UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
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April 3, 2008

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Subject: Draft Environmental Impact Report/Environmental Impact Statement (DEIR/EIS) for the Sunrise Powerlink Project and Proposed Land Use Amendment (CEQ# 20080002)

Dear Ms. Blanchard and Ms. Kastoll:

The U.S. Environmental Protection Agency (EPA) has reviewed the DEIR/EIS referenced above. Our review and comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) Regulations (40 CFR Parts 1500-1508), and our NEPA review authority Section 309 of the Clean Air Act.

The Sunrise Powerlink Project (SRPL) is a proposal by the San Diego Gas & Electric Company (SDG&E) to construct a 150-mile transmission line from the Imperial Valley to coastal San Diego (Northern Route Alternative – Proposed Project). SDG&E proposes to construct this transmission line to maintain reliability, reduce the cost of energy, and accommodate the delivery of renewable energy.

EPA commends the California Public Utilities Commission (CPUC) and the Bureau of Land Management (BLM) for providing a comprehensive document and examining a wide range of alternatives. Many issues, such as greenhouse gas emissions, were addressed in a progressive manner, and the DEIR/EIS contained comprehensive lists of proposed mitigation measures for environmental impacts. EPA recognizes the complexity of the proposal and supports an alternative that assures a long-term, sustainable balance between available energy supplies, energy demand, and protection of ecosystems and human health. We support the development of renewable resources, and we acknowledge that lack of available transmission capacity is frequently a deterrent in the development of these resources. However, the goals of providing additional grid reliability, promoting renewable energy, and reducing energy costs should be carefully balanced.

Since the Preferred Alternative has not been identified, our rating is based on the Proposed Project. Based on our review of the document, we have rated this DEIR/EIS as EC-2, Environmental Concerns – Insufficient Information (See attached "Summary of EPA Rating

System"). We are concerned that the DEIR/EIS does not adequately address basic project objectives, including the demonstration of purpose and need and the disclosure of costs and benefits associated with the various alternatives. We are concerned that the Proposed Project could have significant adverse impacts to watershed resources, air quality, and, in particular, the Anza-Borrego Desert State Park. These impacts should be avoided to the extent possible in order to fully protect the environment. We recommend that the Final Environmental Impact Report/ Environmental Impact Statement (FEIR/EIS) include additional information related to the basic project objectives, the disclosure of economic benefits, and a comparison of costs associated with the alternatives. The FEIR/EIS should also provide additional information regarding impacts to water resources, air quality, and project conformity with the State Implementation Plan. Our detailed comments are enclosed.

From the perspective of environmental stewardship, we encourage the CPUC and BLM to consider the Environmentally Superior Alternatives over the Proposed Project. We also believe that the *No Project/No Action Alternative* has merit, as the DEIR/EIS states that its impacts were equivalent to the Alternatives ranked #1, #2, and #3. We recommend updating the *No Project/No Action Alternative* in the FEIR/EIS, based on the most recent data available.

We appreciate the opportunity to review this DEIR/EIS and we are available to answer questions you may have regarding our comments. We request one copy of the FEIS/EIR when it is officially filed with our Washington, D.C. office. If you have any questions, please call me at (415) 972-3846, or have your staff contact Ann McPherson at (415) 972-3545 or mcpherson.ann@epa.gov.

Sincerely,

/s/

Nova Blazej, Manager
Environmental Review Office

Enclosure: Summary of Rating Definitions
Detailed Comments

EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT/ ENVIRONMENTAL IMPACT STATEMENT (DEIR/EIS) FOR THE SUNRISE POWERLINK PROJECT AND PROPOSED LAND USE AMENDMENT, APRIL 3, 2008

Project Description

The Sunrise Powerlink (SRPL) Project is a proposal by the San Diego Gas & Electric Company (SDG&E) to construct a 150-mile transmission line from the Imperial Valley to coastal San Diego (Northern Route Alternative – Proposed Project). The DEIR/EIS presents a detailed analysis of the Proposed Project and 27 alternatives to the Proposed Project. The 27 alternatives include minor routing adjustments to the Proposed Project, entirely different transmission line routes, "non-wires" alternatives including conventional and alternative energy technologies, system alternatives, and a *No Project/No Action* alternative.

The California Public Utilities Commission (CPUC) and Bureau of Land Management (BLM) have identified seven alternatives that were evaluated in detail within the DEIR/EIS and ranked each of them in terms of environmental superiority: 1) *New In-Area All-Source Generation Alternative*; 2) *New In-Area Renewable Generation Alternative*; 3) *Lake Elsinore Advanced Pump Storage (LEAPS) Transmission-Only Alternative*; 4) *Environmentally Superior Southern Route (SWPL) Alternative*; 5) *Environmentally Superior Northern Route Alternative*; 6) *Northern Route Alternative (Proposed Project)*; 7) *LEAPS Generation and Transmission Alternative*. In addition, a *No Project/No Action Alternative* scenario was also evaluated. The CPUC identified the *New In-Area All-Source Generation Alternative* as the Environmentally Superior Alternative, as required under the California Environmental Quality Act (CEQA). The BLM will identify the agency's Preferred Alternative in the Final Environmental Impact Report/Environmental Impact Statement (FEIR/EIS).

Purpose and Need

The CPUC and the BLM identified three basic project objectives for the SRPL Project: 1) to maintain reliability in the delivery of power to San Diego region; 2) to reduce the cost of energy in the region; and 3) to accommodate the delivery of renewable energy to meet State and Federal renewable energy goals from geothermal and solar resources in the Imperial Valley and wind and other sources in San Diego County (pg. A-6). In addition to the SRPL Project, the DEIR/EIS evaluates five other projects that are closely related to the Proposed Project, including the La Rumorosa wind project, a 250 megawatt (MW) wind facility located near La Rumorosa, Mexico (Section B.6.2).

Importation of Renewable Energy

Sempra Generation, on behalf of Baja Wind U.S. Transmission LLC, applied for a Presidential Permit to construct, operate, maintain, and connect an electric transmission line across the U.S. border with Mexico (Federal Register, February 22, 2008). The proposed transmission line would extend approximately one mile inside the U.S. and two miles inside Mexico and connect to SDG&E's existing Southwest Powerlink 500 kilovolt (kV) transmission line. The Federal Register notice states that the proposed transmission line would be used to transmit the entire electrical output (1,250 MW) of the La Rumorosa wind generators from Mexico to the U.S. The DEIR/EIS, however, states that only about 1,000 MW of in-basin

generation or transmission import capacity would be required to replace the Proposed Project (pg. ES-4) and that the existing Southwest Powerlink transmission line could only accommodate about 300 MW of wind energy (pg. C-150). If the existing transmission system is capable of incorporating an additional 1,250 MW of renewable energy, this would seem to refute one of the major reasons to develop the SRPL Project, namely the need to bring renewable energy resources to San Diego County.

Recommendations:
The FEIR/EIS should address whether there is still a need for the Proposed Project if the existing system is capable of transmitting up to 1,250 MW of renewable energy from La Rumorosa. If there is still a need, this action should be analyzed in the context of the *No Project/No Action Alternative*, also discussed below.

The FEIR/EIS should discuss the Presidential Permit application and the effect of this action on the Proposed Project. The CPUC and BLM should clarify why the DEIR/EIS considered the 250 MW Rumorosa Wind Developers II project, instead of the larger 1,250 MW project, as an "indirect effect" of the Proposed Project.

The FEIR/EIS should clarify whether there is a preference for the importation of renewable energy from a specific location, such as Imperial County. If there is a documented preference to import renewable energy from Imperial County, as opposed to Mexico, SDG&E should consider whether there is existing capacity within the system to import renewable energy from the Imperial Valley, in addition to, or in lieu of importing energy (renewable or non-renewable) from Mexico.

EPA recommends that the FEIR/EIS disclose: 1) the current available capacity of the existing Southwest Powerlink 500 kV transmission line; 2) the estimated capacity of the Southwest Powerlink 500 kV transmission line in future years; and 3) to what degree the line is capable of importing renewable energy from La Rumorosa, Imperial County, and San Diego County.

The FEIR/EIS should clarify whether the importation of renewable energy from Mexico, such as wind energy from La Rumorosa, is eligible for credit within the California Renewables Portfolio Standard Program.

Cost-Benefit Analysis

The CPUC and BLM state that the second basic project objective of the SRPL Project is to reduce the cost of energy in the region. The 6-volume DEIR/EIS, however, does not contain an economic or cost-benefit analysis of the various alternatives. Consequently, it is difficult to evaluate to what degree this objective will be met based on the information presented in the text.

Recommendation:
The FEIR/EIS should include a detailed cost-benefit analysis of the Proposed Project and the various alternatives.

Otay Mesa Energy Center

The CPUC authorized SDG&E to sign a 10-year power purchase agreement (PPA) with Calpine for the purchase of energy from the Otay Mesa Energy Center (573 MW) in 2006. In conjunction with this project, the utility also signed agreements for the building of two peaker plants. During a rehearing on the application, questions were raised regarding whether the PPA would provide ratepayer benefits. Several parties questioned the wisdom of approving a 10-year PPA that gave SDG&E 573 MW of capacity starting in 2008, when the utility needs little of that energy until 2011 (CPUC Decision 06-02-031, February 16, 2006). The CPUC found that the Otay Mesa Energy Center is in a location that will allow SDG&E to meet its grid reliability needs, its resource adequacy requirements, its local area requirements, and be fully deliverable. By June 2006, SDG&E and Calpine reached an agreement whereby the plant's commencement date was changed from January 2008 to May 2009 and SDG&E would have an ownership option following the expiration of the ten-year PPA. This project, however, was only briefly mentioned in the DEIR/EIS.

Recommendation:
With the option to purchase the Otay Mesa Energy Center, SDG&E will have the opportunity to secure energy from a clean power source for 30 plus years. The FEIR/EIS should discuss this project in greater detail and clarify whether this additional power source will impact the basic purpose and need for the Proposed Project as described in the DEIR/EIS. As appropriate, this project should be analyzed in the context of the *No Project/No Action Alternative*, also discussed below.

Alternatives Analysis

Comparison of Alternatives

Although the CPUC ranks the Environmentally Superior Alternatives, the information used to rank the final selection of alternatives is not presented within the Executive Summary in a way that provides the reader with a clear comparison of the various alternatives and their environmental effects, other than what is summarized qualitatively on pages ES-2 through ES-4. We recognize that the number of significant, unmitigable impacts does not, in fact, represent the relative extent and scale of the potential impacts. It would be misleading to use this number as the final measure of impact significance, given the wide range of uncertainties associated with many of the alternatives, the completely different alternative generation methods, and the lack of quantification of environmental impacts. As the DEIR/EIS states, the comparison of different generation alternatives against each other and against transmission alternatives is extremely difficult, since the impacts are very different. Although we found additional information in Section H, we still experienced difficulty in understanding how the final conclusions were drawn.

Recommendations:
The FEIR/EIS should include a concise summary of the environmental impacts associated with each of the eight alternatives and include this information in the Executive Summary. The potential environmental impacts of each alternative should be quantified to the greatest extent possible (e.g., acres of wetlands impacted, tons per year

of emissions produced, etc.) and summarized. EPA suggests creating a matrix that rates each of the alternatives on each of the selection criteria and including this information in the Executive Summary.

The FEIR/EIS should discuss how unquantified environmental impacts (such as a reduction of air pollutants) have been determined in the environmental analysis.

The FEIR/EIS should include a concise summary of the cost-benefit analysis of the Proposed Project and the various alternatives. This information should also be included in the Executive Summary.

Levels of Significance

The DEIR/EIS states that levels of significance are defined by classification (pg. ES-67). Class I is used to identify significant and unavoidable impacts; Class II is used to identify significant impacts that can be mitigated to a less than significant level; Class III is used to identify adverse but less than significant impacts; and Class IV is used to identify beneficial impacts. Tables ES-1 and ES-2 identify Class I and Class II impacts of the Proposed Project; Tables ES-3 and ES-4 identify Class I and Class II impacts of the Proposed Project's Future Transmission System Expansion; and Tables ES-5 and ES-6 identify Class I and Class II impacts of the Proposed Project's Connected Actions (pg. ES-67).

Recommendation:
The DEIR/EIS does not clarify how the determination is made as to Class I, Class II, and Class III impacts. The FEIR/EIS should define the thresholds of significance used to make this determination for each resource.

Simultaneous Regulatory Review by State and Federal Agencies

The LEAPS project is currently undergoing review by the Federal Energy Regulatory Commission (FERC). It is unclear what impact the FERC review could have on the SRPL Project. For example, should FERC issue a license for the LEAPS project (with or without generation) and should the CPUC and BLM select an alternative other than LEAPS, will both projects proceed simultaneously or will the agencies reexamine the issue after FERC issues their decision? Conversely, if FERC decides not to issue a license for the LEAPS project, and the CPUC and BLM select the LEAPS Transmission-Only Alternative, what would happen? We note that FERC recently approved transmission rate incentives in conjunction with the LEAPS transmission line.

Recommendation:
EPA recommends that the FEIR/EIS include an update of the FERC permitting/licensing process for the LEAPS project (FERC Project No. 11858) and discuss measures to ensure interagency coordination in the feasibility analysis of different alternatives under consideration.

LEAPS Alternatives

Environmentally Superior Alternative #3 is identified as the *LEAPS-Transmission Only Alternative* and Environmentally Superior Alternative #7 is identified as the *LEAPS Generation and Transmission Alternative*. We note that EPA submitted comment letters on the DEIS (April 27, 2006) and FEIS (March 5, 2007) for the LEAPS-Generation project. We expressed concerns about the project because of its potential significant adverse impacts to watershed resources, including water quality and habitat, and to air quality. During the review of the FEIS, we continued to express concerns because we found that the document did not fully disclose the project's potential impacts and identify appropriate mitigation measures. Nor did the FEIS provide sufficient information to determine whether the preferred alternative conforms to the applicable State Implementation Plan (SIP).

Recommendation:
We remain concerned about these issues and recommend that the CPUC and BLM examine the two comment letters referenced above and ensure that the potential impacts and appropriate mitigations measures are fully disclosed within the FEIR/EIS.

New In-Area All-Source Generation Alternative

The DEIR/EIS states that the *New In-Area All-Source Generation Alternative* would include a combination of fossil-fuel fired central station generation, renewable generation, and non-renewable distributed generation. The conventional generation considered in this alternative includes a range of specific conventional generation projects: 1) proposed South Bay Replacement Project (SBRP); 2) proposed San Diego Community Power Project (ENPEX); 3) the proposed Encina Power Plant Repowering; 4) proposed peaking gas turbines that SDG&E could procure; and 5) fossil fuel-fired distributed generation facilities. Although the Encina Power Plant Repowering Project was mentioned in the DEIR/EIS, the impacts associated with this project were not considered because the Carlsbad Energy Center filed the Application for Certification (AFC) after this alternative had been defined and analyzed (pg. E.6-1). Based on the fact that LS Power withdrew its AFC, it is doubtful that a new plant will be constructed at the South Bay site, one of the options considered in the DEIR/EIS.

Recommendation:
The FEIR/EIS should discuss the impacts associated with the Encina Power Plant Repowering project since the Carlsbad Energy Center has filed the AFC.

Although the *New In-Area All-Source Generation Alternative* was ranked the highest in terms of environmental superiority, there are several significant, unknown variables associated with this alternative, such as the location of the generation facility. We agree that it was a viable option for consideration; however, it is difficult to quantify and disclose the environmental impacts associated with the *New In-Area All-Source Generation Alternative* when the location of the proposed plant has not been determined.

Recommendation:
The FEIR/EIS should discuss the limitations associated with the assumptions made for the *New In-Area All-Source Generation Alternative* in greater detail.

The CPUC authorized SDG&E to sign a 10-year power purchase agreement (PPA) with Calpine for the purchase of energy from the Otay Mesa Energy Center (573 MW) in 2006. In conjunction with this project, the utility also signed agreements for the building of two peaker plants. This project, however, and the revised PPA were not mentioned as a component of the *New In-Area All-Source Generation Alternative,* and were only very briefly mentioned in the 6-volume DEIR/EIS.

Recommendation:
The FEIR/EIS should discuss: 1) the PPAs signed in conjunction with the Otay Mesa Energy Center; 2) whether new peaker plants will be required in addition to those planned in conjunction with the Otay Mesa Energy Center; and 3) why the Otay Mesa Energy Center is not considered to be part of the *New In-Area All-Source Generation Alternative* or the *No Project/No Action Alternative*.

No Project/No Action Alternative

Although it is difficult to predict exactly what would occur in the absence of the SRPL Project, we believe that this scenario should be updated based on the most recent data available. The DEIR/EIS states that the *LEAPS Transmission-Only Alternative* would substantially satisfy two of the major project objectives, to maintain reliability in the delivery of power and reduce the cost of energy in the region (pg. E.7-7). In conjunction with this alternative, the DEIR/EIS also states that the Green Path Coordinated Projects would provide a path for importing renewable power from the Imperial Valley and other locations into SDG&E territory (pg. E.7-7); however, the DEIR/EIS does not follow up with this concept. The *Green Path Coordinated Projects Alternative* was eliminated from consideration as an alternative by a screening process earlier in the review process (pg. ES-33; pg. C-140). The DEIR/EIS states that these projects are not considered to be more likely to occur in the absence of the SRPL Project, so they were not considered as a component of the *No Project/No Action Alternative* (pg. C-152). We submit the following recommendations for further consideration.

Recommendations:
The Green Path Coordinated Projects is mentioned in conjunction with the *LEAPS Transmission-Only Alternative*. It would seem reasonable to discuss it in greater detail within the FEIR/EIS as a component of the *LEAPS Transmission-Only Alternative* or the *No Project/No Action Alternative*.

The Otay Mesa Energy Center should be discussed as a component of the *No Project/No Action Alternative*, due to the revised PPAs providing SDG&E with the opportunity to purchase the plant after a 10-year period. This effectively extends the opportunity to secure clean energy for a 30-year period.

The Presidential Permit application filed by Sempra Generation to construct, operate, maintain, and connect an electric transmission line across the U.S. border with Mexico should be discussed as a component of the *No Project/No Action Alternative*.

The analysis of environmental impacts for the *No Project/No Action Alternative* should be expanded in Section E.8 and Section H.7 and should include the most recent data available.

Conciseness, Clarity, and Organization of the DEIR/EIS

National Environmental Policy Act (NEPA) documents should be "concise and clear" (40 CFR Part 1500.2 (b)). The DEIR/EIS for the SRPL Project is not concise, as it contains approximately 7,500 pages and is 6 volumes in length. Although many aspects of the project are expressed clearly within the document, the overall layout of the 6-volume document was difficult to understand for those not intimately involved with the project. In particular, it was difficult to understand: 1) how the Proposed Project and 27 alternatives were pared down to the seven Environmentally Superior Alternatives plus the *No Project/No Action Alternative*; 2) the location of the detailed analysis of these alternatives within the multi-volume document; and 3) the location of the detailed analysis for *Environmentally Superior Southern Route Alternative*.

The Executive Summary provided a good description of the conclusions of the DEIR/EIS, including the ranking of the Environmentally Superior Alternatives (pg. ES-2 through ES-4). If the analysis for each of the Environmentally Superior Alternatives had been presented within the 6-volume DEIR/EIS as specific (easy-to-identify) alternatives, the 6-volume report would have been easier to decipher. Comparing the eight different alternatives described in the Executive Summary with Sections D and E, we note the following:

a. *New In-Area All-Source Generation Alternative* (#1) placed into Section E.6;
b. *New In-Area Renewable Generation Alternative* (#2) placed into Section E.5 (missing in our copy);
c. *LEAPS Transmission-Only Alternative* (#3) placed into Section E.7.1;
d. *Environmentally Superior Southern Route Alternative* (#4) discussed in Sections E.1, E.2, E.3, and E.4, but it does not appear to have been consolidated as the Environmentally Superior Southern Route Alternative within Section E.
e. *Environmentally Superior Northern Route Alternative* (#5) placed into Section D;
f. *Northern Route Alternative (Proposed Project)* (#6) placed into Section D;
g. *LEAPS Generation and Transmission Alternative* (#7) placed into Section E.7.2; and
h. *No Project/No Action Alternative* (#8) placed into Section E.8.

Recommendation:
The FEIR/EIS should more clearly define the overall layout of the 6-volume report, specifically addressing how the Environmentally Superior Alternatives are presented within the 6-volume document.

<u>Water Resources</u>

Clean Water Act Section 404

EPA is concerned about the potential adverse impact to aquatic resources that would result from the Proposed Project. The DEIR/EIS states that a formal jurisdictional delineation of the extent of waters, including wetlands, on the project site has not yet been conducted and

verified by the U.S. Army Corps of Engineers (Corps) because the final route has not been selected (pg. D.2-93). EPA is concerned that the impacts to aquatic resources may be underestimated since the formal jurisdictional delineation has not been conducted.

SDG&E should coordinate with the Corps to determine if the proposed project will require a Section 404 permit under the Clean Water Act (CWA). If it is determined that there are jurisdictional waters within the project area, a Section 404 permit will be necessary for any discharges of dredged or fill material into these waters, including wetlands and other special aquatic sites. If a Section 404 permit is required, EPA will review the project for compliance with *Federal Guidelines for Specification of Disposal Sites for Dredged or Fill Materials* (40 CFR 230), promulgated pursuant to Section 404(b)(1) of the CWA. Pursuant to 40 CFR 230, any permitted discharge into waters of the United States must be the *Least Environmentally Damaging Practicable Alternative* (LEDPA) available to achieve the project purpose. No discharge can be permitted if it will cause or contribute to significant degradation of the waters of the U.S.

Based on information provided in the DEIR/EIS, a review of National Wetland Inventory (NWI) maps identifies 19 major drainages that the proposed project would cross (pg. D.2-32). Based on the hydrology study for the Proposed Project, there are approximately 167 identified watercourses the Proposed Project would cross (pg. D.2-32). The Proposed Project would impact classes of wetlands/waters including riverine, slope and depressional wetlands. According to the DEIR/EIS, permanent, temporary and secondary/indirect impacts to waters would occur from construction of the Proposed Project. Direct impacts include the removal of wetland vegetation and/or filling of waters from construction and vehicular stream crossings. Indirect impacts include bank erosion and stream sedimentation (pg. D.2-93).

To determine the extent of impacts to waters and identification of the LEDPA, a jurisdictional delineation should be conducted for the alternatives presented in the DEIR/EIS. At this time, it is difficult to discern the extent of impacts to waters based on information provided in the DEIR/EIS. The NWI maps are at such a large scale that they cannot be relied upon to sufficiently disclose the extent of waters located within the alternatives under consideration.

EPA recognizes that with certain projects, such as transmission lines, there are opportunities to avoid and minimize impacts to waters through sensitive design criteria such as the placement of towers out of waters. Additional avoidance and minimization alternatives should be explored such as the use of directional drilling and Arizona crossings. The project proponent, however, bears the burden of clearly demonstrating that the preferred alternative is the LEDPA that achieves the overall project purpose, while not causing or contributing to significant degradation of the aquatic ecosystem. Based on the information available within the DEIR/EIS, EPA believes that the alternatives analysis in the DEIR/EIS does not demonstrate compliance with the 404(b)(1) Guidelines. EPA offers the following recommendations to help facilitate compliance of the project with the Section 404 Guidelines:

Recommendations:
The FEIR/EIS should include an evaluation of the project alternatives in order to demonstrate the project's compliance with the 404(b)(1) Guidelines and authorization of LEDPA.

The FEIR/EIS should describe the status of consultations with the Corps regarding a CWA Section 404 permit, and how the Proposed Project meets 404 (b)(1) Guidelines which require that projects first avoid, then minimize, and finally mitigate any impacts to waters of the United States (WOUS), including wetlands and other special aquatic sites.

The FEIR/EIS should quantify potential impacts to WOUS to the best extent possible and disclose the inherent uncertainty associated with using the NWI data.

The FEIR/EIS should analyze the feasibility of additional avoidance and minimization alternatives, such as directional drilling and Arizona crossings.

The FEIR/EIS should include a table and clear narrative on the direct, indirect/secondary and temporary impacts to waters, including wetlands.

Pursuant to the 404 Guidelines, SDG&E must mitigate for unavoidable impacts to waters. Based on the information provided in the DEIR/EIS, SDG&E should prepare a detailed compensatory mitigation plan for impacts to waters, including wetlands. Given the difficulty of restoring and creating wetlands, this mitigation plan should include a comprehensive plan to mitigate for adverse effects to all waters including wetlands, such as vernal pools.

To the extent any aquatic features that could be affected by the project are determined not to constitute waters of the United States, EPA recommends that the FEIR/EIS characterize the functions of such features and discuss mitigation. Under Executive Order 11990 Protection of Wetlands, the FEIR/EIS should specifically discuss mitigation opportunities for impacts to non-jurisdictional wetlands.

Air Quality Resources

General Conformity

The DEIR/EIS should ensure that the emissions from both the construction and the operational phases of the Proposed Project conform to the approved SIP and do not cause or contribute to violations of the National Ambient Air Quality Standards (NAAQS). The Proposed Project will be constructed in Imperial County and San Diego County. The Imperial County Air Pollution Control District (ICAPCD) and the San Diego Air Pollution Control District (SCAPCD) are the local agencies responsible for implementing SIPs in nonattainment areas. Imperial County is currently a "*moderate*" nonattainment area for 8-hour ozone NAAQS and a nonattainment area for particulate matter less than 10 microns (PM_{10}) NAAQS (table D. 11-7). The ICAPCD does not currently have a federally approved SIP demonstrating attainment for either the 8-hour ozone or PM_{10} NAAQS. Both of these attainment demonstration SIPs are due to EPA in December 2008.

San Diego County is currently a "*basic*" nonattainment area for the 8-hour ozone NAAQS and an attaining maintenance area for the former 1-hour ozone NAAQS. The SDAPCD does not have a federally approved SIP for 8-hour ozone. An attainment demonstration SIP was

due on June 15, 2007, and the California Air Resources Board submitted the required SIP on that date. Because of a national court case, EPA stated in a June 15, 2007 guidance memorandum that basic areas need not submit their SIPs on that date. Additionally, EPA has undertaken a national rulemaking that, when final, will determine: 1) what the new classification of basic areas will be; 2) what type of SIP such reclassified areas must submit; and 3) the submittal due dates. On March 12, 2008, EPA finalized a new lower 8-hour ozone NAAQS.

Where a SIP or recent SIP revisions are not submitted or approved, a general conformity determination can be demonstrated by air quality modeling, obtaining emissions offsets, or determining that the action does not increase emissions with respect to the baseline emissions. Thus, the obligation to determine that federal actions will not cause or contribute to NAAQS violations under Clean Air Act Section 176(c)(1)(B) applies even where SIPs have not been submitted or approved.

Recommendation:
The responsible agency should ensure that emissions from both the construction and operational phases are included in both the Imperial County SIPs and the San Diego County SIPs. This should be discussed within the FEIR/EIS. For San Diego County, the responsible agency should determine the impact of emissions on the new 8-hour ozone SIP requirements, as well as the impact on the already submitted June 15, 2007 8-hour ozone SIP. Regarding general SIP development, consideration should be given to the new, lower 8-hour ozone NAAQS when determining the impact of emissions.

Construction Emissions Mitigation Plan

Because the project area is in nonattainment for PM_{10}, the responsible agencies should commit to every feasible measure to reduce PM_{10} emissions. We recommend including a *Construction Emissions Mitigation Plan* in the FEIR/EIS and adopting this plan in the Record of Decision (ROD). In addition to all applicable local, state, or federal requirements, EPA recommends that the following mitigation measures be included in the *Construction Emissions Mitigation Plan* in order to reduce impacts associated with emissions of particulate matter and other toxics from construction-related activities:

Fugitive Dust Source Controls:

- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate. This applies to both inactive and active sites, during workdays, weekends, holidays, and windy conditions.
- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions.
- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph.

Mobile and Stationary Source Controls:

- Reduce use, trips, and unnecessary idling from heavy equipment.

- Maintain and tune engines per manufacturer's specifications to perform at EPA certification levels and to perform at verified standards applicable to retrofit technologies. Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications.
- Prohibit any tampering with engines and require continuing adherence to manufacturer's recommendations.
- If practicable, lease new, clean equipment meeting the most stringent of applicable Federal or State Standards. In general, only Tier 2 or newer engines should be employed in the construction phase, given the scale of the construction project and the high background levels of pollutants in the area.
- Utilize EPA-registered particulate traps and other appropriate controls where suitable to reduce emissions of diesel particulate matter and other pollutants at the construction site.

Administrative Controls:

- Identify all commitments to reduce construction emissions and update the air quality analysis to reflect additional air quality improvements that would result from adopting specific air quality measures.
- Identify where implementation of mitigation measures is rejected based on economic infeasibility.
- Prepare an inventory of all equipment prior to construction and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking. (Suitability of control devices is based on: whether there is reduced normal availability of the construction equipment due to increased downtime and/or power output, whether there may be significant damage caused to the construction equipment engine, or whether there may be a significant risk to nearby workers or the public.)
- Utilize cleanest available fuel engines in construction equipment and identify opportunities for electrification. Use low sulfur fuel (diesel with 15 parts per million or less) in engines where alternative fuels such as biodiesel and natural gas are not possible.
- Develop construction traffic and parking management plan that minimizes traffic interference and maintain traffic flow. This plan should describe how any traffic estimates were developed and how these traffic estimates may affect regional transportation.
- Identify sensitive receptors in the project area, such as children, elderly, and infirm, and specify the means by which you will minimize impacts to these populations. For example, locate construction equipment and staging zones away from sensitive receptors and fresh air intakes to buildings and air conditioners.

Greenhouse Gas Emissions

On January 25, 2007, as part of a wider rulemaking on greenhouse gas policies (R.06-04-009), the CPUC adopted an interim *Greenhouse Gas Emissions Performance Standard* to help mitigate climate change. Utilities are not allowed to enter into a long-term commitment to buy baseload power from power plants that have carbon dioxide (CO_2) emissions greater than 1,100 pounds per megawatt hour, which is roughly the amount emitted by a combined cycle turbine fueled with natural gas. The standard is aimed at coal-fired power stations operating outside

California and exporting electricity to the state of California. California utilities are barred from buying electricity from most coal-fired power plants unless specific standards are met, effective February 1, 2007. The *Greenhouse Gas Emission Performance Standard* applies to new power plants, new investments in existing power plants, and new or renewed contracts with terms of five years or more, including contracts with power plants located outside of California (pg. D.11-16).

The DEIR/EIS indicates that most of the existing electrical system is provided by generators within San Diego County, southern California, Arizona, and Mexico (pg. D.11-8). Agencies, organizations, and private citizens have expressed concern about the project's potential to be used to import power from Mexico (pg. ES-22). The Imperial County Air Pollution Control Board of Directors expressed concern that the project would allow further fossil-fuel burning facilities to be built in the Mexicali Valley, Mexico, where air quality standards are not as stringent as those in California, and that this would further degrade air quality in Imperial Valley (pg. ES-24). Concern has also been expressed that the proposed project will be used to supply electricity to the Los Angeles area, instead of the San Diego area.

Recommendation:
EPA recommends that the FEIR/EIS clarify: 1) whether the *Greenhouse Gas Emission Performance Standard* applies to power plants in Mexico that sell electricity to the United States; and 2) what institutional measures exist to ensure that air quality in the Imperial Valley is not further degraded should new fossil-fuel burning facilities in the Mexicali Valley be constructed in order to transmit electricity to the United States via the Proposed Project.

The DEIR/EIS states that GHG emissions would occur as a result of project-related construction activities and operation, maintenance, and inspection activities. Over the life of the Proposed Project, high GHG emissions during the years of construction would be followed by much lower GHG emissions. "*As power plant operation shifts to accommodate the new transmission line and renewable resources replace conventional power plants, indirect GHG reductions are forecasted to occur. But because total construction GHG emissions exceed the GHG reductions achieved due to avoided power plant emissions over 40 years of transmission line operation, the Proposed Project would cause an overall net increase in GHG emissions and a significant climate change impact*" (pg. ES-25).

Recommendations:
EPA recommends that the FEIR/EIS substantiate the finding that the Proposed Project would cause an overall net increase in GHG emissions and a significant climate change impact[1].

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[1] Since the issuance of the April 2, 2007 Supreme Court opinion in Massachusetts, et al. v. EPA, 549 U.S. (2007), EPA has begun to develop regulations to address greenhouse gas emissions from motor vehicles and fuels under the direction of the President's May 14, 2007 Executive Order and relevant Clean Air Act authorities. The Agency continues to evaluate the potential effects of the Court's decision with respect to addressing emissions of greenhouse gases under other provisions of the Clean Air Act. Thus, neither this comment letter nor the EIS for an individual project reflects, and should not be construed as reflecting, the type of judgment that might form the basis for a positive or negative finding under any provision of the Clean Air Act.

EPA recommends the FEIR/EIS present a general, qualitative discussion of the anticipated effects of climate change, including potential effects at a regional scale, on the Proposed Project.

GHG emissions from construction associated with the Proposed Project are estimated to be 109,000 tons of CO_2 (pg. D.11-52). Estimates for GHG emissions from a 1,590 MW power plant proposed in 2007 in Nevada are 20.1 million tons per year; estimates for a combined cycle gas-fired power plant of the same capacity are 5.7 million tons per year (DEIS for the White Pine Energy Station, April 2007). By our calculations, 109,000 tons of CO_2 would be approximately equivalent to 1.92 % of the yearly CO_2 emissions from a 1,590 MW combined cycle gas-fired power plant, or approximately 7 days of emissions. Comparing this to the coal plant, 109,000 tons of CO_2 would be approximately equivalent to .054 % of the yearly CO_2 emissions from a 1,590 MW coal plant, or approximately 1.97 days of emissions.

Recommendation:
We are surprised that the GHG reductions achieved due to avoided power plant emissions over 40 years of transmission are not greater. We recommend that this analysis be reexamined in the FEIR/EIS.

The DEIR/EIS states that the California Independent System Operator (CAISO) forecasts that with the SRPL Project and development of renewable generation projects, emissions from liquid fuel and coal-fired power plants outside of the southwestern U.S. and Mexico would generally increase and natural-gas fired power plant emissions would generally decrease in Arizona, Mexico, and San Diego, resulting in the avoidance of 1,650 tons of CO_2 emissions in 2015 (pg. D.11-51). Avoided emissions would otherwise occur from fossil fuel-fired power plants in 2015 in the absence of the SRPL and the accompanying renewable generation projects. The DEIR/EIS concludes that the Proposed Project would facilitate an overall indirect net decrease in emissions from power plants and would allow existing fossil fuel-fired plants inside San Diego County to decrease operation, regardless of where new renewable generation occurs.

Recommendation:
The magnitude of the calculations seems erroneous considering that 1,650 tons of CO_2 emissions are approximately equivalent to 0.0289 % of yearly emissions from a combined cycle gas fired power plant and 0.0082% of yearly emissions from a coal plant. We suggest that this analysis be reexamined and clarified within the FEIR/EIS.

Factual Inconsistencies and Editorial Recommendations

Listed below are factual inconsistencies EPA identified in our review of the DEIR/EIS. We recommend that all of these inconsistencies be corrected in the FEIR/EIS. We also provide editorial recommendations.

a. *Revisions in the FEIR/EIS should be clearly marked.*

We recommend that any revisions in the FEIR/EIS be clearly marked. We suggest including a bar in the margin beside the text that has been revised and underlining the new text.

b. *Inconsistent numbering of significant, unmitigable impacts within the DEIR/EIS*

Section H.5 states that the LEAPS Transmission and Generation Alternative would have 41 significant impacts (pg. H-115); however, the Executive summary states that this alternative would have 44 significant impacts (pg. ES-4).

Section H.5 and Section H.6 state that the LEAPS Transmission-Only Alternative would have 27 significant impacts (pgs. H-117 and H-133); however, the Executive Summary states that this alternative would have 30 significant impacts (pg. ES-3).

Section H.6 states that the New In-Area Renewable Generation Alternative would have 32 significant impacts (pg. H-133); however, the Executive Summary states that this alternative would have 34 significant impacts (pg. ES-3).

Section H.6 states that the New In-Area All-Source Generation Alternative would have 38 significant impacts (pg. H-134); however, the Executive Summary states that this alternative would have 35 significant impacts (pg. ES-2).

c. *Maps, figures, references, and additional editorial recommendations*

The locations of the Esmeralda-San Felipe Geothermal Project and La Rumorosa Wind Project are not shown on Figure ES-1. The FEIR/EIS should revise the map or the text accordingly (pg. ES-9).

The Executive Summary should clarify that the geothermal project at Truckhaven is referred to as the Esmeralda-San Felipe Geothermal Project within the FEIR/EIS.

We recommend that the Executive Summary reference Section B.6 on pg. ES-9, as Section B.6 describes the *Connected Actions and Indirect Effects* in detail.

We recommend that the Executive Summary reference Section H more frequently, as Section H describes the *Comparison of Alternatives* in greater detail.

Section C.5.8.23 is listed as a reference for the Green Path Coordinated Projects on pg. C-152. This should be revised to Section C.5.8.25.