

Record of Decision

SCE Antelope-Pardee 500-kV Transmission Project

USDA Forest Service
Santa Clara-Mojave Rivers Ranger District, Angeles National Forest
Los Angeles County, California

Decision and Reasons for the Decision

Background

On January 11, 2005, Southern California Edison (SCE) submitted a special use application to the Angeles National Forest to authorize a 12.6 mile 500-kV transmission line, generally located along the Del Sur Ridge, on the Santa Clara-Mojave Rivers Ranger District in Los Angeles County. On December 9, 2004, Southern California Edison (SCE) submitted to the California Public Utilities Commission (CPUC) Application A.04-12-007 for a Certificate of Public Convenience and Necessity for the entire line covering approximately 25.6 miles. Because the proposal involves approval from both the Angeles National Forest and CPUC, the two agencies entered into a Memorandum of Understanding to produce a joint Environmental Impact Statement and Environmental Impact Report.

The applicant's purposes for the proposed line are to facilitate the distribution of renewable wind energy from the Antelope Valley-Tehachapi region; prevent overloading of existing transmission facilities in the SCE grid; and, respond to the California Public Utilities Commission's order requiring SCE to file an application for this project. In addition, the State of California passed a Bill known as the California Renewables Portfolio Standard Project which requires investor-owned utilities (e.g. SCE) to increase their sale of electricity produced by renewable energy sources with a target of 20 percent by 2017. This date has been recently revised to 2010. The Forest Service's purpose is to minimize adverse environmental impacts to National Forest System lands and minimize adverse impacts to Forest Service activities (such as wildland fire suppression and fire fighter safety). The Forest's need for action is to respond to SCE's special use application. The environmental impact statement (EIS) documents the analysis of six action alternatives (five alternatives on National Forest System lands), including the proposed action, to meet this need. As required by law, the analysis also included the No Action alternative. Every action alternative includes amendments to the Angeles National Forest Land Management Plan (Forest Plan).

Decision

Based upon my review of the analyses of all seven alternatives (including the no action) and the comments received during the formal comment period on the Draft EIS, I have decided to select the Forest Service preferred alternative, a combination of Alternatives 2 and 4. This decision includes authorizing a 50-year special use permit for the construction, use and maintenance of 500-kV transmission line facilities within a 160-foot wide, approximately 13.1 mile long route on National Forest System (NFS) lands. In addition, the

existing 66-kV transmission line improvements will be removed and appropriate special use permit(s) will be issued (with additional environmental review) to authorize activities outside the 160-foot wide route on National Forest System lands (e.g. construction). My decision includes amending the Angeles National Forest Land Management Plan by modifying the location for the designated Saugus/Del Sur Utility Corridor, modifying the Scenic Integrity Objectives along the 160-foot wide route, as noted in Table 1; and, providing a project specific amendment for a variance to the Forest Standard related to the Pacific Crest Trail (S1) for this project where the line will cross the trail. The Antelope-Pardee Transmission Line will be located within the revised Saugus/Del Sur 1000-foot wide Utility Corridor. Exhibit 1, Map of Alternative 2/4 Route, attached to this decision, shows the location for this approved project and revised location of the utility corridor on National Forest System lands. The exact location of the transmission line could vary slightly based on the final engineering alignment.

Table 1. Revision to the Scenic Integrity Objective Based on Mile Markers of Transmission Line.

Mile Marker	Present SIO	Amended SIO
Miles 5.7 to 5.8	High	Low
Miles 5.8 to 6.15	Moderate	Low
Miles 6.15 to 6.4	High	Low
Miles 6.4 to 7.7	High	Very Low
Miles 7.7 to 8.1	High	Low
Miles 8.1 to 8.6	N/A (non-NFS lands)	N/A (non-NFS lands)
Miles 8.6 to 10.4	High	Low
Miles 10.4 to 10.7	N/A (non-NFS lands)	N/A (non-NFS lands)
Miles 10.7 to 12.7	High	Low
Miles 12.7 to 12.8	Moderate	Low
Miles 12.8 to 13.5	High	Low
Miles 13.5 to 14	High	Very Low

Along with my decision, I am incorporating the appropriate mitigation and protection measures, and monitoring provisions proposed in the Antelope-Pardee 500-kV Transmission Project EIS/EIR (as noted in Exhibit 2, Protection, Mitigation and Monitoring Measures on National Forest System lands). Mitigation measures related to non-National Forest System lands, and addressed in the EIS/EIR, were incorporated into CPUC’s March 1, 2007 decision. Mitigation measure B-14 (p. C.3-65) requires visual mitigation on the conductors adjacent to Bouquet Reservoir to minimize the potential for avian collisions. To implement this measure, I am requiring SCE to add obstructing marker spheres on the conductors along the east side of Bouquet Reservoir, on National Forest System lands, per Federal Aviation Administration Advisory Circular 70/7460-1K, Obstruction Marking and Lighting. This will also ensure safety for fire fighting pilots working in the Bouquet Reservoir area. In addition, to comply with this mitigation measure, swan flight diverters will be installed on the line where it spans across the Pacific Crest Trail.

I have decided to authorize this project through a special use permit at this time. Once the improvements are constructed and operational, the Regional Office will consider issuing a Special Use Easement for the remaining 50-year period based on the as-built location of improvements (per FSH 1909.15,31.12,10)

My decision best meets the Forest Service purpose of the project: to minimize adverse impacts on National Forest System (NFS) lands, minimize the effects of urbanization or negative effects to open space and natural settings, ensure future forest management activities such as wildland fire fighting and fire fighter safety are not detrimentally affected by the location and/or design of the project, and to ensure the location of the transmission line maximizes the accommodation of future utility needs. In addition, I considered public concerns received during the public comment period regarding impacts to lands outside the Angeles National Forest. My conclusion is based on a record that shows a thorough review of relevant scientific information, a consideration of responsible opposing views, and the acknowledgment of incomplete or unavailable information, scientific uncertainty, and risk.

The combination of Alternatives 2 and 4 best addresses the concerns for scenic resources, fire management activities, and fire fighter safety. The Alternative will route the 500-kV transmission line off Del Sur Ridge, east of Bouquet Reservoir, and across a narrow canyon where the line would cross the Pacific Crest Trail. When compared to the other action alternatives, this route will decrease adverse impacts to scenic resources. As noted on pp. C.15-77 to C.15-78 of the Final EIS, Alternative 2 was located after careful analysis of “seen areas” to reduce adverse visual impacts. On pp. C.15-79 to C.15-83, the visual resource analysis addresses that there will be significant adverse effects from this route (Alternative 2) within the Forest, but the route would improve the scenic integrity when compared with the proposed action. In addition, the Forest Plan Scenic Integrity Objective amendment is limited to the 160-foot wide route because I want to ensure any future proposals along this corridor are designed to minimize visual impacts to the fullest extent possible. The decision on focusing the Scenic Integrity Objectives Forest Plan amendment to the 160-foot wide route is supported with the Washington Office appeal decision on the Forest Plan dated July 24, 2007 (p. 15, Attachment 2 of the appeal decision). As noted on p. C.9-39 in the Final EIS, the transmission line would inhabit the edge of the western boundary of the 1000-foot Saugus-Del Sur Utility Corridor, permitting the accommodation of future utility needs.

As noted on pp. C.7-22 to C.7-23 of the Final EIS, moving the transmission line mid-slope off Del Sur Ridge and removing the existing 66-kV transmission line will also decrease adverse impacts to fire suppression, fire prevention activities, and fire fighter safety along the ridge top (an important strategic location to fight wildland fires in the area). By locating the project mid-slope, Alternative 2/4 could potentially affect fire suppression effectiveness and fire fighter safety, but the risk of adverse effects is lower than the action alternatives that locate the project along Del Sur Ridge. Alternative 2/4 would have a beneficial impact to firefighter safety and fire suppression by removing the existing 66-kV line from Del Sur Ridge and fuelbreak (p. C.7-23). As noted on p. C.7-23 in the Final EIS, mitigation measures F-6 (de-energize the line), F-8a (SCE shall enter into an agreement to

widen Del Sur Ridge Fuelbreak), and F-8b (provide safety training) would decrease the impacts associated with Alternative 2/4 to less than significant levels.

In addition, the majority of towers will be constructed on site through the use of helicopters, further decreasing adverse visual impacts and reducing erosion associated with access road construction and the larger transmission tower footprints that are required where helicopters are not used in constructing the towers. Helicopter construction and removal of the 66-kV improvements (mitigation measure V-4a) will also minimize the construction of access roads, minimizing adverse effects to the open space and natural settings of the Forest environment. As noted on pp. C.9-38 to C.9-39 in the Final EIS, Mitigation Measures V-3a (Remove Existing Foundations, Rehabilitate, and Re-Vegetate Tower Sites), V-3b (Remove, Rehabilitate, and Re-Vegetate Crane Pads) and V-3c (Avoid Locating New Roads in Bedrock) would further minimize the effects of urbanization, or negative effects to open space and natural settings on National Forest lands.

In addition, mitigation measures noted in Exhibit 2 will further reduce impacts. Key measures not already noted are: B-1b, no activities will occur in Riparian Conservation Areas; H-1a, include best management practices to minimize erosion; R-1a coordinate construction schedule to minimize impacts to recreation areas/activities; R-4, permanent closure and re-vegetation of construction roads; V-15b, re-contour and restore areas disturbed during construction to provide a natural-appearing landform upon completion of construction.

Although Alternative 5 and the No Action Alternative would cause the least resource damage to National Forest System lands and least impact to Forest management activities, I have decided not to choose Alternative 5 because of public concerns and social and economic effects. I did not select the No Action alternative (which is the Forest Service environmentally preferred alternative) because of the need for renewable energy in Southern California. Alternative 1 would have the greatest short-term adverse impacts to the Forest environment from construction activities. Alternative 1 would also require substantial cut and fill along Del Sur Ridge and a 3-mile all-weather access road along Del Sur Ridge adversely impacting Forest resources (pp. C.5 to C.34). In addition, it would increase adverse effects of urbanization and have negative effects to open space and natural settings. The alternatives which proposed overhead lines along Del Sur ridge (i.e., Proposed Action, Alternative 3 and the northern portion of Alternative 4) had the greatest adverse impacts to the Forest scenic resources (pp. D.34 to D.36) and forest management activities (pp. D-20 to D-22).

Although the Forest did not have an official comment period after the Final Environmental Impact Statement was published, I received numerous comments voicing concerns over the preferred alternative and requested other alternatives be considered. The concerns raised were similar to those received during scoping and during the formal comment period on the Draft EIS/EIR, and included adverse impacts to fire fighting, scenic resources, and impacts to private property. I believe the Final EIS addresses these concerns and provides an accurate picture of the potential consequences and risks. I have accounted for these consequences and risks in reaching my decision.

Other Alternatives Considered

In addition to the selected combination of Alternatives 2/4, I considered five other alternatives, which are discussed below (Alternative 3 is identical to the proposed action on National Forest System lands as noted below). A more detailed comparison of these alternatives can be found in the EIS in Section B (Description of Proposed Project/Action and Alternatives), pp. B-1 to B-50 and pp. B-66 to B-114 and in Section D (Comparison of Alternatives), pp. D-1 to D-37.

Proposed Action and Alternative 3: Antelope-Pardee Single-Circuit 500-kV Towers between Haskell Canyon and Pardee Substation

Under the Proposed Action, SCE would be issued a 50-year term Special Use Easement, 160 feet wide, along 12.6 miles of National Forest System lands to construct, use, and maintain improvements (500-kV transmission line and ancillary improvements). In addition, the existing 66-kV transmission line would be removed; temporary special use permit(s) would be issued to authorize construction activities outside the 160-foot wide corridor; and, the Forest Land Management Plan would be amended to modify the Scenic Integrity Objectives along the project route and provide a variance from the Forest Standard related to the Pacific Crest Trail (S1) where the project crosses the Trail. Alternative 3 is identical to the proposed action alternative on National Forest System lands. The difference between the two alternatives occurs outside the Forest boundary.

Alternative 1: Antelope-Pardee Partial Underground

Under Alternative 1, SCE would be issued a 50-year term Special Use Easement, 160 feet wide, along 12.6 miles of National Forest System lands to construct, use, and maintain improvements (500-kV transmission line and ancillary improvements). In addition, the existing 66-kV transmission line would be removed; temporary special use permit(s) would be issued to authorize construction activities outside the 160-foot wide corridor; and, the Forest Land Management Plan would be amended to modify the Scenic Integrity Objectives along the project route, and provide a variance for this project from the Forest Standard related to the Pacific Crest Trail (S1) where the project crosses the Trail. This alternative is the same as the Proposed Action and Alternative 3 on National Forest System lands, except where a four-mile segment of this line would be buried along Del Sur Ridge, two transition stations approximately 2-3 acres would be constructed at both ends of the buried line, approximately 12-18 underground splicing vaults would be located every 1200-1800 feet for the length of the underground segment, and an addition Forest Plan amendment would be required in which the designated Saugus-Del Sur Utility Corridor route would be slightly modified to follow this Alternative's route.

Alternative 5: Antelope-Pardee Sierra-Pelona Re-Reroute

Alternative 5 would minimize the use of National Forest System lands. Under Alternative 5, SCE would be issued a 50-year term Special Use Easement, 160 feet wide, along 1.5 miles of National Forest System lands (on two separate parcels) to construct, use, and maintain improvements (500-kV transmission line and ancillary improvements). In addition, the existing 66-kV transmission line would be removed; temporary special use permit(s) would be issued to authorize construction activities outside the 160-foot wide

corridor; and, the Forest Land Management Plan would be amended to modify the Scenic Integrity Objectives along the project route, remove the Saugus-Del Sur Utility Corridor, and designate a new utility corridor where the transmission line crosses National Forest System lands.

No Action Alternative (Environmentally Preferred Alternative)

The No Action Alternative would deny SCE's special use application and the project would not be constructed. The No Action Alternative is the Forest Service's environmentally preferred alternative. There would be no direct forest resource impacts from this alternative. An indirect affect would be the eventual removal of the 66-kV transmission line within this project area.

Public Involvement

As described in the background, the need for this action arose when the Angeles National Forest received the application from SCE in January 2005. A public involvement plan was developed for the Proposed Action at the start of the environmental review process. The Plan identified and summarized outreach methods that would be utilized, including the public notification process and types of informational materials. The Notice of Intent, for the proposal for SCE to construct, use, and maintain a new 25.6-mile 500-kV transmission line, of which approximately 13 miles would cross National Forest System lands managed by the Angeles National Forest, was listed in the *Federal Register* on June 28, 2005. The proposal was published for the public and other agencies for comment during scoping which began June 28 and ended July 29, 2005. In addition, as part of the public involvement process, the agency mailed out notices to 77 federal, State, regional, and local agencies and elected officials; a notice of Public Scoping Meetings was mailed to over 2,500 addresses; notice of two scoping meetings was uploaded on the official website for the project (<http://www.cpuc.ca.gov/environment/info/aspen/antelopepardee/antelopepardee.htm>); newspaper advertisements were published in five regional/local newspapers on June 26 and July 9, 2005; an e-mail address was created along with a telephone and FAX hotline to share project information; and, two scoping meetings were held on June 29 and July 14. To comply with 36 CFR 251.54(f)(2) and Forest Service Handbook 2709.11, Section 11.11, Electric Power Transmission Lines with Capacity of 66 Kilovolts or Higher a letter with attachments was also sent to Department of Energy. An estimated 29 members of the public and representatives from organizations and government agencies attended the public meetings. Thirteen written comments were received; nine individuals provided oral comments during the scoping meeting; and, 21 comments were received on the project phone line.

Using the comments from the public and other agencies, several issues regarding the effects of the proposed action were identified. Main issues of concern included development occurring within the Forest, potential impacts to private property (including general aesthetics and property value), potential health impacts due to new electric and magnetic fields (EMF), construction related concerns (e.g. land disturbance, noise, and air quality impacts), resource impacts to biological resources, geology and soil conditions,

potential conflicts with recreation (including the Pacific Crest Trail), and other various concerns over traffic, public services, and utilities (see Executive Summary, EIS p. ES-5).

In addition, there was an initial 45-day comment period to the Draft EIS with a 15-day extension. Over 2,700 initial notices were mailed or emailed to interested parties, 147 copies of the bound Draft EIS were distributed to federal, State, and local agencies and elected officials as well as Native American representatives, organizations and other interested parties. An additional 135 electronic copies of the Draft EIS in compact disc (CD) were mailed to interested parties. Documents were also made available at 16 public locations in and around the project area. A notice of availability was also published in the *Federal Register* on August 4, 2006, published as a legal notice in the *Los Angeles Times* on August 5, 2006 and published as advertisements in six newspapers between July 28 and July 31, 2006. It was uploaded onto the official website and an email address, telephone hotline and FAX number were established. Four public meetings were held between August 28 and August 30, 2006. Forest Service representatives were also invited to a joint town council meeting (Leona Valley and Agua Dulce) to give a presentation on the project, specifically Alternative 5, which occurred on September 11, 2006. With the extension for public comment, 3,400 mailers were sent to interested parties, a notice of extension was published in the *Federal Register* September 22, 2006, and advertisements were published in seven newspapers. Comments were accepted at the public meetings and by mail, email, and phone/FAX. Over 300 comments were received.

Though there was no formal comment period after the Final EIS was published, the Forest received numerous comments on the project.

Findings Required by Other Laws and Regulations

National Forest Management Act

This decision to issue a 50-year special use permit to Southern California Edison to construct, use, and maintain 500-kV transmission facilities along 13.1 miles of National Forest System lands is consistent with the intent of the Forest Plan's long term goals and objectives. As noted earlier in this decision, the Forest Plan is amended through this Record of Decision to ensure the project is in compliance with all aspects of the Forest Plan. The project description and mitigation measures were designed to ensure compliance with the Plan.

Endangered Species Act

In compliance with the Endangered Species Act, consultation with US Fish and Wildlife Service was completed for the combination of Alternatives 2/4 and is documented with a letter of concurrence (dated August 20, 2007).

Clean Water Act

My decision will comply with the Clean Water Act by incorporating Best Management Practices and other Applicant Proposed Measures and mitigation measures as detailed in Sections C-5 (Geology, Soils, and Paleontology) and C-8 (Hydrology and Water Quality) of the EIS.

Clean Air Act

My decision will comply with the Clean Air Act by applying the Applicant Proposed Measures and mitigation measures as detailed in Section C-2 (Air Quality) of the EIS.

National Historic Preservation Act

Consultation with the State Historic Preservation Officer and National Advisory Council of Historic Preservation occurred and is documented through the fully executed Programmatic Agreement and cover letter (dated August 8, 2007). The Programmatic Agreement was developed and approved, based on the combination of the Alternatives 2/4, in compliance with this law.

Federal Land Policy and Management Act

Issuing a 50-year term special use permit is authorized through the Federal Land Policy and Management Act of October 21, 1976.

In addition, this project is in compliance with other environmental laws, regulations and executive orders [e.g. National Environmental Policy Act, Executive Orders 11988 (Floodplain Management) and 11990 (Protection of Wetlands)].

Implementation

Implementation Date

If no appeals are filed within the 45-day time period, implementation of the decision may occur on, but not before, 5 business days from the close of the appeal filing period. When appeals are filed, implementation may occur on, but not before, the 15th business day following the date of the last appeal disposition.

Administrative Review or Appeal Opportunities

This decision is subject to administrative review (appeal) pursuant to 36 CFR Part 215. Only those individuals and organizations who submitted written or oral comments during the 45-day comment period (36 CFR 215.6) and otherwise meet the specific requirements of 36 CFR 215.13 have standing to appeal. Appeals must be filed within 45 days from the publication date of the legal notice of decision in the *Los Angeles Times*. Notice of appeal must meet the specific content requirements of 36 CFR 215.14. An appeal, including attachments, must be filed (regular mail, fax, email, hand-delivery, express delivery, or messenger service) with the appropriate Appeal Deciding Officer (36 CFR 215.8) within 45 days following the publication date of this notice. The publication date of this notice is the exclusive means for calculating the time period to file and appeal (36 CFR 215.15(a)). Those wishing to appeal should not rely upon dates or timeframe information provided by any other sources.

Appeals must be submitted to Appeal Deciding Officer, Bernard Weingardt, Regional Forester, 1323 Club Drive, Vallejo, CA 94592, phone (707) 562-8737. Appeals may be submitted by FAX at (707) 562-9091 or by hand-delivery to the Regional Office, at the address shown above during normal business hours (Monday through Friday, excluding holidays, 7:30 am to 4:00 pm). Electronic appeals must be submitted in a format such as an

email message, plain text (.txt), rich text format (.rtf), portable document format (.pdf) or Word (.doc) to: appeals-pacificsouthwest-regional-office@fs.fed.us with Subject: ANF SCE Antelope-Pardee 500-kV Transmission Project. In cases where no identifiable name is attached to an electronic message, a verification of identity will be required. A scanned signature is one way to provide verification.

Contact Person

For additional information concerning this decision or the Forest Service appeal process, contact Marian Kadota, Project Manager, Planning Forester, Adaptive Management Services Enterprise Team at (805) 961-5732 or mkadota@fs.fed.us.

JODY NOIRON
Forest Supervisor
Angeles National Forest

DATE

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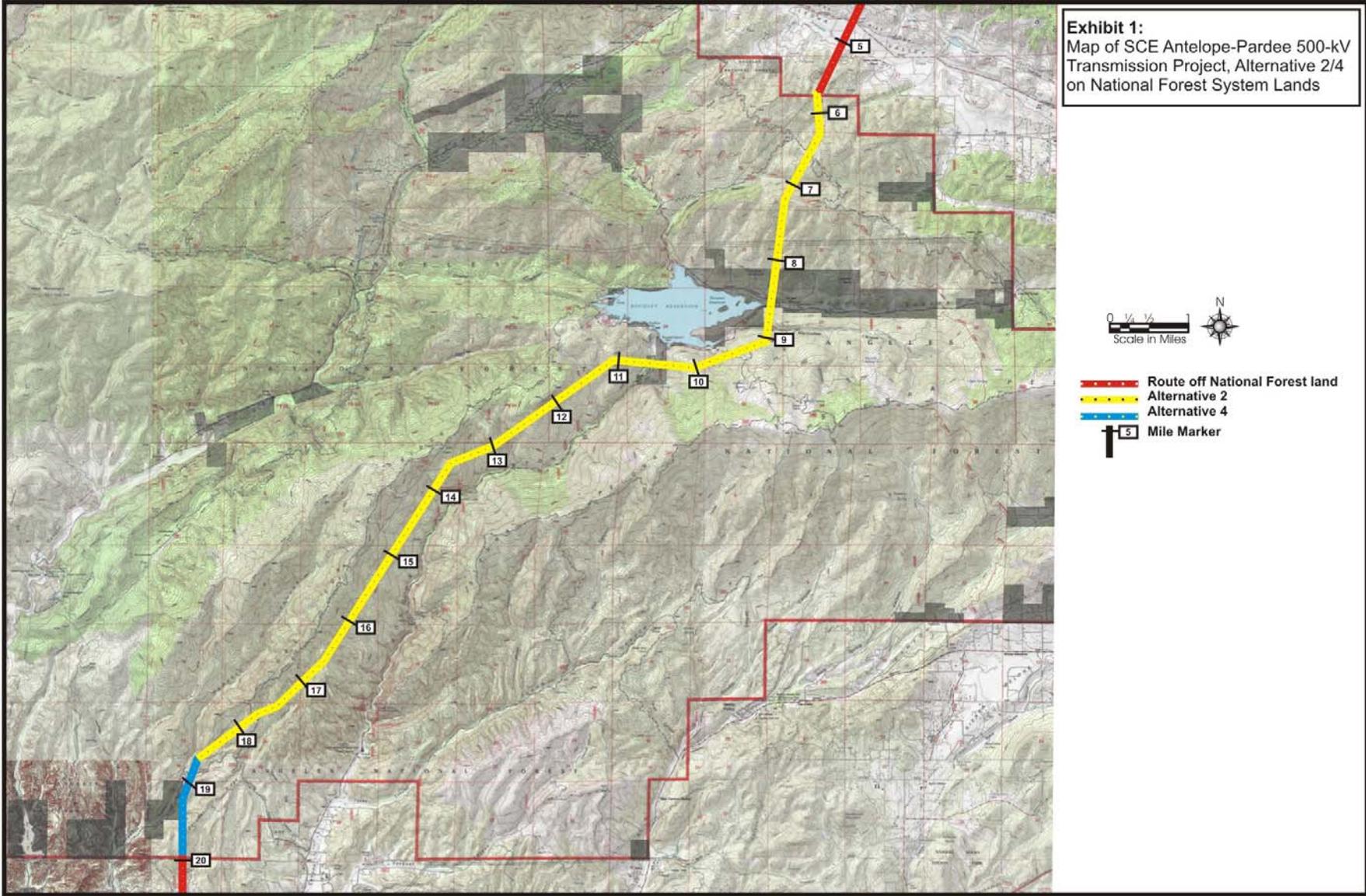


Exhibit 2, Protection, Mitigation, and Monitoring Measures on National Forest System lands

Project Protection and Mitigation Measures

During the development of the proposed action, in response to public comments on the proposal, and during the environmental affects analysis, project protection (applicant-proposed measures) and mitigation measures were developed to reduce adverse impacts the various alternatives may cause. The CPUC incorporated protection and mitigation measures on and off National Forest System lands in their decision, dated March 1, 2007. Table B-1 (below) contains the protection and mitigation measures related to National Forest System lands developed to reduce or eliminate impacts in various resource areas. Implementation of these measures is incorporated as an integrated part of my decision. More detailed descriptions of the measures can be found in Section C of the Antelope-Pardee 500-kV Transmission Project Final EIS.

Table B-1. List of Protection and Mitigation Measures Incorporated into the Decision.

Measure Number	Summary Description of Measure
APM AQ-1 and A-1c	Use ultra low sulfur fuel (less than or equal to 15 ppm of sulfur) in all diesel-powered construction equipment
APM AQ-2	Use of clean burning on-road and off-road diesel engines
APM AQ-3	Construction worker will carpool when possible
APM AQ-4 and A-1d	Vehicles idling time will be restricted to a maximum of 10 minutes
APM AQ-5 and A-1a	Water all active construction areas, access roads, and staging areas as needed
APM AQ-6 and A-1a	Cover all trucks hauling soils and other loose materials, or require at least 2 feet of freeboard
APM AQ-7 and A-1a	Construction vehicles will use paved roads to access the construction site when possible
APM AQ-8 and A-1a	Limit vehicle speeds to 15 mph on unpaved roads
APM AQ-10 and A-1a	Stabilize soils in inactive construction areas on an as-needed basis
APM AQ-11 and A-1a	Enclose, cover, water twice daily, or add soil binders to exposed stockpiles of soil and other excavated materials.
APM AQ-12	Allow natural revegetation to occur on temporarily disturbed areas following the completion of construction
A-1a	Implement Construction Fugitive Dust Control Plan
A-1b	Property maintain mechanical equipment
A-1e	Schedule deliveries outside of peak traffic hours
A-1f	Off-road diesel-fueled equipment standards
A-1g	On-road vehicle standards shall meet all applicable California on-road admission standards
A-1h	Off-road gasoline-powered equipment shall have EPA Phase 1/Phase 2 compliant engines

APM BIO-2	Every effort will be made to minimize vegetation removal and permanent loss at construction sites. In necessary, native vegetation will be flagged for protection
APM BIO-4, H-1a	Crews will be directed to implement Best Management Practices (BMPs). These measures will be identified prior to construction and incorporated into the Storm Water Pollution Prevention Plan
APM BIO-5	SCE will assign biological monitors to the project. Where appropriate, monitors will flag the boundaries of areas where activities need to be restricted and ensure these areas are protected from project activities
APM BIO-6, APM HYD-4	SCE shall implement a worker environmental awareness training program to ensure construction personnel are aware of the environmental conditions that must be adhered. All field construction personnel will be required to sign a statement that they agree to comply with all environmental protection measures associated with the project
B-1a, V-15b, V-15c	SCE shall submit a Restoration and Revegetation Plan to the Forest for review and approval
B-1b	No activities from this project will occur in Riparian Conservation Areas
B-2	Restoration of Coast Live Oak Trees. Any oak or native tree removed or killed from this project shall be replaced in kind.
B-4	SCE will implement weed control measures on Forest lands
B-6	Pre-construction surveys and monitoring will occur for breeding birds. Any nests found within 500' of construction activities will have 300' buffers around the nest.
B-7	Pre-construction surveys (during the appropriate flowering period) and monitoring will occur for sensitive plant species within 100 feet of all surface disturbing areas and within the 160-foot wide route
B-8a, B-9	Pre-construction focused surveys will occur where arroyo toad and California red-legged frog habitat exists in all areas that may be affected by the project. If toads are found within 500' of the project, all activities within the 500' occupied area will cease and SCE will consultation with US Fish and Wildlife Service (USF&WS), and develop and implement a monitoring plan. If SCE intends to consult through ESA, Section 7, a federal agency, other than the Forest Service, will need to be included.
B-8b	Vehicles and equipment shall not utilize the Bouquet Creek crossing (Forest Road 6N19) if flowing water covers any portion of the bridge.
B-12	Pre-construction protocol surveys will occur where California Gnatcatchers habitat exists in all areas that may be affected by the project (including a 300' buffer). If gnatcatchers are found and can be impacted, work in that area will cease and SCE will complete the needed formal consultation with USF&WS. If SCE intends to consult through ESA, Section 7, and the area does not include Forest lands, a federal agency, other than the Forest Service, will need to be included.
B-13	Raptor safety protection will be required on tower/conductor (lines) on National Forest System lands in appropriate locations.
B-14	Bird collision-reducing techniques shall be implemented. As example would be installing "swan" diverters in high risk areas.
B-16	Pre-construction surveys will occur for sensitive amphibians and reptiles. Habitat occupied by toads will be flagged and avoided during construction. Sensitive toads and reptiles will be moved to suitable habitat outside of the construction area.
B-19, B-25	Pre-construction surveys will occur for burrowing owls and badgers. When avoidance measures (flagging with a buffer) are not possible, burrowing owls and badgers will be relocated after consultation with the Forest biologist
Programmatic Agreement	All mitigation measures on NFS land acknowledged in the Programmatic Agreement with SHPO and noted in the EIS
AMP GEO-2	Prior to final design, a geotechnical study would be preformed to support good engineering practice

AMP GEO-3	Construction activities will be performed in accordance with the soil erosion/water quality protection measures specified in the Construction SWPPP
AMP PAL-1, G-10	Certified paleontologist will be retained by SCE to produce a monitoring plan including process if fossils are found and potentially impacted
G-2	Appropriate BMPs will be included in the Construction SWPPP
G-4	Perform geologic/geotech study to confirm location of mapped traces of active and potential faults crossed by alignment. Design towers appropriately given the information
G-5	Perform design-level geotech investigations specifically to assess the potential for liquefaction, lateral spreading, seismic slow instability, and ground-cracking hazards. Design measures will be conducted based on this information
G-7	In areas with potentially corrosive soils, design-level geotech studies shall ID the presence. If presence exists, appropriate design measures shall be utilized.
G-8	Perform design-level geotech studies to ID problematic soils and develop appropriate design features
G--9	Perform design-level geotech studies to evaluate unstable slopes, landslides, earth flows, and debris flows. Design structures to address these areas of concern
G-11	coordinate with Bouquet Cyn Stone Quarry by developing a plan to avoid or minimize interference with quarry operations
APM PHS-1	SCE will perform Phase I Environmental Site Assessments to assess all project-related areas of planned ground disturbance prior to the initiation of construction and avoid any identified hazards accordingly
PH 1a	An environmental training program will be established to communicate environmental concerns and appropriate work practices
PH-1b, APM HYD-5	Hazardous Substance Control and Emergency Response Plan will be prepared as part of the Storm Water Pollution Prevention Plan
PH-1c	All construction and demolition waste determined to be potentially hazardous will be removed to a hazardous waste facility and in compliance will California Integrated Waste Management Board standards.
PH-1d	Hazardous material spill kits will be maintained and stored on-site for small spills
PH-2	A Phase II investigation shall be conducted for any sites revealed to be potentially contaminated by the Phase I Environmental Site Assessment
PH-3, APM HYD-7	During grading or excavation work during the project, the contractor will observe soil for visual evidence of contamination. Should an area on the Forest be questionable, work will cease in the area and appropriate measures will be taken to protect human health and the environment
PH-4b, APM HYD-6	SCE shall ensure hazardous material spill kits are maintained and available in maintenance vehicles to address small spills during the operation and maintenance of the project. During construction, any excess concrete escaping from foundations will be allowed to set up before being removed
PH-5a	As part of the design and construction process for the project, SCE shall limit the conductor surface electric gradient in accordance with the IEEE Radio Noise Design Guide
PH-5b	After energizing the transmission line, SCE shall respond to and document all radio-television/equipment interference complains received and the responsive action taken
PH-6	SCE shall identify objects that have the potential for induced voltages (as part of the siting and construction process) and work with the affected parties to determine proper grounding procedures. SCE will notice all property owners within and adjacent to the project , including SCE's responsibility with respect to grounding all conducting objects.
F-1	In consultation with the Forest, SCE shall develop a Fire Plan for the construction, operation and maintenance of the project.

F-2	In consultation with the Forest, SCE shall develop an Operation and Maintenance Plan
F-3	SCE will provide Forest dispatch information, 7 days in advance of helicopter use on the Forest. Should a wildfire occur in the area, helicopters for SCE will immediately cease upon direction from the Forest Aviation Officer.
F-6	SCE shall de-energize the transmission line when the Forest feels continued power transmission will impact fire suppression activities and/or fire fighter safety.
F-8a	SCE shall enter into an Agreement with the Forest to share in the cost to widen Del Sur Ridge Fuelbreak
F-8b	SCE shall provide appropriate transmission line safety training to Forest Fire staff annually, prior to fire season
APM HYD-2	A Storm Water Pollution Prevention Plan will be prepared before construction can begin and implemented
APM HYD-3	The erosion control and sediment transport control plan (part of the SWPPP) will be prepared and implemented.
APM HYD-4	SWPPP will include preparations for quick and safe cleanup of accidental spills.
H-1b	The maximum allowable road gradient to all new roadways (e.g. temporary spurs) will be no greater than 10 percent grade
H-1c	The Forest shall pre-approve all road surface treatments proposed on Forest lands. Watering of roads to minimize air and soil erosion impacts will be required on Forest lands.
H-1d	Construction activities will occur during the dry season or when precipitation events are not expected
H-1e	Subsurface drainage devices shall be Forest pre-approved and implemented where necessary to minimize the potential failure of slope construction areas
H-1f	Side-casting material must be utilized on the road surface with any excess material relocated off forest or to forest pre-approve temporary waste areas. Temporary waste areas will be removed before the first anticipated rains. No permanent disposal sites will be located on Forest lands.
H-4	SCE shall determine the specific location and extent of any groundwater resources that may be encountered during excavation activities and will develop a groundwater remediation plan, if applicable
H-7	Transmission line towers shall be designed and engineered to withstand any mechanical stresses (including potential flooding or erosion of the surrounding area)
R-1a	Coordinate construction activities and schedule. SCE shall schedule the work to avoid heavy recreation use periods. SCE shall prepare public notices for distribution as well as publication in local papers
R-1b	SCE shall coordinate with the Forest to identify alternative recreation sites (including trails) that can be used during construction
R-1c	SCE shall coordinate with the Forest and shall post public notices on temporary closures of OHV routes during construction activities
R-1d, APM TRA-9	SCE shall submit plans for proposed road maintenance activities to the Forest Engineer for review and approval. Work will include restoration of the roads at Maintenance Level 2 (which would allow continued use of OHV recreationists)
R-3, APM TRA-6, APM TRA-9	SCE shall implement Forest requirements related to road improvements and maintenance. For all designated Maintenance Level 2 roads, SCE shall adhere to the prescription guidelines and avoid upgrades to these roads. Upgrades will occur to provide safe access and erosion control
R-4, APM TRA-9	After construction is completed in an area, the Forest pre-approved, minimal access roads built (or reopened) for construction of the project will be blocked from future vehicle access and rehabilitated to a near natural condition.
N-1b	During construction, SCE shall provide advance notice of construction by mail to all

	single-family residences and business that would be within 600' of project construction.
N-1c	During construction, SCE will ensure the installation of temporary shields or curtains to reduce stationary equipment noise levels when operating within 600' of single-family residences and within 200' of commercial uses
APM TRA-1	Construction activities would be designed to minimize work on or use of local streets
APM TRA-2	When local streets must be used for more than normal traffic purposes, an encroachment permit or similar authorization would be obtained from the appropriate agency
APM TRA-3	Any construction or installation work requiring the crossing of a local street would incorporate the use of guard poles, netting, or similar means to protect moving traffic and structures from activity.
APM TRA-4, T-1a	SCE will develop a traffic control plan for construction activities to minimize effects from the project to traffic, including immediate emergency vehicle passage
APM TRA-5, APM TRA-8, T-7	Any damage caused by this project to local streets and Forest roads will be repaired at SCE's cost
APM TRA-7, V-4a	Specific sites and details of helicopter use will be determined in consultation and approval by the Forest (when use occurs on the Forest)
T-1b	To mitigate traffic congestion and delays during construction, overhead construction activities will occur during off-peak periods only. Lane closures will not occur between peak hours of 6-9:30 am and 3:30-6:30 pm.
T-2	SCE shall prepare a Construction Transportation Plan that includes how construction personnel will commute to the work sites
U-2	SCE and/or contractor will recycle a minimum of 50% of the waste generated and will provide the FS documentation from recycling and landfill facilities to show this was completed
APM VIS-1, V-15a	During construction, the work site will be kept clean of debris and construction waste. Material and construction storage areas will be selected to minimize views from public roads, trails, and nearby residences.
V-1a	In locations designated by the Forest, tubular steel poles will be used in place of lattice towers, where deemed technically feasible and where reliability is not compromised to reduce visual adverse impacts
V-1b	Any access roads (newly constructed or opened up) to construct the lines or remove the 66-kV line will be pre-approved by the Forest
V-1c, V-4b	SCE will submit a Vegetation Removal Plan to the Forest for review and approval that will propose how cleared vegetation will be disposed of in a manner to minimize visual adverse impacts
V-1d, V-4c	SCE will submit an Excavation Plan to the Forest for review and approval that will explain how excavated materials (e.g. soil, rocks, concrete, reinforced steel) will be left or removed from Forest lands
V-1e, V-17a	SCE will submit a Structure Surface Treatment Plan to the Forest for review and approval that shall address how the improvements will have appropriate colors, finished, and/or textures to most effectively blend them into the landscape. SCE shall use only non-specular and non-reflective conductors and insulators shall be non-reflective and non-refractive
V-3a	The 66-kV foundations will be completely removed from forest lands and shall be disposed of properly. All ground disturbances from the removal of the 66-kV line shall be restored to a near natural condition.
V-3b	All crane pads (benching) on Forest lands shall be rehabilitated to a near natural condition.
V-3c	Any Forest pre-approved access/spur roads will be designed to avoid bedrock cuts.
V-4a	In locations designated by the Forest Service, SCE shall remove existing 66-kV towers

	and conductors with helicopters and construct the new improvements with helicopters
V-16c	SCE will submit a Siting Study to the Forest for review and approval that will provide a detailed analysis of the line/tower locations and what actions were taken to minimize visual impacts

Monitoring Measures

During the development of the proposed action, in response to public comments on the proposal, and during the environmental affects analysis, monitoring measures were developed to determine effectiveness of the protection and mitigation measures and to determine how the project will effect the environment. The CPUC incorporated monitoring measures on and off National Forest System lands in their decision, dated March 1, 2007. Table B-2 (below) contains the monitoring measures related to National Forest System lands. Implementation of these measures is incorporated as an integrated part of my decision. More detailed descriptions of the measures can be found in Section C of the Antelope-Pardee 500-kV Transmission Project Final EIS.

Table B-2. List of Monitoring Measures Incorporated into the Decision.

Measure Number	Summary Description of Measure
APM BIO-5	Biological Monitors will monitor restricted areas to ensure they are protected throughout construction
B-1a	Habitat Restoration and Revegetation Plan will include a 5-year post planting monitoring plan with the goal of restoring the area within 3 years. If after 5 years, the measures do not meet the established performance criteria, monitoring will continue until the criteria are met unless noted by the Forest
B-2	Compliance of replacement of native trees will be evaluated 5 years after tree removal.
B-6	Any active breeding bird nests found during surveys will have 300' buffer and monitored until the young have fledged from the nest or the nest fails. These nests will be monitored and documented in monitoring reports
B-7	Any transplanted or seeded sensitive plant species will be monitored for 5-years
PH-1a, APM HYD-4	A monitoring program will be implemented to ensure all plans related to construction activities are followed (e.g., SWPPP, Erosion Control and Sediment Transport Plan)