



MEMORANDUM

Anne Coronado
Aspen Environmental Group

January 25, 2012

RE: Sunrise Powerlink Project – Response to Request for MM B-10a Information

Dear Anne,

SDG&E is submitting this in response to your request for a memorandum on the status of Mitigation Measure B-10a. We understand that the specific questions submitted to the CPUC are as follows:

- 1. Whether SDG&E installed the transmission lines utilizing the Avian Power Line Interaction Committee standards for collision-reducing techniques; and
- 2. Whether any studies on avian collision have been completed to date.

Per Mitigation Measure B-10a (Utilize collision-reducing techniques in installation of transmission lines), SDG&E is obligated to fulfill the following requirements:

Utilize Avian Power Line Interaction Committee Standards for Collision-Reducing Techniques

Applicant shall install the transmission lines utilizing Avian Power Line Interaction Committee (APLIC) standards for collision-reducing techniques as outlined in "Mitigating Bird Collisions with Power Lines: The State of the Art in 1994" (APLIC, 1994) as follows:

- Placement of towers and lines shall not be located above existing towers and lines, topographic features, or tree lines to the maximum extent practicable.
- Power lines should be clustered in the vertical and horizontal planes aligned with existing geographic features or tree lines, and located parallel (rather than perpendicular) to prevailing wind patterns to the maximum degree feasible.
- Additionally, overhead lines that are located in highly utilized avian flight paths shall be marked
 utilizing fixed-mount Firefly Flapper/Diverters, swan flight diverter coils, or other diversion
 devices, if proven more effective, as to be visible to birds and to reduce avian collision with power
 lines. Where such markers are installed, the Applicant shall fund a study to determine the
 effectiveness of the markers as a collision prevention measure since there are few, if any, studies
 that show if such markers work, especially on transmission lines (CEC, 2007).

Submit Draft Study Protocol

The Applicant shall develop a draft study protocol and submit it to the wildlife agencies and California State Parks, as well as to CPUC and BLM, for review. The applicant shall coordinate with the wildlife agencies to develop alternate collision protection measures.

Memo re: MM B10-a

Page 2

Implement an Avian Reporting System

The Applicant shall implement an avian reporting system for documenting bird mortalities to help identify problem areas. The reporting system shall follow the format in Appendix C of "Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006" (APLIC, 2006) or a similar format.

Submit a Draft Reporting Protocol and Reporting System

The Applicant shall submit a draft reporting protocol and reporting system to the wildlife agencies, as well as to CPUC and BLM, for review and approval. The Applicant shall continue to work with these agencies until approval of a final reporting protocol and reporting system is obtained.

Develop and Implement Methods to Reduce Mortalities

The Applicant shall develop and implement methods to reduce mortalities in identified problem areas. The methods shall be approved by the wildlife agencies, CPUC, and BLM prior to implementation.

Document Bird Mortalities

Bird mortality shall continue to be documented in the problem areas per the avian reporting system to determine the effectiveness of the mortality reduction methods and to determine if new methods need to be developed.

Response to Question 1:

The Project is designed to comply with standards for avian collision-reducing techniques suggested in APLIC (1994, 2006). Line separations exceed the suggested practices recommended by APLIC to avoid electrocution incidents. To the maximum extent practicable,, the towers and lines are located at or below the topographic and natural features adjacent to the Project and aligned with existing geographic features. Birds will ascend high enough to pass over the land features and, therefore, also pass over the Project. In addition, birds may not be able to maintain flight control while flying perpendicular to high-velocity winds and get blown into the lines regardless of visibility (APLIC 1994). To the maximum extent practicable, the Project lines have been placed parallel to prevailing winds to minimize loss of flight control.

The Project adheres to codes that govern power line design and construction developed by CPUC General Order 95. The primary criteria used to place towers and power lines for the Project are to satisfy engineering and routing constraints and to minimize impacts to sensitive habitats, such as jurisdictional waters of the United States, riparian corridors, and federal- and state-listed species habitat; visual and aesthetic sensitive areas; cultural resources; and sensitive land uses such as Riparian Conservation Areas.

Response to Question 2:

SDG&E has an approved avian mortality study document (Avian Monitoring and Mitigation Plan: Mitigation Measure Compliance for Hawks, Eagles, and Other Birds, December 7, 2010) (AMMP). The purpose of the AMMP is to study the effectiveness of flight diverters and through analysis of the findings identify the need for additional or alternative collision protection measures. The Final Project Modification Report (PMR) relevant to MM B-10a recognizes that no highly utilized avian flight paths are located along the Project; therefore, implementation of MM B-10a does not require installation of collision-reducing devices or an avian mortality study due to highly utilized avian flight paths. As a safety measure for night-time flights of aircraft, the California Border Patrol and Department of Defense

Memo re: MM B10-a

Page 3

requested that SDG&E install infrared lights on certain towers, as defined in the Final PMR. Since nightflying insects may be attracted to infrared lighting in the vicinity of the towers, which may attract a higher density of nocturnal insectivorous birds, direct impacts to these species could occur if they collide with conductors near the towers. While the Final PMR determined that infrared lighting will not create a new significant impact to birds, MM B-10a will be implemented at infrared lighting installations and flight diverters will be installed on the conductor spans adjacent to the towers with infrared lighting. Swan flight diverters were installed in golden eagle nesting territories at towers without infrared lights in November/December 2011 to enhance line visibility. Marker balls were also installed on spans within golden eagle nesting territories at the request of the FAA for aircraft safety. SDG&E will also implement an avian reporting system (ARS) with their existing Avian Protection Plan in order to document and minimize any avian mortalities. To date, 104 towers have had diverters (swan flight diverters) installed. Approximately 280 towers will have diverters installed once Project construction is complete. SDG&E intends to implement this portion of MM B-10a and begin conducting the avian mortality study in February 2012. In the interim, as requested by the agencies, qualified golden eagle biologists will begin ground-based observations of recently installed portions of the line that pass through golden eagle nesting territories to assess the status of known golden eagle pairs and to observe golden eagle behavior. Additionally, as also suggested by the agencies, bird mortality searches will be conducted where the recently installed line passes over the San Diego River in furtherance of the study. These observations and searches will begin the week of January 30, 2012.

Please do not hesitate to contact us if you have any additional questions regarding this matter.

Sincerely,

Alan Colton

Manager – Environmental Services Sunrise Powerlink Project

San Diego Gas & Electric Office: 858-654-8727

Fax: 858-637-3770

acolton@semprautilities.com

cc: Gerry Akin, SDG&E

Rachel Briles, SDG&E
Dayle Cheever, SDG&E
Robert Jackson, SDG&E
Karen Wilson, SDG&E