

**PUBLIC UTILITIES COMMISSION**505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298

October 21, 2009

Donald Johnson  
Project Manager  
Southern California Edison  
2131 Walnut Grove Ave.  
Rosemead, CA 911770

RE: SCE Antelope-Pardee 500 kV Transmission Project, Segment 1 - Notice to Proceed (NTP #24)

Dear Mr. Johnson,

On October 7, 2009, Southern Californian Edison (SCE) requested authorization from the California Public Utilities Commission (CPUC) for the relocation of six 66 kV overhead transmission lines, referred to as the Antelope-Anaverde-Helijet, Antelope-Shuttle-Quartz Hill #1, Antelope-Quartz Hill #2, Antelope-Ritter Ranch #1, and the Antelope-Ritter Ranch #2, located at SCE's Antelope Substation in the City of Lancaster, California.

The SCE Antelope-Pardee 500 kV Transmission Project was evaluated in accordance with the California Environmental Quality Act and a Certification of Public Convenience and Necessity (CPCN) was granted by CPUC Docket #A.04-12-007, SCH #2005061161 on March 1, 2007. The Forest Service is the federal Lead Agency for the preparation of the Project's EIR/EIS in compliance with NEPA. The proposed work and yard locations do not occur on Forest Service land thus no approval from the Forest Service is required. **NTP #24 is granted by CPUC for the proposed activities based on the following factors:**

- SCE submitted the following information:

SCE is requesting a Notice to Proceed (NTP) for the relocation of six 66 kV overhead transmission lines, referred to as the Antelope-Anaverde-Helijet, Antelope-Shuttle-Quartz Hill, Antelope-Quartz Hill #1, Antelope-Quartz Hill #2, Antelope-Ritter Ranch #1, and the Antelope-Ritter Ranch #2, located at SCE's Antelope Substation in the City of Lancaster, California. This relocation is necessary due to the future expansion of the Antelope Substation within the existing SCE owned property boundary. The expansion of the Antelope Substation was included in the CPCN application for Segment 1 and the Final EIR/EIS. In addition to the relocation of the existing 66 kV transmission lines, the expansion will include site preparation and grading and the relocation of the existing Sagebrush transmission line. Preparation and grading for the proposed substation expansion will be addressed under a separate NTP request submitted at a later date. The proposed relocation of the Sagebrush transmission line will also be addressed under a separate NTP request submitted at a later date. Relocation of the six 66 kV transmission lines at the Antelope Substation is anticipated to begin October 2009 and continue through June 2010.

**PROJECT OVERVIEW**

Existing and proposed routes for the 66 kV transmission lines are on SCE owned property, in an area of open fields with no existing city infrastructure or improvements. The existing 66 kV overhead transmission lines are positioned along the south and southwest side of the existing substation and within the proposed disturbance area for the substation expansion. The existing overhead transmission lines will be re-routed to the substation through new underground and aboveground facilities. The new proposed route for these transmission lines will run along the south, east, and northern perimeter of the proposed expanded substation.

The relocation of the Antelope-Anaverde-Helijet and Antelope-Shuttle-Quartz Hill 66 kV transmission lines are circuits one and two of the six to be relocated at the Antelope Substation. These circuits start 1,700 feet south of the substation at pole # 2345614E on SCE existing ROW and terminate at the 66 kV rack in the Antelope Substation at positions 23, for the Antelope-Anaverde-Helijet, and 22, for the Antelope-Shuttle-Quartz Hill 66 kV transmission lines.

The relocation of the Antelope-Quartz Hill #1 and #2 66 kV transmission lines are circuits three and four of the six to be relocated at the Antelope Substation. These circuits start 1,700 feet south of the substation at pole # 4170460E on SCE existing ROW and terminate at the 66 kV rack in the Antelope Substation at positions 20, for the Antelope-Quartz Hill #1, and 18, for the Antelope-Quartz Hill #2 66 kV transmission lines.

The relocation of the Antelope-Ritter Ranch #1 and #2 66 kV transmission lines are circuits five and six of the six to be relocated at the Antelope Substation. These circuits start 2,200 feet south of the substation at pole # 4170460E on SCE existing ROW and terminate at the 66 kV rack in the Antelope Substation at positions 24, for the Antelope-Ritter Ranch #1, and 25, for the Antelope-Ranch #2 66 kV transmission lines.

### **CONSTRUCTION METHODOLOGY**

The relocation of the six 66 kV transmission lines will require the following:

- Overhead construction including the installation of approximately 6,000 feet of new 954 All Aluminum Conductor (AAC) conductors on fifteen 75-foot Light Weight Steel (LWS) poles double circuit construction and the addition of six new Tubular Steel Pole (TSP) Riser poles.
- Underground construction including the installation of approximately 10,000 feet of new 3000 Copper conductor, in new underground facilities. This entails installing ten vaults, installing approximately 10,000 feet of ducts and structure, and pulling the new conductor.
- Line removal of the existing facilities which consist of approximately 42,000 feet of existing overhead 66 kV conductors and 53 wood poles.

### **OVERHEAD CONSTRUCTION SPECIFICATIONS**

**Installation of Light Weight Steel (LWS) Poles.** The new pole line will be placed on unimproved land within the SCE right-of-way (ROW). For access, an existing 14-foot dirt road, adjacent to the line, will be used. The installation of poles will temporarily impact an area with a 50-foot radius around the center of the pole location. Poles will be delivered and placed next to the existing road where they will be framed. The poles will be installed in a two- to three-foot diameter hole approximately 10 feet deep. The spoils from the new poles will be used to fill the holes for the removed poles.

**Installation of Tubular Steel Poles (TSP) and Footings.** The footings range in diameter from four to six feet and will vary from 20 to 30 feet in depth depending on soil conditions. A steel cage with footing bolts will be inserted into the hole and then the hole will be filled with cement and left to cure. The TSP will be set on the footing when the cement has cured.

**Conductor Installation.** Disturbance during conductor installation will consist of wire stringing sites (WSS). The wire stringing sites will be 100 feet by 50 feet unless noted otherwise. The wire installation crew may use helicopters for pulling sockline cables and monitoring the wire pulling portion of the wire stringing operation. The wire stringing operation may consist of the following activities:

- Prepare wire pulling and wire stringing sites
- Install insulator assembly on the poles
- Hang stringing sheaves
- Haul and set up wire pulling and tensioning equipment. Movement of wire stringing equipment in many cases will require transporting heavy equipment on lowboy trailers from site to site
- Install wire catch-off snubs



- String in conductor wire
- Splice conductor wire
- Remove string sheaves and attach conductor wire to insulators (clipping)
- Dead-end wires (install compression dead-end assemblies)
- Install jumper wires on dead-end structures

The wire stringing setup locations will include buried wire snubbing devices, tensioning equipment, wire reel trailers and wire sagging winch tractors. Buried wire snubbing devices are only required when the stringing setup is between two tangent structures. All wire-pulling equipment will be removed upon completion of conductor installation activities.

## **UNDERGROUND CONSTRUCTION SPECIFICATIONS**

***Installation of Underground Ducts and Substructure.*** There will be a total of three transmission duct banks necessary to complete the underground installation of all six transmission lines. Each duct bank will be approximately 10 feet apart, and will contain six conduits to accommodate two of the six relocated circuits. The installation of each transmission duct bank will temporarily impact an area approximately 25 feet wide by 1,500 feet long – the width of the disturbance area by the length of the trench between vaults. The excavation for the trenches will be approximately five feet deep by 18 inches wide. The trenches would be widened and shored where necessary to meet California OSHA safety requirements. If trench water is encountered, trenches would be dewatered using a portable pump and disposed of in accordance with acquired permits. Trenching operations would be staged in intervals if necessary if a maximum trench length open at one time is determined by permit requirements. At any one time, open trench lengths would not exceed that required to facilitate the installation of the duct bank. Steel plating would be placed over the trenches to maintain vehicular traffic across areas that are not under active construction.

***Installation of Underground Vaults.*** The installation of vaults will temporarily impact an area 50 feet by 100 feet. The vaults will be located approximately every 1,500 feet or less depending on the length of the project. The outside dimensions of a transmission vault area 11 feet 2 inches wide, 21 feet 4 inches long, and 11 feet 2 inches tall. The vaults will be set to a depth so that the main body is a minimum of 18 inches below the surface. The excavation will be a minimum of 12 feet 2.5 inches wide, 22 feet 2.5 inches long, and 12 feet 10 inches deep. The only surface exposure will be a four-foot by five-foot manhole covered with a concrete lid to provide access into the vault.

***Cable Installation.*** After installation of the conduit, SCE would install cables in the duct banks. Each cable segment would be pulled into the duct bank from vault to vault and terminated at the TSP risers. To reduce friction of the cable and the conduit when pulling, a lubricant would be applied to the cable as it enters the duct to decrease friction during pulling. All wire-pulling equipment will be removed upon completion of cable installation activities.

## **LINE REMOVAL**

Removal of the Antelope-Anaverde-Helijet, Antelope-Shuttle-Quartz Hill, Antelope-Ritter Ranch #1, Antelope-Ritter Ranch #2, Antelope-Quartz Hill #1, and Antelope-Quartz Hill #2 66 kV transmission lines, will start south of Antelope Substation. The existing pole line where it is within the SCE right-of-way currently has an existing minimum 14-foot dirt access road adjacent to the line. Conductors will be lowered at each span onto the dirt access road and coiled into empty reels. Poles will be pulled and placed in the existing road where they will be hauled away. Each pole hole will be two to three feet in diameter and typically 10 feet deep. The spoils from the new pole installations will be used to fill the holes where the existing poles were removed. There will be a temporary disturbance area with a 50-foot radius around the center of the poles that are to be removed. The reels of old conductor will be transported by truck to a material and equipment yard to be prepared for recycling. All waste materials no recycled will be characterized as outlined in the Waste Characterization and Management Plan approved by the CPUC on November 14, 2007. Materials will be disposed of at an approved facility using appropriate transportation and documentation protocol.

## **SITE PREPARATION AND ACCESS**

The locations of the existing 66 kV transmission lines are within an already disturbed area on SCE owned property. Additionally, the locations of the new overhead and new underground 66 kV transmission lines are within an open field on SCE owned property. Light grading may be required within the disturbance areas discussed above to facilitate movement of equipment, and staging and assembly of materials.

Access to the existing 66 kV transmission lines will be from existing access roads. These roads may require light grading to make them passable. No construction of new spur or access roads will be required for removal of the existing poles. Existing diversion berms may be temporarily removed to allow access for equipment and materials.

Access to the section of new overhead 66 kV transmission lines along the northern boundary of the proposed expanded Antelope Substation will be from an existing access road off of West Avenue J. Additionally, access will continue from this existing road onto a new access road constructed on the northern side of the new overhead 66 kV lines. Construction of this road will require light grading. SCE would like to leave this road in place for future operation and maintenance of the lines.

Access to the new underground 66 kV transmission lines along the eastern and southern boundary of the proposed expanded Antelope Substation will be from the new access road discussed above. It will begin at an existing access road on the northern side of the new overhead lines then continue east and south to follow the underground route. SCE would like to leave this new access road in place to serve as access to the underground lines for operation and maintenance. Construction of this road will require light grading. SCE will request an addendum from the CPUC for all permanent access roads.

## **CONSTRUCTION EQUIPMENT**

The equipment required for the removal of the existing 66 kV transmission lines, and the installation of the new overhead and new underground 66 kV transmission lines, may include the following: crew hauling trucks, tractor trailer units, 90-foot aerial man-lift trucks, digger derrick trucks, crawler tractors (Cat D6 size), crawler excavator, conductor rewind equipment, stringing sheaves, rough-terrain crane – 40 ton capacity, material hauling trucks and trailers, rope machine to hold back and control conductor as its being removed, portable cutting equipment (cutoff saw or acetylene torch), water truck – 4000 gallon, and fire fighting tool boxes.

Construction activities will include the following:

- Pole location staking
  - Disturbance area marking/flagging
  - Access road grading
  - Pole hauling
  - Pole framing
  - Hole digging
  - Pole setting
  - Installation of stringing sheaves
  - String and sag conductor and overhead ground wires
  - Clip and dead-end wires
  - Energize circuits
  - Final site restoration
- 
- **Biological Resources:** Burns & McDonnell submitted a report dated September 29, 2009 for the *Biological Survey Report for the Expansion of the Antelope Substation and Undergrounding of Portions of Six Existing 66kV Lines to Accommodate the Expansion of the Antelope Substation for the Antelope-Pardee 500kV Transmission Project, Segment 1, Los Angeles County, California*. Surveys were conducted on September 21-22, 2009 by ECORP. The proposed construction area consists



mainly of disturbed California Annual Grassland Series with small pockets of Rubber Rabbitbrush Series (Sawyer and Keeler-Wolfe 1995) located on relatively flat topography. The area is grazed by sheep annually and also has disturbances associated with existing utility facilities (roads and poles/towers). The survey area included a 500-foot buffer around the Project Site and all of its proposed components (with the exception of the developed area within the existing substation boundaries). Meandering transects were walked throughout the proposed construction area and the buffer area at a spacing of approximately 50 feet apart in the grassland areas and 20 feet apart in the rabbitbrush scrub areas, with an emphasis on locating California ground squirrel (*Spermophilus beechyi*), American Badger (*Taxidea taxus*), and canid burrows that could potentially be used by western burrowing owls (*Athene cunicularia*).

A brief assessment of potential nesting habitat and impacts to additional wildlife was also conducted during the survey. Breeding bird surveys were conducted throughout the 2009 nesting season in and near the existing Antelope Substation and the vicinity of the project site. Those surveys found nests of a number of species in structures at the existing substation, in existing transmission towers near the substation, in construction equipment staged at adjacent marshalling yards, and in non-native vegetation planted for screening along the existing Antelope Substation fence line. Therefore, there is potential for nesting birds in the area during the spring breeding season.

No special-status species were observed during the survey. Two small areas were found with concentrations of active California ground squirrel burrows. Only one of these areas contained burrows of suitable size for use by burrowing owls, but the biologist stated that they did not exhibit any owl sign (whitewash, feathers, pellets, etc.). Surveys for burrowing owls were conducted in 2007 and 2008 on the adjacent Segment 1 of the Antelope-Pardee 500 kV Transmission Project (LSA 2007c, 2008a). No potential burrowing owl locations were found during those surveys. Biological clearance surveys were conducted in the vicinity of the project site throughout 2009 for Segment 1 (Burns & McDonnell 2009d) and Segments 2 and 3 (Burns & McDonnell 2009e, 2009f). No active burrowing owl burrows or potential burrowing owl burrows were found during those surveys. No American badger burrows or signs were found. Peirson's morning-glory (CNPS List 4) can be difficult to find during the fall season, and is potentially present on the project site. However, the 2007 and 2008 surveys did not find any occurrences of Peirson's morning-glory in the vicinity of the project site, and none were observed during the current survey.

- **Cultural Resources:** SCE submitted a report from Cogstone Resource Management, Inc. titled *Supplemental Cultural and Paleontological Resources Assessment, TRTP, Antelope Substation Expansion, Los Angeles County, California* dated September 2009. Archaeological and historical background contexts were developed by ECORP Consulting, Inc. for the Antelope Substation under Segment 2 of the TRTP (Ahmet et al. 2006). The proposed project area is undeveloped and has no known historic uses. A search for archaeological and historic records for Segment 2 of the TRTP was also conducted by ECORP Consulting, Inc. (Ahmet et al. 2006). ECORP consulted the South Central Coastal Information Center, the Angeles National Forest Heritage Resources Section, the National Register of Historic Places, the California Inventory of Historic Resources, California Points of Historical Interest and the California Historical Landmarks. The proposed project area falls within the one-mile search radius of the ECORP study and three cultural resources have previously been identified within 1 mile of the proposed project, including two historic-era resources located within the project area. Both of the historic-era resources (Antelope Substation and Antelope Transmission Line) located within the project area have been evaluated and found not eligible for listing on the National Register of Historic Places. Both have also been evaluated as not significant under CEQA. A historic cemetery is within one mile of the project area.



Paleontological background contexts were developed for Antelope Substation under the Paleontological Resources Management Plan Segments 2 and 3 of the TRTP prepared by Cogstone Resource Management, Inc. (Gust and Scott 2008). A search for paleontological records was completed at the Natural History Museum of Los Angeles County (Gust and Scott 2008). The record search included the SCE right-of-way and a one-mile perimeter. No paleontological localities are known within the project boundaries and the sediments in the project area consist of Quaternary alluvium, which is low in sensitivity for paleontological resources (Gust and Scott 2008).

Cogstone Resource Management conducted an intensive-level pedestrian survey on September 21, 2009 within the Antelope Substation parcel. The survey consisted of a one-person crew walking the project area while closely inspecting the ground surface. Transects were walked at 20 meter intervals. No prehistoric archaeological or paleontological resources were observed, but a potentially historic-era can scatter was identified partially inside the parcel boundary acquired for the Antelope Substation. Modern trash has also been dumped in the area. The site is not considered significant, but should be flagged for avoidance.

**The conditions noted below shall be met by SCE and its contractors:**

- As identified in **APM BIO-5** and **Mitigation Measure B-6**, SCE would assign Biological Monitors to the Project. They would be responsible for ensuring that impacts to special-status species, native vegetation, wildlife habitat, or unique resources would be minimized to the fullest extent possible. The Biological Monitors shall be on-site to monitor all work and will conduct sweeps of the approved areas, especially areas with high burrow concentrations which will be impacted. Monitors would flag the boundaries of areas where activities need to be restricted in order to protect wildlife including special-status species. These restricted areas would be monitored to ensure their protection during construction. This will include protecting species covered under the MBTA and CDFG codes regarding the protection of nests and eggs. If breeding birds with active nests are found, a biological monitor shall establish a 300-foot buffer around the nest and no activities will be allowed within the buffer until the young have fledged from the nest or the nest fails. The 300-foot buffer may be adjusted to reflect existing conditions including ambient noise and disturbance with the approval of the CDFG and USFWS (as well as CPUC notification). The Biological Monitors shall conduct regular monitoring of the nest to determine success/failure and to ensure that project activities are not conducted within the buffer until the nesting cycle is complete or the nest fails.
- Biological survey sweeps shall be conducted and results submitted to the CPUC for review and approval prior to equipment and vehicles mobilizing into an area. After complete surveys have been submitted and approved by the CPUC, site occupation can occur; however, if occupation does not occur within seven calendar days of survey submittals, biological clearance sweeps shall be re-conducted prior to site occupation, including nesting bird surveys during the breeding season.
- All open trenches shall have ramps installed at the ends of the trench at the end of each day to allow trapped wildlife to escape. All installed open-ended conduit shall be covered (capped) at the end of each day to discourage wildlife from entering the conduit. All holes for new tubular steel poles (TSP) shall be covered at the end of each day so no wildlife may fall into the holes. The biological monitor shall inspect open trenches and holes every morning for trapped wildlife.
- On June 20, 2008, Dan Blankenship of CDFG provided: "All Pierson's morning glory and other sensitive plants shall be delineated with flagging and avoided. If avoidance is determined not possible, consultation with CDFG is required to minimize impacts. Consultation with CDFG is required prior to construction that will impact any wetland areas in order to determine on site mitigation measures."

- If groundwater is encountered during construction, construction activities at that location shall be halted and SCE shall submit a Groundwater Remediation Plan to the CPUC and RWQCB for review and approval. Until the Plan is approved, groundwater may not be discharged, but shall be pumped into baker tanks for holding.
- All work boundaries shall be flagged prior to occupation of the project area. In addition, all approved access roads, spur roads and overland travel routes to be used shall be flagged prior to construction.
- All sensitive resources buffers shall be flagged prior to construction.
- An archeologist shall flag all culturally sensitive areas for avoidance prior to construction.
- All new roads shall be temporary for construction. If SCE believes permanent roads are necessary, SCE shall submit an addendum to the CPUC for review and approval.
- All project mitigation measures, compliance plans, and permit conditions shall be implemented during construction activities. Some measures are on-going/time-sensitive requirements and shall be implemented prior to and during construction where applicable.
- Copies of all relevant permits, compliance plans, and this Notice to Proceed shall be available on site for the duration of construction activities.
- Prior to the commencement of construction activities, all crew personnel including haul truck and concrete truck drivers shall be appropriately trained on environmental issues including protocols for air quality, hazardous materials, biological resources, known and unanticipated cultural materials, as well as SWPPP BMPs. A log shall be maintained on-site with the names of all crew personnel trained.
- No movement or staging of construction vehicles or equipment shall be allowed outside of the approved areas. If additional temporary workspace areas or access routes, or changes to construction technique or mitigation implementation to a lesser level are required, a Variance Request shall be submitted for CPUC review and approval.
- Project related vehicles and equipment with diesel engines shall limit idle times to no more than 10-minutes.
- If construction debris or spills enter into environmentally sensitive areas, the jurisdictional agencies and CPUC EM shall be notified immediately.

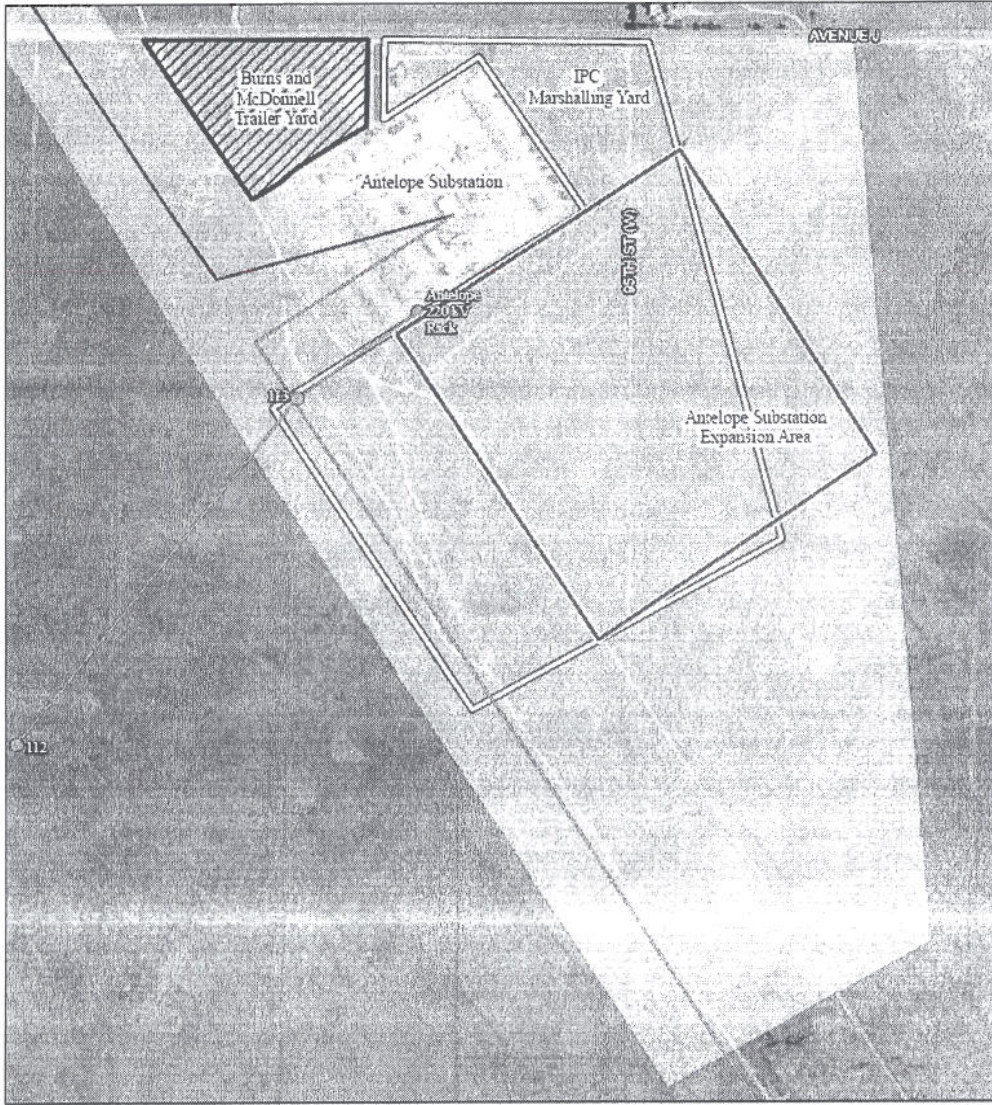
Sincerely,



John Boccio  
CPUC Environmental Project Manager

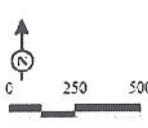
cc: V. Strong, Aspen
















LSA

FIGURE 2



-  Survey Area
-  Burns and McDonnell Trailer Yard
-  IPC Marshalling Yard
-  Antelope Substation
-  Expansion Area

-  Proposed Transmission Tower
-  Antelope-Pardee 500kV Segment 1
-  Antelope Transmission Project - Segment 2
-  Antelope Transmission Project - Segment 3
-  Antelope-Pardee 500-kV Transmission Line Project
-  Proposed Antelope Substation Yard and Expansion Area

Source: Segment-5CE (2007). Image: NALP (2005)