

Response to SDG&E Technical Questions of February 13, 2008

- 1. The Draft EIR/EIS's analysis of the air quality impacts of the construction of the Sunrise Powerlink Project along the proposed project route ("Proposed Project") references Appendix 10 for the calculation of emissions. Appendix 10 does not identify the source of the information or assumptions used in the calculations, or exactly what calculations were being performed. Although we can back-calculate some numbers to understand some of the calculations, we would appreciate more explanation. In addition, did your contractor use information regarding the number and type of construction equipment, and estimated hours of total operation, set forth in SDG&E's Proponent's Environmental Assessment ("PEA"), or did you use some other source? Did your assumptions deviate from those contained in the PEA and, if so, why?**

Response: The emission calculations in DEIR/EIS Appendix 10 rely on the best information available in SDG&E's PEA Appendix F, where supported by subsequent Data Responses from SDG&E, and repeated in Section B.4 of the DEIR/EIS.

The equipment inventory and activity information used in the DEIR/EIS is from SDG&E's PEA Appendix F, but because SDG&E's emission calculations in PEA Appendix F and results shown in PEA Chapters 5 through 8 were not verifiable or consistent, independent emission calculations were prepared. Any assumptions or emission factors that deviate from the PEA are shown in the DEIR/EIS Appendix 10 with the basis. Because monthly activity data in PEA Appendix F could not be rectified with SDG&E's Project Description or responses to Data Requests, the activity of most off-road equipment is counted for the entire duration of each phase.

- 2. Please state whether, in calculating the construction phase emissions for the Proposed Project, the Draft EIR/EIS assumes that each piece of equipment that SDG&E identified in the PEA as operating at the site during construction has its engine operating during the entire generating period identified in Appendix 10.**

Response: The total emissions from each piece of equipment are based on the total possible hours of equipment operation. The total hours are calculated by multiplying the expected hours per day, times the days per week, times the number of months of the construction phase. This accounts for the entire construction period or duration of each phase.

- 3. Are we correct that the baseline set for greenhouse gas emissions in the Draft EIR/EIS is not a calculation of what greenhouse gas emissions would be in any future year if the Sunrise Powerlink Transmission Line is not constructed?**

Response: No. The baseline accounts for what GHG emissions would occur if Sunrise is not constructed. The CAISO GHG modeling results (in CAISO October 12, 2007 letter to Energy Division staff) show the change in CO₂ emissions at power plants compared to a 2015 base case without Sunrise.

- 4. Are we correct that, under the methodology utilized in the Draft EIR/EIS, any project that would emit any amount of any greenhouse gas would be considered to cause an increase in greenhouse gas emissions over the baseline identified in Table D.11-2 because Table D.11-2 is a calculation of past emissions?**

Response: No. A project that emits any amount of any GHG could also enable GHG emission reductions when compared to the baseline or a continuation of conditions without the project. If GHG

reductions can be attributed to a project, then it could result in a net decrease. Although Table D.11-2 shows past emissions, the baseline would be a continuation of these past emissions without the project.

- 5. Are we correct that, under the methodology utilized in the Draft EIR/EIS, any project emitting any amount of CO₂, no matter how little, would be identified as having a “significant” environmental impact?**

Response: No. A project that emits any amount of any GHG could also enable GHG emission reductions. For example, a project that reduces emissions from fossil-fueled power plants that would otherwise occur without the project could have a net GHG decrease and a “beneficial” environmental impact. A new renewable generation facility like the Stirling Concentrating Solar Project (with its impact described on DEIR/EIS p. D.11-39) would be an example of such a project.

- 6. Please explain why the Draft EIR/EIS’s analysis of GHG emissions assumes that the Sunrise Powerlink Transmission Line would operate for only 40 years (the “Assumed 40 Year Period”).**

Response: The CAISO modeled the reliability costs of Sunrise over a 40 year period (for example, see CAISO testimony dated March 1, 2007).

- 7. Please explain the Draft EIR/EIS’s reasons for assuming that the avoided GHG emissions resulting from the Sunrise Powerlink Transmission Line will remain at 1,650 tons of CO₂ each year of the Assumed 40 Year Period. Please provide all documents you rely upon for such assumption.**

Response: The CAISO GHG modeling results are only available for 2015. Without additional forecasts of GHG trends, this is the best available information.

- 8. Did you analyze or estimate the total tons of CO₂ that would be emitted by the construction phase of all power plants and associated transmission lines and other electrical facilities assumed to exist in the Draft EIR/EIS’s New In-Area All-Source Generation Alternative (including the South Bay Replacement Project, the San Diego Community Power Project, the Encina Power Plant Repowering Project, and the peaking power plants). If so, please state the estimated CO₂ emissions for each, describe how you calculated such emissions and provide all workpapers reflecting such calculations.**

Response: The emissions caused by construction of all power plants and transmission lines in the New In-Area All-Source Generation Alternative are analyzed qualitatively (DEIR/EIS Section E.6.11, e.g., p. E.6-177). Because exact construction scenarios are not available, quantitative estimates of construction phase emissions are not available.

- 9. Did you analyze or estimate the tons of CO₂ that would be emitted by the operation and maintenance of all of the new in-area generation that the Draft EIR/EIS assumes would exist in the New In-Area All-Source Generation Alternative for each year of the Assumed 40 Year Period? If so, please state the estimated CO₂ emissions, describe how you calculated such emissions and provide all work papers reflecting such calculations.**

Response: The change in CO₂ emissions during operation of the New In-Area All-Source Generation Alternative is shown in the CAISO GHG modeling results for “South Bay relative to base case in 2015”

(in CAISO October 12, 2007 letter to Energy Division staff). Additional forecasts of GHG trends in other years are not available.

- 10. Did you analyze or estimate the total tons of CO₂ that would be emitted during the construction phase of all new generation expected to be constructed under the New In-Area Renewable Generation Alternative (including the “large-scale solar thermal energy development in the Borrego Springs area” and associated transmission system upgrades, the 60,000 residential and 255 commercial photovoltaic system installations, the Fallbrook Renewable Energy Facility, the Miramar Renewable Energy Facility, Miramar Landfill Biogas Facility, the Fallbrook Renewable Energy Facility, and the wind projects). If so, please state the estimated CO₂ emissions, describe how you calculated such emissions and provide all work papers reflecting such calculations.**

Response: The emissions caused by construction of all renewable generation facilities, transmission lines, and photovoltaic system installations in the New In-Area Renewable Generation Alternative are analyzed qualitatively (DEIR/EIS Section E.5.11, e.g., p. E.5-209). Because exact construction scenarios are not available, quantitative estimates of construction phase emissions are not available.

- 11. Did you analyze or estimate the total tons of CO₂ that would be emitted during the operation and maintenance of all new generation expected to be constructed under the New In-Area Renewable Generation Alternative (including the “large-scale solar thermal energy development in the Borrego Springs area” and associated transmission system upgrades, the 60,000 residential and 255 commercial photovoltaic system installations, the Fallbrook Renewable Energy Facility, the Miramar Renewable Energy Facility, Miramar Landfill Biogas Facility, the Fallbrook Renewable Energy Facility, and the wind projects) for each year of the Assumed 40 Year Period. If so, please state the estimated CO₂ emissions, describe how you calculated such emissions and provide all work papers reflecting such calculations.**

Response: The change in CO₂ emissions during operation of the New In-Area Renewable Generation Alternative is analyzed qualitatively under the assumption that power output by renewable facilities replaces power that would otherwise be provided by burning natural gas, coal, or fuel oil. The CAISO GHG modeling results for Sunrise support this assumption because they attribute zero CO₂ emissions to nuclear, wood, biomass, hydroelectric, wind and solar resources.