Miguel-Mission 230 kV #2 Project

Addendum to Final Environmental Impact Report

Prepared for: California Public Utilities Commission

> Prepared by: Aspen Environmental Group

November 30, 2004

Contents

1.	Introduction 1			
2.	Purp	ose of Project Modification	2	
3.	Project Modifications			
	3.1	Steel Pole Line Modification	3	
	3.2	Temporary Wood Poles		
	3.3	Schedule (Installation and Removal)	4	
	3.4	Operational Restrictions	5	
4.	Envir	onmental Analysis	5	
	4.1	Air Quality	5	
	4.2	Biological Resources	6	
	4.3	Cultural Resources	7	
	4.4	Geology, Soils, and Paleontology	8	
	4.5	Hydrology and Water Quality	8	
	4.6	Land Use and Recreation	9	
	4.7	Noise and Vibration	10	
	4.8	Public Health and Safety	10	
	4.9	Public Services and Utilities	11	
	4.10	Socioeconomics	12	
	4.11	Transportation and Traffic	12	
	4.12	Visual Resources	13	
	4.13	EIR Mitigation Measures	14	
5.	Conc	lusion	21	
6.	Refer	ences	21	

Tables

Table 4-1	Temporary Impacts to Coastal Sage Scrub from Wood Poles	6
Table 4-2	Estimated Noise Levels of the Proposed Changes	.10
Table 4.3	Estimated EMF Levels Associated with the Existing, Temporary, and Final Configurations	.11
Table 4-4	Mitigation Measures Presented in the Project EIR, Applicable to the Proposed	
	Modifications	.14

Appendices

Discuss A 1	Existing and Terror energy Creek Section of Schooting A (Dreaded Date #10, #282)
Figure A-1	Existing and Temporary Cross-Section of Subsection A (Proposed Pole #10-#282)
Figure A-2	Existing and Temporary Cross-Section of Subsection A (Proposed Pole #282-#342)
Figure A-3	Existing and Temporary Cross-Section of Subsection A (Proposed Pole #342-#752)
Figure A-4	Existing and Temporary Cross-Section of Subsection B (Proposed Pole #752-#1000)
Figure A-5	Existing and Temporary Cross-Section of Subsection B (Proposed Pole #1000-#1110)
Appendix B:	Steel Pole Modification
Figure B-1	Proposed Temporary 138/230 kV Operation for Miguel-Mission 230 kV #2
Appendix C:	Schematic of Temporary Wood Poles near Steele Canyon High School
Figure C-1	Pole Placement in the Vicinity of Steele Canyon High School
Appendix D:	Biological Resource Maps Showing Areas Potentially Impacted by Temporary
	Wood Pole Installation/Removal
Figure 4-3	Impacts to Existing Biological Resources - Map 3
Figure 4-8	Impacts to Existing Biological Resources - Map 8
Figure 4-17	Impacts to Existing Biological Resources - Map 17
Figure 4-18	Impacts to Existing Biological Resources - Map 18
Appendix E:	Visual Simulations
Figure F-1	Bundled Wire Simulation

Figure E-1Bundled Wire SimulationFigure E-2Single Wire Simulation

Miguel-Mission 230 kV#2 Project EIR Addendum

1. Introduction

San Diego Gas and Electric Company (SDG&E) filed an application (A.02-07-022) for a Certificate of Public Convenience and Necessity (CPCN) with the California Public Utilities Commission (CPUC) on July 12, 2002, for the 35-mile Proposed Miguel-Mission 230 kV #2 Project (Miguel-Mission Project). The primary component of the Miguel-Mission Project would be a new 230 kV circuit between Miguel and Mission Substations, which would be located entirely within SDG&E's existing 35-mile right-of-way (ROW).

The CPUC is the State Lead Agency, responsible for compliance with the California Environmental Quality Act (CEQA). The CEQA process for the Miguel-Mission Project began with the CPUC's issuance of the Notice of Preparation of an EIR on September 5, 2003, along with an extensive scoping process. In December 2003, a comprehensive Scoping Report was issued that summarized issues and concerns received from the public and various agencies, which included copies of all written comments received. A Draft Environmental Impact Report (EIR) was prepared by the Commission in compliance with CEQA Guidelines and published in April 2004, with a 45-day comment period that ended on May 17, 2004.

The Final EIR, which documents the evaluation of approximately 16 wire alternatives, five of which were carried through for full evaluation, including the EIR's Environmentally Superior Alternative, was released in June 2004. The Environmentally Superior Alternative is identical to the Proposed Project except for two short route segments where it would be installed underground for 3.5 miles in Jamacha Valley as the Jamacha Valley 138 kV/69 kV Underground Alternative and 1.35 miles in the City of Santee as the City of Santee 138 kV/69 kV Underground Alternative.

On July 8, 2004, the Commission certified the Final EIR and approved the Miguel-Mission Project with Decision 04-07-026 (Decision). SDG&E filed a Petition for Modification of the Decision (PFM) on September 30, 2004. The purpose of the PFM is to modify the Miguel-Mission Project and the Decision in order to expedite the installation and operation of a temporary 230 kV transmission line during the construction of the Miguel-Mission Project. This accelerated schedule for the operation of a 230 kV transmission line is a temporary solution that SDG&E claims is needed to decrease the financial cost burdens of managing congestion at Miguel Substation, and Reliability Must Run (RMR) generation in SDG&E's service area. This project modification is expected to cost approximately \$2.1 million, but provide annual net savings of \$8 to \$13 million according to the California Independent System Operator (CAISO). See Section 2, Purpose of Project Modification, for a detailed description of the purpose of the proposed modifications.

Under the proposed modification, the existing 69 kV line would be temporarily removed from operation, and a 230 kV line would be temporarily energized in its place. The result would be a replaced line with transmission lines operating at 230 kV and 138 kV levels, instead of at the 138 kV and 69 kV levels that were authorized in Decision 04-07-026. The operation of the higher voltage would only be temporary (12 to 18 months). After the existing steel lattice towers are modified to receive the 230 kV line and the new steel poles have been constructed that are required for the new 230 kV line, the power levels on the subject new poles would be restored (de-energized) to the 69 kV and 138 kV levels as described and approved in the Miguel-Mission Project Final EIR. This temporary 230 kV line is proposed to run 15 miles from Miguel to Los Coches Substations. See Section 3, Project Modification, for a detailed description of the proposed modifications.

Pursuant to CEQA Guidelines Section 15164, the purpose of this Addendum is to document proposed modifications to the approved project. The proposed modifications are temporary and have been reviewed by the CPUC. The impact levels presented in the Final EIR remain unchanged (see Section 4, Environmental Analysis). Specifically, the temporary modifications result in no new or increased environmental impacts. Accordingly, the CPUC finds that the preparation of an Addendum pursuant to CEQA Guide-lines Section 15164 is appropriate.

2. Purpose of Project Modification

SDG&E states that the proposed temporary project modifications under the PFM are to relieve SDG&E and its ratepayers from the burden of escalating costs associated with system congestion at Miguel Substation, and the management of the RMR generation contracts needed to ensure local reliability. From July 2003 through March 2004, congestion-related costs at the Miguel Substation were greater than \$7 million per month. Precipitated by the Commission's investigation of Assembly Bill 970 regarding electric transmission and distribution constraints (I.00-11-001), and Interim Opinion Regarding Electric Reliability Issues (R.04-04-003), SDG&E conducted an analysis to determine how to reduce congestion issues and the need for RMR contracts until the Miguel-Mission Project is completed. One partial solution would be to expedite the operation of a 230 kV transmission line, which could be accomplished with the proposed project modification.

Miguel Substation imports power from two major sources, including the 500 kV Southwest Power Link from Arizona and the Imperial Valley and the Miguel-Tijuana 230 kV line from Mexico. There are also two major transmission outlets from Miguel Substation: the Miguel-Mission and Miguel-Sycamore 230 kV transmission lines. Additional power is sent out along the 138 kV Miguel-Proctor Valley line and two 224 MVA 230/69 kV transformer banks that feed into several 69 kV lines. The power outflow limit at Miguel Substation is 1100/1400 MW, and is limited by the potential for power overloading, or congestion, on the 138 kV and specific 69 kV lines caused by outages on the Miguel-Mission and Miguel-Sycamore lines.

SDG&E is in the process of implementing a set of upgrades to reduce congestion and associated costs at Miguel Substation. These upgrades will increase the amount of power that is able to flow through Miguel Substation. All of these upgrades are expected to be completed by the end of 2004, except for the addition of a second Miguel-Mission 230 kV transmission line. The upgrades that will be completed by year's end will increase the capacity of power flowing into Miguel Substation. The addition of the Miguel-Mission 230 kV #2 line approved in the Decision will increase power flowing out of Miguel Substation. Operation of this line is currently scheduled for 2006. The proposed project modifications would allow this 230 kV transmission line to be put into service sooner than 2006, in a temporary configuration.

3. Project Modifications

3.1 Steel Pole Line Modification

Under the proposed modifications, SDG&E seeks to accelerate the operation of a 230 kV line by temporarily operating a segment of the two existing 69 kV and 138 kV lines at a voltage of 138 kV and 230 kV, respectively. This would involve temporarily removing the 69 kV line from service and installing a temporary 230 kV circuit. Modifications to the steel pole lines would be necessary to facilitate the increase in line capacity. Larger insulators with bundled conductors would be required on the eastern side of the new steel pole line to support the increased 230 kV transmission capacity from SDG&E's Miguel Substation to Los Coches Substation. See Appendix A (Figures A-1 through A-5) for existing and temporary cross-sections of right-of-way between Miguel Substation and Los Coches Substation. The poles to be temporarily operated at 138/230 kV are 95 feet tall with three 11-foot 4-inch arms on both sides of the poles, vertically separated by 12 feet six inches. See Appendix B (Figure B-1) for an illustration of the dimensions of the poles to be temporary operated at 138/230 kV. The additional modifications to the Miguel-Mission Project would require the lengthening of the arms on one side of six steel poles intended to accommodate operation of the 230 kV line. The proposed changes to the arm lengths range from 1.5 feet to 2.5 feet. Longer cross-arm length is required to provide sufficient clearance between conductors and structures to meet CPUC General Order 95 clearance regulations. When the permanent 230 kV line for the approved Miguel-Mission Project is completed and energized, operation of the 138 and 69 kV circuits would be restored to the originally authorized operational voltage specified in the certified EIR. Project modifications that would be permanent include larger insulators, longer arms, and bundled conductors that would remain after the temporary 230/138 kV lines have been de-energized to 69/138 kV.

It should be noted that, due to regulatory, operational, and right-of-way constraints, there is no potential for the de-energized 69 kV circuit to operate at a higher voltage after the permanent 230 kV is installed and operational. There are no engineering options to transfer 230 kV power along the Miguel Mission ROW north of Los Coches Substation unless the following system constraints were resolved:

- Los Coches Substation would need to be converted to a 230 kV substation
- SDG&E would need to design and install new permanent poles between Los Coches Substation and Mission Substation. There is no carrying capacity between Los Coches Substation and Mission Substation for an additional 230 kV circuit.
- Modifications to the 69 kV transmission system would need to take place in order to power the Granite Hills Substation on a long-term basis.
- SDG&E would need to obtain additional CPCN authority from the CPUC.

3.2 Temporary Wood Poles

Under the proposed project modification, construction of eight temporary wood poles will be required until permanent construction of the approved 230 kV towers is complete. The specific locations where the proposed wood poles would be located are illustrated in Appendices C and D. SDG&E will remove the wood poles after completion of the approved Miguel-Mission Project, which is anticipated to be in June 2006. The temporary wood poles are necessary to maintain electrical clearances required by CPUC General Order 95. The poles would be constructed within the existing ROW or on existing SDG&Eowned substation property, and no new access roads would be required for installation or removal of the poles. According to SDG&E's preliminary environmental assessment, the amount of work area that would require disturbance would be one acre or less. Appendix D includes the biological resource map revisions showing the approximate location of the wood poles and the potentially impacted work area associated with the installation and removal of the temporary poles. The following sections provide information about the eight temporary wood poles required to facilitate the early operation of the 230 kV line.

3.2.1 Miguel Substation

Installation of three temporary wood poles is proposed on SDG&E Miguel Substation property to reroute an existing 69 kV line in order to ensure sufficient electrical clearance. The poles would be located between 400 and 800 feet northeast of the developed substation property (see Appendix D, Figure 4-3) and would be 60 to 80 feet tall.

3.2.2 Los Coches Substation

One angle pole and one stub pole would be temporarily installed to accommodate a change of direction within the ROW. These two temporary wood poles, 60 to 80 feet tall, would need to be installed within SDG&E's easement approximately one half-mile south-southeast of Los Coches Substation (see Appendix D, Figure 4-18).

3.2.3 Steel Canyon

In order to provide adequate phase-to-phase clearance and to temporarily support one conductor, two temporary wood poles would need to be installed in the Steele Canyon area, immediately southeast of Steele Canyon High School (see Appendix D, Figure 4-8). These poles would enable the temporary 230 kV to cross under the future permanent 230 kV line. The 69/138 kV steel poles will be utilized to support two conductors (2 of the 3 conductors) of the temporary 230 kV circuit. The remaining conductor would be supported using temporary wood poles. The wood poles would range in height from 50 to 70 feet. See Appendix C (Figure C-1) for an illustration of the temporary poles near Steele Canyon High School.

3.2.4 Lake Jennings Area

In the Lake Jennings area, three of the wood poles that were approved for installation under the Miguel-Mission EIR would need to be five feet taller than originally proposed. In addition, one temporary wood pole would be required to provide temporary support to the conductors and to give adequate ground clearance, per CPUC General Order 95. The temporary wood pole would be located approximately one mile south of the Los Coches Substation (see Appendix D, Figure 4-17).

3.3 Schedule (Installation and Removal)

The temporary 230 kV line is proposed to be energized as soon as possible and continue operation through the end of Miguel-Mission Project construction (2006), when it would be permanently configured as described in the Final Miguel-Mission Project EIR.

The duration for construction of the proposed project modifications, which would extend for a total of 15 miles from Miguel Substation to Los Coches Substation, is expected to be consistent with the original approved project schedule. After approval of the PFM, energizing the temporary 230 kV project line would coincide with construction of the approved 69/138 kV pole line that extends from Los Coches Substation to Mission Substation, which is expected to be completed in September 2005.

3.4 Operational Restrictions

Several operational restrictions must be implemented in order for the proposed project modifications to comply with CPUC General Order 95 and Cal-OSHA requirements. Climbing steps would not be installed on temporary 230 kV towers and the 69/138 kV steel poles would be considered non-climbable while the temporary 230 kV line is energized. While in this temporary configuration, maintenance would need to be performed from an aerial bucket. In addition, configuration of the temporary 230 kV would require that the 69 kV line (Tie Line 632) be removed from service. Because this 69 kV line is one of two power sources that serve the Granite Hills area, a replacement power source must be employed to deliver power to Granite Substation. An adjacent 69 kV line within the corridor (Tie Line 6914) would be temporarily interconnected between existing neighboring structures to ensure system reliability and provide power. Although no new structures are planned for this redirection of power, an overhead conductor would need to be reconfigured on two existing wood poles to facilitate the tap.

4. Environmental Analysis

The modifications to the originally approved project (approved project) would not create any new environmental impacts that require implementation of mitigation measures beyond those presented in the Final EIR. As discussed below, the modifications require only slight alterations to the issue area analyses that were presented in the Final EIR. Sections 4.1 through 4.12 provide the issue area analysis discussions, while Section 4.13 presents the EIR mitigation measures that are applicable to the proposed modifications.

4.1 Air Quality

Construction activities and equipment that would be required to temporarily replace the 69 kV conductor with the 230 kV conductor would not differ from those described in the Final EIR for the installation of the 138 kV/69 kV poles under the originally approved project. It is anticipated that installation of the proposed temporary wood poles would require use of drilling equipment, mobile cranes, and haul trucks. Emissions from this equipment would be practically identical to those that would occur for tower foundation and erection under the originally approved project. Localized short-term construction emissions would occur (Impact A-1), and implementation of Project Protocols (PP)-56 through PP-60 (see EIR Table D.2-6) and Mitigation Measures A-1a (suppress dust at all work or staging areas and on public roads) and A-1b (use low-emission construction equipment) would reduce potentially significant impacts during the construction phase to less than significant levels (Class II), similar to the project authorized in the Decision.

The proposed modifications to the originally approved project would not require a substantial change in daily construction activity. The activity needed to upgrade the existing 69/138 kV line to 230/138 kV (e.g., install conductor, longer pole arms, and temporary wood poles, etc.) would result in essentially

the same daily activities as those identified for the approved project. Although the proposed modifications would require a minor amount of additional excavation for the eight temporary wood pole installations, SDG&E has not proposed an increase in its daily level of activity. Therefore, it is reasonable to assume that this work would not raise the daily total emissions above the levels presented in Final EIR Table D.2-7. Impacts would remain less than significant with implementation of PP-56 through PP-60 and Mitigation Measures A-1a and A-1b (Class II).

4.2 Biological Resources

Biological impacts associated with the proposed modification not previously documented in the Final EIR would be limited to the construction of the temporary wood poles. A temporary 100 foot-by-100 foot work area would be needed for installation of each of the temporary wood poles. Appendix D to this Addendum (Figures 4-3, 4-8, 4-17, and 4-18) provides Draft EIR Appendix 1 Biological Resources Figures, revised to show the approximate locations of the temporary wood poles and their work areas.

Temporary wood poles T1, T2, and T3 would be located to the southeast of Miguel Substation in coastal sage scrub open space and their construction could potentially impact the California coastal gnatcatcher and other sensitive species' habitat (see Figure 4-3 in Appendix D). Temporary wood pole T3 would be located outside of the vegetation survey area for the approved project. Temporary wood poles T4 and T5 would be located in coastal sage scrub habitat north of Highway 94 in an area already designated by SDG&E to be a stringing/ snub site associated with the originally approved project. Temporary wood pole T6 would be located in coastal sage scrub habitat southwest of Lake Jennings Park Road. Temporary wood poles T7 and T8 would be located south of Los Coches Substation and east of Lake Jennings Park Road in coastal sage scrub habitat just north of an originally proposed string/snub site. The estimated temporary impact areas to Coastal Sage Scrub for each temporary wood pole that is listed in Table 4-1 are in addition to the impacted areas of the originally approved project.

Table 4-1.	Temporary Impacts to Coastal Sage
	Scrub from Wood Poles

Temporary Wood Pole	Impacted Area of CSS		
T1	0.23 acre		
T2	0.23 acre		
Т3	0.23 acre		
T4	0.06 acre		
T5	0.17 acre		
Т6	0.23 acre		
Τ7	0*		
Т8	0.03 acre		
Total	1.18 acres		

* Overlaps other impacts completely CSS refers to Coastal Sage Scrub. Source: SDG&E, 2004c

Coastal sage scrub is one of the two major shrub types that occur in southern California, occupying xeric sites characterized by shallow soils. Dominated by drought-deciduous shrub species with relatively shallow root systems and open canopies, coastal sage scrub communities often contain a substantial herbaceous component. This vegetation community is characterized by California sagebrush, flat-topped buckwheat, white sage (*Salvia apiana*), and laurel sumac. This habitat also supports a number of rare, threatened, or endangered species. Wildlife species most often associated with coastal sage scrub include several upland bird species, such as California towhee (*Pipilo crissalis*), spotted towhee (*Pipilo maculatus*), California thrasher (*Toxostoma redivivum*), Berwick's wren (*Thryomanes bewickii*), and western scrub-jay (*Aphelocoma californica*). The coastal California gnatcatcher, which is federally-listed as threatened, is strongly associated with sage scrub habitats. Scrub habitats also provide cover and forage for mammal species, including California ground squirrel and desert cottontail.

The disturbance to coastal sage scrub (Impact B-1) during construction of the temporary poles would be reduced to less than significant levels through the implementation of standards and procedures in SDG&E's Subregional Natural Community Conservation Plan (NCCP), which recommends avoidance, minimization, and/or mitigation for any potential impacts, and mitigation measures presented in the Final EIR. Specifically, Mitigation Measure B-1a (provide restoration/compensation for impacted sensitive vegetation communities) would reduce impacts relating to temporary loss of sensitive vegetation communities to less than significant levels. Impacts to sensitive wildlife species (Impact B-4), such as the California coastal gnatcatcher, would be reduced to less than significant levels with the implementation of Mitigation Measures B-4a (protect raptor nests), B-4b (protect coastal cactus wren and its habitat), B-4c (protect coastal California gnatcatcher and its habitat), B-4d (protect San Diego fairy shrimp and vernal pools, or provide compensation for impacts), B-4e (protect vernal pools), B-4f (protect quino checkerspot butterfly and its suitable habitat), and B-4g (protect quino checkerspot butterfly). Mitigation Measure B-5a (Protect project area from introduction or establishment of invasive species) would reduce impacts from invasive plant species (Impact B-5) related the construction of the temporary wood poles to less than significant levels (Class II).

In addition, potential indirect impacts from the construction of temporary wood poles could result in the same impacts and impact levels as those identified in the EIR for the approved project, including fugitive dust, human activity, decreased water quality (through sedimentation, urban contaminants, or fuel release, for example), and construction noise. These indirect impacts do not require additional mitigation to those already in place [i.e., Mitigation Measures B-4b (to protect coastal cactus wren and its habitat), B-4c (to protect coastal California gnatcatcher and its habitat), and B-7a (reduce night lighting on sensitive habitats)].

With the implementation of the mitigation measures certified in the Final EIR and the standards and procedures in SDG&E's NCCP, all impacts to biological resources associated with the construction of temporary wood poles would be reduced to less than significant levels (Class II) and the additional impacted areas associated with the temporary wood poles would not result in new or increased impacts beyond those defined in the Final EIR.

4.3 Cultural Resources

Ground disturbance associated with the proposed modification not previously documented in the Final EIR would be limited to the construction of the temporary wood poles. The locations of the eight temporary wood poles and their work areas were evaluated in order to determine potential for impacts to cultural resources. It was determined that no additional field work for cultural resources is required because seven of the eight temporary pole sites are within the existing survey corridor for the project where cultural surveys were previously performed. The one exception is temporary wood pole T3 that would be located on SDG&E owned property at Miguel Substation. This location was also previously surveyed in conjunction with additional field surveys as part of the original project analysis. Temporary wood poles T1 and T2 would be in the vicinity of an artifact and lithic scatter cultural resources site (SDI-4899), previously surveyed as part of the original project. Implementation of Final EIR Mitigation Measures C-1a (avoid all known cultural resources), C-1b (conduct construction monitoring within 150 feet of known cultural resources), C-1c (mark cultural resource boundaries), and C-1d (Evaluate cultural resources that cannot be avoided) at these two temporary poles sites would ensure that impacts to site SDI-4899 would be less than significant (Class II).

In addition to known cultural resource sites, buried or otherwise obscured cultural resources may be present in the area of the proposed temporary wood pole sites. Such previously undiscovered resources

could be damaged during construction of the temporary wood poles. However, implementation of Mitigation Measure C-2b, which requires construction monitoring to be conducted, would reduce potential impacts to previously undiscovered cultural resources to less than significant levels (Class II). Impact significance remains as that identified in the Final EIR, less than significant with implementation of Mitigation Measures C-1a through C-1d, and C-2b (conduct construction monitoring in the project area; Class II).

4.4 Geology, Soils, and Paleontology

Ground disturbance associated with the proposed modification not previously documented in the Final EIR would be limited to the construction of the temporary wood poles. Construction of the temporary wood pole foundations would occur in areas that may be prone to ground failure such as liquefaction and slope instability, erodible soil and potentially unstable earth materials (Impacts G-1, G-2, and G-3). However, given the temporary nature of the wood poles (less than 1.5 years), Mitigation Measures G-1a (geotechnical evaluations of ground stability), G-2a (geotechnical evaluations of ground stability and foundation design), and G-3a (soil erosion along maintenance roads) that require pre-design identification of geologic and soil conditions to evaluate each pole site to select foundation designs are not required to reduce ground failure impacts to less than significant levels. The potential impact associated with the temporary wood poles and ground failure is considered to be less than significant (Class III). However, the presence of erodible soil would require proper site restoration and implementation of Mitigation Measures G-3a and G-5a to reduce soil erosion impacts to less than significant (Class II). As under the originally approved project, access to maintenance roads would be restricted with the placement of devices to bar access by unauthorized vehicles (Mitigation Measure G-4a). Potential impacts to paleontological resources (Impact G-7) would be mitigated to less than significant levels (Class II) with implementation of Mitigation Measures G-7a (review of construction plans by paleontologist) and G-7b (paleontological training and monitoring). Impact significance would be less than significant (Class III) or would remain as that identified in the Final EIR, less than significant with implementation of Mitigation Measures G-3a, G-4a, G-5a, G-7a, and G-7b (Class II).

4.5 Hydrology and Water Quality

Ground disturbance associated with the proposed modification not previously documented in the Final EIR would be limited to the construction of the temporary wood poles. Impacts H-1 through H-4, and H-6 apply to the proposed modifications as described for the originally approved project in Final EIR Section D.6.3. No new impacts not identified in the project EIR would occur as a result of the proposed modification. Potential impacts associated with the modification include soil erosion, water quality degradation and sedimentation from construction activity and access roads (Impact H-1), degradation of water quality through spill of potentially harmful materials used in construction (Impact H-2), groundwater disturbance and water quality degradation through project-related excavation (Impact H-3), increased runoff from new impervious areas (Impact H-4), and construction in a potential dam inundation area (Impact H-6).

SDG&E has proposed PP-6, PP-11, PP-35, PP-38, PP-39, PP-40, PP-41, PP-52, and PP-55 to reduce the erosion and sedimentation from construction (Impact H-1). These measures require implementation of flood, erosion and sediment best management practices; avoidance of streambeds; obtaining NPDES clearance for construction activities; development of and adherence to a Storm Water Pollution Prevention Plan; avoidance of sensitive features including wetlands, waterbodies, and riparian areas; and development of and adherence to an Erosion Control and Sediment Transport Control Plan. The Project Pro-

tocols adequately address construction erosion issues associated with the proposed modifications; impact levels are the same as the approved project (Class III). As with the approved project, no additional mitigation is necessary to reduce impacts.

To reduce water quality impacts during construction (Impact H-2), SDG&E has proposed PP-6, PP-11, PP-16, PP-38, PP-39, PP-52, and PP-55, which specifically require the use of best management practices (BMPs) such as water bars, silt fences and staked straw bales, proper disposal of hazardous materials used in construction, development of and adherence to a construction SWPPP, avoidance of waterbodies and riparian areas where possible during construction, and compliance with RWQCB, USACE, and CDFG guidelines with regard to construction in or near waterbodies. The Project Protocols adequately address water quality issues associated with the proposed modifications; impact levels are the same as the approved project (Class III). As with the approved project, no additional mitigation is necessary to reduce impacts.

To reduce impacts to groundwater (Impact H-3), SDG&E has proposed PP-16, which calls for proper disposal of hazardous materials used in construction, would reduce the risk of introducing contaminants to groundwater. Further, the best management practices required by the proposed SWPPP (PP-38 and PP-39) would ensure proper construction techniques in groundwater areas. The Project Protocols adequately address ground water issues associated with the proposed modifications; impact levels are the same as the approved project (Class III). As with the approved project, no additional mitigation is necessary to reduce impacts.

The temporary pole foundations would add impervious surfaces to the project area causing a slight increase in runoff (Impact H-4); however, the overall runoff increase associated with the impervious surfaces would be negligible. This impact would be adverse, but less than significant (Class III).

With regard to impacts associated with dam inundation (Impact H-6), the temporary wood pole foundations within the dam inundation area near Los Coches Substation could be affected by flowing water, which would cause scour around the base of the poles. Since the risk of dam inundation is considered low, and adverse environmental consequences low, this impact would be considered adverse but less than significant (Class III).

4.6 Land Use and Recreation

Construction impacts to land use, recreation, and agriculture resulting from the implementation of the proposed modification between Miguel Substation and Los Coches Substation would not result in new impacts not identified in the project EIR for the approved project. Impacts would be similar to those identified for the originally approved project in Section D.7 of the Final EIR. Impact L-3 (disrupt an established land use), L-4 (substantially deteriorate a recreational facility), L-6 (convert farmland to non-agricultural use), and L-7 (conflict with an existing agricultural use or a Williamson Act contract) would be adverse, but less than significant (Class III), while Impacts L-1 (conflict with an applicable land use plan, policy, or regulation) and L-5 (disrupt recreational activities) would be potentially significant. Implementation of Mitigation Measures L-5a (avoid peak recreational usage) and L-5b (notify users of recreational resources) would reduce these impacts to less than significant levels (Class II). Implementation of these mitigation measures would ensure that impacts associated with the proposed modification would not result in higher impact levels than the previously approved project. Land Use impact significance levels associated with the proposed modification are consistent with findings identified in the Final EIR.

4.7 Noise and Vibration

Construction of the proposed modification would require short-term use of construction equipment. The noise levels of this equipment (e.g., drill rigs, cranes, etc.) are included in Final EIR Table D.8-2. Noise from work related to the proposed modification, including installation of the temporary wood poles would be similar to the noise necessary for installing the new 138 kV/69 kV poles of the originally approved project. Impacts N-1 (temporary increase in noise levels from construction activities) and N-2 (groundborne vibrations) would occur temporarily, and would adversely affect any sensitive receptors along the route. Implementation of PP-60 (minimizing construction equipment idling time) and Mitigation Measures N-1a (provide advance notice of construction) and N-1b (provide liaison for construction nuisance complaints) would reduce potentially significant noise and vibration impacts during the construction phase to a level that would be less than significant (Class II), consistent with the findings identified in the Final EIR.

Short-term operation of the transmission line at the proposed voltages would cause corona noise (Impact N-3) at levels that would be similar to that associated with the originally approved project. The estimated noise data associated with the proposed modification is presented below in Table 4-2. The table shows the estimated noise levels for the proposed changes as compared to the approved project. As identified in the Final EIR, the San Diego County Code of Regulatory Ordinances establishes a night-time limit of 45 dBA Leq. Although the average noise levels associated with the temporary change would be slightly elevated over those associated with the approved project, the baseline noise levels are low enough that the increase would be barely perceivable. The loudest corona noise level expected due to the proposed modification is approximately 36 dBA L_{50} (see Table 4-2), which would not likely exceed the County's Regulatory Ordinance. No new or additional noise impacts beyond those analyzed in the EIR would result from the proposed modification. Impacts would be less than significant (Class III).

		Approved	d Project	Proposed Changes	
Line Section	Edge of Right-of-Way	L₅₀ (rain) A-Weighted Sound Level (dBA)	L₅₀ (fair) dBA	L ₅₀ (rain) A-Weighted Sound Level (dBA)	L₅₀ (fair) dBA
A2	West	34.7	9.7	35.3	10.3
	East	31.9	6.9	35.6	10.6
B1	West	35.2	10.2	34	9
	East	33.7	8.7	35.5	10.5
B2	West	35.4	10.4	35	10
	East	33.1	8.1	36.1	11.1

Table 4-2. Estimated Noise Levels of the Proposed Changes

Source: SDG&E, 2004c

4.8 Public Health and Safety

Hazardous Materials. As discussed in the Final EIR, the Helix Water District, Levy Treatment Facility site is located just north of temporary wood poles T7 and T8 at 9738 Lake Jennings Park Road along the project route. These tank sites have no known contamination issues and would have only minor potential to environmentally impact the construction of the approved project or additional work related to the construction of temporary wood poles T7 and T8.

However, unexpected soil and or groundwater contamination could be encountered during excavation activities for the construction of temporary wood poles (Impact H-1). This could result in exposure of

workers or the public to hazardous materials. This impact would be less than significant with implementation of Mitigation Measure HZ-1a (Class II; observation of soil for contamination) and the environmental hazardous materials training committed to by the Applicant (PP-7).

During construction, hazardous materials such as vehicle fuels, oils, and other vehicle maintenance fluids would be used and stored in construction staging yards. Spills of hazardous materials during construction activities could potentially cause soil or groundwater contamination (Impact H-2). SDG&E Project Protocols and Mitigation Measure HZ-2a (review of training and response plan) would ensure that impacts would be reduced to less than significant levels (Class II). Overall, impacts from hazardous materials would be less than significant and no changes to impact significance levels would occur with the additional work documented in this addendum.

Electric and Magnetic Fields. As shown in Table 4-3, the temporary configuration, like the final configuration, would provide significant reductions in magnetic field levels from the existing configuration. Overall magnetic field levels would be reduced 73% (from 71.69 mG to 19.08 mG) from the existing to the temporary configuration. Data presented in Table 4.3 are based on peak system operations. Implementation of the proposed modification would result in a temporary beneficial impact (Class IV) with regard to EMF levels.

	Existing Config (mG)		MM2 Temporary (mG)		MM2 Final (mG)	
Segment	Left ROW	Right ROW	Left ROW	Right ROW	Left ROW	Right ROW
A1	55.13	94.97	22.67	34.59	35.53	18.88
A2	55.13	94.97	1.47	8.07	17.91	6.08
A3	53.88	62.14	1.47	8.07	17.91	6.08
B1	49.77	110.93	25.75	18.99	18.43	13.11
B2	49.26	109.82	25.60	22.05	17.61	14.70
B3	85.32	97.98	33.77	22.89	37.28	18.05
C1	54.61	58.05	35.68	15.63	29.08	14.72

 Table 4.3. Estimated EMF Levels Associated with the Existing, Temporary, and Final Configurations

Source: SDG&E, 2004b

4.9 Public Services and Utilities

Ground disturbance associated with the proposed modification not previously documented in the Final EIR would be limited to the construction of the temporary wood poles. The installation of the temporary wood poles would require drilling and excavation. It is possible that buried utility lines (e.g., water, sewer, electricity, natural gas, telecommunications, etc.) share the proposed ROW with existing transmission lines or run perpendicular to the proposed ROW in the area of the temporary wood poles. Therefore, there could be a potential for utility service interruptions during drilling and excavation activities associated with the construction of temporary wood poles (Impact U-1). Since temporary wood pole construction would not require continuous trenching and would occur in only eight locations, potential for accidental disruption of utilities is relatively low. In addition, identified in PP-66, the Applicant is required by State law to contact Underground Service Alert and manually probe for existing buried utilities in the Proposed Project corridor prior to any powered-equipment drilling or excavation. After probing for existing utilities, exact placement of the temporary wood poles would be determined so that they would not conflict with other co-located utilities. Same as for the approved project, this Project Protocol would reduce potential impacts to a less than significant level (Class III). Therefore, the impact level would be the same as that for the approved project.

Fire protection or other emergency service providers could be required at a project construction site in the event of a construction accident. However, the likelihood of an accident requiring such a response would be low. Therefore, the installation of the temporary wood poles would not likely affect the service capacities of local fire departments. Regardless, Mitigation Measure U-2a (maintain adequate emergency vehicle access) would ensure that impacts would be less than significant (Class II). The impact level would be the same as that for the approved project.

Construction of the temporary wood poles would require some additional water for dust suppression because of the excavation activities for temporary pole placement. Small amounts of construction waste and construction debris and minimal wastewater would also be generated. Impacts on utility and service provider demands (Impact U-3) associated with water supply, wastewater facilities, area landfills, and police and fire service would be adverse but less than significant (Class III). There would be no impacts to existing schools, fire, or police department service capabilities because there would be no increase in the local population. Public service and utilities impact significance levels associated with the proposed modification are consistent with findings identified in the Final EIR.

4.10 Socioeconomics

The proposed modification documented in this addendum would require a limited amount of additional construction activities due to the construction of temporary wood poles. However the additional work is expected to be consistent with the originally approved project schedule, no additional crewmembers would be necessary for construction of the temporary wood poles, and no new personnel would be necessary to operate or maintain the route. Therefore, no population growth would occur (Impact S-1), no new housing would be needed for this additional work (Impact S-3), no housing would be displaced (Impact S-4), and no new competition for existing housing would be likely to occur (Impact S-5). Need for temporary accommodations could occur during construction (Impact S-3), but any impacts would be less than significant (Class III) and would not be different from the approved project as defined in the Final EIR.

4.11 Transportation and Traffic

There are two major roadways that would be in the vicinity of the temporary wood pole construction. The proposed modification includes an overhead crossing of State Route (SR) 94, a two-lane undivided roadway, just south of temporary wood poles T4 and T5. Average daily traffic in 2002 on SR 94 between SR 54 and Steele Canyon Road was 20,600 trips. It should be noted that this crossing would also be required under the originally approved project.

In addition, Lake Jennings Park Road is east of the proposed location of temporary wood pole T6 and east of temporary wood poles T7 and T8, separated by the Helix Water District, Levy Treatment Facility in the community of Lakeside. Lake Jennings Park Road is classified as Major Arterial in the County of San Diego Circulation Element and is part of the County of San Diego's bicycle network system.

Construction of the eight temporary wood poles would require short-term construction activities similar to the activity associated with the approved project and there would be no change in impact significance or the originally approved project schedule as defined in the Final EIR. As with the approved project, this additional construction would have the potential to adversely impact transportation and traffic through temporary road closures and additional construction traffic. Also, as with the approved project, all construction related impacts (Impacts T-1 through T-6) would be reduced to less than significant

levels through implementation of Mitigation Measures T-1a (prepare traffic control plans), T-1b (restrict time of lane closures), T-3a (repair damaged roadways), T-4a (pedestrian and bicycle circulation and safety), and T-5a (ensure emergency response access) (Class II/Class III). Therefore, the transportation impact levels associated with the proposed modifications would be the same as those for the approved project.

4.12 Visual Resources

The primary visual resource concerns for the project modifications are caused by use of a bundled conductor rather than a single conductor for the temporary portion of the 230 kV circuit. The additional modification to the Miguel-Mission Project would require the lengthening of the arms on one side of six steel poles intended to accommodate operation of the 230 kV line. The proposed changes to the arm lengths range from 1.5 feet to 2.5 feet. Longer cross-arm length is required to provide sufficient clearance between conductors and structures to meet CPUC General Order 95 clearance regulations. The project modifications that would be permanent include larger insulators, six longer arms, and bundled conductors that would remain after the temporary 230/138 kV lines have been returned to 69/138 kV. The eight temporary wood poles would be removed, once the permanent Miguel-Mission 230 kV line is energized. Thus the eight temporary wood poles would result in negligible, less than significant impacts (Class III).

Figure E-1 in Appendix E shows a visual simulation of the temporary 230 kV line with bundled wire installed on one side of the steel poles. It does not portray differences in arm length or insulator size, which would have only minor visual effects. Figure E-2 in Appendix E illustrates the same scenario but with a single wire, which represents the SDG&E project as approved. Because SDG&E has not yet completed the process of installing the 69/138 kV pole relocations for the approved project, the poles depicted in Figures E-1 and E-2 are simulated. The Final EIR analyzed the relocated 69/138 kV pole line with single conductors at each phase position.

Overall, this alternative would predominantly result in visual changes that would be similar to, or slightly greater than, the visual effects of SDG&E's approved project in the area. Based on a comparison of the visual simulations, the additional visual impact from the proposed bundled conductors is imperceptible, and represents a negligible change in Impacts V-1 through V-5, as defined below and identified in the Final EIR.

- V-1: Short-Term Visibility of Construction Activities and Equipment
- V-2: Long-Term Visibility of Upgraded/New 230 kV Structures
- V-3: Long-Term Visibility of New 138 kV/69 kV Mono-Pole Structures
- V-4: Long-Term Visibility of New 230 kV Conductors
- V-5: Long-Term Damage to Landscape Resources from Maintenance Activities

The long-term effect of maintenance activities on adjacent landscape resources does not change with the bundled conductor because the maintenance required of the bundled conductors would be the same as that required of the single conductor.

With implementation of Mitigation Measures V-1a (reduce visibility of construction activities and equipment), V-4a (reduce potential for visual impacts due to view obstructions), and V-5a (reduce direct impacts to, and visual degradation of, exotic landscapes and natural scenic areas for the life of the project), all impacts would remain less than significant with the larger insulators, longer arms, and bundled conductors. Thus, no new or more significant visual impacts than those previously analyzed in the Final EIR would occur as a result of the additional work included in this addendum.

4.13 EIR Mitigation Measures

Table 4.4 presents the Miguel Mission Project EIR mitigation measures that are applicable to the proposed modifications. Implementation of these mitigation measures is required to ensure that impacts associated with the proposed modifications are not increased over those identified in the project EIR for the approved project.

Table 4-4. Mitigation Measures Presented in the Project EIR, Applicable to the Proposed Modifications

MM No.	Mitigation Measure
A-1a	Suppress dust at all work or staging areas and on public roads. SDG&E shall (1) pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas if activity causes persistent visible emissions of fugitive dust beyond the work area; and (2) sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.
A-1b	Use low-emission construction equipment. SDG&E shall (1) use diesel engines that meet, at a minimum, 1996 CARB or U.S. EPA certified standards for off-road equipment that has a rating of more than 100 horsepower, or install high-pressure diesel injectors and retard the injection timing on any off-road equipment that was manufactured prior to 1996; (2) maintain construction equipment per manufacturing specifications; and (3) substitute small electric-powered equipment for diesel- and gasoline-powered construction equipment where feasible.
B-1a	Provide restoration/compensation for impacted sensitive vegetation communities. SDG&E shall implement the following in addition to PP-1 and PP-41:
	1. Where impacts to chamise chaparral, coastal sage scrub (including disturbed), maritime succulent scrub, and annual grasslands cannot be avoided, SDG&E shall either restore temporarily disturbed areas to pre-construction conditions following construction or deduct from the SDG&E Mitigation Credits, as stated in the SDG&E NCCP. Where onsite restoration is planned for mitigation of temporary impacts to sensitive vegetation communities, the Applicant shall identify a Habitat Restoration Specialist to be approved by the CPUC to determine the most appropriate method of restoration. Restoration techniques can include: hydroseeding, hand-seeding, imprinting, and soil and plant salvage, as discussed in Section 7.2.1 of the NCCP.
	Monitoring would include visual inspection of restored areas after one year. A second application may be made. If, after the second year, restoration is deemed unsuccessful, the USFWS and CDFG, in cooperation with SDG&E, shall determine whether the remaining loss shall be mitigated through a deduction from the SDG&E Mitigation Credits, or a third application would better achieve the intended purpose. The mitigation objective for impacted sensitive vegetation communities shall be restoration to pre-construction conditions as measured by species cover, species diversity, and exotic species cover. The cover of native species should increase while the cover of non-native or invasive species should decrease. Success criteria shall be established by comparison with reference sites. If, however, roots are not grubbed during temporary impacts, restoration/hydroseeding may not be necessary. This applies to impacts greater than 500 square feet, and only where grubbing occurred. For all temporary impacts greater than 500 square feet, areage not meeting success criteria shall be deducted from SDG&E's mitigation credits at a 1:1 ratio.
	2. Based on information provided in the biological technical report (RECON, 2004), the total acreage requiring resto- ration for temporary impacts is 75.23 acres (Table D.3-5). The total acreage of permanent impact mitigation is 13.89 acres, which must be subtracted from SDG&E's mitigation bank credit. These totals included impacts to vegetation communities for the coastal California gnatcatcher and quino checkerspot butterfly.
B-4a	Protect raptor nests.
	 Prior to construction, SDG&E shall remove all existing raptor nests from structures that would be affected by project construction.
	2. Removal of nests shall occur outside the raptor breeding season (January to July).
	 If it is necessary to remove an existing raptor nest during the breeding season, a qualified biologist, approved by the CPUC prior to the start of construction, shall survey the nest prior to removal to determine if the nest is active. If

CPUC prior to the start of construction, shall survey the nest prior to removal to determine if the nest is active. If the nest is inactive, it shall be removed promptly. If a nest is determined to be active, the nest shall not be removed and the biologist shall monitor the nest to ensure nesting activities/breeding activities are not disrupted. If the biological monitor determines that project activities are disturbing or disrupting nesting activities, the monitor shall make feasible recommendations to reduce the noise and/or disturbance in the vicinity of the nest.

MM No.	Mitigation Measure
B-4b	Protect coastal cactus wren and its habitat.
	1. SDG&E shall implement PP-43.
	2. All grading or brushing of maritime succulent scrub, habitat for the coastal cactus wren, shall be conducted from September through February, which is outside the coastal cactus wren breeding season. Grading, brushing, and any other project activity shall avoid impacting cactus patches within proximity to coastal cactus wren populations and/or that provide suitable nesting habitat for the coastal cactus wren.
	When conducting project activities during the coastal cactus wren breeding season of March through August, within maritime succulent scrub habitat, the following avoidance measures shall apply:
	(a) A qualified biologist shall survey for coastal cactus wren within one week prior to initiating project activities in an area.
	 If coastal cactus wrens are present but not nesting, a qualified biologist shall survey for nesting coastal cactus wrens once per week in the vicinity of project activities, for the duration of the activity in that area.
	 If an active coastal cactus wren nest is located in the vicinity of project activities, a biologist qualified for coastal cactus wren nest monitoring shall monitor the nest daily until either project activities are no longer in the vicinity of the nest, or the fledglings become independent of their nest.
	(b) If the coastal cactus wren nest monitor determines that project activities are disturbing or disrupting the nesting activities of an active nest, the monitor shall make feasible recommendations to reduce the noise and/or disturbance in the vicinity. This may include recommendations such as, but not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nesting coastal cactus wren and the project activities, and working in other areas until the young have fledged.
	 Consultation with USFWS and CDFG would occur in accordance with the SDG&E NCCP and is required prior to undertaking any activity that would impact nesting birds in order to agree on specific suitable actions.
B-4c	Protect coastal California gnatcatcher and its habitat.
	1. SDG&E shall implement PP-43.
	 All grading or brushing taking place within coastal sage scrub, disturbed coastal sage scrub, or maritime succulent scrub, habitats of the coastal California gnatcatcher, shall be conducted from September through February, which is outside the coastal California gnatcatcher breeding season.
	3. When conducting all other project activities during the coastal California gnatcatcher breeding season of March through August, within habitat in which coastal California gnatcatchers are known to or have a high potential to occur, the following avoidance measures shall apply:
	(a) A qualified biologist shall survey for coastal California gnatcatchers within one week prior to initiating project activities in an area.
	 If coastal California gnatcatchers are present, but not nesting, a qualified biologist shall survey for nesting coastal California gnatcatchers approximately once per week in the vicinity of project activities, for the duration of the activity in that area.
	 If an active coastal California gnatcatcher nest is located in the vicinity of project activities, a biologist qual- ified for coastal California gnatcatcher nest monitoring shall monitor the nest daily until either project activities are no longer in the vicinity of the nest or the fledglings become independent of their nest.
	(b) If the coastal California gnatcatcher nest monitor determines that the project activities are disturbing or disrupt- ing the nesting activities, the monitor shall make feasible recommendations to reduce the noise and/or disturbance in the vicinity. This may include recommendations such as, but not limited to, turning off vehicle engines and other equipment when ever possible to reduce noise, installing a protective noise barrier between the nesting coastal California gnatcatchers and the project activities, and working in other areas until the young have fledged.
	 Consultation with USFWS and CDFG would occur in accordance with the SDG&E NCCP prior to undertaking any activity that would impact nesting birds in order to agree on specific suitable actions.

MM No.	Mitigation Measure
B-4d	Protect San Diego fairy shrimp and vernal pools, or provide compensation for impacts.
	1. Prior to construction, SDG&E's biological monitor (to be approved by the CPUC prior to the start of construction) shall clearly flag and stake all vernal pools and depressions within access roads to help minimize project impacts including, but not limited to, the following areas: the access road between Calle de Vida and Tower #873081; southern section of the loop road between Towers #579861 and #731171; and the depression immediately west of Tower #731172. In addition to vehicles being restricted from these areas, crewmembers on foot shall also avoid these areas.
	A preconstruction environmental training session shall be conducted by a qualified biologist for the construction crew before reconductoring activities occur to inform them of project-specific constraints and to educate them on covered species and sensitive resources at the project site.
	 A qualified biologist shall be present during all activities being conducted within the access routes to Towers #873081, #873072, #579861, and #731172 to monitor and assist the crew to minimize project impacts.
	 If the alternate access route to Tower #873072 and its associated stringing site is feasible, and approval from MCAS Miramar, USFWS and CDFG is granted, this route shall be used for all project activities associated with Tower #873072 including its stringing site.
	5. Access roads to Towers #873081, #873072, #579861, and #731172 shall be used only when the roads and depressions are completely dry, preferably during the dry season (typically April through November). If Towers #873081, #873072, #579861, and #731172 must be accessed while any portion of the depressions within the roads are wet, metal plating or bridging shall be placed over the depressions to prevent alteration of the depression topography, hydrology, and impacts to San Diego fairy shrimp.
	6. Assuming that the vehicles required for reconductoring have adequate space to turn around within the access road or adjacent spur roads near Tower #873081, this tower shall be accessed only from Tierrasanta Boulevard, instead of Calle de Vida to prevent driving through the depression north of this tower. If space is not adequate for turning around the reconductoring vehicles, the recommendations above (Items 3 through 5) shall be followed.
	 The depression immediately west of Tower #731172 shall be avoided to prevent impacts to potential San Diego fairy shrimp habitat. Reconductoring vehicles shall park far enough away from this tower to avoid effects on the depression.
B-4e	Protect vernal pools.
	If use of alternative routes is feasible:
	 Old routes and roads shall be blocked from use to allow for the recovery of natural vegetation. In some cases, restoration of vernal pools and/or habitat in abandoned roads may be appropriate.
	If use of alternative routes is not feasible and impacts to San Diego fairy shrimp and vernal pools are unavoidable:
	2. In lieu of the requirement defined in Item 5 of Mitigation Measure B-4d, SDG&E shall clearly define and improve exist- ing access roads (elevate and crown with appropriate material) and permanently maintain these access roads to prevent ponding, thereby precluding native plant and animal species from being established in the road beds. As such, appropriate mitigation for temporary and permanent impacts to San Diego fairy shrimp and vernal pools within the access roads shall be developed in coordination with the USFWS and CDFG.
	3. The mitigation program required by USFWS and CDFG is expected to include a quantification of project impacts,

3. The mitigation program required by USFWS and CDFG is expected to include a quantification of project impacts, a mitigation ratio of 2:1 for vernal pool surface area impacts that do not support sensitive species, a mitigation ratio of 3:1 for vernal pools that do support listed, covered, and/or sensitive species, implementation of a vernal pool restoration plan on an area with appropriate soils, and maintenance and monitoring for five years.

MM No.	Mitigation Measure
B-4f	Protect quino checkerspot butterfly and its suitable habitat.
	1. SDG&E shall implement PP-42.
	 Prior to construction, SDG&E shall clearly stake the boundaries of all actual construction sites at existing structures, new structures sites, stringing, snub, and staging areas in quino checkerspot butterfly habitat.
	 A preconstruction environmental training session shall be conducted for the construction crew before vegetation and ground clearing activities occur to inform them of project-specific constraints and to educate them on covered species and sensitive resources at the project site.
	 If the project is to be implemented in the summer or fall of 2004, adult flight season surveys shall be conducted in the spring of 2004 to observe any changes in habitat or additional quino checkerspot butterfly locations.
	5. The staked construction sites at existing structures, new structure sites, stringing, snub, and staging areas from Tower #675995 to Tower #675984 shall be resurveyed and reassessed for potential impacts to quino checkerspot butterfly after the sites have been staked but prior to grading and grubbing activities. Estimated impacts to quino checkerspot butterfly habitat shall also be recalculated based on the boundaries of the staked construction sites.
	 If feasible, grading and grubbing activities shall occur between June 1 and October 15, which is outside of the quino checkerspot butterfly larval and adult activity season.
	7. If grading and grubbing activities occur during the quino checkerspot butterfly larval and adult activity season (October 16 through May 31), a qualified quino checkerspot butterfly biologist shall survey the area prior to grading activities. If the adult flight season has not begun, according to USFWS Survey Protocol (2002), a qualified larval quino checkerspot butterfly biologist shall survey the area for larval quino checkerspot butterfly prior to grading and grubbing activities. As post-diapause larvae may also be present during the adult flight season, larval surveys may also be necessary concurrent with the adult flight season. If egg clusters, larvae, and/or adults are present within the impact area, and impacts to these individuals are unavoidable, the USFWS shall be contacted to determine whether the quino checkerspot butterfly shall be salvaged or relocated.
	 A qualified biologist shall be present during grading and grubbing activities to monitor and assist the grading and grubbing crew to ensure project impacts only occur within the staked construction work sites.
	 The San Diego National Wildlife Refuge shall be notified prior to project activities occurring at New Structure Site #30 and Tower #675995 through New Structure Site #161 and Tower #675987.
	10. Activities occurring at a time when diapause quino checkerspot larvae could be present shall either (1) avoid dis- turbance within 10 meters of primary host plants (identified during the 2004 adult flight season survey) within occupied habitat, or (2) a biologist qualified to identify diapause quino checkerspot butterfly larvae should conduct surveys within 10 meters of primary host plants prior to project activities.
B-4g	Protect quino checkerspot butterfly.
	 A qualified biologist shall identify "suitable quino habitat" any time of the year, but prior to clearing and grubbing. "Suitable quino habitat" is defined as "shrub communities such as coastal sage scrub, chaparral, and desert scrub with 50 percent shrub cover or less and the potential to support dot-seed plantain or other larval host plants" (RECON, 2000).
	If suitable habitat is identified within the project footprint, and the Proposed Project would not avoid impacts to all suitable habitat, then adult flight season surveys shall be conducted.
	(a) If no quino are detected, project activities may proceed and SDG&E shall mitigate at a 1:1 ratio for all impacts to suitable habitat.
	(b) If quino are detected and the impact to "non-excluded area" as defined in the USFWS Adult Flight Season Survey Protocol (2002) is less than one acre, then SDG&E shall mitigate for all impacts to all non-excluded areas at a 2:1 ratio.
	(c) If impacts to non-excluded areas are greater than or equal to one acre, the USFWS and CDFG approval is necessary. If project constraints do not allow for a 2004 adult flight season survey, then the non-excluded area shall be assumed to be occupied and protocols shall follow those specified above.
	 Based on information provided in the biology technology report (RECON, 2004), the currently anticipated mitiga- tion requirement for temporary impacts is 6.18 acres and the mitigation requirement for permanent impacts is 0.90 acres, resulting in a total mitigation requirement of 7.08 acres. These numbers may change based on new surveys in 2004.

MM No.	Mitigation Measure
B-5a	Protect project area from introduction or establishment of invasive species. SDG&E shall prevent invasion of invasive, non-native plant species into sensitive plant species habitats and vegetation types by:
	• Existing vegetation shall be cleared only from areas scheduled for immediate construction work (within 10 days) and only for the width needed for active construction activities with one exception: If the grading within the 10-day window would occur during a time frame which prohibits grading in certain areas for specific species (e.g., coastal California gnatcatcher) then grading may occur outside the 10-day window, in which case, SDG&E would immediately implement appropriate erosion control measures and commence work as soon as possible.
	 During construction, the upper 12 inches of topsoil (or less depending on existing depth of topsoil) shall be salvaged and replaced wherever the transmission line is trenched through open land (not including graded roads and road shoulders)
	 Disturbed soils shall be revegetated with an appropriate seed mix that does not contain invasive, non-native plant species.
B-7a	Reduce night lighting on sensitive habitats. Exterior lighting within the project area adjacent to preserved habitat shall be of the lowest illumination allowed for human safety, selectively placed, shielded, and directed away from preserved habitat to the maximum extent practicable.
C-1a	Avoid all known cultural resources. In addition to avoiding cultural resources located along access roads and structure locations, SDG&E shall avoid, if feasible, all cultural resources located in staging areas, stringing sites, substations, and other areas subjected to ground-disturbing construction operations.
C-1b	Conduct construction monitoring within 150 feet of known cultural resources. All ground-disturbing activities within 150 feet of a known cultural resource shall be monitored. Cultural resources discovered during monitoring shall be evaluated to determine if they are historical resources or unique archaeological resources. The effect of the project on historical resources or unique archaeological resources identified by evaluation shall be determined and appropriate mitigation measures developed. Determination of project effects shall include consideration of effects from future maintenance operations.
C-1c	Mark cultural resource boundaries . All known historical resources and potential historical resources within 150 feet of any construction area shall be clearly marked with highly visible temporary markers prior to construction. All marking shall be removed during cleanup and restoration. Cultural resources determined ineligible for listing in the CRHR or determined to be nonunique archaeological resources do not require avoidance. Ineligible resources include: (1) cultural resources that have been formally evaluated and determined ineligible for listing in the CRHR; (2) cultural resources destroyed by past development; and (3) isolated artifacts.
C-1d	Evaluate cultural resources that cannot be avoided. All cultural resources that cannot feasibly be avoided shall be evaluated. The effect of the project on historical resources or unique archaeological resources shall be assessed and appropriate mitigation measures developed. Assessment of project effects shall also include effects from future maintenance operations. A data recovery plan shall be developed pursuant to the provisions of CCR 15126.4(b)(3)(C) when data recovery excavation is chosen as mitigation of project effects. Any data recovery plan developed pursuant to this mitigation measure shall be fully implemented prior to and during construction or maintenance activities that cause adverse effects.
C-2b	Conduct construction monitoring in the project area . All ground-disturbing activities in the project area, except those occurring in disturbed areas where the underlying intact sediments predate the late Pleistocene/Holocene transition, shall be monitored. The project archaeologist shall have discretion to exclude areas from monitoring or to terminate monitoring when field conditions show a low likelihood for the presence of intact archaeological deposits. Cultural resources discovered during monitoring shall be evaluated to determine if they are historical resources or unique archaeological resources. The effects of the project on evaluated historical resources or unique archaeological resources shall be determined and appropriate mitigation measures developed and implemented. Determination of project effects shall also include effects from future maintenance operations.
G-3a	Soil erosion along maintenance roads. Soil erosion along the maintenance roads shall be minimized through con- struction of water bars, grading road surfaces to direct flow away from natural slopes, and through the consistent main- tenance of roads and culverts to maintain appropriate flow paths. Silt fences and straw bales shall be installed as appropriate prior to construction, but shall be removed to restore natural drainage during the cleanup and restoration phase of the project.

MM No.	Mitigation Measure
G-4a	Restrict access to maintenance roads. To prevent erosion caused by unauthorized use of the maintenance roads by the general public, access to maintenance roads shall be restricted with devices that effectively bar access by unauthorized vehicles.
G-5a	Foundations in unstable slopes or erodible soils. A geologist and geotechnical engineer should evaluate the placement of towers on mesas, ridges, slopes, spurs, and in or near active streambeds. Their analyses shall describe the geologic stability and make recommendations for the best foundation type and depth for the local conditions.
G-7a	Review of construction plans by paleontologist. A qualified paleontologist shall review the project and provide an opinion of which geologic units are classified as sensitive in terms of paleontologic sensitivity. The findings of the paleontologist shall be used to organize paleontologic monitoring in sensitive units (pursuant to Mitigation Measure G-7b) as well as to identify potential areas of avoidance for new access road construction and construction laydown areas.
G-7b	Paleontological training and monitoring. A qualified paleontologist familiar with the results of the findings of G-7a shall be employed to help implement the paleontological portion of the environmental training program for construction workers. All employees involved with earthmoving during the primary project construction shall receive this training and shall be instructed as to the laws regarding the protection of paleontologic resources. The paleontologist or qualified monitors selected by the paleontologist shall also monitor excavations and drilling for new footings or foundations in sensitive geologic units at the Miguel Substation and along the route west of Eucalyptus Hills (Valle Vista Road). Where fossil finds have been disturbed due to excavation or road grading, the fossils should be collected (salvaged) and prepared for curation with a public museum that has a paleontologic collection. The paleontologist should sample the excavation spoils pile for both mega fossils (can be seen by the naked eye) and microfossils (very tiny fossils that must be retrieved through wet or dry screening of fine-grained samples). The Society of Vertebrate Paleontologic monitoring shall be presented in a final paleontologic report following completion of the primary project. The report will be held confidential to protect the locations of paleontological resources. A copy of the confidential report and all paleontologic finds from the project shall be donated to a curating museum.
L-5a	 Avoid peak recreational usage. SDG&E shall not schedule construction during times of peak usage (as defined by and coordinated with recreational facility operators) at the following recreational areas: All Class II Bikeways Cottonwood at Rancho San Diego Golf Club Lake Jennings County Park San Diego River Louis A. Stelzer County Park Santee Lakes Regional Park and Campground Mission Trails Regional Park Admiral Baker Golf Course Any other recreational resource the CPUC determines to be impacted by construction. If the CPUC determines another recreational resource is being impacted during peak recreational hours, SDG&E shall reschedule the appropriate construction activities such that they occur outside times of peak usage (i.e., as defined by and coordinated with recreational facility operators).
L-5b	 Notify users of recreational resources. During construction, SDG&E shall provide appropriate notice to all affected recreationists by doing the following: Onsite notification of recreational access closures at least thirty days in advance, through the posting of signs and/or other notices at all public entrances and/or other areas of high visibility (i.e., visitors' center, clubhouse, etc.); and Public notification through community newspapers and bulletins.
N-1a	Provide advance notice of construction. SDG&E or its construction contractor shall provide advance notice, between two and four weeks prior to construction, by mail to all sensitive receptors and residences within 300 feet of construction sites, staging areas, and access roads. The announcement shall state specifically where and when construction will occur in the area. If construction delays of more than 7 days occur, an additional notice shall be made, either in person or by mail. Notices shall provide tips on reducing noise intrusion, for example, by closing windows facing the planned construction. SDG&E shall also publish a notice of impending construction in local newspapers, stating when and where construction will occur.

MM No.	Mitigation Measure
N-1b	Provide liaison for construction nuisance complaints. SDG&E shall identify and provide a public liaison person before and during construction to respond to concerns of neighboring receptors, including residents about construction noise disturbance. Procedures for reaching the public liaison officer via telephone or in person shall be included in notices distributed to the public in accordance with Mitigation Measure N-1a. SDG&E shall also establish a toll-free telephone number for receiving questions or complaints during construction and develop procedures for responding to callers (procedures to be approved by the CPUC).
HZ-1a	Observation of soil for contamination. During trenching, grading, or excavation work for the Proposed Project, the contractor shall observe the exposed soil for visual evidence of contamination. If visual contamination indicators are observed during construction, the contractor shall stop work at the location of the discovery until the material is properly characterized and appropriate measures are taken to protect human health and the environment. The contractor shall comply with all local, State, and federal requirements for sampling and testing, and subsequent removal, transport, and disposal of hazardous materials. In the event contaminated groundwater is encountered, the contractor shall comply with all applicable regulations and permit requirements. This may include laboratory testing, treatment of contaminated groundwater, or other disposal options.
	If contamination is observed, the contractor shall document the exact location of the contamination and shall immediately notify the CPUC's Environmental Monitor, describing proposed actions. These actions shall be consistent with the Hazardous Substance Control and Emergency Response Plan submitted per PP-32. A weekly report listing encounters with contaminated soils and describing actions taken shall be submitted to the CPUC.
HZ-2a	Review of training and response plan. The Environmental Training, and Hazardous Substance Control and Emergency Response Plan required by PP-7 and PP-32 shall be reviewed and approved by the CPUC and San Diego County Department of Environmental Health, Hazardous Materials Division.
U-2a	Maintain adequate emergency vehicle access. SDG&E shall coordinate with appropriate permitting agencies for review and approval of Proposed Project traffic control plans and any required protocols to maintain adequate emergency vehicle access when crossing existing roadways. These protocols (usually from the Work Area Protection and Traffic Control Manual) would help ensure use of highly visible warning signs, flaggers, barricades, flashers, or traffic cones to give advance warning, and use of channelization devices to define traffic lanes through the work zone and separate opposing lanes of traffic. Flaggers shall wear approved warning garments and follow standard flagging procedures. SDG&E shall provide to the CPUC evidence of its Traffic Control Plan for the Proposed Project and any associated permits with regard to emergency vehicle access upon approval and receipt from appropriate permitting agencies.
T-1a	Prepare traffic control plans. Prior to the start of construction, SDG&E shall submit traffic control plans to all agencies with jurisdiction of public roads that would be affected by construction activities. The traffic control plans shall define the locations of all roads that would need to be temporarily closed due to construction activities, including hauling of oversized loads by truck and conductor stringing activities.
T-1b	Restrict time of lane closures. SDG&E shall restrict all necessary lane closures or obstructions on major roadways associated with overhead construction activities to off-peak periods to mitigate traffic congestion and delays. Lane closures must not occur between 6:00 and 9:00 a.m. and between 3:30 and 6:30 p.m., or as directed by the appropriate jurisdictional agency.
T-3a	Repair damaged roadways. If damage to roads and sidewalks occurs, SDG&E shall coordinate repairs with the affected public agencies to ensure that any impacts to area roads are adequately repaired. Roads disturbed by construction activities or construction vehicles shall be properly restored to ensure long-term protection of road surfaces. Care shall be taken to prevent damage to roadside drainage structures. Roadside drainage structures and road drainage features (e.g., rolling dips) shall be protected by regrading and reconstructing roads to drain properly. Said measures shall be incorporated into an access agreement/easement with the applicable governing agency prior to construction.
T-4a	Pedestrian and bicycle circulation and safety. Where construction will result in temporary closures of sidewalks and other pedestrian facilities, SDG&E shall provide temporary pedestrian access, through detours or safe areas along the construction zone. Any affected pedestrian facilities and the alternative facilities or detours that shall be provided will be identified in the Traffic Management Plan (TMP). Where construction activity will result in bike route or bike path closures, appropriate detours and signs shall be provided. Where trenching will affect bicycle travel on streets without bicycle facilities, requirements for plates to cover trenches will be in accordance with the permit requirements of the local jurisdiction.

MM No.	Mitigation Measure
T-5a	Ensure emergency response access. SDG&E shall coordinate in advance with local jurisdictions to avoid restricting move- ments of emergency vehicles. SDG&E shall request that police departments, fire departments, ambulance services, and paramedic services be notified in advance by each jurisdiction of the proposed locations, nature, timing, and dura- tion of any construction activities and advised of any access restrictions that could impact their effectiveness. At locations where access to nearby property is blocked, provision shall be ready at all times to accommodate emergency vehicles, such as plating over excavations, short detours, and alternate routes in conjunction with local agencies. Traffic control plans (Mitigation Measure T-1a) shall include details regarding emergency services coordination and procedures. Documentation of coordination with local jurisdictions shall be provided to the CPUC prior to the start of construction.
V-1a	Reduce visibility of construction activities and equipment. Adjacent to residences, parks, recreation areas, and public schools, ground disturbance due to staging and storage areas shall be screened with temporary fencing of an appropriate design and color. Along the entire ROW, all evidence of construction activities, including ground disturbance due to staging and storage areas, shall be removed and all disturbed areas shall be remedied to an original condition upon completion of construction, including the replacement of any vegetation or paving removed during construction. SDG&E shall submit final construction plans, demonstrating compliance with this measure to the CPUC for review and approval at least 60 days prior to the start of construction.
V-4a	Reduce potential for visual impacts due to view obstructions. To the degree feasible, transmission structures shall be designed to ensure that conductors do not cause new or significantly increased view obstructions from residential areas. Conductors that have the potential to cause significantly increased view obstructions shall be designed to be at the same or similar elevation as the existing conductors, or at an elevation that reduces or avoids potential conflicts with residential views. SDG&E shall submit a plan demonstrating compliance with this measure to the CPUC for review and approval at least 60 days prior to the start of construction.
V-5a	Reduce direct impacts to, and visual degradation of, exotic landscapes and natural scenic areas for the life of the project. Ground disturbances resulting from routine access to the ROW during the operational life of the proj- ect shall be minimized to the extent possible. This measure shall apply to all park and recreation areas, residential areas, and public facilities' landscaped grounds crossed by and adjacent to the ROW. All evidence of maintenance activities, including ground disturbances from the movement and use of vehicles and equipment shall be remedied to an orig- inal condition, outside of access roads, including the replacement of any vegetation or paving removed during con- struction. SDG&E shall submit final maintenance plans, demonstrating compliance with this measure to the CPUC for review and approval at least 60 days prior to the start of construction.

5. Conclusion

As documented above, the proposed temporary modifications to the approved Miguel-Mission Project would not result in new or increased impacts that would require implementation of new mitigation measures to reduce impacts to less than significant levels beyond those presented in the Final EIR. Therefore, the CPUC finds that preparation of an addendum pursuant to CEQA guidelines Section 15164 is appropriate for the temporary modification to the previously approved Miguel-Mission Project.

6. References

- San Diego Gas and Electric Company (SDG&E). 2004a. Petition of San Diego Gas and Electric Company (U 902 E) For Modification of Decision Number 04-07-026. September 30.
- _____. 2004b. Response of San Diego Gas & Electric Company to the Administrative Law Judge's Ruling Soliciting Information. September 30.
- _____. 2004c. Supplement to the Petition of San Diego Gas & Electric Company (U 902 E) For Modification of Decision Number 04-07-026. October 14.
- . 2004d. San Diego Gas & Electric Miguel Mission #2 PFM data request-A.02-07-022. October 25.