APPENDIX C

MITIGATION MONITORING PLAN

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Appendix A. Monitoring Forms

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ACOE	U.S. Army Corps of Engineers
BLM	U.S. Bureau of Land Management
BMP	Best Management Practice
CalTrans	California Department of Transportation
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CHRIS	California Historical Resources Information System
CNPS	California Native Plant Society
CSLC	California State Lands Commission
CPUC	California Public Utilities Commission
CPCN	Certificate of Public Convenience and Necessity
EA	Environmental Assessment
EPGN	El Paso Global Networks
ESA	Federal Endangered Species Act
HAZWOPER	Hazardous Waste Operations Training
HDPE	high-density polyethylene
IS/MND	Initial Study/Mitigated Negative Declaration
mph	miles per hour
NEPA	National Environmental Protection Act
NRHP	National Register of Historic Places
NPDES	National Pollution Discharge Elimination System
OSHA	Occupational Safety and Health Administration
PEA	Proponent's Environmental Assessment
ROW	Right-of-Way
RWQCB	Regional Water Quality Control Board
SHPO	State Historic Preservation Officer
SPCC	Spill Prevention, Containment, and Control Plan
SR	State Route
SWRCB	State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
US Hwy	U.S. Highway

1.1 **PURPOSE**

The purpose of this Mitigation Monitoring Plan, which is supplemented by the BLM Monitoring, Conservation, and Mitigation Plan attached as Appendix G to the IS/MND, is to describe the mitigation monitoring process developed by El Paso Global Networks Company (EPGN) to ensure implementation of environmental requirements and mitigation measures that apply to the California Telecommunication System Project in California. EPGN, a subsidiary of El Paso Energy Corporation, has been developing a nationwide network of fiber optic telecommunication facilities and has identified the need for an extension of its system into the western region of the United States. EPGN, in partnership with Broadwing Corporation, is currently developing an approximately 972-mile long fiber optic installation project traversing the states of California, Arizona, New Mexico, and Texas. As part of the overall system, EPGN will be installing eight, 1.9-inch high-density polyethylene (HDPE) conduits and ancillary facilities (access vault, manholes or hand-holes, optical-amplification, regeneration stations, and centerline markers) from El Paso, Texas, to Los Angeles, California. Typically, either a manhole or hand-hole will be installed at each splice point to provide access for installation of additional fiber and maintenance of existing fiber. The distance between splice points is approximately 20,000 linear feet. These locations will be placed near roads where possible to ensure optimum accessibility and to minimize disturbance along the right-of-way (ROW). This Mitigation Monitoring Plan, which has been prepared for the portion of the system constructed in California, and which is supplemented by the BLM Monitoring, Conservation and Mitigation Plan attached as Appendix G to this IS/MND, is vital for ensuring that measures proposed to mitigate significant environmental impacts are implemented. Important criteria for the success of the Mitigation Monitoring Plan include:

- Ensuring that all environmental requirements are met during the pre-construction, construction, post-construction/restoration and post-construction/operational phases of the project.
- Coordinating inspection, monitoring, and enforcement activities of the agencies, who, since project activities would simultaneously affect various environmental resources, may have overlapping jurisdictions.
- Establishing clear roles for the numerous monitoring entities and the line of authority and reporting duty for each entity.

1.2 SCOPE

This Mitigation Monitoring Plan incorporates the mitigation measures that will be implemented for the protection of environmental resources as determined by the California Environmental Quality Act (CEQA). The mitigation measures adopted for the project were derived from the Proponent's Environmental Assessment (PEA) for the California Telecommunication System Project. The California Public Utilities Commission (CPUC) is the designated state lead agency for review of this project under CEQA. This Mitigation Monitoring Plan involves all of the measures that meet the requirements of the CPUC, and incorporates other mitigation as required by federal, state, or local agencies on the project.

1.3 AGENCY REQUIREMENTS

The Public Utilities Code grants authority to the CPUC to regulate the terms of service and safety, as well as the practices and equipment, of utilities subject to its jurisdiction. It is the standard practice of the CPUC to require that mitigation measures predetermined as conditions of approval be implemented properly, monitored, and reported. To the extent authorized, the Mitigation Monitoring Plan can also be a means of enforcement of certain requirements of individual agencies. The agencies that may have jurisdiction over portions of the project include:

- Air pollution control and air quality management districts
- California Department of Fish and Game (CDFG)
- California Department of Transportation
- Appropriate Regional Water Quality Control Boards (RWQCB)
- <u>California State Lands Commission (CLSC)</u>
- California State Water Resources Control Board (SWRCB)
- Local counties, cities, and special districts

The proposed system crosses many jurisdictions and will require approvals and permits from various federal, state, and local agencies for the system route and associated facilities that comprise the system. Portions of the project are subject to compliance with federal environmental regulations, including the following:

- Section 7 of the federal Endangered Species Act requires consultation with the U.S. Fish and Wildlife Service (USFWS) regarding necessary means to avoid harm to plant, fish, and wildlife species that are federally listed as threatened or endangered where there is a federal lead agency (e.g., the U.S. Army Corps of Engineers [ACOE], U.S Forest Service [USFS], U.S. Bureau of Land Management [BLM]). Section 7 requires and establishes protocols for pre-construction wildlife surveys and mitigation measures.
- Section 106 of the National Historic Preservation Act requires examination of cultural resources before various federal agencies can provide permits under their jurisdiction. Section 106 establishes requirements and protocols for pre-construction cultural resource surveys and mitigation of impacts on cultural resources.

1.4 SUPPORTING TECHNICAL DOCUMENTATION

The following technical studies and documents have been or will be prepared in support of the Initial Study/Mitigated Negative Declaration (IS/MND). Copies of the pertinent reports will be provided to the CPUC, applicable jurisdictional agencies, and the project's Environmental Resource Coordinator and resource monitors before the initiation of construction activities.

• A Storm Water Pollution Protection Plan (SWPPP) has been developed for the system route and submitted to the appropriate RWQCBs in support of (NPDES) regulations. The plan identifies activities that may cause pollutant discharge (including sediment) during storms, and the best management practices (BMP) that will be employed to control pollutant discharge. Construction techniques that reduce the potential for runoff, including minimizing site disturbance, controlling water flow over construction sites, stabilizing bare soil, and ensuring proper site cleanup are also identified. In addition, the plan specifies the erosion and sedimentation control measures to be implemented, such as silt fences, trench plugs, terraces, water bars, baffle boards, and seeding and mulching. The SWPPP also specifies spill prevention countermeasures, identifies the types of materials used for equipment operation (mainly vehicle fluids such as fuel and hydraulic fluids), and identifies measures for the prevention or cleanup of hazardous material and waste spills. The SWPPP will be included in the contract specifications for the route.

- A cultural resource inventory report has been prepared in compliance with the National Historic Preservation Act, which also requires evaluation of some cultural resources and consultation between applicable federal agencies and the State Historic Preservation Officer.
- A Construction Plan will be prepared to provide specific direction on construction operations and an overview of project administration, construction process and methodology, mitigation, compliance, contingency planning, work force information, safety requirements, treatment of industrial wastes and toxic substances, stabilization and restoration operation, maintenance of the fiber optic line, and restoration of the land subject to the long-term Special Use Permit for Operation and Maintenance of the fiber optic line. The appendices of the Construction Plan will contain documents necessary for successful project completion such as permits, contract specifications, plans (including this site-specific Mitigation Monitoring Plan), Construction Plan updates, and variances. The Construction Plan is meant to be a "living document." During the course of the project, changes are anticipated to the Construction Plan.

The CPUC is responsible for ensuring full compliance with the mitigation measures for the project. The CPUC will monitor and report on all mitigation and construction activities; the CPUC will also require EPGN to implement this applicant's Mitigation Monitoring Plan. EPGN is responsible for complying with the mitigation measures and reporting the progress of that compliance through the Mitigation Monitoring Plan.

EPGN will ensure that any deviation from the procedures identified under the Mitigation Monitoring Plan is first approved by the CPUC and the other appropriate agencies. Any proposed deviation will be reported immediately to the CPUC and appropriate agencies by EPGN for consideration by the CPUC.

EPGN will inform the CPUC of any mitigation measures that are not or cannot be successfully implemented. The CPUC will assess whether alternative mitigation is appropriate and specify to EPGN the subsequent actions required.

2.1 FIELD MANAGEMENT STRUCTURE

EPGN has extensive experience constructing fiber optic cable facilities. To provide the best potential for the success of the project, a proper project management structure, adequate training of field personnel, an environmental awareness program, and the ability to respond to changing circumstances are critical. A field management structure has been established for overseeing the construction process. In addition, training classes for the contractor and construction crews will be held to cover issues such as environmental protection, safety, spill prevention and response, fire prevention and management, and proper management of storm water runoff.

The field management structure established for the system route will include engineering, construction, and environmental personnel, such as the Project Engineer, Environmental Managers, Senior Outside Plant Manager, Spread Supervisors, Environmental Resource Coordinators, Environmental Inspectors, and Biological and Archaeological Specialists. Spread Supervisors and Environmental Inspectors will be assigned specific spread teams. A "spread" is a geographic area in which fiber optic conduit is actively being installed; the size of the spread is limited by the number of work areas that one person can supervise and depends on the complexity and timing of the work. The roles and responsibilities of each on-site representative will be clearly understood and communicated during the training program and are summarized below.

2.2 FIELD MANAGEMENT ORGANIZATION AND RESPONSIBILITIES

EPGN is responsible for establishing and implementing an organizational scheme to oversee fiber optic conduit line construction from a permit compliance standpoint. To this end, environmental inspection programs will be in place to ensure that construction remains in compliance with federal, state, and local laws and regulations, and appropriate permit conditions. The inspection program will focus on working proactively with the agencies and with the contractor's crews to provide for the timely and responsive resolution of concerns or incidents during construction. EPGN's team organization is shown on Figure 2-1. A description of EPGN team members is provided below.

2.2.1 PROJECT MANAGER

The Project Manager is responsible for the successful completion of the project. He or she will resolve any issues that were not considered during the design phase of the project. The Project Engineer will report to the Project Manager regarding project status and construction and environmental issues. The Senior Outside Plant Manager may also report directly to the Project Manager regarding construction issues. The Project Manager is the point of contact for written notifications from the CPUC regarding the progress of construction, changes to the permits, stopwork orders, and other communications. The Project Manager will also communicate directly with the CPUC Project Coordinator and CPUC Third Party Compliance Supervisor, as needed.

2.2.2 PROJECT ENGINEER

The Project Engineer will oversee the engineering, construction, inspection, ROW permitting, and environmental teams. He or she will coordinate with the EPGN team and act as an arbitrator if conflict arises between any of the spread teams (primarily the Spread Supervisors and Environmental Inspectors). He or she will also coordinate with the Environmental Managers on key environmental concerns and the Property Rights Coordinator on property rights issues. The Senior Outside Plant Manager may also report directly to the Project Engineer regarding construction issues. The Project Engineer will be the primary point of contact for questions and concerns from the public regarding the project, and all questions should be referred to him or her.

2.2.3 PROPERTY RIGHTS COORDINATOR

The Property Rights Coordinator is responsible for overseeing landowner communication and coordination, and any other issues regarding the purchase of property for the project. The responsibilities of the Property Rights Coordinator will likely not involve any field work.

2.2.4 ENVIRONMENTAL MANAGERS

The Environmental Managers will be responsible for the implementation and quality assurance of the project's environmental and archaeological compliance program. They



Figure 2-1 Mitigation Monitoring Plan Organizational Chart

will delegate duties to the Environmental Resource Coordinator as well as the Senior Outside Plant Manager and Spread Supervisors regarding environmental and archaeological issues. The Environmental Managers will oversee implementation and quality assurance of the project's environmental compliance program. They will manage and support environmental field staff, negotiate and resolve any conflicts relevant to environmental compliance, review project documentation and technical plans, track approval of variance requests, update the Construction Plan as needed, and perform general troubleshooting on environmental compliance issues. They will ensure that the Environmental Inspection Team (i.e., Environmental Resource Coordinator, Environmental Inspectors, Archaeological Specialists and Biological Specialists) has adequate administrative and logistical support. They will also establish a communication network between the CPUC and other agencies, EPGN, and EPGN's contractors.

2.2.5 SENIOR OUTSIDE PLANT MANAGER

The Senior Outside Plant Manager is responsible for managing the construction activities to ensure that all project facilities are completed according to project plans, schedules, and budgets. He or she will notify the Environmental Managers and, as necessary, the Project Engineer of any proposed changes to the project work so that appropriate variance requests and environmental reviews can take place. He or she will be in close contact with the Spread Supervisors on a daily basis regarding the progress of construction activities and any unanticipated construction or environmental issues. The Senior Outside Plant Manager will provide quality control inspection relevant to specific construction crafts. He or she will serve as another set of eyes in the field for the spread. (If the Senior Outside Plant Manager observes activities that may be of environmental concern, he or she will contact the Environmental Managers.

2.2.6 SPREAD SUPERVISORS

The Spread Supervisors, each assigned to an individual spread, will be on site to oversee the individual construction crews and Environmental Inspectors within his or her spread. He or she will work with the contractor to resolve field conflicts. The Spread Supervisor will perform most of the administrative duties and will report directly to the Senior Outside Plant Manager, communicating on a daily basis all information on construction activities related to compliance, safety, and administration. He or she will also report environmental issues to the Environmental Managers. As ROW permitting issues arise, he or she will coordinate with the ROW Permitting Coordinator to resolve any issues.

2.2.7 RIGHT-OF-WAY PERMITTING COORDINATOR

The ROW Permitting Coordinator is responsible foroverseeing permittee communication and coordination, ensuring that all ROW permits and authorizations are secured, and that all permitting conditions are incorporated into the Mitigation Monitoring Plan. He or she reports directly to the Spread Supervisors.

2.2.8 ENVIRONMENTAL RESOURCE COORDINATOR

The Environmental Resource Coordinator will be responsible for day-to-day implementation of environmental compliance in the field. He or she will oversee implementation of the Environmental Management Program. The Environmental Resource Coordinator will be responsible for assigning both inspection activities and other specialty monitoring activities on a daily basis for each spread. In addition to directing the Environmental Inspectors for each spread and performing other inspection duties, the Environmental Resource Coordinator will act as a

liaison between the construction personnel and agency field representatives regarding environmental compliance issues. He or she will report to the Spread Supervisors as well as the Environmental Managers. In this capacity, he or she will ensure that required inspectors, resource specialists, and observers are present when construction activities are scheduled in all areas. He or she will have the primary responsibility for submitting variance requests in coordination with the Environmental Managers. He or she will have the responsibility of ensuring field distribution of variances and Construction Plan updates.

2.2.9 ENVIRONMENTAL INSPECTORS

The Environmental Inspectors will ensure that all construction activities are performed in accordance with applicable mitigation requirements, permit conditions, and environmental specifications. The inspectors will act as liaison between construction personnel and agency monitors. Inspectors will be assigned to those areas requiring their expertise and presence. The inspectors will play a significant role by suggesting methods to bring construction activity into compliance and/or by temporarily halting certain activities that may cause environmental damage Working under the direction of the Environmental to sensitive environmental resources. Resource Coordinator, the Environmental Inspectors will also work diligently to assess work area conditions ahead of construction, noting concerns and requirements ahead of construction activity. In every instance possible, the inspectors will work to provide advance notice to the construction managers and the contractor regarding conditions and situations that require specific awareness and planning. CPUC consultations will be held in the field, as appropriate, with the Environmental Inspectors providing a key liaison role in coordinating attendees and facilitating agreements. The Environmental Inspector will communicate directly with CPUC Third Party Compliance Monitor, the CPUC Biological Specialists and CPUC Cultural Monitors, as needed. Environmental Inspectors will be responsible for installation and repair of project signage, flagging, fencing, and marking in compliance with the Mitigation Monitoring Plan. They will also monitor directional drilling activities for frac-outs and other potential environmental issues.

Environmental Inspectors will be assisted in the field by resource specialists who will provide technical support in assessing resource issues that may arise and monitoring compliance relevant to the protection of biological and archaeological resources. Based on the results of the PEA, there are no paleontological resource concerns in the project area.

2.2.10 ARCHAEOLOGICAL SPECIALISTS

The Archaeological Specialists report to the Environmental Inspector for a specific spread. An Archaeological Specialist will be on site for archaeological sensitive portions of the construction spread. Typically, he or she will be deployed from his or her home office on an as-needed basis at the request of an Environmental Inspector. The Archaeological Specialist will ensure that construction is performed in accordance with archaeological/cultural mitigation requirements and permit conditions. He or she will act as a liaison between construction personnel and agency representatives. He or she will have a significant role in suggesting methods to bring construction activities into compliance and, if necessary, halting certain activities that may cause damage to sensitive archaeological Specialists will also assess work area conditions prior to construction activities, noting concerns and requirements ahead of construction activity. They will work to provide advance notice to the construction managers and construction contractor of conditions that may require specific awareness and planning. Agency consultations will be held in the field as appropriate with the Archaeological Specialist playing a key role in coordinating attendees and facilitating agreements. The Archaeologal Specialist is responsible for ensuring that all

archaeological and cultural permit conditions and other requirements are fulfilled. The Archaeological Specialist will be the primary contact for agencies such as the BLM and for tribes regarding archaeological and cultural issues and will negotiate resolution of project-related conflicts. He or she will work with the Environmental Inspector to ensure field compliance.

2.2.11 BIOLOGICAL SPECIALISTS

The Biological Specialists report to the Environmental Inspector for a specific spread. A Biological Specialist will be on site for biologically sensitive portions of the construction spread. Biological Specialists will be present at critical habitat areas along the ROW to ensure that biological resources are protected. The Biological Specialist will be the primary contact for the agencies, such as the BLM, USFWS, and CDFG regarding biological issues and will negotiate resolution of project-related conflicts. He or she will be responsible for conducting the biology section of the environmental education program for contractors and EPGN field teams. He or she will work with the Environmental Inspector to ensure field compliance.

USFWS-permitted desert tortoise handlers will be present in critical desert tortoise habitat. They will inspect the construction area and under construction equipment every morning prior to daily construction start-up. If a desert tortoise is observed within the construction ROW, permitted desert tortoise handlers will be responsible for safely relocating the tortoise. At no time will unqualified personnel be allowed to touch, handle, or harass desert tortoises.

2.3 ROLE OF EPGN

The Environmental Managers will establish a communication network between the CPUC and other agencies, EPGN, and EPGN's contractors. This network will identify both individual and joint responsibilities and processes for monitoring, compliance determination, and reporting.

Prior to and shortly after construction contracts are awarded, the Environmental Managers will hold a meeting between the Spread Supervisors and the Environmental Resource Coordinator to ensure implementation of the Mitigation Monitoring Plan and the site-specific mitigation measures, and to complete the list of individuals participating in the environmental compliance monitoring process.

The Environmental Managers, in conjunction with the CPUC Project Coordinator, will develop a process for *daily* briefings and reports of environmental monitoring activities, construction progress, and other pertinent items. Such reports may either be provided personally, via telephone, or via computer modem.

Reviews of the Construction Plan, SWPPP, and permits will also be completed prior to the initiation of construction. These reviews will be completed by the Environmental Managers and the CPUC Project Coordinator.

EPGN will conduct training of the in-field Environmental Inspectors. This training should include information on the resources of concern, recognition of those resources, the approved mitigation measures for the resources, and procedures to be followed when the resources are encountered.

In addition, during construction activities, Biological Specialists will establish exclusion zones around identified special-status plant populations. They will identify noxious weed infestation areas and indicate these locations on construction drawings. In addition, Biological Specialists

will identify and monitor the locations of special-status fish, burrowing owls, desert tortoises, Mohave ground squirrel burrows, red-legged frogs, nesting and migratory birds, raptors, swallows' nests, and special-status bats. They will also create and stake buffer zones as necessary and complete variance forms and obtain clearance from resource agencies.

2.4 ROLE OF THE CPUC AND OTHER AGENCIES

The lead agency under CEQA, the CPUC, is responsible for overseeing this project to ensure that required mitigation measures are implemented. The CPUC will be responsible for ensuring compliance with the requirements in the Mitigation Monitoring Plan. The CPUC has the definitive authority to stop any construction, operation, or maintenance activity associated with the Phase II California Fiber Optic Conduit Project if an activity is determined to be a deviation from the approved project or the adopted mitigation measures. The CPUC may delegate duties and responsibilities for monitoring to other environmental monitors or consultants as deemed necessary. Please refer to the Impacts and Mitigation Measures table (Section 5.0) for specific enforcement responsibilities associated with each mitigation measure.

As part of the quality assurance role, the agencies will conduct oversight inspection and monitoring activities to the extent determined necessary by the individual agencies. For example, CDFG might perform oversight of biological monitoring at stream crossings, and USFS might perform oversight on federal lands.

EPGN will coordinate directly to CPUC and their designated monitors. Joint environmental and safety training sessions will be held. EPGN will meet with CPUC monitors weekly and will communicate with them daily. CPUC monitors will be informed on a daily basis of construction activities and resource concerns. Monthly meetings will be held with the Environmental Managers Environmental Resource Coordinator, and the CPUC team to address any noncompliance issues, the construction schedule, and ongoing issues or problems.

3.1 APPROACH

Environmental protection measures are most effective when they are incorporated early into the engineering design, construction planning, and daily construction effort of the project. The EPGN team will work during the pre-construction phase to provide effective mitigation requirements for contractors and field inspectors. EPGN will work with their construction contractors to ensure that an environmental education program for construction drawings and that specific mitigation measures are clearly shown on construction drawings and that specific environmental requirements are fully understood. As part of the environmental education program, copies of the Mitigation Monitoring Plan will be distributed and discussed in detail. CPUC, BLM, USFWS, and CDFG will also be invited to participate in the environmental education program.

The EPGN team will serve as a "bridge" between federal and state agency requirements on one side, and its construction contractors on the other. The bridge represents both an understanding of how the CPUC and other agency requirements can be effectively incorporated into the project; and a close daily working relationship between the Environmental Inspection Team, the CPUC monitoring team, and the EPGN/contractor team.

During the construction phase, the Environmental Inspection Team's trained field monitors will inspect and monitor mitigation activities to ensure compliance with plans, permits, and conditions. Some of the goals for inspecting during construction will be to reduce the number of information transfers; provide more direct means of communication between inspectors in the field, EPGN, BLM, CPUC, and other agencies; and send specialty monitors, on an as-needed site or resource specific basis, to supplement the full-time inspection and CPUC monitoring teams.

For each construction spread, the Environmental Inspection Team will provide one Environmental Inspector. In addition, one Biological Specialist will be present at all stream crossings and at every identified sensitive biological resource area. One Archaeological Specialist will be present at all sensitive cultural/archaeological resource areas. All Environmental Inspectors and resource specialists will report to the Environmental Resource Coordinator.

3.2 COMMUNICATION

A critical component of a successful environmental mitigation monitoring plan is timely, open, and regular communication. Regular meetings will be held between the Environmental Inspection Team, the CPUC monitoring team, and Spread Supervisors to discuss the environmental implications of the day's construction activities, and to check the adequacy of progress in resolving outstanding special reports on noncompliance events. These meetings would also be an opportunity for Environmental Inspectors to establish the mitigation requirements for advance notice of certain construction activities and/or entry into certain areas.

Should a situation arise in which there is clear infringement of environmental requirements, and the time necessary for standard communications could result in an unacceptable environmental impact, the Environmental Inspection Team will take immediate action to discontinue or redirect specific tasks and notify appropriate EPGN and agency personnel. An example of such a

situation would be if construction activities encountered historic or prehistoric resources. Contingencies for such events can be formulated during pre-construction meetings. Communication via cellular phones and radio would facilitate quick response time in such situations.

4.1 **PROJECT PROPOSED ACTION**

EPGN is developing an approximately 972-mile long telecommunication system project traversing the states of California, Arizona, New Mexico, and Texas for the transmission of voice and data services. The new telecommunication system will connect the cities of El Paso, Texas to Phoenix, Arizona, and Phoenix, Arizona to Los Angeles, California. Approximately 337 miles of the system, which will include a cable line placed within a ROW and six off-ROW regeneration stations, will be located within the state of California and subject to the jurisdiction of the CPUC. The CPUC must grant a Certificate of Public Convenience and Necessity (CPCN) in order for EPGN to provide services to the public as a facilities-based, non-dominant interexchange carrier.

In the state of California, the CPUC is the lead regulatory agency that oversees the construction and operation of telecommunications systems. Under CEQA, CPUC must consider the environmental effects of its action, the granting of a CPCN. Therefore, the CPUC must consider the environmental consequences for the California segment of the project. The entire project, from El Paso to Los Angeles, has been reviewed by the BLM for compliance with NEPA. The environmental consequences of installation and operation of the telecommunication system from the Arizona/California border to Los Angeles, and its associated regeneration stations within the state of California, are analyzed in an IS/MND.

4.2 TELECOMMUNICATION SYSTEM (ON-ROW) GENERAL SETTING

Construction of the telecommunication system within California will commence in the fourth quarter of 2001 and is scheduled to be completed in the last quarter of 2002. The system will be installed simultaneously in three to four separate spreads, with 30 to 75 construction workers per spread for a total of 90 to 300 construction workers. The majority of the system will be co-located within other existing ROW facilities such as roadways, railroads, and pipelines. The proposed system passes through Riverside, San Bernardino, and Los Angeles counties and through lands owned by the federal government.

4.2.1 PROPOSED ROW

The proposed ROW enters California near the City of Blythe. The conduits will be attached to the Interstate 10 Highway Bridge to cross the Colorado River. The proposed ROW proceeds to the west for about 2 miles along the Interstate 10 offramp to East Hobson Way and along East Hobson Way until it intersects Highway 95. The ROW proceeds north along Highway 95 to 4th Avenue. At 4th Avenue, the ROW turns west and follows 4th Avenue 2 miles to North Lovekin Boulevard. The ROW proceeds north along North Lovekin Boulevard until it intersects with Rice Midland Road, and then follows Midland Road for approximately 34 miles until it intersects State Route (SR) 62. At this point, the ROW proceeds in a westerly direction within SR 62's ROW for about 99 miles through San Bernardino County, Riverside County, and then back into San Bernardino County. The ROW will cross the Colorado River Aqueduct at four locations.

The proposed ROW passes through the City of Twentynine Palms and proceeds west on SR 62 until Sunburst Street (in the community of Joshua Tree). The ROW then proceeds north following Sunburst Street and Border Avenue, with a short jag over from Sunburst to Border

along Golden Street. At Reche Road, the ROW turns to the west until reaching Belfield Boulevard (in Landers) where it then proceeds north. At Linn Road, the ROW turns west until it reaches SR 247 (Old Woman Springs Road). The ROW follows SR 247 to the north and west for approximately 31 miles until reaching SR 18 in Lucerne Valley. Continuing to the west, the ROW follows SR 18 almost 11 miles to Bear Valley Road in Apple Valley. The ROW follows Bear Valley Road for several miles, enters Victorville, and turns onto Mariposa Road. The ROW proceeds southwest on Mariposa Road for a short distance to Maple Avenue. From Maple Avenue, the ROW turns onto Main Street until it intersects U.S. Highway (US Hwy) 395.

The ROW turns north, paralleling US Hwy 395 for approximately 6 miles, until reaching SR 18 (Palmdale Road) in Adobe Corners. The ROW turns west at this point for approximately 10 miles, following SR 18 until intersecting Sheep Creek Road. The ROW proceeds directly north until reaching El Mirage Road and turning westerly again. The ROW proceeds west along El Mirage Road and Avenue P and then runs south along 240th Street East until East Palmdale Boulevard. At East Palmdale Boulevard, the ROW turns west for about 20 miles, proceeds into Palmdale, and turns south on SR 138 until East Avenue R. The ROW continues west along East Avenue R through Palmdale to the terminal at 37918 6th Street East.

Just before reaching the Palmdale terminal, the ROW also turns to the south along Sierra Highway. Leaving Palmdale, the ROW parallels Sierra Highway to Soledad Canyon Road, and then Escondido Canyon Road, Agua Dulce Canyon Road, and Davenport Road back to Sierra Highway as it proceeds west through Soledad Canyon. Following Sierra Highway, the ROW continues southerly until reaching Foothill Boulevard. The ROW then follows Foothill Boulevard to Glenoaks Boulevard. The ROW then turns southeast onto Glenoaks Boulevard, continuing easterly through the Cities of Sylmar and San Fernando. The ROW continues to follow Glenoaks Boulevard until reaching the Burbank city limits. The ROW then follows North Kenneth Road and West Kenneth Road into the city of Glendale.

From West Kenneth Road, the ROW proceeds south along North Pacific Avenue, West Doran Street, North and South Columbus Avenue, Chevy Chase Street, South Central Avenue, San Fernando Road, and Fletcher Road to Glendale Boulevard in Glendale. The ROW proceeds into downtown Los Angeles along North and South Alvarado Street, West 8th Street, and Wilshire Boulevard, terminating at Wilshire Boulevard and South Grand Avenue.

4.2.2 REGENERATION STATIONS (OFF-ROW)

Six off-ROW regeneration stations will be constructed in California as part of the project. Each regeneration station houses equipment that reconstructs and/or boosts the optical signal. The proposed regeneration stations are required because signals transmitted on a fiber optic strand must be amplified (i.e., boosted) approximately every 45 miles and reconstructed (maintained) every 90 to 120 miles. A typical regeneration site includes the facility itself, access road, drive and parking area, a generator/fuel tank, fiber optic manholes/hand-holes, and a fence enclosing the compound. The land area for each regeneration station varies slightly in size based on the number of customers served by each station. The locations of the proposed regeneration stations are listed in Table 4-1. The six proposed regeneration stations will be located on private land, and lease or purchase arrangements will be made with property owners regarding station locations.

STATION	COUNTY	OWNERSHIP	LOCATION	
Blythe, 45 by 60 feet	Riverside	Private	East corner of Midland Rd. & Railroad tracks; NE ¹ / ₄ , NE ¹ / ₄ , Sec. 6, T6S, R23E. 1.19 acres.	
Rice, 60 by 66 feet	San Bernardino	Private	SW & SE corners of SR 62 & Midland Rd; SE ¹ / ₄ , SW ¹ / ₄ , Sec. 14, T1S, R20E. 14.83 acres.	
Twentynine Palms, 45 by 60 feet	San Bernardino	Private	2.75 mi east of intersection of Chadwick Rd. & SR 62, north side of SR 62; SE ¹ / ₄ , NE ¹ / ₄ , Sec. 4, T1S, R12E. 3 acres.	
Linn, 45 by 60 feet	San Bernardino	Private	SE corner of Linn Rd. & Shawnee Trail; NE ¹ / ₄ , NW ¹ / ₄ , NW ¹ / ₄ , Sec. 2, T3N, R5E. 5.6 acres.	
Apple Valley, 45 by 60 feet	San Bernardino	Private	2,000 ft north of Hwy. 18 on west side of Soledad Rd.; NE ¹ / ₄ , SE ¹ / ₄ , SE ¹ / ₄ , Sec. 33, T4N, R2W. 5 acres.	
El Mirage, 45 by 60 feet	Los Angeles	Private	South of El Mirage Rd., and east of 240 th Street East; NW ¹ / ₄ , NE ¹ / ₄ , Sec. 23, T6N, R8W. 2.47 acres.	

Table 4-1Regeneration Station Sites

Table 5-1 presents the mitigation measures that apply to the EPGN California Telecommunications System Project. The table has been developed based on the environmental impacts and mitigation measures presented in the El Paso Global Networks California Telecommunication System Project IS/MND, Table ES-1. The CPUC has determined that with implementation of the mitigation measures presented in the table, no significant impacts will occur as a result of construction and operation of the EPGN California Telecommunications System Project.

The table provides a brief description of the following: the potential impact; the mitigation measures developed to reduce or avoid the impact; the specific area (county, regeneration site, stream crossings, etc.) to which the mitigation measure needs to be applied; the monitoring/reporting action required to document compliance with the measure; any performance criteria that applies to demonstrate success of the mitigation measure; the responsible agency overseeing implementation or compliance; and the timing (before, during, or after construction) in which the mitigation measure needs to be implemented.

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program	
AESTHE	TICS	1	1	T		[T		
AE-1	Landscaping in the utility ROW may be impacted by trenching or plowing.	AE-1	 EPGN will consult with local agencies and landowners on proper restoration of landscaping. 	On-ROW, service boxes	Aesthetic impacts are minimized and landscaping is restored to original form.	Before and during construction	Spread Supervisor	The Spread Supervisor will ensure that all restoration is completed to the satisfaction of local agencies and landowners.	
AE-2	Due to the historic landscape of the townsite of Rice, the new power line and regeneration station could degrade the historic character of the landscape.	AE-2a	The building's exterior surface is being designed to blend in with the stark desert landscape.	Rice Regeneration Station	Aesthetic impacts to the historic landscape are minimized.	Before and during construction	Spread Supervisor	The Spread Supervisor will ensure that all restoration is completed to plan specifications.	
		AE-2b	EPGN proposes to construct the powerline with wooden poles and cross-arms visually similar to powerlines present in the period of historical significance, World War II. The pole line proposed will suspend two lines, a hot line and a ground line. Some design changes may be required to provide for raptor protection from electrocution. Presently, the design	Vicinity of Rice Regeneration Station	Wooden poles are visually similar to those of that time period and do not contrast with the historic landscape.	Before and during construction	Spread Supervisor	The Spread Supervisor will ensure that all restoration is completed to plan specifications.	

Table 5-1	Impacts and Mitigation Measures
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Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
			calls for vertically separating the two lines, rather than horizontally.					
		40.4		All - 11 - 1 - 1	A.1	D. (E . 1	
AQ-1	Heavy equipment will produce temporarily increased levels of fair pollutants which may contribute to exceedances of established limits and violations of air quality standards.	AQ-1	 Work crews to use low-emission construction equipment. Apply water to disturbed areas as necessary to reduce suspension of dust particles. Reestablish ground cover on construction sites through seeding. Maintain truck and equipment engines in good working order. Clean equipment as needed to prevent tracking of soil onto adjacent roads. Clean soil from adjacent roads as needed. Suspend grading activities when wind quists exceed 25 mph 	All sites on and off ROW	Air quality standards for area are met.	Before, during, and after construction	Environmental Resource Coordinator	The Environmental Resource Coordinator will notify the CPUC when EPGN applies to the air district for a permit to operate. When the permit is granted, the Environmental Resource Coordinator will notify the CPUC and provide a copy of the permit conditions, if any. The Environmental Resource Coordinator will report on compliance in the weekly progress report to the CPUC.
AC 2	Diopol onginge	AC 2	gusis exceed 20 mpn.		Dollutanta ara	Pofora	Environmentel	The Environmental
AQ-2	for emergency backup generators will emit air	AQ-2	 Authority to construct and operate backup diesel generators by applicable permitting agencies will ensure 	sites	Air quality standards for area are met.	construction and during operation of any	Resource Coordinator	Resource Coordinator will notify the CPUC when EPGN applies to the air district for a permit to

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program	
	pollutants during the infrequent periods they are used.		that proper air standards are met			emergency backup generators		operate. When the permit is granted, the Environmental Resource Coordinator will notify the CPUC and provide a copy of the permit conditions, if any. The Environmental Resource Coordinator will report on compliance in the weekly progress report to the CPUC.	
AQ-3	Fugitive dust emissions during grading and site preparation activities would contribute to the existing air quality.	AQ-1	• See mitigation AQ-1 for details.	All off-ROW sites	Fugitive dust emissions are contained. Air quality standards for area are met.	Before and during construction	Environmental Resource Coordinator	The Environmental Resource Coordinator will notify the CPUC when EPGN applies to the air district for a permit to operate. When the permit is granted, the Environmental Resource Coordinator will notify the CPUC and provide a copy of the permit conditions, if any. The Environmental Resource Coordinator will report on compliance in the weekly progress report to the CPUC.	
BIOLOG		S							
BIO-1	Construction associated with the project could cause damage to or permanent loss of federally or state listed plant species.	BIO-1a	 Complete pre- construction floristic surveys to identify special-status plant populations in and adjacent to the project route. Exclusion zones will be established around identified special- 	On-ROW and off- ROW facilities in sensitive areas	Successful monitoring. Project will not cause significant impact on sensitive biological resources.	Before, during, and after construction	Environmental Resource Coordinator, Environmental Inspector, and Biological Specialist	The Environmental Inspectors will report daily to the Environmental Resource Coordinator on the completion of staking and flagging exclusion zones relative to sensitive plants. The Environmental Inspectors in conjunction with the Environmental Resource Coordinator will	

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
			 status plant populations. Installation will be re- routed around the exclusion zone by lateral shifting or boring beneath the exclusion zone to install the conduit. 					arrange for a Biological Specialist to be onsite during pre-construction and construction activities, as needed. The Environmental Resource Coordinator will document compliance in the weekly report to the CPUC.
			 All stakes and flagging demarcating exclusion zones will be removed within 60 days after construction and site restoration have been completed in the area. 					
		BIO-1b	 For CNPS list 4 plant species, floristic surveys will be performed in the appropriate seasons. Plant populations and suitable habitat will be identified in the construction corridor; these areas will be staked and flagged. Construction activities will be conducted when plants are not flowering. 					
			 Ground disturbance will be limited to the smallest possible corridor. 					

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
		BIO-1c	A Biological Specialist will be present onsite during pre- construction and construction activities					
BIO-2	Construction activities could introduce exotic weeds.	BIO-2	• Per permitting agency requirements, noxious weed infestation areas will be identified before construction activities, and locations will be indicated on construction drawings.	On- and off- ROW	Spread of noxious weeds will be avoided.	Before, during, and after construction	Environmental Resource Coordinator, Environmental Inspector, and Biological Specialist	Noxious weed infestations will be located by the Environmental Inspectors and Biological Specialists before construction. The monitors will then coordinate with the contractor to ensure that appropriate BMPs are implemented. The Environmental Resource
			 Use certified weed- free imported materials or rice straw in upland areas. 					Coordinator will be notified of any failures to follow the prescribed mitigation program and the CPUC will
			 Coordinate with land management agencies to ensure that the appropriate BMPs are implemented. 					be immediately notified.
			 Contact county agricultural commissions and land management agencies to develop lists of target noxious weed species for the project route and to discuss measures to avoid the dispersal of noxious weeds. 					
			 Educate construction supervisors and managers on weed 					

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
			identification and the importance of controlling and preventing the spread of noxious weed infestations.					
			 Clean all equipment coming onto the project area from weed-infested areas or areas of unknown weed status. 					
			 Use on-site sources of fill, mulching, and seeds when available. 					
			 Use certified weed- free fill, mulch, and seed. 					
			 Use certified weed- free imported materials (or rice straw in upland areas). 					
			 Biological Specialists will be present on-site to identify noxious weeds and provide guidance. 					
BIO-3	Construction associated with the project has potential to cause adverse impacts to special-status burrowing species and their habitats.	BIO-3a	 EPGN will have qualified <u>USFWS and</u> <u>CDFG-approve</u> Biological Specialist (per USFWS and <u>CDFG specifications</u>) identify the locations of potential burrowing owl, desert tortoise, and Mohave ground 	On-ROW	Sensitive special-status burrowing species are not significantly impacted.	Before, during, and after construction	Environmental Resource Coordinator, Environmental Inspector, and Biological Specialist	The Environmental Inspectors and Biological Specialists will map burrow locations. The Environmental Resource Coordinator will oversee the qualified Biological Specialist in determining that burrows have been vacated and in monitoring conduit

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
			 squirrel, and Mojave fringe-toed lizard burrows. The locations of these burrows will be mapped. If it is determined that burrows are occupied by any of the above special-status species, the burrows will be avoided until a qualified biologist determines that they have been vacated. Surveys will be conducted in accordance with agency-approved survey protocols or guidelines. 					installation activities. Environmental Inspectors and Biological Specialist will work with contract compliance inspectors to ensure that barrier fencing, stakes, and agency-required setback buffers are maintained. They will also be responsible for monitoring construction activities in areas that support special- status burrowing species. Environmental Inspectors will also be responsible for completing variance forms and obtaining clearance for deviations from the mitigation measures.
		BIO-3b	 EPGN qualified Biological Specialist will monitor installation activities on the project in the areas where occupied burrow habitat has been identified. EPGN qualified Biological Specialist will be responsible for staking or flagging 					
			staking or fragging occupied burrows, conducting on-site monitoring, documenting violations and compliance,					

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
			coordination with construction personnel, and post- construction documentation.					
			 EPGN qualified Biological Specialists will also be responsible for monitoring construction activities in areas that support special-status burrowing species. They will also be responsible for completing variance forms and obtaining clearance from the resource agencies for deviations from the mitigation measures (e.g., decreases in exclusion zones). 					
		BIO-3c	 EPGN will conduct a biological resource education program for construction crews before construction activities begin. The education program will include a brief review of the special-status species and other sensitive resources that could occur in the proposed project area, locations where they may be encountered 					

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
			and their legal status and protection under the California and Federal Endangered Species Acts (CESA and ESA).					
		BIO-3d	 The proposed project could potentially adversely affect the desert tortoise and other federally-listed threatened or endangered species; an interagency Section 7 consultation is required between BLM and USFWS. This process prohibits federal agencies or federal permit applicants from making irreversible or irretrievable commitment of resources once Section 7 consultation has been initiated. 					
			 EPGN will incorporate all additional permit conditions identified during the consultation process into construction specifications. 					
			 EPGN and qualified Biological Specialist will routinely inspect construction activities 					

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
			to verify that these permit conditions have been implemented.					
		BIO-3e	 A state listed species could potentially be affected (e.g., Mohave ground squirrel), a permit pursuant to Section 2081 of the Fish and Game Code is required. Section 2080 of CESA prohibits "take" of any state-listed species. During the permitting process, additional measures to avoid or mitigate impact to Mohave ground squirrel may be identified. EPGN will incorporate all additional permit conditions identified during the permitting process into construction specifications and EPGN inspector will 					
			verify that these conditions are implemented.					
			 <u>Mitigation measures</u> <u>BIO-3a, BIO-3b, BIO-</u> <u>3c, and BIO-3d will</u> <u>reduce potential</u> <u>impacts to the Mohave</u> <u>ground squirrel. These</u> 					

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
			measures are summarized as follows:					
			<u>Pre-construction</u> <u>surveys to identify and</u> <u>map currently</u> <u>occupied and active</u> <u>burrows;</u>					
			<u>Occupied burrows will</u> <u>be avoided until a</u> <u>qualified biologist</u> <u>determines that they</u> <u>have been vacated:</u>					
			<u>Biological resource</u> education program for construction crews:					
			Biological monitor to ensure compliance with all mitigation measures;					
			Any additional conditions required by the California Department of Fish and Game (CDFG) and the US Fish and Wildlife Service (USFWS) will be incorporated prior to construction.					
BIO-4	Construction associated with the project has the potential to cause adverse impacts to western	BIO-4a	EPGN will have a qualified <u>USFWS and</u> <u>CDFG-approve</u> Biological Specialist (per USFWS and <u>CDFG specifications)</u> conduct a pre-	On-ROW	Sensitive amphibian and reptile species are not significantly impacted.	Before, during, and after construction	Environmental Resource Coordinator, Environmental Inspector, and Biological Specialist	The Environmental Resource Coordinator will oversee the Biological Specialist in conducting pre- construction surveys. The Environmental Resource Coordinator will notify the

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
	spadefoot toad, California red- legged frog, arroyo toad, southwestern pond turtle, silvery legless lizard, and San Diego horned lizard and/or their habitats.		 construction survey for special-status amphibians and reptiles and their habitats in areas designated critical habitat. During surveys, all areas of appropriate habitat will be identified and mapped. Exclusion zones will be installed and exclusion fencing will be developed around these areas. EPGN shall retain qualified biologists (per USFWS and CDFG specifications) to conduct a preconstruction survey for special-status amphibians and reptiles and their habitats in areas designated critical habitat. During surveys, all areas of appropriate habitat be installed and exclusion fencing survey for special-status amphibians and reptiles and their habitats in areas designated critical habitat. During surveys, all areas of appropriate habitat shall be identified and mapped. Exclusion zones shall be identified and mapped. 					CDFG and USFWS of the results. The Environmental Inspectors will ensure that construction-related activities are prohibited in the buffer zones. The Environmental Resource Coordinator will note compliance with this mitigation measure and will notify the CPUC before the initiation of the construction.

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
			 If arroyo toad or the California red-legged frog are found during these surveys, the terms and conditions listed in the USFWS Biological Opinion issued for this project shall be implemented. 					
		BIO-4b	 Before construction, a qualified Biological Specialist will stake and flag exclusion zones around all riparian and wetland areas. 					
			 Most construction- related activities will be prohibited within the exclusion zones. 					
			 Foot traffic and essential vehicle operation on existing roads will be allowed. 					
			 All other construction activities, vehicle operation, material and equipment storage, and other surface-disturbing activities will be prohibited within the exclusion zones. 					
			 Construction activities within an exclusion zone will be accomplished by 					
Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
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			directionally boring under the zone.					
		BIO-4c	 In areas that represent appropriate habitat for special-status amphibians and reptiles, EPGN will avoid disturbance to special-status reptiles and amphibians by directionally boring under streams, constructing barrier fencing, and relocating animals during construction. 					
			 Barrier fencing will be constructed along each side of the work area to prohibit animals from re- entering the work area during system installation activities. 					
			 Once the system is installed, the site will be immediately restored to its original scope and conditions, and the barrier fencing will be removed. 					
			 EPGN qualified Biological Specialist will be on site to identify and relocate any animal that moves into the work area during construction 					

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
			activities.					
			 Where other access is unavailable, vehicles may need to cross drainages that could potentially support special-status amphibians and reptiles. 					
			 If an alternate crossing is not available, barrier fencing will be installed and animals will be relocated. 					
			 Barrier fencing will be constructed of wire mesh material so that flows are not impeded but access into the disturbance area by amphibians and reptiles is restricted. 					
			 If barrier fencing is required, it will be installed four days prior to use of the crossing site. 					
			 Relocation surveys will be conducted for three consecutive days to verify that all animals are removed from the disturbance area. 					
			 Temporary barriers will be removed immediately after the installation activities 					

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
			are completed, the crossing is no longer needed, and the site is restored.					
		BIO-4d	 Because the proposed project could potentially result in adverse impacts to California red-legged frog, consultation under Section 7 of the ESA between BLM and USFWS is required. 					
			 Refer to Mitigation BIO-3d for a detailed description of this permitting process and EPGN's commitment to implementing avoidance, protection, and mitigation measures identified and agreed upon during this process. 					
		BIO-4e	 A Biological Specialist will be present onsite during pre- construction and construction activities. 					
		BIO-4f	 Consultation with USFWS for potential effects to arroyo toad Critical Habitat. 					
BIO-5	Construction associated with the project may	BIO-5a	 If construction activities are scheduled to occur 	On-ROW	Potential adverse affects on	Before and during construction	Environmental Resource Coordinator	The Environmental Inspector is responsible for ensuring that sufficient time is

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
	cause adverse impacts to special-status non-riparian nesting bird species or otherwise protected raptors.		 during the breeding season, pre- construction surveys of all identified active nest sites within the area immediately adjacent to the construction ROW. If construction activities are scheduled to occur during the non-nesting season, then no surveys are required. If surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation is required. 		non-riparian nesting bird species or otherwise protected raptors are avoided.		and Environmental Inspector	provided for pre-construction surveys. The Environmental Resource Coordinator will notify the USFWS of the results. The Environmental Inspectors will ensure that construction-related activities are not allowed in buffer zones during exclusion periods and advise the Environmental Resource Coordinator of any noncompliance. The Environmental Resource Coordinator will note compliance in the weekly report to the CPUC before initiation of construction.
			 To avoid potential adverse effects on nesting raptors, no- disturbance buffers will be established around active nests during the breeding season. 					
			 If active nests are found, buffers must be established around the active nest for prairie falcon, and Bendire's thrasher. 					
			 Evaluations and buffer adjustments shallbe 					

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
			completed in consultation with USFWS and CDFG representatives and approved in writing by these agencies.					
			 The portion of the project ROW that is within the designated buffer will be identified in the field by staking and flagging. 					
			 If construction activities occur only during the non- breeding season between August 31 and February 1, no surveys need to be conducted and no buffers would be established. 					
		BIO-5b	 Because the proposed project could potentially affect gilded flicker, a state- listed species, a permit pursuant to Section 2081 of the Fish and Game Code may be required. 					
			 During this permitting process additional measures to avoid or mitigate impact to these species may be identified. 					

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
			• EPGN will incorporate all additional permit conditions identified during the permitting process into construction specifications and the contract compliance inspector will verify that these conditions are implemented.					
			<u>Mitigation measures</u> <u>BIO-5a and BIO-5c</u> <u>will reduce potential</u> <u>impacts to the gilded</u> <u>flicker. These</u> <u>measures are</u> <u>summarized below:</u>					
			Pre-construction surveys to determine the locations of currently occupied and active nests during the nesting season;					
			<u>Establishment of</u> <u>buffer areas around</u> <u>active nests;</u>					
			Biological monitor to ensure compliance with all mitigation measures;					
			<u>Any additional</u> <u>conditions required by</u> <u>the CDFG and the</u> <u>USFWS will be</u> <u>incorporated prior to</u> <u>construction.</u>					

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
		BIO-5c	 A Biological Specialist will be present onsite during pre- construction and construction activities. 					
		BIO-5d	 Consultation with USFWS for potential effects to coastal California gnatcatcher Critical Habitat. 					
BIO-6	Construction associated with the project could result in the disturbance of special-status bats.	BIO-6	 A Biological Specialist will be present onsite during pre- construction and construction activities. In conjunction with mitigation for nesting swallows (see Mitigation BIO-10) and before construction, a wildlife biologist will conduct a survey of all bridge attachment sites to determine if bats are present. If no bat roosts are found, no further mitigation would be required. If bat roosts are found, the location will be mapped and included as part of the Sensitive Resource Education Program. 	On-ROW	Potential adverse affects to special-status bats.	Before and during construction	Environmental Resource Coordinator, Environmental Inspector, and Biological Specialist	The Environmental Inspectors will inform the Environmental Resource Coordinator of the presence of special-status bats roosting on bridges. The Spread Supervisor is responsible for ensuring that construction will be postponed in accordance with this mitigation measure. The Environmental Resource Coordinator will note compliance with these requirements and the presence of special-status bats in the weekly report to the CPUC.

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
			 system to these bridges would result in a temporary, short- term disturbance to active bat roosts. If bats are determined to be actively using a roost on a bridge attachment site, no work will be conducted 					
			until the bats have left, as determined by a qualified and CDFG- approved biologist.					
			bridges will be conducted at night when the bats are foraging.					
			 EPGN will retain a qualified biologist (per CDFG specifications) to monitor attachment to these bridges. 					
			EPGN will contact CDFG to determine if any additional measures would be required to avoid or reduce adverse impacts to these species.					
BIO-7	Construction associated with the project could cause damage to or permanent	BIO-7	 Construction equipment will be confined to construction ROW and designated work sites 	On-ROW	Potential adverse effects to riparian communities.	Before and during construction	Environmental Resource Coordinator, Environmental Inspector, and	The Environmental Inspectors will inform the Environmental Resource Coordinator, Spread Supervisor, and construction

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
	loss of riparian communities		 in areas that support sensitive resources. Construction personnel will be informed about the importance of ground-disturbing activities outside the designated work area. 				Biological Specialist	personnel of the presence of riparian communities along ROW. The Spread Supervisor is responsible for ensuring that construction equipment does not operate outside the ROW or designated work sites in areas containing riparian communities. The Environmental Resource Coordinator will note compliance with these requirements and the presence of riparian communities in the weekly report to the CPUC.
BIO-8	Construction associated with the project may adversely impact waters of the U.S.	BIO-8	 When possible, directional boring will be used to place the fiber optic line under Waters of the U.S., including wetlands. Boring locations will be determined through consultation with the resource agencies and the onsite biological monitor. In wetland areas, construction activities will be limited to the ROW. Protective barrier fencing or staking and flagging will be used in specified areas to protect waters of the 	On-ROW	Significant impacts to waters of the U.S.	During and after construction	Environmental Resource Coordinator, Environmental Inspector, and Biological Specialist	The Environmental Inspectors will report daily to the Environmental Resource Coordinator on the completion of marking the limit of work zones and removal of markings. The inspectors will then coordinate with the contractor to ensure that appropriate BMPs are implemented. The Environmental Resource Coordinator will ensure that this mitigation is followed. The Environmental Resource Coordinator will notify the CPUC of any failures to follow the prescribed mitigation measure.

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
			U.S. near the work zone.					
			 Wetlands will also be identified on the construction drawings or resource mitigation drawings. 					
			 EPGN Biological Specialist will assist in placing stakes and flagging or protective barriers around waters prior to any ground- disturbing activities. 					
			 EPGN will identify the specific location of protective barriers before construction activities are initiated near specified jurisdictional wetlands. 					
			 Stabilize exposed slopes and streambanks immediately on completion of installation activities. 					
			 Restore in a manner that encourages vegetation to re- establish to its pre- project condition and reduces the effects of erosion on the drainage system. 					
			 In highly erodible stream systems, 					

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
			geotextile mats, excelsior blankets, or other soil stabilization products approved by the agencies will be used.					
			 In riparian or wetland areas, no rice straw will be used to stabilize erodible soils. 					
			 Remove trees, shrubs, debris, or soils during construction that are inadvertently deposited below the ordinary high-water mark of drainages in a manner that reduces to a less-than- signifcant level disturbance of the drainage bed and bank. 					
			 Implement additional measures that may be required as part of the CDFG, ACOE, and RWQCB permits that will be obtained for the project route. 					
			 Avoid installation activities in saturated or ponded wetlands. 					
			 Re-contour the ground surface to maintain pre-project wetland hydrology. 					

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
BIO-9	Construction associated with the project may cause adverse impacts to special-status riparian-nesting bird species.	BIO-9a	 Pre-construction surveys will be conducted to determine the presence or absence of nesting migratory birds prior to initiation of construction activities at the project site. If nesting migratory birds are located during the survey, construction will be postponed until the nestlings have fledged. To protect migratory birds no woody riparian vegetation removal will be conducted between March 15 and September 15 for those identified nesting areas. Vegetation will be cut at least 1 foot above ground level to leave the root systems intact and allow for more rapid regeneration of the plants. Cutting will be limited to the minimum area necessary within the 25 foot-wide conduit 	On-ROW	Potential adverse affects on special-status riparian- nesting bird species are avoided.	Before and during construction	Environmental Resource Coordinator and Environmental Inspector	The Environmental Inspector is responsible for ensuring that sufficient time is provided for pre-construction surveys. The Environmental Resource Coordinator will notify the USFWS of the results. The Environmental Inspectors will ensure that construction-related activities are not allowed in buffer zones during exclusion periods and advise the Environmental Resource Coordinator of any noncompliance. The Environmental Resource Coordinator will note compliance in the weekly report to the CPUC before initiation of construction.

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
			 ROW. Erosion control procedures will be 					
			followed in all cases where there is the potential to impact riparian habitat.					
		BIO-9b	 Although it is not anticipated that the proposed project would result in adverse impacts to the federally-listed least Bell's vireo, additional measures to mitigate potential impacts to these species may be identified during this consultation process. Because the proposed project may adversely affect western yellow- billed cuckoo, elf owl, and gila woodpecker, state listed species, a permit pursuant to Section 2081 of the Fish and Game Code would be required. During this permitting process additional measures to avoid mitigate impacts to these species may be identified. 					
			least Bell's vireo are					

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
			 both state and federally-listed species. CDFG could defer to USFWS for these species or cover them under the Section 2081 permitting process. EPGN will incorporate all additional permit conditions identified during the permitting process into construction specifications, and the contract compliance inspector would verify that these conditions are implemented. 					
			<u>Mitigation measures</u> <u>BIO-9a and BIO-9c</u> <u>will reduce potential</u> <u>impacts to the western</u> <u>yellow-billed cuckoo,</u> <u>elf owl, and Gila</u> <u>woodpecker. These</u> <u>measures are</u> <u>summarized below:</u>					
			Pre-construction surveys to determine the locations of currently occupied and active nests;					
			Postpone construction until after young have fledged;					
			 INO removal of woody 					

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
			 vegetation during the breeding season; Measures to prevent impacts to riparian habitat in BIO-7; Biological monitor to ensure compliance with all mitigation measures; Any additional conditions required by the CDFG and the USFWS will be incorporated prior to construction. 					
		BIO-9c	 A Biological Specialist will be present onsite during pre- construction and construction activities. 					
BIO-10	Construction associated with the project may result in damage to or loss of swallow nests.	BIO-10	 A Biological Specialist will be present onsite during pre- construction and construction activities. A wildlife Biological Specialist will inspect known nest sites during the swallows' non-breeding season between September 1 and February 28. If all swallow nests are abandoned, <u>as</u> <u>determined by a</u> gualified CDFG- 	On-ROW	Potential adverse affects to swallow nests.	Before and during construction	Environmental Resource Coordinator, Environmental Inspector, and Biological Specialist	If construction will occur during the swallow breeding season, the Environmental Inspectors will inform the Environmental Resource Coordinator of any known nest sites on bridges to which cable is to be attached. The Spread Supervisor is responsible for ensuring that construction will be postponed if necessary to comply with this mitigation measure. The Environmental Resource Coordinator will note compliance with this

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
			 <u>approved biologist</u>, the nests will be removed. <u>Bridge attachments</u> with actively nesting cliff swallows will be avoided between March 1 and September 1. If the proposed bridge attachments would occur during the swallows' breeding season, the nests will be removed before March 1. If swallows begin building nests on the bridge after March 1, the mud placed by the swallows will be removed weekly either by manually knocking them down or by high pressure water. If a swallow completes a nest during bridge attachments, EPGN will contact USFWS to obtain the appropriate permits for removal. The mud will be removed weekly from March 1 until September 1 or until the bridge attachments are completed, whichever 					measure and the necessity for obtaining permits from the USFWS in the weekly report to the CPUC before initiation of construction.

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program			
			comes first.								
BIO-11	Construction associated with the project near waterways could cause discharge of sediment into waterways.	construction BIO-11 ssociated with ne project near vaterways ould cause ischarge of ediment into vaterways.	 EPGN will not trench in wetted channels. The conduit will be attached to bridges at the Colorado, Mohave, and Santa Clara River crossings. Ground disturbance near waterways will be limited to the 		discharge to waterways is avoided.	Before and during construction	Environmental Resource Coordinator and Environmental Inspector	Inspectors will identify locations of special-status fish species along the route prior to construction and identify irrigation ditches. In addition, the Environmental Inspector will perform field surveys to assess sensitive spawning and rearing areas. The Environmental Resource Coordinator will oversee fish salvage by responsible parties.			
			 construction ROW. The potential for accidental bentonite seeps through frac- outs will be reduced to a less-than-significant level with the measures specified in the IS/MND. 								
			 A Biological Specialist will be present onsite during pre- construction and construction activities. 								
			 Spills of hazardous materials will be reduced to a less- than-significant level through implementation of measures specified in the SPCC. 								

Impact No.	Impact	Mitigation No.	Mitig	ation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program			
BIO-12 An acci release hazardo materia constru equipm impact resourc	An accidental release of hazardous materials from construction equipment could impact resources.	BIO-12	 As of SW sub stor loca feet other 	described in the 'PPP, hazardous istances will be red in staging areas ated at least 150 t from streams and er surface waters.	On-ROW	No accidental spill will occur.	During construction	Environmental Resource Coordinator and Environmental Inspector	The Environmental Inspectors coordinate with the contractor to ensure that appropriate BMPs are implemented. The Environmental Resource Coordinator will ensure that this mitiantion is followed			
			 Refining mai perfining feet recent 	ueling and vehicle ntenance will be formed at least 150 t from these eiving waters.					The Environmental Resource Coordinator will notify the CPUC of any failures to follow the prescribed mitigation			
									 Sed cert bale wate will add prot ditcl 	limentation fences, tified weed-free hay es, sandbags, er bars, and baffles be used as litional sources of tection for waters, thes, and wetlands.	es, hay fles of s, ds.	Significant
BIO-13	Directional boring or waterways for telecommunica- tion system installation, if improperly done, could result in frac- outs that release harmful bentonite into local waterways.	BIO-13	 Rec to s drilli reta equ mor dow cros quic see stop into dete imp con mea age requ 	quire boring crews trictly monitor ing fluid preserves; in containment ipment on site; nitor waters vnstream of the ssing sites to ckly identify any p, and immediately o work if a seep o a stream is ected; immediately lement itainment asures; adhere to ency reporting uirements, and	On-ROW near drainage crossings	Significant impacts to waters of the U.S. will be avoided.	Before and during construction	Environmental Resource Coordinator and Environmental Inspector	The construction contractor will monitor for frac-outs. If there is a failure to follow the prescribed mitigation measure, the Environmental Resource Coordinator will immediately notify the CPUC.			

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program		
			 identify responsible parties. Containment equipment will include staked and floating silt barriers to isolate frac- out locations from flowing water. 							
BIO-14	Construction associated with the project may affect species protected by the County of San Bernardino Desert Native Plant Protection Ordinance.	BIO-14	 Re-route corridor or directionally bore to avoid impacting smoketrees, mesquites, creosote bush rings, Agavaceae species plants, and Joshua trees, or acquire appropriate permits for tree removal from San Bernardino County. A Biological Specialist will be present onsite during pre- construction and construction activities. 	On- and off- ROW	Minimize disturbance to desert native plants.	Before, during, and after construction	Environmental Resource Coordinator, Environmental Inspector, and Biological Specialist	The Environmental Inspectors will report daily to the Environmental Resource Coordinator regarding the presence of protected native plants. The Environmental Inspectors in conjunction with the Environmental Resource Coordinator will arrange for a Biological Specialist to be onsite during pre-construction and construction activities, as needed. The Environmental Resource Coordinator will obtain necessary permits and note compliance with this requirement in the weekly report to CPUC.		
CULTURAL RESOURCES										
CR-1	There are seven historic buildings that were previously listed or have been determined potentially eligible for the NRHP. These	CR-1	 Submit all survey reports and site records to the appropriate CHRIS clearinghouses as required. A programmatic Agreement is in the process of being 	On-ROW	No significant impact to cultural resources.	Before and during construction	Environmental Resource Coordinator, Environmental Inspector, and Archaeological Specialist	The Environmental Resource Coordinator will submit the cultural resources report to the CPUC. The Environmental Inspectors will specify and enforce the requirements of the report in accordance with this mitigation measure. Any noncompliance will be		

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
	buildings are not within the ROW and will not be impacted by construction activities.		drafted between the BLM, the National Park Service, the ACOE, the Bureau of Indian Affairs, the California, Arizona, New Mexico and Texas SHPOs, the Gila River Indian Community, and EPGN for BL 31, 22, 23, 32a, 35, 39, 41, 43a, and 43b.					reported to the Environmental Resource Coordinator who will notify the CPUC immediately.
			 Coordinate with the California SHPO, CPUC, Native Americans, local agencies, and jurisdictions on all impacts to historic buildings through project design. 					
			 Reduce construction- related short-term impacts to a less-than- significant level by shortening construction time and avoiding weekends and holidays. 					
			 Avoid all known eligible historic and prehistoric archaeological sites. 					
			 Conduct archaeological monitoring with qualified archaeologist 					

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
			as determined in consultation with CPUC.					
			 If previously unidentified cultural resources are found, work will stop until a qualified Archaeological Specialist can make appropriate recommendations. 					
			 Conduct appropriate consultations with state and federal land management agencies. 					
			 On federal lands, treat unavoidable sites in accordance with mitigation measures set forth in the El Paso Environmental Assessment submitted to the BLM. 					
			 Conduct worker educational training. 					
			 Utilize Native American monitors during construction if warranted. If human remains are encountered, contact the county coroner and the Native American Heritage commission within 24 					

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program			
			 hours of the find. If known fossiliferous deposits are present, a qualified paleontologist will monitor during construction grading and excavation. 								
CR-2	Potential for significant cultural remains.	CR-2	 EPGN is committed to installing the system within Midland Road in the area adjacent to the townsite. Therefore, no direct impacts will occur. The regen location contains no significant features or deposits. 	Rice Townsite	No significant impact on cultural resources.	Before and during construction	Environmental Resource Coordinator, Environmental Inspector, and Archaeological Specialist	The Environmental Resource Coordinator will submit the cultural resources report to the CPUC. The Environmental Inspectors will specify and enforce the requirements of the report in accordance with this mitigation measure. Any noncompliance will be reported to the Environmental Resource Coordinator who will notify the CPUC immediately.			

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
CR-3	Unidentified cultural resources encountered during construction.	CR-3	 If find is significant, resource will be avoided. If avoidance is not possible, a meeting with CPUC and other agency personnel shall be held to discuss data recovery and/or other measures as possible mitigation. 	All off-ROW sites	No significant impact to cultural resources.	Before and during construction	Environmental Resource Coordinator, Environmental Inspector, and Archaeological Specialist	The Environmental Inspectors will notify the Environmental Resource Coordinator of any sensitive cultural resources identified. The construction contractor will stop work in the area and provide sufficient time to assess and consult. The Environmental Inspector will enforce the treatment measures developed to avoid substantial adverse changes. The Environmental Resource Coordinator will note compliance with this mitigation measure in the weekly report to the CPUC.
CR-4	Potential for unanticipated fossiliferous deposits.	CR-4	 At the request of agencies, if paleontological resources are discovered during construction, work would stop until the paleontologist can review the discovery and recommend appropriate mitigation such as onsite analysis and/or recovery of the find, leading to subsequent analysis and reporting on the discovery. 	All off-ROW sites	No significant impact on paleontologic al resources.	Before and during construction	Environmental Resource Coordinator and Environmental Inspector	The Environmental Inspectors will specify and enforce the requirements of this mitigation measure. Any noncompliance will be reported to the Environmental Resource Coordinator who will notify the CPUC immediately. If needed, the Environmental Resource Coordinator will provide a copy of the final paleontological report and inventory to the CPUC as soon as it is available.

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
CR-5	Potential for the discovery of human remains.	CR-5	 If human remains are discovered, all work in the immediate area shall stop and the County Coroner and Native American Heritage Commission must be contacted within 24 hours of the find. The steps outlined in CEQA section 15064.5(e) must be followed. On federal lands, the steps outlined in the Native American Graves Protection and Repatriation Act must be followed. 	All off-ROW sites	Minimal disturbance of discovered human remains.	During construction	Environmental Resource Coordinator, Environmental Inspector, and Archaeological Specialist	The Environmental Inspector will notify the proper authorities and the Environmental Resource Coordinator immediately if human remains are discovered and will implement the mitigation measures. The Environmental Resource Coordinator will notify the CPUC of the find. The Environmental Resource Coordinator will not compliance with this mitigation measure in the weekly report to CPUC.
GEOLOG	Y AND SOILS							
G&S-1	Potential erosion due to excavation, grading, and filling.	G&S-1	 EPGN will comply with all local design, construction, and safety standards through the permit process. Erosion control plans will be prepared for areas identified to be susceptible to erosion. 	On-ROW	Erosion at the project areas is contained.	Before and during construction	Environmental Resource Coordinator and Environmental Inspector	The Environmental Inspector will notify the Environmental Resource Coordinator of any erosion issues. The Environmental Resource Coordinator will immediately notify the CPUC if erosion is encountered and provide information about how the situation is being handled.
G&S-2	In a few areas where installation will require excavation into steep slopes,	G&S-2	 Areas of existing and potential instability will be avoided where possible. Geotechnical analysis 	On-ROW	No landslides are recorded and the conduit remains undamaged.	Before construction	Environmental Resource Coordinator and Environmental Inspector	The Environmental Inspector will notify the Environmental Resource Coordinator of any mass movement issues. The Environmental Resource Coordinator will

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
	willow mass movement (i.e., landslides) could occur.		will be conducted in areas where the proposed route must pass through a potentially unstable area.		undamaged.		Inspector	immediately notify the CPUC if mass movement occurs and provide information about how the situation is being handled.
G&S-3	Seismically- induced liquefaction could occur if soils are not compacted properly.	G&S-3	 The construction of the building pads must conform to the Uniform Building Code Seismic Zone Criteria. As required, a state- certified Engineer must certify the design, placement, and compaction of soil for the building pads. Engineered placement of fill material will mitigate impacts associated with seismic liquefaction of soil. Geophysical testing of soils at the building pad sites will be conducted to determine the geophysical properties of the soils and the building pads designed accordingly. 	All off-ROW facilities	Successful construction of building pads with little or no subsidence.	Before construction	Environmental Resource Coordinator and Environmental Inspector	The Environmental Inspector will notify the Environmental Resource Coordinator of any liquefaction issues. The Environmental Resource Coordinator will immediately notify the CPUC if liquefaction occurs and provide information about how the situation is being handled.

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
G&S-4	Erosion impacts exist due to runoff and wind erosion.	G&S-4	 Prepare and implement the SWPPP and BMPs to collect or redirect stormwater runoff around the proposed project sites. 	Off-ROW	No pooling or standing water at the subject site following a storm event.	Before, during, and after construction	Environmental Resource Coordinator and Environmental Inspector	The Environmental Inspector will notify the Environmental Resource Coordinator of any erosion issues. The Environmental Resource Coordinator will immediately notify the CPUC if erosion is encountered and provide information about how the situation is being handled.
HAZARD	S AND HAZARDO	US MATERIA	ALS	1		T		
HAZ-1	Potential release of hazardous materials, which may result in injury to workers.	HAZ-1	 The construction contractor will ensure proper labeling, storage, handling, and use of hazardous materials in accordance with BMPs and OSHA's HAZWOPER requirements. The construction contractor will ensure that employees are properly trained in the use and handling of these materials and that each material is accompanied by a material safety data sheet. A spill kit will be present at each construction site. Any small quantities of hazardous materials stored temporarily in 	On-ROW	Proper handling procedures and BMPs prevent the spill of hazardous materials to the surrounding area. Hazardous materials encountered are properly managed.	During construction	Environmental Resource Coordinator and Environmental Inspector	The contractor will ensure that qualified individuals are available on the construction team. The Environmental Resource Coordinator will immediately notify the CPUC if any hazardous materials are encountered and provide information about how the wastes are being handled.

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
			staging areas will be stored on pallets within fenced and secured areas and protected from exposure to weather.					
			 Incompatible materials will be stored separately as appropriate. 					
			 To avoid unexpected releases of hazardous materials, the construction contractor team will include individuals trained in accordance with OSHA's HAZWOPER requirements. 					
			 The construction team will have a written plan outlining how to respond if hazardous materials are unexpectedly encountered. 					
			 All hazardous waste materials removed during construction will be handled and disposed of by a licensed waste disposal contractor and transported by a licensed hauler to an appropriately licensed and permitted disposal and or recycling 					

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
HAZ-2	Long-term storage of hazardous materials may result in accidental spills/releases.	HAZ-2	 facility. EPGN will require in its contracts that contractors meet federal, state, and local requirements. A SWPPP must be prepared specific to each proposed regeneration station and strictly followed. A SPCC must be prepared for the proposed regeneration station, station, and strictly followed. 	All off-ROW facilities	No release of hazardous materials to the surrounding environment.	During construction	Environmental Resource Coordinator and Environmental Inspector	The Environmental Inspector will notify the Environmental Resource Coordinator of any accidental spill/releases of potentially hazardous materials. The Environmental Resource Coordinator will immediately notify the CPUC if a spill/release occurs and provide information about how the situation is being bandled
HYDROL	OGY AND WATER	R QUALITY						nandled.
HY-1	During boring operation, bentonite could seep to the surface within a stream channel.	HY-1	 EPGN will attach conduit from existing bridges, whenever feasible at crossings. The potential for accidental bentonite seeps through frac- outs will be reduced to a less-than-significant level by measures specified in the IS/MND. 	On-ROW	Successful monitoring and environmental education. No significant impact on sensitive biological resources.	Before and during construction	Environmental Resource Coordinator and Environmental Inspector	The construction contractor will monitor for frac-outs. If there is a failure to follow the prescribed mitigation measure, the Environmental Resource Coordinator will immediately notify the CPUC.
HY-2	Stormwater runoff may adversely impact quality of receiving	HY-2	 EPGN's SWPPP and associated BMPs must be employed to prevent erosion and contain sediments on 	All off-ROW facilities	Stormwater runoff will be successfully prevented from transport	During construction	Environmental Resource Coordinator and Environmental	The Environmental Inspectors coordinate with the contractor to ensure that appropriate BMPs are implemented. The

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
	waters.		site and during construction.		into waterbodies.		Inspector	Environmental Resource Coordinator will ensure that this mitigation is followed. The Environmental Resource Coordinator will notify the CPUC of any failures to follow the prescribed mitigation measure.
HY-3	Contamination of aquifer and nearby wells may occur due to refueling of vehicles and storage of toxic fluids near surface waters.	HY-3	 Implement EPGN's SPCC Plan. 	All off-ROW facilities	Hazardous materials will be successfully prevented from transport into aquifers and wells.	During construction	Environmental Resource Coordinator and Environmental Inspector	The Environmental Inspectors coordinate with the contractor to ensure that appropriate BMPs are implemented. The Environmental Resource Coordinator will ensure that this mitigation is followed. The Environmental Resource Coordinator will notify the CPUC of any failures to follow the prescribed mitigation measure.
NOISE		4				1		
NO-1	Construction noise may substantially increase noise above background sound levels.	NO-1	 All equipment will have sound-control devices no less effective than those provided on original equipment. No equipment will have an unmuffled exhaust. Additional noise control measures must be installed to reduce increases in ambient 	On-ROW	Noise from construction is kept to levels that do not exceed local standards.	Before and during construction	Environmental Resource Coordinator and Environmental Inspector	The contractor will enforce the requirements for the construction team. The Environmental Resource Coordinator will notify the CPUC of any noncompliance with this measure.

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
			noise concentrations to sensitive receptors around the sites.					
NO-2	Backup generators will exceed allowable noise levels.	NO-2	 Install additional noise measures to reduce ambient noise concentrations to sensitive receptors around the sites. 	Off-ROW	Sites will have allowable ambient noise concentrations.	Before construction	Environmental Resource Coordinator and Environmental Inspector	The contractor will enforce the requirements for the construction team. The Environmental Resource Coordinator will notify the CPUC of any noncompliance with this measure.
NO-3	Sensitive receptors are located within 350 feet of the proposed regeneration stations.	NO-3	 Install additional noise measures to reduce ambient noise concentrations to sensitive receptors around the sties. 	Off-ROW	Sites will have allowable ambient noise concentrations.	Before construction	Environmental Resource Coordinator and Environmental Inspector	The contractor will enforce the requirements for the construction team. The Environmental Resource Coordinator will notify the CPUC of any noncompliance with this measure.
RECREA	TION							
REC-1	An increase in off-road vehicling and illegal camping on public lands may occur by the construction work force.	REC-1	 EPGN will instruct contractor to limit vehicle traffic to the construction ROW and prohibit off-road vehicling on public lands and camping, except in authorized areas. 	On-ROW	Limit disturbance to public lands.	During construction	Environmental Resource Coordinator and Environmental Inspector	The contractor will enforce the requirements for the construction team. The Environmental Resource Coordinator will notify the CPUC of any noncompliance with this measure.
TRANSP	ORTATION/TRAF	FIC						
TR-1	Increase in traffic that is substantial in relation to	TR-1	 EPGN will coordinate with county public works departments and CalTrans to 	On-ROW	Minimize traffic delays and impacts.	During construction	Environmental Resource Coordinator and	The Environmental Inspectors coordinate with the contractor to ensure that appropriate BMPs are

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s) Involved	Effectiveness Criteria	Timing	Responsible Party	Monitoring Program
	existing traffic load.		minimize ROW encroachments.				Environmental Inspector	implemented. The Environmental Resource
			 All local safety and construction standards shall be met through the local permit process. 					this mitigation is followed. The Environmental Resource Coordinator will notify the CPUC of any failures to follow the prescribed mitigation measure.
			 Advance notice two weeks prior to surrounding area of construction date and time. 					
			 Consultation with local agencies on appropriate restoration of impacted public service facilities in ROW. 					
			 EPGN will submit As- Built Plans to CalTrans and county public works departments for areas where the proposed route encroaches on CalTrans ROWs. 					
			 Traffic control measures, such as the placement of warning signs and the use of traffic control personnel when appropriate, will be implemented. 					
			 Prepare a traffic control plan detailing lane closures, 					

Impact No.	Impact	Mitigation No.	Mitigation Measure	Site(s)	d Effectiveness	Timing	Responsible Party	Monitoring Program	
			scheduling, signing and flagging procedures, safety protocol, etc.						
Notes:									
ACOE	U.S. Army Corps	of Engineers		HAZWOPER	Hazardous Waste Operations Training				
BLM	U.S. Bureau of L	and Managem	nent	IS/MND	Initial Study/Mitigated Negative Declaration				
BMP	Best Manageme	nt Practice		mph	miles per hour				
CalTrans	California Depart	tment of Trans	portation	NRHP	National Register of Historic Places				
CDFG	California Depart	tment of Fish a	and Game	OSHA	Occupational Safety and Health Administration				
CEQA	California Enviro	nmental Quali	ty Act	ROW	Right-of-Way				
CESA	California Endan	gered Species	s Act	RWQCB	Regional Water Quality Control Board				
CHRIS	California Histori	cal Resources	Information System	SHPO	State Historic Prese	ervation Office	r		
CNPS	California Native	Plant Society		SPCC	Spill Prevention, Containment, and Control Plan				
CPUC	California Public	Utilities Comr	nission	SWPPP	Storm Water Pollution Prevention Plan				
EPGN	El Paso Global N	letworks		USFWS	U.S. Fish and Wildl	ife Service			
ESA	Federal Endange	ered Species A	Act						

6.1 VARIANCE PROCESS

If the project is expected to go outside or beyond the proposed facility locations presented in the IS/MND, EPGN will be required to file a project variance with the CPUC. The variance request form is provided in Appendix A. Minor variations to the project will be handled whenever possible through the field variance process. This would entail confirmation from the Archaeological Specialist, Biological Specialist, and the CPUC field monitor that no resources would be adversely affected. Field variances will require approval by the Environmental Resource Coordinator and the CPUC Third Party Compliance Monitor. The purpose of the field variance process is to expedite approval of minor changes so as not to slow down the construction schedule for minor deviations. EPGN would also be responsible for informing affected local agencies in writing of any major project changes. EPGN is responsible for informing the CPUC of any requests by local agencies for project deviation from the proposed facility locations. If the project deviates significantly from the proposed project, a complete environmental review of the project could be triggered under CEQA, with the CPUC as the lead agency. EPGN does not anticipate a major change in the project and if one does occur EPGN will be responsible for preparing an Initial Study following the CEQA Checklist. EPGN will work with CPUC to ensure that any changes in the project will not result in significant impacts.

All variance requests will include the following minimum information:

- A description of the requested action
- The reason for the variance
- Relevant mitigation requirements
- The impact of the variance
- Additional relevant mitigation resulting from the variance
- The impact of not obtaining the variance

6.2 **PRIOR TO CONSTRUCTION**

Prior to the commencement of construction, the ROW Permitting Coordinator will review the permits obtained from the respective permitting agencies. Requirements and/or restrictions will be incorporated into the Mitigation Monitoring Plan. The Mitigation Monitoring Plan will delineate these requirements, and any reports to be provided to the permitting agencies will be noted.

Archaeological and Biological Specialists will review plans for the delineation and protection of sensitive resources within the project area. A list of specific sites to be monitored will be catalogued, and periodic site visits will be carried out by the specialists. A mitigation compliance reports will be filed for each visit to a sensitive resource area.

Prior to construction, Environmental Inspectors and Archaeological and Biological Specialists will be responsible for identifying sensitive resources in the field and installing protective structures, flagging, or other necessary elements to protect the resource. All sensitive resources

will be identified and marked at least one day prior to construction activities within the immediate area. They will be responsible for checking sensitive resources daily during construction to ensure that protective structures or flagging are intact. In some sensitive areas, Archaeological and/or Biological Specialists will be present during construction activities to ensure that resources are adequately protected. These areas could include stream crossings, desert tortoise habitats, and sensitive cultural resource areas.

6.3 CONSTRUCTION PHASE

Upon commencement of construction, the Environmental Managers will serve as the direct link to EPGN's environmental mitigation compliance monitoring process. Through the Environmental Inspectors, the Environmental Managers will evaluate the extent to which construction activities comply with EPGN environmental mitigation measures, and the level of compliance to the respective directives given by EPGN monitoring staff.

The Environmental Managers will meet with the Environmental Inspectors prior to construction to discuss environmental mitigation requirements. EPGN views the enforcement procedures of the California Telecommunications Project to be an important element in the satisfactory execution of mitigation measures.

The Environmental Inspectors will inspect sensitive resource areas, especially during construction activities in the vicinity. Protective structures, flagging, or other necessary elements will be inspected, and for any violations observed, corrective action will be undertaken.

EPGN Environmental Monitors will inspect a mitigated activity and note if the activity is in compliance with mitigation requirements and the Mitigation Monitoring Plan. If the activity is not in compliance, then a sequence of noncompliance reports and recommendations will be undertaken to bring the activity back into compliance.

7.1 CONSTRUCTION PHASE

The EPGN reporting process will include a component for ranking the severity of noncompliance conditions and activities. The level of severity is directly related to an aggregate of factors, such as the frequency of occurrence, the degree of consequence, and the immediacy of countermeasures. For example, a small noncompliance that occurs repeatedly could be judged more severely than a major noncompliance that was not reasonably preventable.

Some common root causes of noncompliance events are as follows:

- Incorrect information
- Lack of communication
- Expediency
- Lack of competence or training
- Deliberate disregard
- Unanticipated conditions

The environmental reporting requirements for the project are separated into two major categories: daily inspection reports and progress reports. This two-component strategy has been used by EPGN to review the adequacy of environmental compliance for monitoring requirements of other linear projects, and has been found to be effective.

7.2 DAILY INSPECTION REPORTS

The results of the environmental Mitigation Monitoring Plan will be recorded through a diligent reporting process. The Environmental Inspection Team will complete two types of forms, using the environmental monitoring forms presented in Appendix A:

- the Daily Inspection Form, which documents and comments on mitigation activities inspected on a regular basis and provides a check on the completeness of the overall Mitigation Monitoring Plan; and
- the Special Environmental Report Form, which documents unsatisfactory or noncompliance conditions.

Daily forms will be used to document contractor compliance with all mitigation measures.

A special environmental report represents a potentially serious problem that deserves immediate and high level attention. Special reports will be addressed to the contractor involved in the noncompliance activity, and the severity of the infraction will be outlined. Specific remedial actions to be undertaken will be clearly documented.

7.3 **PROGRESS REPORTS**

Progress reports submitted on a monthly basis will provide the Project Engineer with a concise summary of the previous month's events and compliance status. The reports will include: information regarding completion of mitigation measures; violations and analyses of potential remediation; mitigation successes; status of construction activities; actual or anticipated monitoring plan problems; and additional information required by the Project Engineer. A copy of the monthly report will also be submitted to the CPUC address listed below:

California Public Utilities Commission Energy Division, Analysis Branch 505 Van Ness Avenue, Fourth Floor San Francisco, CA 94102

From previous environmental monitoring projects, EPGN has found that a process of monthly reporting proves very useful for keeping management informed of work progress, problems, and the possible need for early remedial action. The reports are also useful as a concise chronology of compliance events at each facility location.

7.4 AFTER CONSTRUCTION

Following completion of the construction phase of the project, the Environmental Managers will evaluate the success of implementing the environmental Mitigation Monitoring Plan. An interim report will be prepared documenting the compliance of the environmental mitigation measures, specifying any noncompliance elements that remain, and outlining any corrective actions needed. The report will also summarize the required site restoration work to be conducted and the monitoring requirements for those activities. The interim report will be delivered to the CPUC within 30 days of construction completion. The report will also be made available to other regulatory agencies (e.g., CDFG) on request following completion of construction.
APPENDIX A

MONITORING FORMS

VARIANCE REQUEST FORM

1. STATE REQUESTED ACTION AND PROVIDE A DETAILED DESCRIPTION OF THE VARIANCE LOCATION.

2. PROVIDE A DETAILED REASON FOR THE VARIANCE.



3. ADDRESS ISSUES IN THE CEQA CHECKLIST AND PROVIDE ALL SPECIFIC MITIGATION MEASURES TO BE IMPLEMENTED.

A) Aesthetics

Potential Effects

ation Measures to reduce impact	(s) to less than significant.
are Resources atial Effects gation Measures to reduce impact	(s) to less than significant.
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ity ntial Effects	
ation Measures to reduce impact	(s) to less than significant.
l Resources ntial Effects	
	ation Measures to reduce impact

Mitigation Measures to reduce impact(s) to less than significant.

E) Cultural Resources Potential Effects

Mitigation Measures to reduce impact(s) to less than significant.

F) Geology and Soils Potential Effects

Mitigation Measures to reduce impact(s) to less than significant.

G) Hazards and Hazardous Materials Potential Effects

H) Hy	ydrology and Water Quality Potential Effects
	Mitigation Measures to reduce impact(s) to less than significant.

	Mitigation Measures to reduce impact(s) to less than significant.
J) Mi	neral Resources Potential Effects
	Mitigation Measures to reduce impact(s) to less than significant.
K) Noi	ise Potential Effects
	 Mitigation Measures to reduce impact(s) to less than significant.
L) Poj	pulation and Housing Potential Effects
	Mitigation Measures to reduce impact(s) to less than significant.

M) Pu	blic Services
	Potential Effects
	Mitigation Measures to reduce impact(s) to less than significant.
N) Re	creation
	Potential Effects
	Mitigation Measures to reduce impact(s) to less than significant.
O) Tra	ansportation/Traffic Potential Effects
	Mitigation Measures to reduce impact(s) to less than significant.
P) Uti	lities and Service Systems
	Mitigation Measures to reduce impact(s) to less than significant.

Q) Mandatory Findings of Significance Potential Effects

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- 4. PROVIDE COPIES OF BIOLOGICAL, CULTURAL RESOURCE, HYDROLOGY, GEOLOGY AND SOILS SURVEY REPORTS AND ANY OTHER RELEVANT SURVEYS/EVALUATIONS PERFORMED.
- 5. **PROVIDE MAP SHOWING VARIANCE LOCATION AND VICINITY.**
- 6. **PROVIDE TOPOGRAPHIC/MILEPOST MAP WITH VARIANCE LOCATION.**
- 7. PROVIDE A DETAILED VARIANCE SITE PLAN (FOR BUILDINGS AND STRUCTURES).

EPGN CALIFORNIA TELECOMMUNCATIONS PROJECT DAILY INSPECTION FORM

Date of Report:

Inspector:

Weather:

General Location:

TIME	SPECIFIC LOCATION		ΑCTIVITY	A M N	PPLICABLE IITIGATION MEASURE NUMBER(S)	
COMME	NTS:					
COMME	NTS:					
COMME	NTS:				·	
COMMENTS:						
COMMENTS:						
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EPGN CALIFORNIA TELECOMMUNICATIONS PROJECT SPECIAL ENVIRONMENTAL REPORT FORM

Date of Report:		Monitor:	
Weather:		General Location:	
	SPECIFIC		APPLICABLE MITIGATION
TIME	LOCATION	ACTIVITY	MEASURE

NUMBER(S).

REMEDIAL ACTIONS:		
COMMENTS:		

VIOLATION: