition in that area that necessitates importation of energy.

A discussion of supply and demand should address the growing consensus that energy production facilities must be located near urban centers – not in remote, sparsely populated, and ecologically valuable areas like Eastern San Diego County. Large-scale, urban, photovoltaic projects are being proposed and approved in SDG&E's and Southern California Edison's territories. The increasing importance of these locally distributed generation projects should be thoroughly reviewed and analyzed in the environmental review of the project.

The EIR/EIS must also fully address the reliability issues with wind energy production and fully analyze recent events at the Campo Indian Reservation, which caused operators to shut down 25 turbines for the past two months because of weather-related damage.² A comprehensive reliability analysis should be conducted comparing these large-scale energy production facilities and DG alternatives prior to approval of the project.

² <http://www.eastcountymagazine.org/node/2734>

In addition, in regard to the ESJ component of the project, reviewing agencies must explain why there is a need for additional transmission infrastructure when it is eminently feasible to transmit electricity produced in the La Rumorosa area along *existing* transmission lines that are already interconnected directly to the SDG&E electrical grid and have at least 800 MW of spare transmission capacity³ – a number that could likely be doubled if the lines were reconducted with composite conductors.⁴ These transmission lines are jointly owned and operated by SDG&E and the Comisión Federal de Electricidad (“CFE”) and comprise one tie connecting CFE’s Tijuana Uno Substation to SDG&E’s Miguel Substation and one joining CFE’s La Rosita Substation with SDG&E’s Imperial Valley Substation. Together, the ties are called Western Electricity Coordinating Council (“WECC”) Path 45. The EIR/EIS must fully analyze current transmission capacity and analyze whether and to what extent the ESJ project is necessary.

Finally, the reviewing agencies must clarify whether the purpose of the ESJ project is to facilitate the importation into the United States of *solely* wind energy and/or other renewable energy. The EIR/EIS must make clear whether the cross-border transmission line could and potentially would be used to transmit energy produced from natural gas, coal or other fossil fuel-based resources. Comprehensive coordination with all Mexican governmental agencies with jurisdiction over the project, related developments, and their environmental effects should be conducted as early as feasible in the planning process to assure that the project’s stated purpose and need are accurate and realistic, and are accepted as such by the relevant Mexican regulatory bodies.

II. Sunrise Powerlink

As discussed above, the project is intimately linked to the Powerlink project and other energy development and transmission projects in the area. Environmental review of all of the proposed projects should have been conducted on a programmatic level prior to more focused reviews of the individual projects. In light of the fact that no programmatic review has taken place, Conservation Groups ask that the present review process include a comprehensive treatment of cumulative impacts, which would include discussion of the Powerlink impacts in combination with the impacts from the present project on the desert resources of Eastern San Diego County and Imperial County.

³ See California Energy Commission Report No. CEC-600-2008-004, June 2008, “Challenges and Opportunities to Deliver Renewable Energy from Baja California Norte to California” (CEC Report), prepared by KEMA Inc. and Bates-White, LLC, *available at* <http://www.energy.ca.gov/2008publications/CEC-600-2008-004/CEC-600-2008-004.PDF>.

⁴ See Bill Powers, October 2007, “San Diego Smart Energy 2020: The 21st Century Alternative,” *available at* http://www.etechnicalinternational.org/new_pdfs/smartenergy/52008_SmE2020_2nd.pdf, pp. 54-55.

III. Project and Alternatives Descriptions

The project description must be clear, concise, and accurate from the start. Descriptions of complex, multifaceted projects such as the present project often fail to meet this standard. Further, descriptions of alternatives similarly should be complete and comprehensive or the comparative analysis can easily become excessively confusing and incomplete, as exemplified by the alternatives analysis in the EIR/EIS for the Powerlink project. Thus, Conservation Groups urge the reviewing agencies to clearly describe the proposed project and alternatives thereto in the EIR/EIS.

IV. Alternatives

The EIR/EIS must address a reasonable range of alternatives. *City of Carmel-by-the-Sea v. U.S. Department of Transportation*, 123 F.3d 1142, 1155 (9th Cir. 1997). The reasonable range of alternatives required by NEPA should include a "reasonable number of examples covering the full range of alternatives." CEQ Forty Questions, No. 1b. Furthermore, an agency may not limit its consideration to only those alternatives it believes it has the authority to implement. Rather, the alternatives should be wide-ranging and include options that may require additional approvals or participation by others. *Sierra Club v. Lynn*, 502 F.2d 43, 62 (5th Cir. 1974); *see also Alaska Wilderness Recreation and Tourism Ass'n v. Morrison*, 67 F.3d 723, 729 (9th Cir. 1995). The reviewing agencies' analysis of the full range of alternatives to the proposed project should include, among others, the alternatives discussed below.

First, the CPUC and BLM should consider the alternative of providing and promoting increased distributed generation and increasing conservation measures in the urban load centers that would be served by the project. Expanding distributed generation would serve the same purposes as the project, including increased electricity generation and supply of renewable energy. Increasing conservation decreases demand to further close any forecast gaps between supply and demand. This alternative is eminently feasible, as the California Renewable Energy Transmission Initiative ("RETI") has determined that there is up to 27,500 MW of potential distributed generation in small-scale (1-20 MW projects on less than 160 acres) photovoltaic facilities alone (in California).⁵

Furthermore, developing distributed generation facilities would have fewer environmental impacts and be far less expensive than constructing and operating the project's new wind farms, transmission lines, and substations. As CPUC Commissioner John Bohn has acknowledged, "[u]nlike other generation sources, [distributed generation] projects can get built quickly and without the need for expensive new transmission lines. And . . . these projects are extremely benign from an

⁵ California RETI, January 2009, "Phase 1B Final Report," available at <http://www.energy.ca.gov/reti/documents/index.html>, p. 1-12.

environmental standpoint, with neither land use, water, or air emission impacts.”⁶ Further, the cost for most DG installations continues to plummet, making DG the economically preferable option. Moreover, distributed generation facilities pose a significantly lower risk of shut-offs and damage from wildfire and thus would improve electrical reliability.

Second, the EIR/EIS should analyze the alternative of undergrounding all or portions of the proposed transmission lines. The benefits of this alternative include reduced fire danger, risk to aircraft, avian mortality and other biological impacts, and improved aesthetics.

Third, specifically related to the ESJ component of the project, CPUC and BLM must examine the alternative of transmitting the wind power from the La Rumorosa area along existing CFE and SDG&E lines (the WECC Path 45) instead of through a newly constructed generation tie and substation (the ECO Substation and expanded Boulevard Substation). As discussed in the Purpose and Need section of these scoping comments, the CFE lines are *already* directly connected to the SDG&E electrical grid and have at least 800 MW of *spare* transmission capacity. Furthermore, the amount of spare capacity could likely be doubled if the lines were reconducted with composite conductors. While CFE would charge a small wheeling fee for use of its lines, the charge could be reduced in exchange for Energia Sierra Juarez U.S. Transmission, LLC (“ESJ” - formerly Baja Wind U.S. Transmission, LLC, and a subsidiary of Sempra Energy) reconductoring the lines. In addition, by using the existing lines ESJ would be saving substantially on construction costs. Overall, this alternative is eminently feasible and would likely have fewer environmental impacts and cost less than the proposed project.

Fourth, the reviewing agencies should evaluate the possibility of limiting the use of the project’s transmission infrastructure to only allow transmission of power from renewable energy projects, particularly wind and solar, and not from fossil fuel-based generation. Placing such a condition in the project approvals would not only be feasible and environmentally beneficial, it has already been supported, at least in part, by ESJ and its parent corporation, Sempra Energy.⁷

V. Environmental Impacts

The EIR/EIS must take a “hard look” at the environmental impacts of proposed major federal actions and provide a “full and fair discussion” of those impacts. 40 C.F.R. § 1502.1; *see also National Parks & Conservation Ass’n v. Babbitt*, 241 F.3d 722, 733 (9th Cir. 2001). From a CEQA

⁶ CPUC, 6/18/2009, “CPUC Approves Edison Solar Roof Program,” Press Release, *available at* http://docs.cpuc.ca.gov/published/News_release/102580.htm.

⁷ *See* U.S. Department of Energy, 9/22/2009, “Energia Sierra Juarez Transmission Line Project: Scoping Report” (Scoping Report), *available at* <http://www.esjprojecteis.org/documents.htm>, p. 5.

point of view, the EIR must inform the public and agency decisionmakers of all potentially significant environmental impacts prior to project approval. As the California Supreme Court has previously explained, “[t]he environmental impact report is the heart of CEQA and the environmental alarm bell whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return.” *Sierra Club v. State Board of Forestry* (1994) 7 Cal.4th 1215, 1229, quotations and citations omitted. Here, the reviewing agencies must fully analyze all of the environmental impacts of the project. Accordingly, the CPUC and BLM must evaluate the effects of the project in both the United States and Mexico. See, e.g., *Hirt v. Richardson*, 127 F. Supp. 2d 833 (W.D. Mich. 1999); *National Organization for Reform of Marijuana Laws v. United States Department of State*, 452 F. Supp. 1226, 1232-33 (D.D.C. 1978); cf. Exec. Order No. 12114, 44 Fed. Reg. 1957 (1979), reprinted in 42 U.S.C.A. § 4321 app. Among others, the EIR/EIS must thoroughly analyze the impacts discussed below.

A. Fire

Ironically, SDG&E recently sought permission from the CPUC to turn off electrical power in the area of the ECO and Boulevard substations when fire dangers are high – a drastic measure from any perspective – yet it claims in its August 10, 2009 Proponent’s Environmental Assessment (“PEA” or “ECO PEA”) for the ECO project that construction of extensive, additional electricity infrastructure in the exact same area will not present a significant fire hazard. If existing lines are dangerous enough that SDG&E wants to shut off the power to thousands of people on windy days (potentially causing school shutdowns, disrupting emergency alert systems, and disabling hospital operations), how can the construction of even *more* substations and transmission lines be properly categorized as having an *insignificant* impact? Clearly, the fire dangers presented by this project are significant and must be subjected to a full and accurate analysis in an EIS/EIR.

In their review of fire hazards, the reviewing agencies must incorporate all relevant wildfire occurrence information, including historic fire frequency, duration, and magnitude data. The agencies should ensure that a complete understanding of the fire hazards in light of the region’s fire history is produced in the EIS/EIR.

In addition to the direct impacts of the described components of the project, the EIR/EIS will also have to address the indirect fire hazard impacts of the multiple wind farm or other energy production projects that the ECO substation will accommodate. The indirect fire hazard impacts could potentially devastate the area and therefore must be categorized as significant.

The fire risk analysis must also include thorough discussion of the cumulative impacts of the project with all other relevant projects in the area, including the Powerlink project and related energy development projects dependent on that transmission line. The cumulative impacts of the industrialization of the East County area have the potential to permanently alter the fragile desert ecosystem through a process called type conversion, described below:

Plant invasions are widely recognized as significant threats to biodiversity conservation worldwide. One way invasions can affect native ecosystems is by changing fuel properties, which can in turn affect fire behavior and, ultimately, alter fire regime characteristics such as frequency, intensity, extent, type, and seasonality of fire. If the regime changes subsequently promote the dominance of the invaders, then an invasive plant–fire regime cycle can be established. As more ecosystem components and interactions are altered, restoration of preinvasion conditions becomes more difficult.⁸

In short, once the fire-resistant native chaparral is converted to invasive annual grasses and other highly flammable plants that become tinder-dry each summer, the fire regime shifts – irrevocably – to a much shorter fire recurrence interval, potentially as short as every year. Once established, a short fire recurrence regime effectively destroys wildlife habitat and creates such an extreme annual fire danger as to preclude safe human habitation. The EIR/EIS must therefore present a comprehensive analysis of the effects of past and future fires on the vitality of the remaining acreage of native chaparral and other disappearing mountain and desert ecosystems in light of the cumulative impacts of the project and other energy development and transmission projects that are planned in Eastern San Diego County and Imperial County.

Additionally, the project could present significant obstacles to firefighters responding to wildfires. For example, the proposed transborder transmission line for the ESJ component of the project would create a substantial hazard for low-flying spotter and bomber aircraft that apply aerial retardant or water. It would be impossible to see those power lines in smoke filled canyons, and either pilots would be forced to risk their lives by flying when the lines are not clearly visible or aerial fire suppression would be stymied. Furthermore, in some cases the transborder line and other project-related transmission lines would need to be de-energized before firefighters could enter certain areas, giving the fire more time to spread.

In light of the many fire-related impacts, reviewing agencies should give serious consideration to an alternative that avoids these impacts, such as the undergrounding of the new transmission lines or the preferably, pursuit of DG alternatives as discussed more thoroughly above.

⁸ *Effects of Invasive Alien Plants on Fire Regimes*, Brooks, M.L., C.M. D'Antonio, D.M. Richardson, J.M. DiTomaso, J.B. Grace, R.J. Hobbs, J.E. Keeley, M. Pellant, D. Pyke, 2004, *Bioscience* 54:677-688, available at: http://www.californiachaparral.com/images/Brooks_et_al_Effects_of_Invasives_on_Fire_Regimes.pdf

B. Biological Impacts

There are many potential biological impacts of the project that the reviewing agencies must address in the EIR/EIS. In all of their biological analyses, the CPUC and BLM should develop and utilize current population and habitat surveys and up-to-date scientific studies. Similarly, all required surveys of the proposed project areas must be completed before preparation of the EIR/EIS, not afterward as occurred with the majority of the biological surveys for the Powerlink project. The EIR/EIS must analyze the impacts of the project on threatened, endangered or special status species, including the Quino checkerspot butterfly and the Peninsular bighorn sheep, both of which have proposed, suitable, inhabited, and/or designated critical habitat that overlaps with or is adjacent to the proposed project sites. Tragically for the Peninsular bighorn sheep, the proposed La Rumorosa wind projects and ESJ project transmission route would be located directly adjacent to (and perhaps overlap with) the Peninsular Ranges of Mexico, an area which the U.S. Fish and Wildlife Service views as “the *only* possible route for a natural connection with other bighorn sheep populations for the [distinct population segment of sheep] in the U.S.” 74 Fed. Reg. 17288, 17311 (2009) (emphasis added).

Additionally and relatedly, the EIR/EIS must also evaluate the effects of the project on avian injury and mortality, including impacts on both special status birds (such as the California condor) and others (such as the golden eagle, which is protected by the Bald and Golden Eagle Protection Act). In its discussion of avian impacts, the EIR/EIS must address risks associated with wind turbines and power lines (e.g. electrocution). It must also assess how the light and noise pollution associated with the project would impact birds and other species.

Specific to the Tule Wind Project, construction and operation of the project will adversely affect numerous endangered or threatened species in the McCain Valley, including but not limited to the Arroyo toad, Quino checkerspot butterfly, Peninsular bighorn sheep, least Bell’s Vireo, barefoot banded gecko, Swainson’s hawk, and southwestern willow flycatcher. There is also additional sensitive and locally important wildlife in the area that must be evaluated. Furthermore, there are endangered, rare, and sensitive plant species in the area that must be protected as well.

The EIR/EIS must not only identify the species that may be affected, but it must also analyze the potential impacts and provide for mitigation where feasible. First and foremost, highly trained and experienced biologists should be involved in the entire process to survey for and mitigate damage to all biological resources in the area. It is extremely important that those surveying for these resources be knowledgeable and have up-to-date information on the species being surveyed. For example, there have been recent scientific discoveries regarding the distribution and habitat needs of the Quino checkerspot butterfly. New host plants for the Quino checkerspot butterfly have just been discovered. 74 FR 28775, 28776. The butterfly has been documented at higher elevations than ever before, as well as near granitic rather than clay soils. *Id.* Most biologists do not have experience surveying under the newly developed survey guidelines. *Id.* These factors must be taken into account as the reviewing agencies prepare the EIR/EIS.

C. Habitat Fragmentation and Related Edge Effects

Habitat fragmentation is the breaking up contiguous natural habitats into small patches that are isolated from intact areas of habitat. The project's plans for construction, staging, and building of access roads and structures will result in direct loss of habitat, division of the remaining habitat into isolated patches, and reduced size of habitat patches. These fragmentation impacts, when spread across a large area, are almost invariably accompanied by localized extirpation of species. Here, the project will fragment scrub and chaparral habitats. Local species sensitive to the developed or altered edge and species that have large area requirements are among the first to disappear from habitat fragments, triggering cascading impacts to ecological communities. The fragmentation of habitats inhibits movement of species and disrupts necessary interactions among species. These adverse impacts decrease the viability of species in the area and degrade habitat value as species become more isolated in contained areas. The project will fragment habitat within the project area, particularly through the construction of access roads, and will potentially cause significant impacts to many species within the area. These impacts must be fully discussed in the EIR/EIS.

Further, fragmentation causes edge effects that also degrade the local habitat near power lines and maintenance roads. An edge marks where natural habitat conditions transition to a human-altered condition. Edge effects decrease the net, biologically functional area of habitats left undeveloped within landscapes fragmented by roads, cleared areas, or development structures. These edge effects further reduce available habitat for native species, while creating new habitats for non-native, human-tolerant species. The construction of the project will cut directly through acres of important habitat currently undisturbed by human activity. The EIR/EIS must therefore thoroughly discuss the fragmentation and edge effect impacts of the project.

D. Soil and Invasive Species

An estimated 140,000 cubic yards of soil may be imported to fill the ECO project site alone. The EIR/EIS must analyze the project's likely importation of invasive plant species within the fill soil. Further, invasive species may be transported through construction and maintenance vehicle use and increased public access. The reviewing agencies must identify, analyze, and, if necessary, develop mitigation measures for these impacts in their environmental study of the project.

E. Visual and Aesthetic Impacts

The project will severely diminish the serene aesthetics and expansive unobstructed vistas in the region. The EIR/EIS must consider these impacts, including the sheer height and overall size of the facilities, the wide geographic scope and visual incongruity of the project, and the obtrusive effects of the facilities' nighttime lighting fixtures. The reviewing agencies should analyze these viewshed impacts from multiple vantage points, including popular scenic vistas as well as the places (homes, roads, etc.) frequented by residents of the region, such as the citizens of Boulevard, California.

Further, as discussed above, the EIR/EIS should give serious consideration to an alternative that undergirds any new transmission lines or preferably to a DG alternative, which would obviate the need for this project altogether.

F. Noise

The introduction of industrial noise levels during construction, operation, and maintenance of the project will be significant. These significant noise impacts will disturb adjacent property owners and the endangered and sensitive species that occupy and pass through the area. These noise impacts are even more significant given Eastern San Diego County's quiet, rural setting.

In addition to the immediate noise impacts of the project itself, the EIR/EIS must address the noise impacts of the construction of the multiple additional energy generation facilities that will connect to the ECO, ESJ and Tule components of the project. The cumulative construction impacts of the project with the Powerlink project and other area projects will be significant and should be fully analyzed in an EIR/EIS.

G. Visual & Night Sky Resources

The EIR/EIS should address the significant impacts of the project on visual and night sky resources. First, the project will significantly affect the area's visual resources by introducing massive new industrial projects – including most prominently the enormous wind turbines planned for the ESJ and Tule components of the project – with industrial-scale lighting, new roads, graded pads, water tanks, and 10-foot-high barbed wire fencing into a scenic, rural area. The scarring of the landscape will be visible from many locations as graded portions of the desert never resume their natural appearance once cleared. The project will affect scenic and historic roadways and will detract from local, small businesses that rely on a tourist- and recreation-based economy, including the nearby Desert View Tower and the Jacumba Hot Springs Spa.

Additionally, the EIR/EIS must fully address the combined aesthetic effects of the project with the Powerlink project and other proposed energy production facilities in the area. Maps and photo simulations must fully reveal the intensive visual impacts of the proposed Powerlink infrastructure and related wind farms, including the industrial-scale wind turbines that will be located directly behind the ECO Substation. When added together, the Powerlink, the various new wind and solar facilities, the existing Southwest Power Link ("SWPL"), and the proposed project will drastically degrade the visual context of the area's rural communities and vast undeveloped public lands. These cumulative visual impacts must be thoroughly evaluated by the reviewing agencies.

Further, the EIR/EIS must fully account for the significant impacts of the project on night skies. The fifty, 300-watt tungsten-quartz lamps proposed for the ECO substation will significantly impair the night skies in one of the last dark sky areas left in Southern California. As with visual resources,

the EIR/EIS should address all of the other indirect night sky impacts from the other planned energy production facilities that will connect to the SWPL through the ECO and Boulevard substations. These light pollution impacts will likely be individually and cumulatively significant.

H. Geology

The EIR/EIS should fully review and evaluate the geological impacts of placing wind turbines in the project area. Despite having small footprints relative to other types of energy developments, wind turbines require high levels of slope stability and a solid foundation to prevent safety disasters. In order to safely site wind turbines, a significant amount of drilling is often required. The EIR/EIS must evaluate the impact of such drilling on seismic, slope, and soil stability, as well as groundwater contamination that may be caused by deep penetration drilling.

I. Conservation Initiatives

The EIR/EIS must discuss the project's negative impacts on the region's conservation initiatives. The construction of the project and all of the other energy production facilities dependent on the ECO and Boulevard substations will impair the ecological value of the project sites themselves as well as miles of surrounding mountains and high desert. This degradation of the mountain and desert ecosystems in the region will likely affect conservation decisionmaking, turning money and protection away from the area as conservationists look for less-developed lands to preserve. Some of the conservation initiatives that could be affected by the project include The Nature Conservancy's purchase of the Jacumba-Eade property in January 2008 for inclusion into the Anza Borrego State Park, preservation programs in the County of San Diego's East County Multiple Species Conservation Plan, the Las Californias Binational Conservation Initiative, and the Parque to Park proposal, which seeks to connect Anza Borrego State Park (and the Jacumba property purchased for the Park mentioned above) with Baja Mexico's Parque Nacional Constitucion de 1857 and the Parque Nacional San Pedro Martir.

J. Economic Consequences and Rural Blight

Local tourism and recreation are a major source of income for the region's local businesses. The project's threatened transformation of the area from an open-space, recreational mecca to an industrial landscape will cause the closure of many small businesses that provide recreation-based services. These empty storefronts and deserted commercial areas present significant impacts in the form of rural blight. The fall in property values in the area due to the degraded rural landscape may cause homes and neighborhoods to become abandoned, further exacerbating rural blight. These impacts should be discussed in the reviewing agencies' EIR/EIS.

K. Wilderness Experience

The EIR/EIS must also evaluate the project's effects on the region's wilderness areas. Of particular concern are impacts to the Carrizo Gorge Wilderness area, which is located north of both the proposed ECO Substation and Boulevard Substation expansion. Other potentially impacted wilderness and environmentally sensitive areas include the Jacumba Wilderness Area, the Table Mountain Area of Critical Environmental Concern, and the Anza Borrego Desert State Park.

L. Recreational Resources and Public Access

Because the project will involve the cutting of new roads into previously inaccessible areas, public use of these areas, whether authorized or unauthorized, may increase dramatically. This increase in use is likely to result in increased fire danger, invasive species distribution, vandalism, and disruption of habitat in remote, currently unaltered natural resource areas. These impacts due to increased public access should be fully addressed in the EIR/EIS.

Relatedly, the EIR/EIS must clearly and consistently describe the public's recreational access to the project sites and accurately analyze the impacts of that designated level of access. For example, the Tule Wind Project proponent asserts that a mere 2% of the land in the project area will be occupied by wind power production equipment and the rest will remain open for existing recreational uses. But access for recreational users may in fact be limited. In the Powerlink approval, mitigation measures require that current and new access roads are to be closed to the public due to safety, invasive species, and fire hazard concerns. If reviewing agencies follow the Powerlink example, then large portions of the project area will be closed to recreational activities, limiting the ability of recreationists to legally use and enjoy the area. On the other hand, if these newly constructed access roads are not closed to the public, the additional public access will increase fire hazards, the risk of introducing invasive species, and the likely degradation of the surrounding environment, as discussed above. Furthermore, there is no guarantee that the public will remain on the access roads; resulting off-road vehicle use will in turn cause further habitat destruction in and around the project area.

M. Cultural Resources

The project location is rich with significant cultural resources, including Native American sacred sites, burial/cremation areas, and traditional cultural properties. For example, there are at least 40 previously recorded archeological sites within the right of way proposed for the Tule Wind Project. Furthermore, there are more than 30 archaeological investigations that have previously taken place within that proposed right of way. Disruption of these areas will result in significant impacts that must be fully explained in the EIR/EIS, and analyzed in an appropriate National Historic Preservation Act review process. The reviewing agencies must evaluate and set forth mitigation measures to address these significant impacts to cultural and archaeological resources.

N. Rural Character and Quality of Life of Backcountry Communities

The EIR/EIS must thoroughly discuss the effects of the project on the rural character and quality of life of backcountry communities. The industrialization of Eastern San Diego County will adversely affect the lives of the residents who have chosen to live in rural communities in part because of their close connection to nature. The reviewing agencies should therefore address this important issue.

O. Environmental Justice

The reviewing agencies should assess the environmental justice issues raised by the construction of massive, industrial facilities and infrastructure for the provision of power to urban consumers within and surrounding low-income, rural communities. These important and often-overlooked issues are critical here, where urban electricity users seek to export the environmental costs of their electricity usage to poor rural communities.

P. Climate Change Impacts

1. Use of Excess Capacity to Transport Fossil-fuel Based Electricity

The EIR/EIS must also address the likelihood that the new substation and transmission lines will cause more fossil-fuel-based generating facilities to be built in Mexico or near the substation in the United States. Notably, Sempra's Bajanorte Gasducto LNG line and a newly constructed water line run through Sempra's leased land directly south of the new ECO substation. With the construction of the project's new cross-border ESJ tie-line, Sempra will have all the necessary ingredients for a new gas-fired power plant on the Mexican side of the international border: gas, water, and transmission. Sempra has previously indicated that LNG will serve as its primary fuel for decades to come and has invested billions in its LNG infrastructure in Baja, including the construction of the Energia Costa Azul LNG terminal near Ensenada, Mexico. The reviewing agencies should fully investigate the potential for the project to increase fossil fuel consumption and analyze the consequent effects on greenhouse gas emissions, global warming, and air quality in the project area.

2. Additional Climate Change Impacts

In addition to the potential increase in fossil-fuel based energy production, the EIR/EIS must also address other climate change impacts. For example, SDG&E's ECO PEA admits that "fugitive emissions of SF₆ — a potent [greenhouse gas] with a [global warming potential] of 23,900—will result from the operation of transmission-line equipment that will be installed at the ECO and Boulevard substations." ECO PEA, p. 4.3-24. SDG&E plans to implement a SF₆ monitoring and reduction plan, but the plan will only "reduce emissions of SF₆ by approximately 5 percent." *Id.* The ECO PEA concludes that the plan will mitigate the impact of SF₆ emissions to less-than-significant

levels, but a reduction by 5 percent does not mitigate this significant impact to a less-than-significant level. A full discussion of SF6 emissions by all components of the project must be present in the EIR/EIS. Further the environmental review should discuss the cumulative impacts of these emission on climate change.

Additionally, studies have begun to show that undisturbed alkaline desert areas, such as the Mojave Desert, eastern San Diego County and western Imperial County, sequester carbon-dioxide in surprising quantities.⁹ This new understanding of deserts as important carbon sinks should be discussed in the reviewing agencies' analysis of this project's impacts on greenhouse gas emissions. The project will disturb and open up vast stretches of currently untrammelled desert lands to large-scale industrial development. These huge desert areas may do more good in reversing global warming if left alone than if they are fully developed into renewable energy generation facilities. This is particularly true where, as here, distributed photovoltaic energy production near the energy demand centers could eliminate or substantially reduce the need for the project. A complete analysis of this indirect adverse impact of the project should be conducted prior to the reviewing agencies' decision.

Q. Air Quality

In addition to greenhouse gases, the EIR/EIS must also evaluate the impacts of the project on local air quality and public health. Most specifically, the reviewing agencies must analyze the particulate matter emissions that would occur during construction of the project from, among other things, excavation, grading and off-road vehicle use.

R. Ground and Surface Water

The EIR/EIS must contain an adequate analysis of the impacts of the project on ground and surface water resources. As for groundwater, the project's short- and long-term demands on the region's groundwater resources will be a key part of the analysis. If the project draws down groundwater levels to a significant degree, neighbors' wells will be negatively affected. Such a drop in groundwater could also adversely impact any local springs or seeps connected to the aquifer, which could, in turn, affect desert animals reliant on those springs and seeps. These impacts must be thoroughly studied.

Further, the EIR/EIS must adequately analyze the potential for contamination of the underlying aquifers from the 569,800 gallons of oil that will be used at the ECO substation and the 25,660 gallons at the Boulevard substation due to operator error, equipment malfunction, fire, earthquake, windstorm, landslide, vandalism, sabotage, or other causes. Contamination of the fractured rock aquifers in Eastern San Diego County is notoriously difficult, if not impossible, to remediate. Contamination can

⁹ http://www.ecostudies.org/press/Schlesinger_Science_13_June_2008.pdf

be transported off site via high-flow fractures at unknown rates and in unknown directions. The reviewing agencies must analyze these potentially significant impacts in the EIR/EIS prior to making a decision on the project.

Turning to surface water, the project's impacts on local water courses should be fully evaluated. Construction of the ECO substation component of the project alone will require 30 million gallons of water. Even if this water is to be pumped out of the aquifer, purchased from nearby water districts, or trucked in from the City of El Centro, surface water supplies affected by these sources may be compromised. The ECO PEA does not analyze the availability of water for construction or the project's impacts on surface water supplies. Further, apart from short-term construction water needs, it is not clear to what extent long-term *operation* of the facility will require surface water supplies. In an area as dry as the proposed project site, water supply and demand must be very carefully evaluated prior to approval of any new project.

Also, construction of the project has the potential to affect surface runoff. By altering the slope and changing the topography where the project's wind turbines are to be placed, the traditional path that water follows in the area may be obstructed. This will not only cause changes in the quantity of runoff that reaches downslope streams and watercourses, but it will certainly affect the quality of such water as well. Runoff following construction activities will pick up large amounts of sediment, subsequently degrading the downslope streams. The EIR/EIS must address all of these hydrologic impacts.

S. Impacts on Boulevard

The Boulevard Substation will increase in size by approximately 600 percent *See, e.g.*, ECO PEA, Figure 3-17. This increase in size is particularly significant since the property is located in a residentially zoned area. The reviewing agencies must conduct a complete study of the impacts of the much larger substation on the community of Boulevard.

VI. Other Projects that Should Be Considered in this EIR/EIS

The ECO PEA states that it will be designed to "accommodate additional renewable generation in the future, beyond what is currently in the CAISO Queue." ECO PEA, p. 2-7. To the extent that the impacts from these projects and their generation tie-lines are "reasonably foreseeable," they must be addressed in the EIR/EIS as indirect impacts. CEQA Guidelines §§ 15064, 15126.2, 15130. As noted above, the large-scale projects (in addition to the ESJ and Tule Wind Projects) that are dependent on the construction of the ECO substation will have significant impacts on the region's environment, prompting the need for thorough and comprehensive environmental review of all such related projects, such as Invenergy's plans to construct a 160 MW wind energy project on the Campo Indian

Reservation.¹⁰ Massive wind farms such as this have the proven capacity to kill thousands of birds each year. Similarly, large scale solar-thermal projects that may tie in to the ECO substation can create superheated zones around the collector towers that can reach ambient temperatures of 800 degrees, hot enough to literally cook birds in mid-flight. Endangered species, such as the Peninsular bighorn sheep and the Quino checkerspot butterfly, inhabit the area and will be adversely affected by the construction and operation of these types of renewable energy projects. The EIR/EIS must accordingly address these and many other significant indirect impacts.

VII. Cumulative Impacts

As discussed throughout these comments, the cumulative impacts of this project, along with the Powerlink and the multiple other planned energy production facilities that will rely on its new infrastructure, will be significant. The EIR/EIS must fully address these cumulative impacts. Previous attempts to address the cumulative impacts of the energy developments proposed in this remote region have failed. Most notably, the Powerlink EIR/EIS did not discuss and analyze the substantial environmental changes that the proposed development of eastern San Diego County and Imperial County for energy production will cause.

One of the most important impacts to address is the increased cumulative fire danger. Southern California is already struggling to develop solutions to its rapidly growing fire vulnerability. Each year, massive wildfires devastate vast areas of Southern California. Many of these fires have been caused by electricity generation and transmission facilities. SDG&E's recent proposal to turn off the power to Eastern San Diego residents during high fire danger periods is further proof of the depth of the fire hazard problem. An explosion of new energy facilities in this fire-prone area presents an extreme danger to the health and welfare of the area's citizens and threatens the very existence of small, rural communities such as Boulevard and Jacumba. These impacts are significant and should be addressed appropriately.

Also important, the cumulative construction impacts of the project together with all of the other related infrastructure and energy development are likely to disturb sensitive desert animals, including the Peninsular bighorn sheep, which require the areas contemplated for development for their continued survival. Similarly, the Quino checkerspot butterfly's critical habitat will be directly impacted by the construction of both the new transmission lines for this project and the Powerlink as well as other potential new energy development facilities in the area. These impacts should be avoided by relocating or disapproving these facilities.

The project's cumulative impacts to visual, water, soil, biological, air quality, noise, and cultural resources will be significant. The EIR/EIS must not ignore these cumulative impacts – as the

¹⁰ <http://www.signonsandiego.com/news/2009/jun/11/wind-farm-project-set-campo-reservation/>

Powerlink EIR/EIS did – or otherwise attempt to trivialize the proposed energy developments' potential to transform much of eastern San Diego County and western Imperial County into a permanently scarred, ecologically degraded, industrial zone.

VIII. Growth Inducing Impacts

The EIR/EIS must address the industrial growth that the project will spur. The reviewing agencies must consider the impacts of all future projects that may connect to or depend upon the Tule Wind and ESJ projects, or with the increased capacity of the ECO and Boulevard substations. If the reviewing agencies determine that the impacts of these projects are not indirect impacts, then they must consider these impacts in a separate chapter on growth-inducing impacts. The effects of the new energy development projects will be significant and pervasive and must be addressed in an EIS/EIR prior to approval of the project.

In particular, the reviewing agencies must examine the ESJ project's capacity to induce increased population, as well as the industrial growth the project would spur, including an evaluation of the likelihood of and impacts from the future use of the project's transboundary transmission line to carry electricity generated from fossil fuels. As discussed above, unless the CPUC or BLM places a condition in the permit prohibiting the transmission over the new line of fossil-fuel-based electricity, there is a distinct possibility that a new *gas-fired* power plant would be built in the vicinity of the La Rumorosa area and transport electrical output to the U.S. via the ESJ project transmission line and ECO and Boulevard Substations. These potential growth inducing impacts of the new transmission capacity provided by this project must be full described and analyzed by the reviewing agencies.

IX. Mitigation

Should this project be approved notwithstanding its potentially catastrophic effects on the natural ecosystems of a vast area of eastern San Diego County, every economically and legally feasible mitigation measure that might reduce these impacts should be given thorough consideration and, if found effective, implemented fully. Such mitigations would include, but not be limited to, requiring the complete decommissioning of these projects, and restoration of the surrounding environment to its preexisting, natural condition, once the projects have reached the end of their useful life. Given the rapid emergence of new and improved technologies for the generation and conservation of energy, including DG alternatives such as the installation of thin-film photovoltaic rooftop solar systems, early retirement of these projects due to their obsolete technology and excessive cost should be anticipated. Substantial bonds should be required of all project proponents in order to secure complete removal of the projects and restoration of the natural environment promptly after these projects are retired.

Additional mitigations required during the operation of the project should include acquisition of the replacement habitat on at least a 3-to-1 ratio for wildlife habitat disturbed by the project. Under no circumstances should habitat for any threatened or endangered species be reduced or degraded for the project, however.

X. Consultation

The EIR/EIS must list and discuss all "Federal permits, licenses, and other entitlements which must be obtained in implementing the proposal" (40 C.F.R. § 1502.25(b)), and analyze the consistency of the project with state and local laws and conduct joint environmental review with state and local agencies to the "fullest extent possible." 40 C.F.R. § 1506.2. Formal consultation under ESA will be required. The project's proposed transmission line will cut directly through Quino checkerspot butterfly critical habitat. Also, the project location overlaps with or is immediately adjacent to critical habitat for Peninsular bighorn sheep. As noted in the ECO PEA, the effects of the substation on the continued survival of these endangered species must be fully analyzed in coordination with the California Department of Fish and Game ("DFG"), BLM, and the U.S. Fish and Wildlife Service ("FWS"). Conservation Groups request that such consultation take place at the earliest point possible in the planning process so that the views of DFG and FWS on the project's effects on endangered species can be fully integrated into the CEQA and NEPA review for this project. Similarly, consultation with local Native American tribes should commence early in the review process given the importance of the cultural resources in the area.

The project will need to obtain multiple additional permits or other entitlements before it can proceed. For example, approvals will be necessary from San Diego County, the U.S. Army Corps of Engineers, and the San Diego or Colorado River Regional Water Quality Control Board under the federal Clean Water Act and the California Porter-Cologne Water Quality Control Act. The reviewing agencies must describe these and other required permits and explicate the anticipated interagency review of the project.

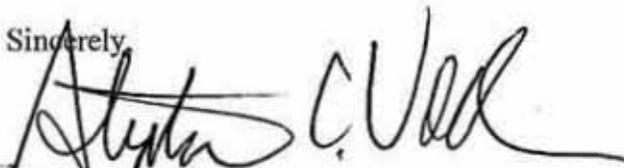
XI. Conclusion

Conservation Groups again emphasize their concern that the environmental impacts of the projects that threaten to industrialize eastern San Diego County and western Imperial County must be comprehensively reviewed in a programmatic EIR/EIS. The combined effects of all of the projects proposed, including the present project, the Powerlink project, and all other reasonably foreseeable energy developments in the area will fundamentally alter the region in ways that have not been fully

Re: Scoping Comments for the ECO/ESJ/Tule Project EIR/EIS
February 15, 2010
Page 19

revealed or analyzed to date. The best way to provide for the future energy needs of Southern Californians is not through destructive development of their irreplaceable wildlands, but rather through the deployment of distributed generation facilities at already disturbed locations within or near the urban demand centers.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephan G. Volker". The signature is fluid and cursive, with a long horizontal stroke at the end.

Stephan G. Volker
Attorney for Backcountry Against Dumps,
The Protect Our Communities Foundation, East
County Community Action Coalition and Donna
Tisdale

SCV:taf



OFF-ROAD BUSINESS ASSOCIATION, Inc.

www.orba.biz

February 15, 2010

Attn: Greg Thomsen,
BLM California Desert District Office
22835 Calle San Juan de Los Lagos
Moreno Valley, California 92553-9046

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RE: Comments for Consideration and Inclusion in the Scoping Process of the Tule Wind Project.

Dear Greg:

Thank you for the opportunity to provide scoping comments on Tule Wind project. I am writing on behalf of the Off-Road Business Association (ORBA) a national non-profit trade association representing all aspects of the motorized recreation industry – from OEM manufacturers to aftermarket suppliers and distributors, and local retailers across the United States.

According to information found on the BLM's website Pacific Wind Development has submitted an application to construct, operate, and maintain an energy generation facility that would generate 200 megawatts of renewable power. The project, known as the Tule Wind Project, would include the construction of new roads, turbines, a transmission line, and other facilities.

The proposed project would be constructed on approximately 15,500 acres, comprised of lands administered by the BLM and the CSLC, lands of the Ewiiapaayp Indian Reservation, and privately-owned property under the jurisdiction of San Diego County. The BLM lands comprise 12,124.9 acres. The proposed project is located in unincorporated San Diego County, approximately 60 miles east of San Diego, California.

GENERAL COMMENTS

ORBA understands and accepts the need for this country to develop energy from renewable sources. At the same time, it is important to realize that many of these projects are proposed for land where OHV recreation occurs, as this one is. San Diego County has very few OHV recreation opportunities therefore it is important we do not lose even one inch of trail in this particular area. We believe that with the proper siting of the towers and other various mitigation measures this project could co-exist with OHV recreation. We request the BLM work with the project proponent so it is designed in a manner that avoids any reduction in the land available for recreational use by off-highway vehicles.

SPECIFIC COMMENTS

The Draft EIS/EIR must evaluate many impact categories in order to meet the goals specified in NEPA, CEQA and their respective implementing regulations. These include the following:

Recreational Activities – The Draft EIS/EIR must evaluate the project’s potential impacts on the recreational uses in the area including, but not limited to, off-highway vehicle (OHV) use, camping, photography, hiking, wildlife viewing and rockhounding.

Cumulative Loss of OHV Recreational Areas - The Draft EIS/EIR must evaluate the cumulative losses of land available for OHV recreation, including, but not limited to, the cumulative closures or limitations on desert lands managed by BLM and on forest lands managed by the U.S. Forest Service.

Local Economic Impact – The Draft EIS/EIR must evaluate the economic impacts caused by the project’s construction, implementation, and operation. This evaluation must address (1) the economic impacts on the local community caused by the loss of commerce created by recreational users to the area including gasoline, grocery and equipment purchases; (2) the economic impacts on businesses that sell OHV’s and OHV-related equipment – such as motorcycles, ATV’s, UTV’s, dune buggies, motorhomes, trailers and their associated tow vehicles.

Reclamation Plan - The Draft EIS/EIR must include a “reclamation plan” for the eventual return of these lands to public use. This plan needs to ensure that if the applicant, for any reason, chooses to abandon the project that the land will be returned to public use in as close to its original condition as possible. The “reclamation plan” should also include provisions for returning the land to public use after the term of the right-of-way has expired.

Water Supply - The Draft EIS/EIR must evaluate the project’s impact on available water supplies. Such an evaluation must take into account water required for dust control, fire prevention and containment, vegetation management, sanitation, equipment maintenance, biological preserve land, construction, human consumption, and any other project uses.

Biological Impacts - The Draft EIS/EIR must evaluate the project’s potential to create direct, indirect, and cumulative biological impacts, including, but not limited to impacts on endangered and threatened species.

Consistency with Land Use Plans - The Draft EIS/EIR must evaluate the project’s consistency with existing land use and regulatory plans, including examination of impacts of on those plans. This includes reviewing the project’s consistency with the regulations set forth in Executive Order 11644, signed on February 8, 1972, which allows for use of off-road vehicles on the public lands.

Environmental Justice - The Draft EIS/EIR must evaluate whether the project’s environmental burdens (including diminished recreational access) are being placed disproportionately on individuals and/or groups who, due to their socio-economic status, have insufficient resources to challenge the proposed project.

Archeological, Cultural and Historic Impacts - The Draft EIS/EIR must evaluate potential impacts on archeological, cultural, and historical resources in the vicinity of the project, including, but not limited to: (1) Native American resources, burial sites, and artifacts; and (2) historical mining operations and related artifacts.

CONCLUSION

In order to provide the public with an adequate understanding of the project's impacts, the Draft EIS/EIR must address the issues described in this letter. We thank you for this opportunity to comment on the scope of the Draft EIS/EIR

Please consider this our formal request for inclusion on the EIS/EIR mailing list. Send all documents and updates to: Meg Grossglass 32383 Perigord Rd, Winchester, Ca 92596.

Sincerely,

Meg Grossglass

Denis Trafecanty
PO Box 305
Santa Ysabel, CA 02070
760-703-1149

February 15, 2010

Greg Thomsen
BLM California Desert District Office
Iain Fisher
California Public Utilities Commission

Re: Scoping Comments on the East County (ECO) Substation Project, the Energia Sierra Juarez Generator Tie-Line Project (ESJ) and the Tule Wind Project

Dear Sirs,

This is to inform you that I am opposing all three of these projects. I concur with the comments submitted by the Law Offices of Stephan Volker, Bill Powers of Powers Engineering, the San Diego Sierra Club, the County of San Diego and the Boulevard Planning Group. This is clearly an unnecessary industrialization of pristine wilderness areas.

In the unlikely event that these projects are approved and bypass all types of legal appeals, it is necessary to implement mitigation measures which must be put in place at the outset for when these projects become technologically obsolete (probably in 20 years or less). Those who develop projects must be required to dismantle transmission lines on the sites, and remove all towers, blades and concrete pilings and restore the wilderness to its original condition. We just can't rely on the word of the developers as they may very well be out of business in the future. The "restoration bond" must be sufficient in amount to complete the restoration of the wilderness before any construction begins. The bond will need to be reviewed biannually for anticipated cost of living adjustments and the amount of the bond will need to be increased accordingly.

Again in the unlikely event that these projects are approved and bypass all types of legal appeals, it is absolutely mandatory that no construction or preparation for construction begin until it is determined that the proper Mexican Government agencies give final approval for the ESJ project.

Sincerely,

Denis Trafecanty



Date: Feb. 15, 2010

To:

Iain Fisher
California Public Utilities Commission,
605 Third Street,
Encinitas, CA 92024

And to:

BLM California Desert District Office,
Atten: Greg Thomsen,
22835 Calle San Juan de Los Lagos,
Moreno Valley, California 92553-9046

Subject: Joint EIR/EIS for East County Substation, Tule Wind, and Energia Sierra Juarez Gen-tie Projects Comments.

Dear Sirs,

We are a Mountain Empire wide organization and have an interest in the projects noted above. Our comments will concentrate primarily on the full analysis of alternate options in the EIR/EIS over a long time period. The following are some of the more important points that we want to stress:

- The comparison between “distributed in-basin” renewable power generation and remote power generation should be analyzed for total cost and benefit.
 - **We believe that the “distributed in-basin” concept will**
 - Cause many more long-term local jobs to be generated and the whole local in-basin economy will benefit,
 - Require much less “new” infrastructure to be built to support the transport of remote renewable power,
 - Mean that existing infrastructure can be upgraded and made to handle more power without adding totally new lines,
 - Allow the existing network to be modernized and made to use the “smart” technology which will improve service, efficiency and reliability,
 - Greatly encourage homeowners and businesses to install solar and wind renewable systems and tie into the grid,
 - Make advances in technology such as Dr. Daniel Nocera’s new hydrogen/oxygen separator system a household item sooner,

- Make advances in technology such as the “Tres Amigas Super Station” project in New Mexico involving about 20 miles of gigawatt scale superconductor underground cables more cost effective, installed in more places and help the US keep the lead in this important field,
- Make it unnecessary to disrupt towns by putting large buried cables in the middle of them,
- Not cause the land values of many local residents in the backcountry to go down for the benefit of just a few non-resident project owners,
- Help preserve the backcountry’s visual beauty for the benefit of all citizens,
- Help preserve the quality and quantity of groundwater in the backcountry,
- Help keep the citizens more informed and directly involved in the efficient use of electricity and stress conservation to a much greater degree, and,
- Help meet the goals of California SB-375 and AB-32.

We believe that there are better ways to plan and meet the goals of the new legislation, the long term needs of the public and industry, and at the same time, protect the areas we live in to a much higher degree.

We reference letters by Dennis & Connie Berglund (dated Feb. 12, 2010) and Billie Jo Jannen (dated Feb. 15, 2010); both letters give greater scoping details on many of the topics that have been commented on above.

We thank you for considering this input and hope that it has a positive effect on your review and decisions.

Sincerely,

Larry Johnson,
Chair, Rural Economic Action League,
Tel #: (619) 478-5566



Locations

**Mountain Empire
Family Medicine
Campo**
31115 Highway 94
Campo, CA 91906
(619) 478-5311
Fax (619) 478-2267

**High Desert
Family Medicine
Jacumba**
44460 Old Highway 80
Jacumba, CA 91934
(619) 766-4071
Fax (619) 766-4128

**Alpine Family Medicine
Alpine**
1620 Alpine Boulevard
Alpine, CA 91901
(619) 445-6200
Fax: (619) 320-3347

**Escondido Family Medicine
Escondido**
255 N. Ash Street Ste. 101
Escondido, CA 92027
(760) 745-5832
Fax: (760) 745-7847

**25th Street Family Medicine
San Diego**
316 25th Street
San Diego, CA 92102
(619) 238-5551
Fax: (619) 238-3807

**Mountain Empire Community
Center
Campo**
976 Sheridan Rd.
Campo, CA 91906
(619) 478-2384
Fax: (619) 478-9473



Mountain Health & Community Services, Inc.

FAMILY CARE FOR SAN DIEGO COUNTY COMMUNITIES



February 17, 2010

Iain Fisher
California Public Utilities Commission
c/o Dudek
ecosub@dudek.com

RE: East County Substation Project

Dear Mr. Fisher:

I appreciate the opportunity to submit my comments regarding the scope and impact of the East County Substation Project.

As CEO of Mountain Health & Community Services, Inc. (MHCS), I would like first to tell you about the demographics and unique area we serve. The 950 square mile rural portion of the service area is the geographically isolated border region directly adjacent on the south to 100 miles of U.S./Mexico border, on the east by rural Imperial County, and on the north by the Cleveland National Forest. To reach the closest emergency room, laboratory, or specialist requires a trip of at least 50 - 90 miles over a mountain pass, which is subject to periodic closure due to snow, ice, fog, fire and high winds. The only pharmacy is in Alpine, as is the only X-Ray unit, which is operated by MHCS.

There is extremely limited public transportation, and a "trip to town" for health care or other services may require an overnight stay. The area includes few paved roads, extremely limited basic services, and faces all of the issues related to the porous border with Mexico. The combination of weather, distance, poverty, and lack of job skills also perpetuates a multi-generational cycle of unemployment and increased health risk factors within the target population, on both sides of the border.

The population is medically underserved - over 90% of patients served meet the federal definition of "poor" or "working poor", and 29% are self-pay patients who do not qualify for Medi-Cal or other programs, and who are charged fees based upon their ability to pay. None are refused service.

MHCS provides primary and preventive care, behavioral health and community services to this vulnerable rural population, which faces many barriers in accessing health care and community services. The neediest populations within our rural area are seniors, people with disabilities and young families who have limited transportation or financial means to travel outside of the area to obtain services, or to understand the resources that are available to them. MHCS is known as a leader in providing rural health care and participates at the County, State and Federal levels in ensuring that access to care addresses the needs of vulnerable, rural populations. MHCS is one of the only local organizations in the rural backcountry with the infrastructure to compete for private and public funding, bringing programs to meet the area needs.

MHCS was instrumental in organizing The Mountain Empire Bio-Terrorism and Disaster Defense Team (MEBTDD) in November, 2001, which is still active today. Through the auspices of the MEBTDD committee, MHCS collaborated and

ensured that the rural communities designated Community Disaster Centers and helped design the brochure that was sent to every home in the Mountain Empire area informing the residents where their Community Disaster Centers are located and emergency contact information.

The MEBTDD team developed the San Diego County Community Protection/ Evacuation Plan Template for Lake Morena /Campo, and it was the first to be formally accepted and recognized by the San Diego County Board of Supervisors. Several MHCS staff members have participated in CERT training and are active in promoting CERT in the rural communities so that all residents understand the importance of emergency preparedness.

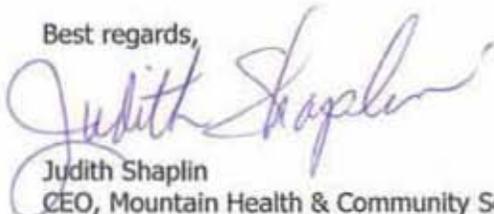
The Mountain Empire was heavily affected during the firestorms of October 2003 and 2007. Hundreds of homes were lost, and thousands of people, along with their pets and livestock, were completely cut off by fire from the basic necessities of life, including food, water, shelter, and health care. During and after both firestorms, MHCS was a leader in ensuring that the rural population and the displaced residents from the evacuated communities had access to these necessities. The Mountain Empire Community Center became the local evacuation shelter for the areas threatened and/or destroyed by fire. For weeks, the center functioned as the focal point for shelter, health care, mental health care, food, and assistance to people who had either lost their homes.

With this information in mind, please take into account the unique needs and impacts on these rural communities when considering the Community Enhancement Plan and potential mitigation for the ECO Substation Project:

- Development of locally generated distributed energy resources on public buildings, including community centers, health centers, fire stations, libraries and schools.
- Emergency generators for rural fire stations, schools and community/health centers.
- Assistance with funding a new health center in Campo.
- Expansion of Campo Community Center by refurbishing adjacent "theatre" building to better serve the community in a disaster, e.g. firestorm, etc.
- Development of new or expanded rural parks and recreational opportunities for youth and families due to impacts on recreation, community character and visuals impacts.
- Support of new community center in Boulevard for emergency shelter, training and community recreation and events.
- Funding of new fire station in Boulevard due to projects in high fire risk areas.
- Funding of new community center in Boulevard or refurbishment of current fire station when and if a new fire station is secured.
- Preservation of Camp Lockett and the Gaskill Brothers Stone Store as historic sites.
- Funding to form a Mountain Empire Health District.
- Additional fire fighting equipment for rural fire stations due to projects in high fire risk areas.

Thank you for your consideration.

Best regards,



Judith Shaplin
CEO, Mountain Health & Community Services, Inc.
1620 Alpine Boulevard
Alpine, CA 91901

San Diego Chapter Sierra Club

RESOLUTION ON WIND FARM TEST SITES IN SAN DIEGO COUNTY

WHEREAS the U.S. Bureau of Land Management has permitted wind energy testing on approximately 17,600 acres in San Diego County in the vicinity of Campo, Jacumba, and McCain Valley, and is considering another testing application in the vicinity of Julian;

WHEREAS the purpose of testing wind energy is to determine suitable locations for future wind energy generating facilities;

WHEREAS wind generated electricity is a fast-growing, renewable energy source and may be important in delivering larger supplies of "green" domestic power;

WHEREAS wind energy generation also carries a significant potential for harm to the environment that must be carefully considered before accepting it as "green" energy, including, among others:

- bird and bat deaths due to collision with wind turbine rotors and towers
- severe visual disruption of the landscape
- fragmentation of habitat and resulting displacement of species
- impacts on cultural and sacred sites
- unavoidable low-frequency noise
- conflicts with other uses of the land;

WHEREAS the Wind Siting Advisory¹ of the national Sierra Club asks local chapters to evaluate support or opposition to wind energy generating sites on a case-by-case basis in order that the Club may speak with a unified voice;

WHEREAS the Sierra Club's Wind Siting Advisory guidelines may be summarized as follows:

The Sierra Club usually supports the Most Appropriate Sites:

- agricultural and grazing land
- land that has already been significantly disturbed or has transmission lines.

The Sierra Club should support the More Appropriate sites (with appropriate mitigation):

- Sites near population and electricity consumption centers
- Sites where credible environmental review concludes there will be acceptable wildlife/habitat impacts
- Sites with extremely good wind potential without strong negative concerns

The Sierra Club may oppose Less Appropriate sites unless mitigation can adequately minimize environmental impacts:

- Natural areas where damaging road and/or transmission capacity must be installed

¹ http://www.sierraclub.org/policy/conservation/wind_siting.asp

- Projects that will significantly impair important scenic values

The Sierra Club will usually oppose Not Appropriate sites:

- National parks
- Marine preserves or parks
- State parks
- National monuments
- Wilderness areas
- Wildlife refuges
- Federally designated roadless areas
- Critical habitat and designated recovery areas for Rare, Threatened, or Endangered Species or habitat for indigenous species critical to a region or state's biodiversity
- Areas of cultural significance and sacred lands;

WHEREAS the U.S. Bureau of Land Management's Interim Wind Energy Development Policy² emphasizes minimization of "... negative impacts to the natural, cultural, and visual resources on the public lands ..." and specifies that negative impacts can be minimized as follows:

- "by avoiding special management areas with land use restrictions"
- "avoiding major avian (bird) migration routes and areas of critical habitat for species of concern"
- "establishing siting criteria to minimize soil disturbance and erosion on steep slopes"
- "utilizing visual resource management guidelines to assist in proper siting of facilities"
- "avoiding significant historic and cultural resource sites"
- "and mitigating conflicts with other uses of the public lands"

In addition, the Bureau of Land Management's Interim Wind Energy Development Policy also states, "Biological and cultural resource surveys and studies may also be required during the term of the site testing and monitoring authorization to collect information for future resource assessments";

WHEREAS the U.S. Fish and Wildlife Service's Interim Guidelines to Avoid and Minimize Wildlife Impacts from Wind Turbines³ stresses careful study of potential wind energy generating sites, for the following reasons, among others:

- "the wind industry is rapidly expanding into habitats and regions that have not been well studied"
- "the cumulative effects of this rapidly growing industry may initiate or contribute to the decline of some wildlife populations"
- "the potential harm to these populations from an additional source of mortality or adverse habitat impacts makes careful evaluation of proposed facilities essential";

² http://windeis.anl.gov/documents/dpeis/appendices/Appendix_A.pdf

³ <http://www.fws.gov/r9dhcbfa/wind.pdf>

WHEREAS the location of wind energy generation sites in the McCain Valley National Cooperative Land and Wildlife Management Area will likely result in significant environmental impacts including the following, among others:

- Impacts to designated critical habitat for the endangered Peninsular bighorn⁴
- Impacts to the designated Southeast San Diego Recovery Unit for the endangered Quino checkerspot butterfly
- Impacts to other suitable habitat for the endangered Quino checkerspot butterfly
- Impacts to bird and bat populations
- Fragmentation of large natural habitat landscape
- Impact to scenic views and wilderness experience in two adjacent wilderness areas⁵
- Impact to significant concentration of Native American cultural sites
- Conversion of outstanding rural scenic values to industrial use
- Impact to experience of quiet and remoteness from the urban environment
- Conflicts with use by rock climbers, hikers, campers, hunters, and off-roaders;

WHEREAS the pending Banner Grade wind testing site near Julian will likely result in significant environmental impacts including the following, among others:

- Unmitigable impacts on birds using the Banner Canyon migration corridor⁶
- Fragmentation of habitat
- Impacts to bird and bat populations
- Conversion of outstanding rural scenic values to industrial use
- Impact to outstanding scenic values of a major gateway into Anza-Borrego State Park

WHEREAS the Jacumba wind testing site will likely result in significant environmental impacts including the following, among others:

- Impacts to the designated Southeast San Diego Recovery Unit for the endangered Quino checkerspot butterfly
- Impacts to Golden eagles using nearby nesting sites
- Impacts to bird and bat populations
- Impacts to Native American cultural sites
- Impacts to scenic views in the adjacent designated Table Mountain Area of Critical Environmental Concern
- Fragmentation of habitat

WHEREAS the Shockey Truck Trail wind testing site near Campo is still undergoing study by the San Diego chapter of the Sierra Club but has the following known faults:

- Impacts to Native American cultural sites

⁴ Personal communication with Lynda Kastoll, Realty Specialist, U.S. Bureau of Land Management

⁵ Sombrero Peak Wilderness and Sawtooth Mountains Wilderness

⁶ Personal communication with Lynda Kastoll, Realty Specialist, U.S. Bureau of Land Management

- Impacts to bird and bat populations
- Impact to suitable habitat for the endangered Quino checkerspot butterfly
- Fragmentation of habitat;

WHEREAS the U.S. Bureau of Land Management appears to have violated the Endangered Species Act when it failed to conduct or require site-specific biological resource studies, and when it failed to formally consult with the U.S. Fish and Wildlife Service to ensure that wind testing facilities will not jeopardize any listed species or harm designated critical habitat;

WHEREAS the company investigating installation of wind generating facilities, Pacific Wind Development LLC, appears to have violated its wind testing permit at one of the McCain Valley sites by failing to remove evidence of vehicle tracks to at least one test tower so as to discourage establishment of new vehicle trails through undisturbed habitats;⁷

WHEREAS the Desert Committee of the San Diego Chapter of the Sierra Club has unanimously elected to oppose wind energy generating and/or testing facilities at the Banner Grade, Jacumba, and McCain Valley sites for the reasons specified above and to take no position on the Shockey Truck Trail site; NOW THEREFORE BE IT

RESOLVED that the San Diego Chapter of the Sierra Club opposes location of future wind energy generating and/or testing facilities at the following sites for the reasons listed above, consistent with the Sierra Club's Wind Siting Advisory guidelines and the U.S. Bureau of Land Management's Interim Wind Energy Development Policy guidelines:

- McCain Valley National Cooperative Land and Wildlife Management Area
- Banner Grade
- Jacumba

RESOLVED that the San Diego Chapter of the Sierra Club takes no position on the Shockey Truck Trail wind testing site pending further analysis;

RESOLVED that the San Diego Chapter Sierra Club Energy Committee representatives, in collaboration with the Conservation Committee, will seek to establish a wind energy advisory coalition in an effort to identify appropriate wind resource areas consistent with national Sierra Club policy and in cooperation with scientists, regulators, wind developers, SEMPRA, and others; AND

RESOLVED that Kelly Fuller be appointed as the San Diego Chapter Sierra Club's representative and spokesperson on the issue of possible wind energy generating sites on BLM land at Banner Grade, Jacumba, McCain Valley, and Shockey Truck Trail.

###

⁷ See Exhibit C, U.S. Bureau of Land Management Right-of-way grant/Temporary Use Permit; "All tracks will be raked out after construction is complete."