December 2, 2011

Mr. Alan F. Colton
Manager – Environmental Services
Sunrise Powerlink Transmission Project
8315 Century Park Court, CP21G
San Diego, CA 92123-1550

RE: SDG&E Sunrise Powerlink Transmission Line Project – Variance Request #34

Dear Mr. Colton,

On November 29, 2011, San Diego Gas and Electric (SDG&E) conducted a conference call with jurisdictional resource agencies including U.S. Department of Agriculture, Forest Service (USFS), United States Fish and Wildlife Service (USFWS), California Public Utilities Commission (CPUC) and Bureau of Land Management (BLM) regarding completing overhead stringing work up to, but no later than December 15, within four golden eagle nest buffer locations along the Project right-of-way. Project Mitigation Measure B-7h prohibits work in the eagle breeding season from December through June. A formal variance request was received by the CPUC on November 29, 2011. Three of the golden eagle buffers are located in part or whole on USFS lands (El Cajon, Bell Bluff, and Thing Valley), and the fourth is located on BLM and private lands (Barrett/Echo). This joint BLM and CPUC variance approval applies to construction located only on BLM and private lands; separate USFS authorization is required for work on USFS lands.

The CPUC voted on December 18, 2008 to approve the SDG&E Sunrise Powerlink Transmission Line Project (Decision D.08-12-058) and a Notice of Determination was submitted to the State Clearinghouse (SCH#2006091071). The BLM issued a Record of Decision approving the Project on January 20, 2009. The Project also crosses Cleveland National Forest (CNF) lands under jurisdiction of the USFS who issued their Record of Decision and Supplemental Information Report on July 9, 2010.

The CPUC also adopted a Mitigation, Monitoring, Compliance and Reporting Program (MMCRP) to ensure compliance with all mitigation measures imposed on the Sunrise Powerlink Project during implementation. The MMCRP also acknowledges that temporary changes to the project, such as the need for additional workspace, are anticipated and common practice for construction efforts of this scale and that a Variance Request would be required for these activities.

This letter documents the CPUC’s and BLM’s evaluation of all activities covered in this variance, and that, based on substantial evidence, no new impacts or substantial increase in impact severity would result from the requested variance activities. The CPUC and BLM in consultation with the USFS, USFWS, and California Department of Fish and Game (CDFG) has determined that the proposed work, including additional SDG&E proposed measures within the four specified golden eagle buffer areas, would not substantially increase the level of interference with any golden eagle breeding activities beyond that...
described in the Sunrise Powerlink Environmental Impact Report/Environmental Impact Statement (EIR/EIS). SDG&E’s additional proposed measures include additional golden eagle monitoring by qualified experts to assess any potential golden eagle activity in the affected golden eagle buffer areas, and provide these experts with the authority to stop work immediately if golden eagle breeding activity is disturbed. The proposed scope of the eagle expert team’s methodology for conducting the observation work before and after November 30 is described in greater detail, below.

Variance #34 to Mitigation Measure B-7h to allow work within the eagle nest buffers up to, but no later than December 15, 2011 is granted by CPUC and BLM for the proposed activities based on the factors described below.

**SDG&E Variance Request.** Excerpts from the SDG&E Variance Request received November 29 (Attachment A), a clarification memo received November 29, 2011 (Attachment B), e-mail correspondence (Attachment C), daily observations of golden eagle behavior (Attachment D), as well as verbal clarifications from SDG&E to the CPUC December 1, 2011 are presented below (indented) with CPUC additions in parentheses and in bold:

SDG&E requests that the CPUC, BLM, and the USFS grant a variance authorizing SDG&E to conduct Sunrise Powerlink Transmission Project (Project) construction work within one or more of four 4,000 foot golden eagle buffer areas for one additional week beyond the start of the eagle breeding season as identified in mitigation measure B-7h as December 1. This would allow work to continue through December 7, and in the event of exceptional unforeseen circumstances, as late as December 15. This would ensure that site and public safety are not compromised.

The four golden eagle buffer areas are:
- El Cajon Mountain (affects Structures CP66-2, CP67-3, and CP68-1);
- Bell Bluff (affects Structures CP104-2, CP 105-1, and CP106-1);
- Barrett/Echo (affects Structures EP-43 and EP-44); and

Three buffer areas are located in part or whole on Forest Service lands (El Cajon, Bell Bluff, and Thing Valley), and one is located on private and BLM lands. (*Please note that all of the tower locations within the El Cajon buffer fall on BLM lands.*)

SDG&E is on schedule to complete all stringing work within the golden eagle buffer areas by the end of day on November 30. Due to high wind conditions inhibiting helicopter operations and county noise limitations over the Thanksgiving Holiday, limited additional work is now anticipated to be required after November 30. The anticipated work consists of terminating the strung conductors and placing spacers, dampers, and marker balls on the lines for safety purposes and to prevent avian collision, as required by Mitigation Measure B-10a. We (SDG&E) believe that work required during the extension period can be completed in 5 work days. This assumes no construction equipment breakdown, normal weather, and no wire, insulator or marker ball failures that would require replacement. (*Please note that SDG&E verbally notified the CPUC that USFS has prohibited work on USFS lands December 1 and 2 due to high winds.*)

Golden eagles are resident in certain areas of Project construction. SDG&E believes that the proposed work (within the golden eagle buffer areas, including additional, SDG&E proposed measures), would not (substantially increase the level of) interference with any golden eagle breeding activities. SDG&E has retained a golden eagle expert and a team of eagle biologists to assess any potential golden eagle activity in the affected golden eagle buffer. See below for the proposed scope of how the eagle expert team would conduct the observation work before and after November 30. This Monitoring Protocol has been revised to reflect the requested change to allow the lead eagle biologist at each golden eagle buffer area to stop work immediately.

After November 30, SDG&E’s anticipated construction work (including helicopter work) should continue to decrease at each site over the requested variance period from that which is ongoing (*when so authorized to start by the agencies*). A description of the remaining work activities within golden eagle buffer areas can also be found below. Nest building typically does not begin in earnest until late December/early January and egg laying does not typically occur at
this latitude until the last couple of weeks of January (at the earliest). The CNF Pilot Raptor Management Program for FY2010 ("CNF Pilot Program") confirms this understanding by identifying the nesting season as starting December 15. Additionally, the Lead Eagle Expert will have the authority to stop or alter work, if needed.

SDG&E will continue to provide the agencies with daily updates of the work going on in each of the four golden eagle buffer areas.

So as to not potentially surprise or startle golden eagles, helicopter pilots will be directed to fly consistently over the line as much as possible and any flights away from the line (to pick up materials, refuel, avoid aircraft, etc.) will be directed AWAY from nest sites. For example, near the Barrett/Echo nest site, helicopter pilots will be directed to fly north of the alignment as safety allows.

SDG&E is committed to working on an “inside out manner” at each buffer area, meaning that work in areas considered potentially more sensitive would be conducted first, as possible.

(At the request of the USFS, SDG&E has agreed to install additional line markers which, over time, will help protect the species from potential line strikes. Verification has been supplied.)

(In addition SDG&E has supplied to the resource agencies eagle survey data with description of current non-nest behaviors and associated survey maps as presented below.)

Eagle Monitoring Protocol

Proposed minimization measures for:
1. Surveying all four golden eagle 4,000 foot buffer areas along the Sunrise Powerlink alignment prior to December 1, 2011, and
2. Working within one or more of four golden eagle 4,000 foot buffer areas during the golden eagle nesting period beginning December 1, 2011:

Assumptions:
1. All construction within the golden eagle buffer areas will be related to completing the pulling of conductor wire and installing safety balls on the conductor wire.
2. All work will be completed no later than December 7, 2011.

Proposal for November 28, 29, and 30:
1. Four teams of two biologists each will do simultaneous observations at all four above sites. Surveys will be conducted for 8 hours each day.
2. Each of the four teams will be led by highly qualified biologists (Lead Eagle Biologist) meeting the most stringent eagle guideline requirements of three years or more experience.
   a. Dave Bittner—40 plus years of GOEA and BAEA experience (Lead Eagle Expert)
   b. Dr. Jeff Lincer- 35 plus years of BAEA and GOEA experience
   c. Dr. James Hannan- 17 plus years of GOEA experience
   d. Chris Meador- 8 plus years of GOEA experience
3. Each team leader will be assisted by one of the potential following biologists: Renee Rivard, Alexis Smoluk, James Newland, Daniel Palmer, Marcus Collado, or Katie Quint
4. Several observation locations within the 4,000 foot buffer of each Golden Eagle territory will be selected to maximize the ability to detect Golden Eagles. These locations have been selected based on previous knowledge by Wildlife Research Institute (WRI) observers of the territory. WRI has surveyed these locations for the Sunrise Powerlink for the past two golden eagle breeding seasons.
   WRI will provide the authorizing agencies maps of these observation locations.
5. WRI biologists will repeat the locations and observations each of the three days. There will be a minimum of 2 hour-observations at each of the identified observation locations. Some territories will have up to three separate observation points with a main site that will be repeated during the same day. This will assure complete coverage of the 4,000 foot buffer zone.
6. All Eagle observations will be shared with all of the concerned agencies and the Main point of
Contact (MPC) for the Utility Construction crew working on the site.

Proposal for December 1 through December 7 (extending to December 15 in the event of extreme unforeseen circumstances), 2011:

1. Observations will continue at each golden eagle buffer area until construction has ceased; however, the observation period will be extended to 12 hours to provide even greater coverage.
2. If the head WRI Lead Eagle Biologist determines that the construction activity is in anyway interfering with normal Eagle breeding behavior then a stop or alter work order will be presented to the Utility MPC and the Lead Eagle Expert, David Bittner. An immediate decision to stop or change work in the affected area(s) will be made on site by the Lead Eagle Biologist who will have authority to make the final decision on whether work should be stopped or altered.
3. How long the construction should be stopped and what the next steps will be discussed with the appropriate authorizing agencies the same day and a plan will be developed based on the observed Golden Eagle activity.
4. December is the early start of the Eagle Breeding season and usually the activity is random, occasional and unpredictable until January when breeding and nest building activity gets fully underway; therefore, decisions to stop or alter construction should be based on actual observations by WRI observers and their determination that the observation is of a resident eagle representing nest building or reproductive behavior.

Proposed Wire Activities After November 30 for Golden Eagle 4,000 foot Buffer Areas

Each of the four golden eagle 4,000 foot buffer areas is part of a “wire stringing span.” Each of the wire stringing spans includes tower structures within the golden eagle buffer area and tower structures outside the golden eagle buffer area. At each end of the wire stringing span there is a wire stringing site; one of the wire stringing sites is identified as the “puller” site and one is the “tensioner” site. All puller and tensioner sites are outside the golden eagle 4,000 foot buffer areas. The “pulling” or “stringing” of all conductor wire will be “pulled” in all four of the golden eagle buffer areas by the end of day on November 30. (Due to an equipment malfunction on November 30, a single Optical Ground Wire (OPGW) line still needs to be pulled in the Bell Bluff eagle buffer area. This information was provided by SDG&E November 30, 2011 by e-mail and verbal clarifications occurred December 1, 2011.) The conductor and OPGW will then be terminated at the final tower, located at the puller site (this is known as catching off the wire). All of this work, which would take place after November 30, will be outside the golden eagle buffer areas.

Proposed Work Activities after November 30 Within Golden Eagle Buffer Areas:
The general sequence of the final wire activities that will occur after November 30 within golden eagle buffer areas is as follows:

1. Complete OPGW Pull (Bell Bluff eagle buffer area)
   There was a malfunction of the pulling equipment at the Bell Bluff eagle buffer area on November 30, 2011. The OPGW line was safely stabilized. SDG&E will finish the installation.
   - Equipment Used – light or medium lift helicopter
   - Personnel – 10 to 15 crew members
   - Up to 6 personnel including, biological, archaeological, quality control inspector, construction supervisor, and possibly a CPUC monitor may be accessing tower sites until all work is completed.

2. Attach Conductor to Insulators on Tangent Towers (13 towers within golden eagle buffer area)
   This is the process by which the stringing sheaves (travelers) are removed and the wire is clipped in to the insulators. This occurs once the conductor has reached its final sag.
   - Equipment Used – light or medium lift helicopter
   - Personnel – 5 to 6 crew members
   - Up to 6 personnel including, biological, archaeological, quality control inspector, construction supervisor, and possibly a CPUC monitor may be accessing tower sites until all work is completed.

3. Cutting in Dead Ends and Installing Conductor Wire Jumpers (Only 7 dead end towers within the golden eagle buffer area)
   This process also involves attaching the conductor to the insulators, for a different type of structure (dead-end instead of tangent). Because this is a larger, heavier structure the process takes a few more personnel and a little more time. The travelers are removed and the wire is clipped in to the insulators. Additionally, conductor wire jumpers are installed.
-Equipment Used – light or medium lift helicopter; 40-ton crane and 2 crew trucks may be used for conventional access sites instead of a helicopter
-Personnel – 8 to 10 crew members
-Up to 6 personnel including, biological, archaeological, quality control inspector, construction supervisor, and possibly a CPUC monitor may be accessing tower sites until all work is completed.

4. Spacers and Marker Ball Placement

Once all the conductor wire is clipped in to the insulators, the spacers and aviation marker balls can be installed. Spacers are devices that are designed to hold apart the conductor wire that is bundled together, so that the bundles don’t touch each other and damage the wire. Aviation marker balls are large colored spheres that are installed on the wire in locations where aircraft may need assistance identifying the location of the wire in their flight corridor and are also used to prevent avian collision, as required by Mitigation Measure B-10a.

-Equipment Used – spacer carts, light lift helicopter, 3 to 5 crew trucks, and a boom truck
-Personnel – 5 crew members
-Up to 6 personnel including, biological, archaeological, quality control inspector, construction supervisor, and possibly a CPUC monitor may be accessing tower sites until all work is completed.

5. Final Inspection and Completion of Punch List Items

-Equipment Used – Light lift helicopter or crew truck
-Personnel – 2 to 3 PAR personnel plus SDG&E’s QC inspectors
-Up to 6 personnel including, biological, archaeological, quality control inspector, construction supervisor, and possibly a CPUC monitor may be accessing tower sites until all work is completed.

6. BMP Maintenance, Site Stabilization, and Restoration

-Equipment Used – Light, medium or heavy lift helicopter or crew truck, Hydroseeder
-Personnel – 3 to 4 PAR personnel plus SDG&E’s SWPPP inspectors
-Up to 6 personnel including, biological, archaeological, SWPPP inspector, and possibly a CPUC monitor may be accessing tower sites until all work is completed.

CPUC Evaluation of Variance Request

In accordance with the MMCRP, the subject variance request was reviewed by CPUC in coordination with BLM, USFS, USFWS, and CDFG to confirm that no new impacts or increase in impact severity would result from the requested variance activities. The following discussion summarizes this analysis for biological resources. A list of conditions is presented below to define additional information and clarifications regarding mitigation requirements. In some cases, these items exceed the requirements of the Mitigation Measures and Applicant Proposed Measures, and are based on specific site conditions and/or are proposed conditions by SDG&E.

Biological Resources. The CPUC biological consultant participated in the November 29, 2011 conference call and further coordinated with SDG&E to clarify the variance request.

The Project EIR/EIS includes Mitigation Measure B-7h: Implement appropriate avoidance/minimization strategies for eagle nests. No construction or maintenance activities shall occur within 4,000 feet of an eagle nest during the eagle breeding season (December through June).

Considering SDG&E’s request and supporting documentation, the agencies (USFWS, CDFG, USFS, BLM and CPUC) have agreed to SDG&E’s request to extend the work deadline within the eagle nest buffers to no later than December 15th based on the following information:

- Three of the golden eagle buffers are located in part or whole on USFS lands (El Cajon, Bell Bluff, and Thing Valley), and the fourth is located on BLM and private lands (Barrett/Echo). SDG&E proposes to complete the work in five working days assuming no construction equipment breakdown, normal weather, and no wire, insulator or marker ball failures that would require replacement. SDG&E has
been notified by the agencies, and as conditioned by this Variance approval, that no work shall be allowed to extend beyond December 15.

- SDG&E has supplied the agencies with eagle survey data including descriptions of current non-nesting behaviors and associated survey maps. Survey results provided observations on November 28, 29, and 30. Eagles were observed at the El Cajon buffer on November 28th (2 adults), 29th (one adult), and 30th (one adult). At the Bell Bluff buffer area one adult was observed on November 28th and 30th, and no eagles were observed on November 29th. Eagles were observed at Barrett/Echo on November 28th (two adults and two sub-adults), November 29th (two adults and one juvenile), and November 30th (two adults and one juvenile). No eagles were observed at the Thing Valley buffer on any day. Overall observations were that eagles were exhibiting various degrees of pre-nesting activity, including visiting the nest sites. However, based on documented golden eagle nesting behavior, nest building begins in January. Historically, golden eagle eggs are laid in February and March in San Diego County, but recently some eggs have been laid in the last part of January. The November 28th and 29th observations are also consistent with the Cleveland National Forest Pilot Raptor Management Program for FY2010 which provides for standard eagle nesting season area closures beginning December 15 within the CNF. Therefore this work extension is in compliance with current USFS protocols.

- At the request of the USFS, SDG&E has agreed to install additional line markers to minimize future avian collisions with the Project. All additional line marker installations shall be completed within the five working day window as proposed by SDG&E.

- USFWS and CDFG have been consulted and have provided concurrence on November 30, 2011, as follows:

  “The Service supports the extending the work period as outlined in the variance request. Our primary concern is that the work be completed as soon as possible. We certainly encourage installation of additional equipment that will reduce collision risk for eagles and other birds, but it is important that these additional measures do not delay the process. Similarly, the additional eagle monitoring may have some benefit to eagles, but it is important that it does not result in work stoppages that would substantially delay completion of the work.”

  “The Department also supports the completion of the work with the least delays possible to avoid further encroachment into the nesting period.”

Conditions of Variance Approval.

The conditions presented below shall be met by SDG&E and its contractors:

1. No work shall proceed on USFS lands until USFS authorization is issued to SDG&E, and provided to USFWS, CDFG, BLM and CPUC.

2. All applicable project EIR/S mitigation measures, APMs, compliance plans, and BLM and USFS Record of Decision/Notice to Proceed and CPUC Notice to Proceed conditions shall be implemented. Some measures have on-going/time-sensitive requirements and shall be implemented prior to and during construction where applicable.

3. Copies of all relevant permits, compliance plans, and this Variance approval shall be available on site for the duration of additional construction activities within golden eagle buffers.

4. SDG&E shall work in established corridors and work “inside out” in regard to completing work in the most sensitive areas first.
5. SDG&E must work to finish all tasks in as short a time period as possible. They must strive to complete the work within the five days proposed. If work is anticipated to occur after December 7, SDG&E shall notify all of the agencies by December 5th and provide the rationale for work beyond the proposed five workday period. SDG&E shall not extend work beyond December 15 and shall plan their construction activities accordingly in anticipation of not completing construction within the subject eagle buffers.

6. Consistent with the requirements described above, qualified eagle specialists shall oversee monitoring of the proposed work and ensure implementation of the Eagle Monitoring Protocol. The protocol provides the lead eagle biologist at each golden eagle buffer area with the authority to stop work immediately.

7. SDG&E will continue to provide the agencies with daily updates of the ongoing construction activities and eagle observations at each of the four golden eagle buffer areas.

8. At the request of the USFS, SDG&E has agreed to install additional line markers to minimize future avian collisions with the Project. All additional line marker installations shall be completed within the five working day window as proposed by SDG&E.

Therefore, based on the evidence and analysis presented above, we find the variance request is necessary and will not result in a new significant impact or an increase in the severity of any impact beyond what was described in the Sunrise Powerlink EIR/EIS.

Please contact us if you have any questions or concerns.

Sincerely,

Billie Blanchard
______________________________
Billie Blanchard
CPUC Environmental Project Manager
Sunrise Powerlink Transmission Project

Thomas Zale
______________________________
Thomas Zale
Bureau of Land Management, Acting Field Manager
El Centro Field Office
1661 S. 4th Street
El Centro, CA 92243

cc: Daniel Steward, BLM El Centro Field Office
    Bob Hawkins, Forest Service
    Erinn Wilson, CDFG
    Eric Porter, USFWS
    Susan Lee, Aspen Environmental Group
    Vida Strong, Aspen Environmental Group
    Anne Coronado, Aspen Environmental Group
ATTACHMENT A
November 29, 2011

Ms. Billie Blanchard, Environmental Project Manager, Sunrise Powerlink
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Mr. Shelby Howard
Helix Environmental Planning
7578 El Cajon Blvd., Suite 200
La Mesa, CA 91942

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

Mr. Brian Paul, Sunrise SUP Program Manager
U.S. Department of Agriculture, Forest Service
Descanso Ranger District
3348 Alpine Boulevard
Alpine, CA 91901

Re: Request for Variance to Work within Certain Limited Golden Eagle Buffer Areas after November 30, 2011 For One Week

Dear Billie, Shelby, Tom, and Brian:

This letter is to request that the California Public Utilities Commission (CPUC), the Bureau of Land Management (BLM), and the U.S. Department of Agriculture Forest Service (USFS) grant a limited variance authorizing San Diego Gas & Electric (SDG&E) to conduct Sunrise Powerlink Transmission Project (Project) construction work within one or more of four 4,000 foot golden eagle buffer areas for one additional week beyond the start of the eagle breeding season as identified in mitigation measure B-7h as December 1. This would allow work to continue through December 7, and in the event of exceptional unforeseen circumstances, as late as December 15. This would ensure that site and public safety are not compromised. The four golden eagle buffer areas are:

- El Cajon Mountain (affects Structures CP66-2, CP67-3, and CP68-1);
- Bell Bluff (affects Structures CP104-2, CP 105-1, and CP106-1);
- Barrett/Echo (affects Structures EP-43 and EP-44); and

The attached Overview Map depicts the four golden eagle buffer areas. Three buffer areas are located in part or whole on Forest Service lands (El Cajon, Bell Bluff, and Thing Valley), and one is located on private and BLM lands. Also, more detailed maps of each of the four areas and the overhead structures falling within the buffer areas are attached. All maps are contained in Attachment 1.

As you know, SDG&E has been working closely with the agencies on its activities in these areas, and has made significant progress towards completing the work in these areas prior to December 1. As we discussed with agency personnel recently, as of today, November 29, 2011, SDG&E is on schedule to complete all stringing work within the golden eagle buffer areas by the end of day on November 30. Due to high wind conditions inhibiting helicopter operations and county noise limitations over the Thanksgiving Holiday, limited additional work is now anticipated to be required after November 30. The anticipated work consists of terminating the strung conductors and placing spacers, dampers, and marker balls on the lines for safety purposes and to prevent avian collision, as required by Mitigation Measure B-10a. We believe that work required during the extension period can be completed in 5 work days. This assumes no construction equipment breakdown, normal weather, and no wire, insulator or marker ball failures that would require replacement.

Golden eagles are resident in certain areas of Project construction. SDG&E believes that the proposed work would not interfere with any golden eagle breeding activities. As discussed, SDG&E has retained a golden eagle expert and a team of eagle biologists to assess any potential golden eagle activity in the affected golden eagle buffer. Attached is the proposed scope of how the eagle expert team would conduct the observation work before and after November 30 (Attachment 2). This Monitoring Protocol has been revised to reflect the requested change to allow the lead eagle biologist at each golden eagle buffer area to stop work immediately.

In addition to the Monitoring Protocol SDG&E will incorporate into their work plan any conditions requested by the authorizing agencies designed to maximize protection of golden eagles in the above four historic eagle nesting territories.

After tomorrow, November 30, SDG&E’s anticipated construction work (including helicopter work) should continue to decrease at each site over the requested variance period from that which is ongoing now. A description of the remaining work activities within golden eagle buffer areas is included in Attachment 3. As you know, nest building typically does not begin in earnest until late December/early January and egg laying does not typically occur at this latitude until the last couple of weeks of January (at the earliest). The CNF Pilot Raptor Management Program for FY2010 confirms this understanding by identifying the nesting season as starting December 15. Additionally, the Lead Eagle Expert will have the authority to stop or alter work, if needed.

Of course, I will continue to provide you with a daily update of the work going on in each of the four golden eagle buffer areas. Please feel free to call me with your questions (858 637-3708).
Sincerely,

Donald E. Haines, AICP  
Environmental Mitigation Manager  
Sunrise Powerlink

Attachments

c: Daniel Stewart, BLM  
   Eric Porter, USFWS  
   Erinn Wilson, CDFG  
   Kirsten Winter, USFS  
   Vida Strong, Aspen Environmental  
   Anne Coronado, Aspen Environmental  
   Cassandra Garza, Aspen Environmental  
   Bob Jackson, SDG&E  
   Gerry Akin, SDG&E  
   Karen Wilson, SDG&E  
   Alan Colton, SDG&E
Attachment 1

Maps
Sunrise Powerlink Alignment
California, USA

Legend
- Golden Eagle (GOEA) Nest
- 4,000' Radius Buffer
- GOEA Nest
- USFS Managed Lands
- Sunrise Structure
- Sunrise Powerlink Overhead
- Sunrise Access Road
- Pull or Tensioner Site

Sunrise Powerlink
Golden Eagle Nest Observations
Bell Bluff

Date Printed: 11/29/2011
Author: stondre
Name: 10-279 WRI GOEA Nest3 Bell Bluff no obs Mode

Data Source: Golden Eagle Active Nests - Wildlife Research Institute
Attachment 2

Monitoring Protocol
ATTACHMENT 2
Golden Eagle Monitoring Protocol

Proposed minimization measures for:

1. Surveying all four golden eagle 4,000 foot buffer areas along the Sunrise Powerlink alignment prior to December 1, 2011, and
2. Working within one or more of four golden eagle 4,000 foot buffer areas during the golden eagle nesting period beginning December 1, 2011:

Assumptions:

1. All construction within the golden eagle buffer areas will be related to completing the pulling of conductor wire and installing safety balls on the conductor wire.
2. All work will be completed no later than December 7, 2011.
3. The four golden eagle 4,000 foot buffer areas are:
   - El Cajon Mountain (affects Structures CP66-2, CP67-3, and CP68-1);
   - Bell Bluff Truck Trail (affects Structures CP104-2, CP 105-1, and CP106-1);
   - Barrett/Echo (affects Structures EP-43 and EP-44); and

Proposal for November 28, 29, and 30:

1. Four teams of two biologists each will do simultaneous observations at all four above sites. Surveys will be conducted for 8 hours each day.
2. Each of the four teams will be led by highly qualified biologists (Lead Eagle Biologist) meeting the most stringent eagle guideline requirements of three years or more experience.
   a. Dave Bittner—40 plus years of GOEA and BAEA experience (Lead Eagle Expert)
   b. Dr. Jeff Lincer- 35 plus years of BAEA and GOEA experience
   c. Dr. James Hannan- 17 plus years of GOEA experience
   d. Chris Meador- 8 plus years of GOEA experience
3. Each team leader will be assisted by one of the potential following biologists:
   a. Renee Rivard, Phar D, 2 years GOEA experience
   b. Alexis Smoluk, Wildlife biologists with 1 year experience with GOEA, 9 years with Spotted Owls, and 12 years observing, banding and trapping Raptors including Eagles.
   c. James Newland- 6 years GOEA experience
   d. Daniel Palmer-1 year GOEA experience
   e. Marcus Collado - 2 years GOEA experience
   f. Katie Quint—1 year GOEA experience
4. Several observation locations within the 4,000 foot buffer of each Golden Eagle territory will be selected to maximize the ability to detect Golden Eagles. These locations have been selected based on previous knowledge by Wildlife Research Institute (WRI) observers of the territory. WRI has surveyed these locations for the Sunrise Powerlink for the past two golden eagle breeding seasons. WRI will provide the authorizing agencies maps of these observation locations.
5. WRI biologists will repeat the locations and observations each of the three days. There will be a minimum of 2 hour-observations at each of the identified observation locations. Some territories will have up to three separate observation points with a main site that will be repeated during the same day. This will assure complete coverage of the 4,000 foot buffer zone.
6. If construction is completed on or prior to November 30 in a golden eagle buffer zone, observations will be discontinued in that golden eagle buffer zone.
7. All Eagle observations will be shared with all of the concerned agencies and the Main point of Contact (MPC) for the Utility Construction crew working on the site.

Proposal for December 1 through December 7, 2011:

1. Observations will continue at each golden eagle buffer area until construction has ceased; however, the observation period will be extended to 12 hours to provide even greater coverage.
2. If the head WRI Lead Eagle Biologist determines that the construction activity is in anyway interfering with normal Eagle breeding behavior then a stop or alter work order will be presented to the Utility MPC and the Lead Eagle Expert, David Bittner. An immediate decision to stop or change work in the affected area(s) will be made on site by the Lead Eagle Biologist who will have authority to make the final decision on whether work should be stopped or altered.
3. How long the construction should be stopped and what the next steps will be discussed with the appropriate authorizing agencies the same day and a plan will be developed based on the observed Golden Eagle activity.
4. December is the early start of the Eagle Breeding season and usually the activity is random, occasional and unpredictable until January when breeding and nest building activity gets fully underway; therefore, decisions to stop or alter construction should be based on actual observations by WRI observers and their determination that the observation is of a resident eagle representing nest building or reproductive behavior.
Attachment 3

Description of Work Activities
Attachment 3

Proposed Wire Activities After November 30 for Golden Eagle 4,000 foot Buffer Areas

Background
Each of the four golden eagle 4,000 foot buffer areas is part of a “wire stringing span.” Each of the wire stringing spans includes tower structures within the golden eagle buffer area and tower structures outside the golden eagle buffer area (See maps in Attachment 1). At each end of the wire stringing span there is a wire stringing site; one of the wire stringing sites is identified as the “puller” site and one is the “tensioner” site. All puller and tensioner sites are outside the golden eagle 4,000 foot buffer areas. The “pulling” or “stringing” of all conductor wire will be “pulled” in all four of the golden eagle buffer areas by the end of day on November 30.

The conductor and optical ground wire (OPGW) will then be terminated at the final tower, located at the puller site (this is known as catching off the wire). All of this work, which would take place after November 30, will be outside the golden eagle buffer areas.

Proposed Work Activities after November 30 Within Golden Eagle Buffer Areas:
The general sequence of the final wire activities that will occur after November 30 within golden eagle buffer areas is as follows:

I. Attach Conductor to Insulators on Tangent Towers (13 towers within golden eagle buffer area)
   This is the process by which the stringing sheaves (travelers) are removed and the wire is clipped in to the insulators. This occurs once the conductor has reached its final sag.
   a. Equipment Used – light or medium lift helicopter
   b. Personnel – 5 to 6 crew members
   c. Up to 6 personnel including, biological, archaeological, quality control inspector, construction supervisor, and possibly a CPUC monitor may be accessing tower sites until all work is completed.

II. Cutting in Dead Ends and Installing Conductor Wire Jumpers (Only 7 dead end towers within the golden eagle buffer area)
   This process also involves attaching the conductor to the insulators, for a different type of structure (dead-end instead of tangent). Because this is a larger, heavier structure the process takes a few more personnel and a little more time. The travelers are removed and the wire is clipped in to the insulators. Additionally, conductor wire jumpers are installed.
   a. Equipment Used – light or medium lift helicopter; 40-ton crane and 2 crew trucks may be used for conventional access sites instead of a helicopter
   b. Personnel – 8 to 10 crew members
   c. Up to 6 personnel including, biological, archaeological, quality control inspector, construction supervisor, and possibly a CPUC monitor may be accessing tower sites until all work is completed.

III. Spacers and Marker Ball Placement
   Once all the conductor wire is clipped in to the insulators, the spacers and aviation marker balls can be installed. Spacers are devices that are designed to hold apart the conductor wire that is bundled together, so that the bundles don’t touch each other and damage the wire. Aviation marker balls are large colored spheres that are installed on the wire in locations where aircraft may need assistance identifying the location of the wire in their
flight corridor and are also used to prevent avian collision, as required by Mitigation Measure B-10a.

a. Equipment Used – spacer carts, light lift helicopter, 3 to 5 crew trucks, and a boom truck
b. Personnel – 5 crew members
c. Up to 6 personnel including, biological, archaeological, quality control inspector, construction supervisor, and possibly a CPUC monitor may be accessing tower sites until all work is completed.

IV. Final Inspection and Completion of Punch List Items
   a. Equipment Used – Light lift helicopter or crew truck
   b. Personnel – 2 to 3 PAR personnel plus SDG&E’s QC inspectors
   c. Up to 6 personnel including, biological, archaeological, quality control inspector, construction supervisor, and possibly a CPUC monitor may be accessing tower sites until all work is completed.

V. BMP Maintenance, Site Stabilization, and Restoration
   a. Equipment Used – Light or medium lift helicopter or crew truck
   b. Personnel – 3 to 4 PAR personnel plus SDG&E’s SWPPP inspectors
   c. Up to 6 personnel including, biological, archaeological, SWPPP inspector, and possibly a CPUC monitor may be accessing tower sites until all work is completed.
MEMORANDUM

Anne Coronado
Aspen Environmental Group
1463 Friel Street
Burton, MI 48523

November 30, 2011

RE: Sunrise Powerlink Project – Variance to Work within 4,000-foot Buffer of Golden Eagle Nest - Conditions SDG&E is Willing to Implement with the Requested Variance

Dear Anne,

Pursuant to our conversation, I am sending this supplemental memorandum addressing work within 4,000 feet of golden eagle nest buffers. The four golden eagle buffer areas are:

- El Cajon Mountain (affects Structures CP66-2, CP67-3, and CP68-1);
- Bell Bluff (affects Structures CP104-2, CP 105-1, and CP106-1);
- Barrett/Echo (affects Structures EP-43 and EP-44); and

As requested by the agencies, SDG&E will incorporate into its work plan conditions designed to further maximize the protection of golden eagles that may be found in the four historic golden eagle nesting territories. The conditions include the following:

- The Monitoring Protocol includes the condition to allow the lead eagle biologist at each golden eagle buffer area to stop work immediately.
- So as to not potentially surprise or startle golden eagles, helicopter pilots will be directed to fly consistently over the line as much as possible and any flights away from the line (to pick up materials, refuel, avoid aircraft, etc.) will be directed AWAY from nest sites. For example, near the Barrett/Echo nest site, helicopter pilots will be directed to fly north of the alignment as safety allows.
- SDG&E is committed to completing the work in golden eagle buffer areas as rapidly as possible. Construction estimates that remaining work would take approximately 5 work days but that unforeseen circumstances could potentially extend the work to December 15. In light of this SDG&E is committed to working on an “inside out manner” at each buffer area, meaning that work in areas considered potentially more sensitive would be conducted first, as possible.
- The attached table lists the spans within the four eagle buffer areas where marker balls are currently planned and those spans where bird diverters will be added (approximately 185). SDG&E proposes using the BirdMark diverter (see attached). The proposed diverter can be seen at the link: http://www.pr-tech.com/bird-diverters/index.php.
- This condition is consistent with Mitigation Measure B-10a that recommends the use of bird collision-reducing techniques in constructing the lines.

**B-10a - Utilize collision-reducing techniques in installation of transmission lines.** The applicant shall install the transmission lines utilizing Avian Power Line Interaction Committee standards for collision-reducing techniques as outlined in “Mitigating Bird Collisions with Power Lines: The State of the Art in 1994” (APLIC, 1994). . . overhead lines that are located in highly utilized avian flight paths (from MP 50 through MP 88 for the SRPL Proposed Project) 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.
While the golden eagle buffer areas generally fall outside of “highly utilized avian flight paths” for migratory birds generally, the eagle buffer areas are highly utilized by the eagles and identified by the EIR/EIS as important birds to consider when designing the transmission lines. Further, in the Avian Monitoring and Mitigation Plan (AMMP), which is Exhibit 24 to the Forest Service’s Special Use Permit for Sunrise, the Forest Service noted that the use of collision-reducing standards was consistent with the Suggested Practices for Avian Protection on Power Lines, and in furtherance of satisfying Mitigation Measure B-10a. AMMP at 9. The Forest Service also noted that SDG&E “further commits to utilize an adaptive management approach and engage in corrective measures throughout the course of SRPL as needed.” Id.

It should be noted as well that the EIR/EIS analyzed Sunrise’s potential impacts to avian species and, pursuant to Mitigation Measure B-10a, required the installation of avian “diversion devices” that would “be visible to birds” and intended “to reduce avian collision with power lines.” Sunrise BLM ROD Appx. A at D-24 (MM B-10a); Forest Service ROD, Attachment 1 at 29-30 (MM B-10a); see also EIR/EIS at Ap.12-49 (MM B-10a). The EIR/EIS analyzed Sunrise’s visual impacts and concluded that visual impacts will be significant and unmitigable. See EIR/EIS B-47; EIR/EIS Fig. E.1.3-10B (visual simulation of line).

If you have any additional questions or comments, please don’t hesitate to contact me. We look forward to your response.

Sincerely,

Donald E. Haines
Environmental Mitigation Manager
Sunrise Powerlink

Cc: Alan Colton
Aerial Marker Ball and Bird Flight Diverter Locations on Spans within Golden Eagle Nest Buffers

<table>
<thead>
<tr>
<th>From Tower</th>
<th>To Tower</th>
<th>Marker Balls</th>
<th>BirdMARK Bird Flight Diverter</th>
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</thead>
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<tr>
<td><strong>El Cajon Mountain Nest Buffer</strong></td>
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<td></td>
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</tr>
<tr>
<td>CP65-1</td>
<td>CP66-2</td>
<td>0</td>
<td>5*</td>
</tr>
<tr>
<td>CP66-2</td>
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<td>5</td>
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<td>CP68-1</td>
<td>CP69-2</td>
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<tr>
<td><strong>Bell Bluff Nest Buffer</strong></td>
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<td></td>
<td></td>
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<td><strong>Barrett/Echo Nest Buffer</strong></td>
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<tr>
<td>EP44</td>
<td>EP45-1</td>
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</table>

Towers in **bold** fall within a 4,000-foot golden eagle nest buffer.

*A smaller number of flight diverters are being proposed in this span since only a small portion of the span falls within the nest buffer.*
BirdMark BM-AG Bird Diverter

Helping Birds See Hazards Day or Night

Birds large and small—including swans, eagles, hawks, ducks, geese, and many others—often cannot see power lines near the horizon, and they lack the maneuverability to avoid them when they get close enough to see them. Over one million birds are killed annually in North America! BirdMark BM-AG (After Glow) diverters are designed to prevent collisions between birds and hard-to-see power lines day or night.

**Easy to See**
The BirdMark BM-AG offers a low cost, permanent solution for helping endangered species avoid power lines in traditional flight paths. BirdMarks stand out like a beacon against background features, letting birds see where the power lines are. When swaying in the wind, BirdMarks also make a noise that birds can hear. Highly reflective orange and yellow tape is positioned in the center of each BirdMark to further assist in warning birds.

**Night Glow Capability**
Other types of bird diverters are usually designed to help birds avoid obstructions during daylight, but recent studies indicate that most bird collisions happen during low light situations such as fog, rain, and the hours before and after dusk. The BirdMark BM-AG glows up to 10 hours after the sun has set, providing extended protection for at risk birds.

**Features**
- Highly visible day and night
- Sways and reflects in the wind to alert birds of obstructions
- Glows up to 10 hours after dusk and in other low light conditions
- Fully tested and developed by biologists
- Rugged spring-loaded clamp prevents line slippage
- Quick installation by hot stick
- Easily moved for seasonal flight path variations
- Also hazes birds from buildings and structures

**Dimensions**
- 11½” total length
- 5¾” diameter white disk
- Use 15ft spacing for best results

**Easy to Install**
The BirdMark BM-AG can be installed and removed from the ground without interrupting power. Our patented SnapFast KL-70 clamping jaws securely grip all cables up to a diameter of 2½” (70mm). Once in position, the grip is such that the BirdMark BM-AG stays in position, even in a Force 8 gale.
Shelby,

This is the eighth email detailing SDG&E's construction schedule progress in the four golden eagle 4,000 foot buffer areas (see attached). All but one wire has been pulled. There was a malfunction of the pulling equipment at the Bell Bluff eagle buffer area. The OPGW has been safely stabilized and we will not finish the installation until authorized. We estimate that it will take no more than 4 hours to finish the pull.

We just completed submitting all of the requested information for the variance and will not work until we receive an approved variance. Thank-you everyone for your support through this process.

Donald E. Haines, AICP
Environmental Mitigation Manager
Sunrise Powerlink
8315 Century Park Court, CP21G
San Diego, Ca 92123-1548
Tel: 858 637-3708 Fax 858 637-3770
dehaines@semprautilities.com

This is the seventh email detailing SDG&E's construction schedule progress in the four golden eagle 4,000 foot buffer areas (see attached). As I mentioned on the agency conference call today, all wire pulling will be done tomorrow. Early tomorrow I will provide everyone with Dave Bittner's observation points mapped. Thank-you to everyone for calling in today.
Shelby,

This is the sixth email detailing SDG&E's construction schedule progress in the four golden eagle 4,000 foot buffer areas (see attached). As I mentioned on the agency conference call, all wire pulling is expected to be done by November 30 but due to inclement weather (high winds), additional tasks (wire sagging, cutting in dead end structures and marker ball setting) will require extending work into the first week of December.

Dave Bittner began surveying the four golden eagle buffer areas today, November 28. I spoke to him today; he will be available for a call between 2:30 and 4 pm tomorrow to report additional updated information. I will set up a phone number and time for you to call in. For those of you who can't call in I will summarize the information conveyed on the call. We will have observation points mapped by tomorrow and provide you with that information by the time of the call.
Attachment C OPGW pull in Eagle Buffer Areas (11-30-2011) (2).txt

Everything is still on schedule to finish in the golden eagle buffer areas on November 30. As I mentioned yesterday, Dave Bittner will begin surveying the four golden eagle buffer areas tomorrow, November 28, in case we have to take a few days after November 30 to set marker balls for FAA safety purposes. Attached is a survey methodology called “Strategy to work in Golden Eagle Buffers” that describes the surveying methodology Dave will use prior to December 1 and the extended day approach he will use after November 30.
After we get a status update by mid-morning I will give you a call to discuss the appropriateness of seeking a de minimus extension or variance for working after November 30 in one or more of the golden eagle 4,000 foot buffer areas. If you have questions or comments do not hesitate to call.

Donald E. Haines, AICP
Environmental Mitigation Manager
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Tel: 858 637-3708 Fax 858 637-3770
dehaines@semprautilities.com
From: Haines, Don Edward
Sent: Saturday, November 26, 2011 11:25 AM
To: Haines, Don Edward; Shelby Howard
Cc: 'msteward@blm.gov'; 'tzale@blm.gov'; Paul, Robert; 'Winter, Kirsten'; 'eric_porter@fws.gov'; Erinn Wilson (ewilson@dfg.ca.gov); Billie Blanchard (bcb@cpuc.ca.gov); 'Vida Strong'; Colton, Alan F.; Cheever, Dayle M; Ramp, Jennifer; Romani, Rachel; 'Dave Bittner'
Subject: RE: Eagle Buffer Areas (11-23-2011)

Shelby,
This is the fourth email detailing SDG&E’s construction schedule progress in the four golden eagle 4,000 foot buffer areas:

* El Cajon Mountain (Structures CP66-2, CP67-3, and CP68-1); (On schedule to be completed 11-30)
* Bell Bluff Truck Trail (Structures CP104-2, CP 105-1, and CP106-1); (On schedule to be completed 11-30)
* Barrett/Echo (Structures EP-43 and EP-44); (On schedule to be completed 11-30) and
Construction tells me they are still on schedule to finish in the golden eagle buffer areas on November 30. Just in case I am working up a strategy with Dave Bittner if we have to extend into any of the golden eagle buffer areas on December 1. I hope to get that out to you later today. If you have questions do not hesitate to call.

From: Haines, Don Edward
Sent: Wednesday, November 23, 2011 10:40 AM
To: Haines, Don Edward; Shelby Howard
Cc: 'msteward@blm.gov'; 'tzale@blm.gov'; Paul, Robert; 'Winter, Kirsten'; 'eric_porter@fws.gov'; Erinn Wilson (ewilson@dfg.ca.gov); Billie Blanchard (bcb@cpuc.ca.gov); 'Vida Strong'; Colton, Alan F.; Cheever, Dayle M; Ramp, Jennifer; Romani, Rachel; 'Dave Bittner'
Subject: Eagle Buffer Areas (11-23-2011)

Shelby,
This is the third email detailing SDG&E's construction schedule progress in the four golden eagle 4,000 foot buffer areas:

* El Cajon Mountain (Structures CP66-2, CP67-3, and CP68-1); (On schedule to be completed 11-30)
* Bell Bluff Truck Trail (Structures CP104-2, CP 105-1, and CP106-1); (On schedule to be completed 11-30)
* Barrett/Echo (Structures EP-43 and EP-44); (On schedule to be completed 11-30) and

I guess all my concern about Thing Valley was unwarranted. Great progress was made yesterday so that construction now feels they may be finished by December 29th at Thing Valley. Rain is predicted for tomorrow but there is no work scheduled along the alignment. Next update will be Friday. If you have questions do not hesitate to call.

Happy Thanksgiving to everyone!

Donald E. Haines, AICP
Environmental Mitigation Manager
Sunrise Powerlink
8315 Century Park Court, CP21G
San Diego, Ca 92123-1548
Tel: 858 637-3708 Fax 858 637-3770
dehaines@semprautilities.com

From: Haines, Don Edward
Sent: Tuesday, November 22, 2011 12:39 PM
To: Haines, Don Edward; Shelby Howard
Cc: 'msteward@blm.gov'; 'tzale@blm.gov'; Paul, Robert; 'Winter, Kirsten'; 'eric_porter@fws.gov'; Erinn Wilson (ewilson@dfg.ca.gov); Billie Blanchard (bcb@cpuc.ca.gov); 'Vida Strong'; Colton, Alan F.; Cheever, Dayle M; Ramp, Jennifer; Romani, Rachel
Subject: Eagle Buffer Areas (11-22-2011)

Shelby,

This is the second email detailing SDG&E's construction schedule progress in the four golden eagle 4,000 foot buffer areas:

* El Cajon Mountain (Structures CP66-2, CP67-3, and CP68-1); (On schedule to be completed 11-30)
* Bell Bluff Truck Trail (Structures CP104-2, CP 105-1, and CP106-1); (On schedule to be completed 11-30)
* Barrett/Echo (Structures EP-43 and EP-44); (On schedule to be completed 11-30) and

As long as the weather holds up and equipment doesn't break down, it appears SDG&E will meet the schedule of completing all work no later than November 30. If you have questions do not hesitate to call.

Donald E. Haines, AICP
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Sunrise Powerlink
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San Diego, Ca 92123-1548
Tel: 858 637-3708 Fax 858 637-3770
dehaines@semprautilities.com

From: Haines, Don Edward
Shelby,

As we discussed earlier last week I am providing you maps and schedules of the Sunrise Powerlink Project’s construction schedule for the four 4,000-foot golden eagle buffer areas. Last week I mentioned this to staff of the Bureau of Land Management, the U.S. Fish and Wildlife Service and the California Department of Fish and Game, as well. This information is being provided to you as a contingency and to insure that all of the agencies are fully informed of SDG&E’s anticipated activities in these areas.

Attached to this email:

1. One overview map of Golden Eagle Buffer Areas
2. 4 individual maps of each Golden Eagle Buffer Area
3. 4 schedules of each Golden Eagle Buffer Area

I will update the schedules on a daily basis all week except for Thanksgiving day. If SDG&E expects construction to go a few days into the December 1 timeframe, we will assign Dave Bittner to watch the affected buffer area so as to avoid any eagle activities. We will know better Friday and Saturday this week what is happening and work with you to develop a variance or other type of authorization for such activity.

Thank you for your help with this and if you have questions please call me.

Donald E. Haines, AICP
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Sunrise Powerlink
8315 Century Park Court, CP21G
San Diego, Ca 92123-1548
Tel: 858 637-3708 Fax 858 637-3770
dehaines@semprautilities.com
ATTACHMENT D
Attachment D

Date: December 1, 2011

Re: Daily Observations of Golden Eagle Behavior as it Relates to the Request for a Variance to Work within Certain Limited Golden Eagle Buffer Areas after November 30

This memo report summarizes observations on November 28, 29, and 30, 2011 of golden eagle behavior at four nesting areas within 4,000 feet of the Sunrise Powerlink Project (Project) alignment. All observations are being conducted by Wildlife Research Institute (WRI) eagle biologists. WRI has over 20 years of experience in San Diego County conducting eagle surveys and conducted golden eagle surveys in 2010 and 2011 for the Project within 4 miles of the Project alignment. Their survey results showed three active nests within 4,000 feet of the alignment in 2010 (El Cajon Mountain, Barrett/Echo, and Thing Valley) and two active nests within 4,000 feet of the alignment in 2011 (El Cajon Mountain and Barrett/Echo). A fourth nesting area, Bell Bluff, was surveyed in both 2010 and 2011 and was confirmed inactive both survey years; however, SDG&E is treating this nesting area (based on the historic nest site) as active per a request by the USFS. This nesting area is within 4,000 feet of the Project. Therefore, observations of golden eagle behavior are being conducted at the El Cajon Mountain, Bell Bluff, Barrett/Echo, and Thing Valley nesting areas.

Methodology

WRI is employing the following observation methodology of the four golden eagle nesting areas. A total of 8 biologists from WRI (four teams of two) are conducting simultaneous observations of the El Cajon Mountain, Bell Bluff, Barrett/Echo, and Thing Valley nests. Surveys will be conducted for 8 hours each day. Each of the four teams will be led by highly qualified WRI biologists meeting the most stringent eagle guideline requirements of three years or more experience:

- Dave Bittner: 40 plus years of golden eagle and bald eagle experience;
- Dr. Jeff Lincer: 35 plus years of bald eagle and golden eagle experience
- Dr. James Hannan: 17 plus years of golden eagle experience
- Chris Meador: 8 plus years of golden eagle experience

Each team leader will be assisted by one of the potential following biologists:

- Renee Rivard, Phar D: 2 years golden eagle experience
- Alexis Smoluk: Wildlife biologist with 1 year experience with golden eagle, 9 years with spotted owls, and 12 years observing, banding and trapping raptors, including eagles.
- James Newland: 6 years golden eagle experience
- Daniel Palmer: 1 year golden eagle experience
- Marcus Collado: 2 years golden eagle experience
- Katie Quint: 1 year golden eagle experience

Several observation locations are selected by WRI’s biologists within and outside each of the 4,000 foot buffers of each golden eagle nesting area to maximize the ability to detect golden eagles. These locations have been selected based on previous knowledge by WRI observers of the nesting areas. Observations will be conducted from approximately 7:30 am to 4:30 pm. There will be a minimum of 2
hour-observations at each of the identified observation locations. Some nesting areas will have up to three separate observation points with a main site that will be repeated during the same day. This will assure complete coverage of the 4,000 foot buffer zone. If construction is completed on or prior to November 30 in a golden eagle buffer zone, observations will be discontinued in that golden eagle buffer zone. All golden eagle observations will be shared with all of the concerned agencies and Main Point of Contact (MPC) for SDG&E’s Utility Construction crew working on the site.

If construction is allowed after November 30, WRI will continue observing golden eagle activity at each golden eagle buffer area until construction has ceased; however, the observation period will be extended to 12 hours to provide even greater coverage. If the head WRI biologist determines that the construction activity is in anyway interfering with normal golden eagle behavior, then a stop or alter work order will be presented to the Utility MPC. An immediate decision to stop or change work will be made on site by the head WRI biologist. How long the construction should be stopped and what the next steps will be discussed with the appropriate authorizing agencies the same day and a plan will be developed based on the observed golden eagle activity.

Specific observations from November 28, 2011

El Cajon Mountain
Two adult eagles were seen in the vicinity of the main nest area above the Project tower. These eagles were observed in the area for ten minutes. Then one of the adult eagles was seen just east of the nest area about three hours later.

Bell Bluff
One second-year eagle was seen traveling from the southeast to the direction of the Suncrest Substation, but disappeared behind a ridge approximately 1 mile south of the Substation. This was probably a floater just passing through the territory.

Barrett/Echo
Four eagles were seen. Both adults were seen above the canyon where the nests are located. The male was seen perching on rocks approximately 1300 meters north of the Project tower construction and on the same side as the nests. The female remained on the west side of the valley but returned several times. They are in the valley observing the construction activities and we feel that this is positive. If the eagles had instead immediately left the area, they would show fear and they are not exhibiting that. The other two eagles were a sub adult who was escorted out of the area by the male and apparently one of last year’s young who hung around all day and was seen flying and perching along the cliffs.

Thing Valley
No eagles seen.

Please see attached aerial maps of the four nesting areas that show WRI’s survey observation locations on November 28, 2011.

Specific observations from November 29, 2011

El Cajon Mountain
One eagle was seen. This eagle was perched on the top of the rock where the nest for the past few years is located. After approximately 30 minutes the eagle flew lower and perched again on a lower place on
the nest rock. During this time numerous helicopters were performing normal construction flights. No adverse reaction was observed by the eagle to any helicopter flights. Later a Peregrine falcon perched above the eagle and at least three helicopters were flying around below them transporting men and equipment. Again no adverse reaction by the eagle or falcon was observed.

**Bell Bluff**
No eagles were seen in or near the territory.

**Barrett/Echo**
Three eagles were seen near the nest and well within the 4,000 foot buffer. The first eagle to appear was a juvenile from 2011 and spent only a short time perched then flew off over the ridge of Echo Mountain and disappeared to the east. Two adults were seen to fly into the nest area around 10:00AM. One we believe to be the female remained on a perch rock below the nest for over two hours. The male was seen perched on a pole to the south of the nest for several hours. Both eagles were observed with 60x scopes and binoculars while helicopters flew routine flights west and east across the canyon and above the transmission towers. The eagles were watched for any behavior that might be a reaction to the helicopter traffic. After direct observation of 24 flights and almost no reaction by the eagles except to momentarily glance up at each helicopter as it came into view no adverse reaction was observed. Both adult eagles were within seven hundred and one thousand feet of the Project tower and near the nest area from the past few years.

**Thing Valley**
No eagles seen.

Please see attached aerial maps of the four nesting areas that show WRI’s survey observation locations on November 29, 2011.

**Specific observations from November 30, 2011**

**El Cajon Mountain**
On November 29 additional information was obtained after talking with the biologists on site. The Juvenile Golden Eagle from 2011 was walking around in the field about 130 meters north of the El Monte Pull or Lay down site pad. He was observed on the ground for about three hours after having either killed or stole a killed rabbit from another animal. The adult female also came into that area just north of the towers and cables in a hunting stoop but was not seen to land because she disappeared behind the trees in the foreground.

November 30 only the adult male was seen for about 40 minutes around the nest area about 3:00PM then flew high above the mountain and off to the east from where he first came.

**Bell Bluff**
One Eagle was seen flying from Japatul Lane area where we know they forage through the gap in the hills and out toward Bell Bluff. The observers were unable to track the eagle beyond the ridges near where tower pads are being constructed south of the Sub Station.

**Barrett/Echo**
The adult eagles were roosting overnight about 400 meters north of the tower and lines crossing the canyon. They left the roost about 10:00 AM and one flew between the transmission lines. Shortly after
both eagles attempted to pursue and kill a Northern Harrier Hawk not far from the lines. The eagles flew within 70 meters of helicopters on five occasions just south of the towers and above the nest area. These close encounters were all at or near wire level. The nest is at the same level as the wire at this site. This is why I suggested during our conference call that whenever possible the helicopters work north of the wires at this location because of the close proximity of the nest on the south side. The eagles are spending a significant amount of time south of the wires. All pilots should be advised of these eagle approaches since we know they are watching the wires and other activities and may not even be aware the eagles are nearby.

The juvenile eagle from last year put in an appearance for only a few minutes then returned to the east over the ridge and out of sight. When the eagles leave the nest area they most often fly east toward the tower construction and other helicopter activity. We are not aware of exactly where they are going but we will attempt to find out on future observations.

**Bell Bluff**
One Eagle was seen flying from Japatul Lane area where we know they forage through the gap in the hills and out toward Bell Bluff. The observers were unable to track the eagle beyond the ridges near where tower pads are being constructed south of the Sub Station.

**Thing Valley**
No eagles seen

There are no new aerial maps of the four nesting areas that show WRI’s survey observation locations on November 30, 2011.

**General Golden Eagle Observations**

Based on WRI’s past golden eagle survey experience in San Diego County and the brief observation period described in this letter, WRI’s overall observations are that eagles will exhibit various degrees of pre-nesting activity in December; however, the eagles are just visiting the nest sites in early December and nest building begins in January. Historically, golden eagle eggs are laid in February and March in San Diego County, but recently some eggs have been laid in the last part of January. Furthermore, Dave Bittner of WRI pointed out on the teleconference of November 29 that it is well documented (over 100 years of documentation in San Diego County) that golden eagle nesting behavior in San Diego County rarely starts before the end of December. Dave Bittner of WRI relayed that based on their experience of conducting more than 600 aerial surveys of eagle nests without ever flushing an eagle (often within 200 feet of a nest), and the year-round presence of military and Border Patrol helicopter activity within eagle territories in San Diego County, that the construction activities (including helicopter use) required to complete the Project in golden eagle nesting territory will not impact the eagles’ nesting behavior, especially so early in the nesting season.