BLYTHE ENERGY PROJECT

Request for Staff Approved Project Modifications (99-AFC-8C)

Blythe Energy Project Transmission Line

Southern California Edison's Blythe Eagle Mountain Transmission Line Pole Relocations and Modifications And Double-Circuiting 34 Structures to Accommodate Possible Future Solar Project

Submitted to:

California Energy Commission
Sacramento, California

Prepared by:

Blythe Energy, LLC
and

TETRA TECH EC, INC.

June 2009

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Acronyms and Abbreviations

AFC	Application for Certification
APE	Area of Potential Effects
B-EM	Blythe Eagle Mountain Transmission Line
BEP	Blythe Energy Project
BEPTL	Blythe Energy Project Transmission Line
BLM	Bureau of Land Management
Buck Substation	Buck Boulevard Substation
CAISO	California Independent System Operator
CCR	California Code of Regulations
CEC	California Energy Commission
Edison	Southern California Edison Company
FONSI	Finding of No Significant Impact
FSA	Final Revised Staff Assessment
I-10	Interstate 10
LORS	laws, ordinances, regulations and standards
MW	megawatt
NEPA	National Environmental Policy Act
ROW	right-of-way
Western	Western Area Power Administration

1 Introduction

Blythe Energy, LLC (Blythe Energy as the petitioner) hereby requests approval of insignificant project changes to the approved Blythe Energy Project (Project or BEP). In accordance with Section 1769(a)(2) of the California Energy Commission (CEC) Siting Regulations, the proposed changes do not have the potential to have a significant effect on the environment and will not result in the change or deletion of a condition adopted by the CEC or cause the Project to not comply with applicable laws, ordinances, regulations and standards (LORS).

Blythe Energy is the owner of the BEP, which is a 520-megawatt (MW) combined cycle natural gas-fired electric energy generating facility, approved by the CEC under docket 99-AFC-8 (CEC 2001). The BEP is located in the City of Blythe, California, just north of Interstate 10 (I-10), approximately 7 miles west of the California and Arizona border. The Project is presently connected to the Buck Boulevard Substation (Buck Substation) owned by the Western Area Power Administration (Western), which, in turn, is connected to the Blythe Substation and the Southern California Edison Company (Edison) Blythe Eagle Mountain (B-EM) transmission system.

In a CEC Notice of Decision dated October 11, 2006, CEC approved an amendment to the BEP license (99-AFC-8C) for the construction and operation of a 230-kV transmission line (BEPTL) to allow for delivery of the full BEP electrical output to the California Independent System Operator (CAISO)-controlled electrical transmission system (CEC 2006b). Western and the Bureau of Land Management (BLM) served as co-lead federal agencies for review of the Blythe Energy petition pursuant to the National Environmental Policy Act (NEPA) and have issued a Finding of No Significant Impact (FONSI) for the license amendment (Western and BLM 2007).

Blythe Energy requested approval of an insignificant project change in 2007. The change consisted of a modified interconnection from Buck Substation to the new BEP switchyard, route realignment from milepost 0.0 to 3.0, and minor route realignment from milepost 6.5 to 62.1. The CEC approved these changes on July 17, 2007, and Western notified the BLM of Western's withdrawal from the project in a letter dated February 4, 2008. BLM is now the sole lead federal agency for the purposes of NEPA and for all consultations.

In July 2008, Blythe Energy requested a second insignificant project change that included a request for minor realignment of several structures, the adjustment of the eastern and western laydown yards, the addition of a laydown area near the Ford Dry Lake exit, and conductor reconfiguration. The CEC and the BLM approved the second insignificant change on September 25, 2008.

In November 2008, Blythe Energy requested a third insignificant project change that included a request for support modifications for 17 structures (adding guy wires); the expansion of the Desert Center laydown; communications system changes in the Edison system at the BEP, at the California Capacitor Station near the Red Cloud Road exit, and at the Julian Hinds Substation; and a minor additional expansion at the Julian Hinds Substation. The CEC and the BLM approved the third insignificant change on January 27, 2009. Blythe Energy hereby requests the following additional insignificant project changes:

First, changes are needed to the Edison B-EM transmission line which are designed to accommodate the BEPTL crossings:

1. Relocation of two H-frame structures, and the replacement in the existing location of two additional H-frame structures; and
2. Structural support modification at three additional structures by changing hardware from suspension insulators to dead end insulators accompanied with the addition of guy wires.

Although BEP does not consider these changes to Edison's B-EM transmission line as part of the BEPTL project, they are reasonably foreseeable connected actions triggered by the project and would not occur "but for" the need to accommodate the BEPTL project. These changes are necessary to maintain Edison structures without requiring multiple crossings, provide sufficient wire to wire clearances, provide adequate ground clearance under contingency operating conditions for modified structure spans, and provide adequate wire to structure clearance under regulatory and extreme wind conditions. The structure relocations and modifications would be Edison's responsibility under the jurisdiction of the California Public Utilities Commission. Prior to implementing these proposed changes in the B-EM line, Edison will be required to obtain approval from the Public Utilities Commission.

Second, Blythe Energy requests permission to replace up to 34 single-circuit poles already installed during construction with double-circuit-ready poles. This change is necessary to allow for electricity from Project Genesis (if approved) to reach Edison's to-be-constructed Colorado River Substation without additional ground disturbance in the segment of the generation intertie line parallel to the Blythe transmission line. Blythe Energy would install the double-circuit structures entirely at its own risk, understanding that their availability in no way implies or requires the permitting of Project Genesis.

This request for approval of insignificant changes evaluates the proposed actions from the CEQA perspective. In accordance with Section 1769 of the CEC Siting Regulations (California Code of Regulations [CCR] Title 20, Section 1769, Post Certification Amendments and Changes), these two requests for approval of insignificant project changes present a description of the proposed modifications, the necessity for the proposed modifications, and an analysis of potential impacts on the environment, nearby property owners, and the general public. This petition also outlines the Project's continued ability to comply with applicable LORS during construction and upon placing the modifications in service, and demonstrates that the proposed modifications will not result in significant environmental impacts. No changes to, or deletions of, any of the Conditions of Certification are necessary as a result of the proposed modifications.

The information necessary to fulfill the requirements of Section 1769 is provided in the sections that follow this introduction:

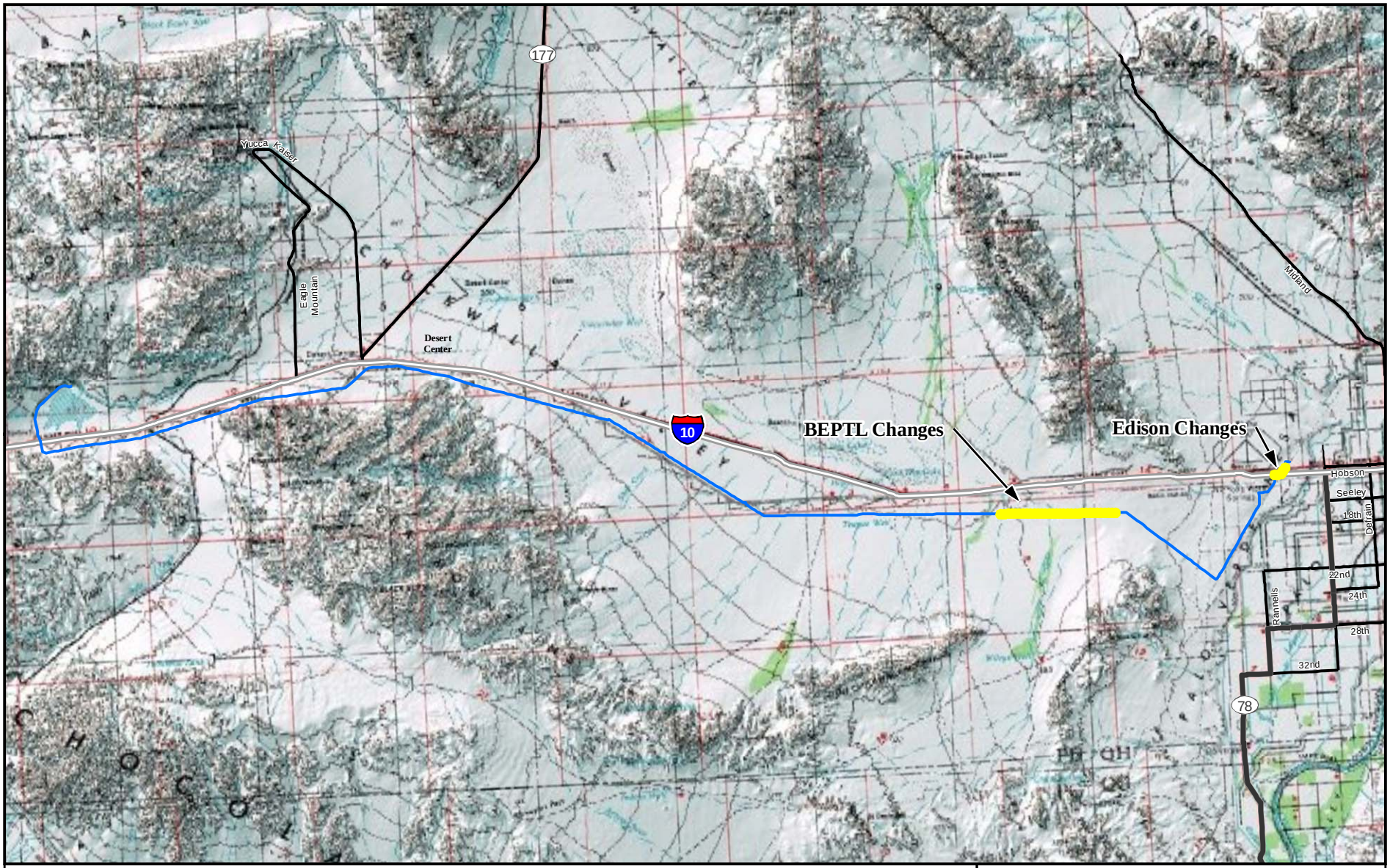
1. Description, Necessity, and New Information for the Proposed Project Changes
2. Environmental Analysis of Proposed Project Changes
3. Ability to Comply with LORS
4. Potential Effects on the Public

5. List of Property Owners
6. Potential Effects on Property Owners
7. References Cited

2 Description, Necessity, and New Information for the Proposed Project Changes

Figure 2-1 indicates the location of each of the minor project changes being discussed in this Request. Figure 2-2 illustrates the overall route and the location of the site-specific changes in the Edison structures and Figure 2-3 shows the location of the 34 poles to be replaced on the BEPTL line. Table 2-1 summarizes the change in disturbance footprint by proposed insignificant change component for the Edison structures. There will be no change in disturbance footprint to accommodate the BEPTL pole replacement. Table 2-2 details the change in underlying land ownership for the various project components between present conditions and proposed changes for the Edison structures, and Table 2-3 details the change in underlying land ownership that has occurred since 2005 along the 34-structure length of the BEPTL.

The Siting Regulations require a discussion of the necessity for the proposed revision to the BEP and whether the modification is based on information known by the petitioner during the certification proceeding (Title 20, CCR, Sections 1769 [a][1][B], and [C]). There was no information regarding the necessity for these changes known by the petitioner during the certification proceeding. Details by change component follow.



Legend

- Proposed Changes
- Proposed Transmission Line

N

0 2.5 5 10
Miles

TETRA TECH EC, INC.

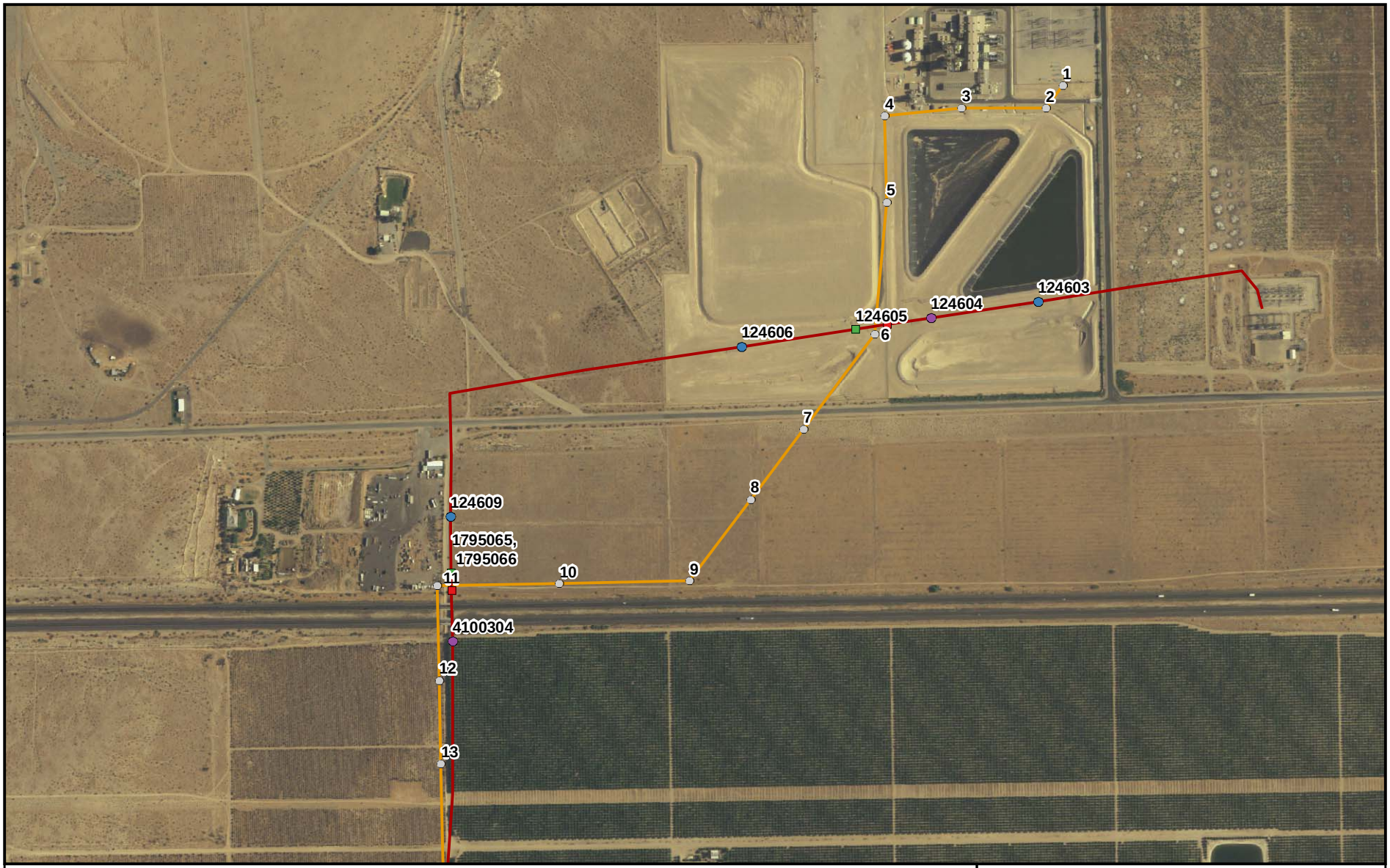
Blythe Energy Transmission Line

Blythe Energy, LLC

Figure 2-1

Overview of the Blythe Energy Project Transmission Line Project Modifications

R:\projects_2005\fpl_blythe_tline\maps\InsigChange20090612\Figure2-1.mxd
Date: 6/15/2009



Legend

Proposed Modification Type
- Relocation
- Structural Modification
- Structure Replacement
- Original Edison Structures

- Blythe Structures
- Proposed Blythe Transmission Line
- Edison Blythe Eagle Mountain Transmission Line

N

0 250 500 1,000
Feet

Source: Powermap, 2008

TETRA TECH EC, INC.

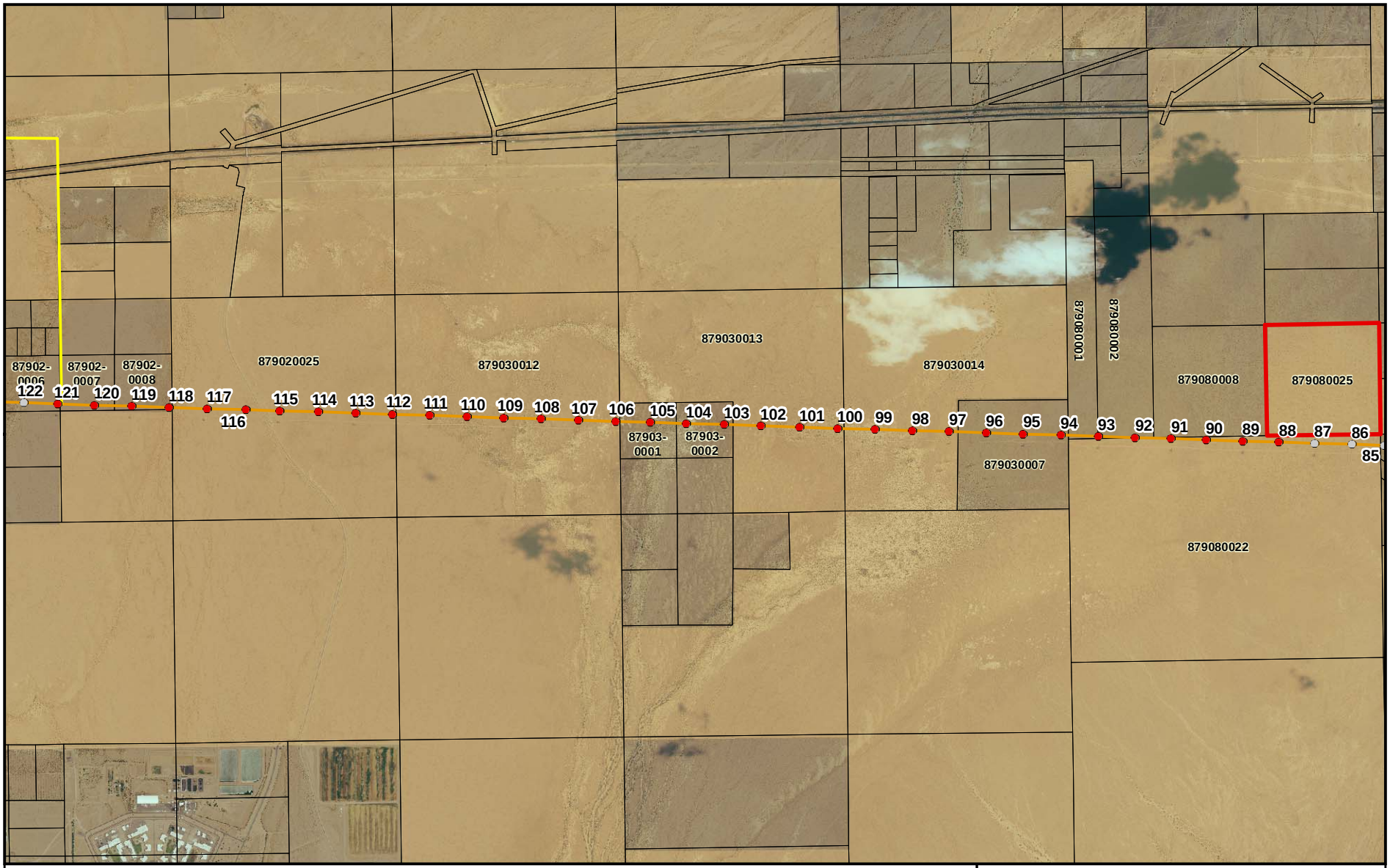
Blythe Energy Project Transmission Line

Edison Modifications

Figure 2-2

Comparison of Existing and Replacement Edison Structures

R:\projects_2005\fpl_blythe_tline\maps\InsigChange20090612\Figure2-2.mxd
Date: 6/16/2009



Legend

- Blythe Structures for Replacement
- Blythe Structures
- Proposed Blythe Transmission Line
- Parcels
- Project Genesis Intertie Transmission Line
- Proposed Location of Colorado River Substation (SCE)
- Public Lands

Source: Riverside County, 2008.

N

0 1,000 2,000 4,000

Feet

TETRA TECH EC, INC.

Blythe Energy Project Transmission Line

Blythe Energy, LLC

Figure 2-3

Overview of Proposed Structure Changes on the Blythe Energy Project Transmission Line

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Date: 6/16/2009

Table 2-1. Summary of Additional Disturbance Due to Proposed Changes (acres)

IPC	Location Detail	Changed Disturbance (acres) [1]
Change in structure support	3 structures	0.0 acres
Relocation of structures to new locations	2 structures	0.48 acres
Replacement of structures in existing location	2 structures	0.48 acres
TOTAL CHANGE IN DISTURBANCE		**0.96 acres**

[1] Assumes 0.06 acres of disturbance per pole removed and installed for a total of 8 H-frame structures (two poles removed and two poles installed for each of four H-frames)

Table 2-2. Summary of Ownership Differences for B-EM Changes

Structure Number	APN	2005 Ownership	2009 Ownership
124603	824-101-021	Blythe Energy	No Change
124604	824-101-021	Blythe Energy	No Change
124605	824-101-012	Caithness Blythe 2	No Change
124606	824-101-012	Caithness Blythe 2	No Change
124609	824-090-028	Sun World International Inc.	No Change
1795065/ 1795066	824-090-028	Sun World International Inc.	No Change
4100304	824-090-024	Desert Citrus	Cocopah Nurseries

Table 2-3. Summary of Ownership Differences for 34 Pole Replacements

Structure Number	APN	2005 Ownership	2009 Ownership
88, 89, 90, 91	879-080-022	BLM	No Change
92	879-080-002	Cittell, Robert and Lynda	Blythe Energy
93	879-080-001	West, Eldon and Vera	Blythe Energy
94, 95, 96	879-030-007	Helmand, Robert	Blythe Energy
97, 98, 99	879-030-014	BLM	No Change
100, 101, 102	879-030-013	BLM	No Change
103, 104	879-030-002	Weining, Ethyl	No Change*
105	879-030-001	Gray, Cheryl	Blythe Energy
106, 107, 108, 109, 110, 111	879-030-012	BLM	No Change
112, 113, 114, 115, 116, 117	879-030-025	BLM	No Change
118	879-020-008	Dessureaut, Robert	No Change*
119	879-020-008	Dessureaut, Robert	No Change*
120	879-020-007	Renee Switzky	Blythe Energy
121	879-020-006	Sharon Switzky 2004 Trust	Blythe Energy

*NOTE: Blythe Energy already has easements across these parcels. Easements will be adjusted as needed to accommodate the double circuit.

2.1 Edison Structure Relocations and Modifications

The construction and operation of the BEPTL has triggered the need to replace or modify seven structures along Edison's B-EM transmission line. These structures are located within the first 11 miles of the BEPTL west of the Buck Boulevard substation in Riverside County, CA. As shown in Figure 2-1, the structures are within the portion of the existing transmission line corridor that runs primarily north of I-10, crossing the BEPTL twice. Changes to Edison's line are proposed to accommodate these crossings.

2.1.1 Description

Structure Relocations and Modifications

Figure 2-1 shows the present locations and proposed locations of structures 124605 and 179065E/1795066E of the B-EM transmission line to be relocated to accommodate crossing by the BEPTL. Appendix B details the structure changes and locations. Structure 124605 is currently located on the east side of the BEPTL just north of BEPTL structure 6, adjacent to the power plant property. It will be relocated approximately 190 feet to the west, on the existing alignment. The existing structure is a 90-foot wood pole H-frame with an above ground height of 79 feet. The replacement structure will be a 110-foot steel pole H-frame with an above ground height of 90 feet. This new structure will be supported by three way guys anchored 85 feet from the poles (west, north, and south) and a span guy on the east over the crossing of the BEPTL.

Due to the increased height of the replacement structure and line span at this location, structure support modifications at, or replacement of, adjacent structures will also be required (see description of support modifications below for details about structures). Suspension hardware at structures 124603 and 124606 will be replaced with dead ending hardware, and back and ahead guys will be added. New anchors will be installed for structure 124603 65 feet to the east and west of the pole. One new anchor will be installed for structure 124606 55 feet east of the pole; the existing anchor will be used on the west. The existing 90-foot wood pole H-frame structure 124604 will be replaced at its current location with a 95-foot steel pole H-frame structure. The existing three way guys will be used for support (north, east, and south) and a span guy will be used across the BEPTL crossing to structure 124605 to the west.

Structure 179065E/1795066E is currently located south of the BEPTL, just east of BEPTL structure 11, on the north side of the 1-10 freeway crossing. It will be relocated approximately 106 feet to the north, on the existing alignment. The existing structure is a 75-foot wood pole H-frame with an above ground height of 66 feet. The replacement structure will be a steel pole H-frame with an above ground height of 71 feet. The installation of taller structures at this location necessitates changing the suspension hardware on structure 124609 to the north to dead ending hardware, and adding ahead and back guy wires (55 feet from the poles to the north and south). Additionally, due to the increased line span at the freeway crossing, structure 4100304E will be replaced with a taller structure to accommodate sags under broken wire conditions. The taller

structure will be an 80-foot tall steel pole H-frame with an above ground height of 70 feet placed less than 4 feet from its current location. It will be supported with suspension hardware.

Construction Details

Structures—In general, transmission line pole installation would be accomplished by the delivery of poles, crossarms and hardware to the field location by semi- truck and trailer. The pole would be placed on the ground within the existing ROW. A drilling rig would excavate a hole larger in diameter than the pole butt to the required setting depth. A crane would be positioned between the conductor wires adjacent to the setting hole and within reach of the pole. The pole would be picked up and moved within the wires parallel to the line then raised between the wires and set in the hole. The pole would be plumbed and aligned and the hole backfilled with imported gravel or concrete.

The crossarm would then be lifted and attached to the poles. Hardware would likely be attached to the crossarm while it is on the ground. The wires would be lifted and set in the shoes attached to the insulators. Old structures would be removed by cutting and placing them in disposal bins. The bins would then be disposed of at an approved hazardous waste facility. Appendix B contains detailed plan and profile drawings of each of the relocated structures.

Support—New and modified structures will require guys to stabilize the structures and to provide for the safety of the public and the reliability of the transmission line. The guy wires will not extend out of the existing 70-foot-wide right-of-way (ROW). The guys are installed by first installing a guy anchor. If soil conditions are suitable, a power-installed screw anchor (PISA) will be installed by screwing the anchor into the ground. This is typically done with a truck-mounted auger. This is the preferred type of anchor to be used. If the soil does not allow for a PISA, then a plate anchor will be installed by first drilling a hole, then placing the anchor into the ground, and backfilling the hole. The elevation of the guy wires vary depending on the height of the pole used. Guy wires will be attached approximately one foot below the equipment it is supporting (see discussion of structure relocations and modifications above for a description of anchor distances from poles).

Construction Access and Other Requirements—No additional vegetation clearing or access road construction would be required to reach the locations of pole installation or removal. Existing roads such as Butch Avenue and Hobsonway would be used. If an additional material staging area is required, the Blythe Substation property will be used.

The extra workspace required to install the guy anchors will include a one-time track for the drill rig to back up to the anchor location and install the anchor, with an assumed width of 12 feet. No new roads or additional clearing will be required, as the trucks can drive over the vegetation if needed. The maximum amount of disturbance would be 0.06 acres per pole replaced or removed, resulting in a total of 0.96 acre of additional disturbance (two poles per each of four H-frames removed and then either replaced or relocated). No additional ground disturbance would be required for support modifications to the three other structures.

Based on the California Division of Occupational Safety and Health (Cal/OSHA) rules, structure relocations, and associated structure modifications and replacements, will be conducted with the line de-energized. An outage will be required for the B-EM transmission line, and may also be required for the BEPTL while the relocations inside their facility are being performed.

Crew Requirements and Timing—Work conducted at each location will require a 10-man construction crew and will be conducted using a line truck, a material truck, a 30-ton truck mounted crane, two bucket trucks, and two ¾-ton crew trucks. An auger or backhoe may also be necessary to dig the proper depth for pole setting. Work at each location will take two days to install the new structures, transfer the conductor, and remove old structures. Table 2-4 summarizes the needed construction personnel and equipment for these minor modifications.

Table 2-4. B-EM Construction Personnel and Equipment Summary

Construction Element	Personnel	Days	Equipment Requirements
At each BE-M structure relocation/structure modification/structure replacement site	10	2	Line truck Material truck 30-ton mounted crane 2 Bucket trucks 2 ¾-ton crew trucks Auger truck or backhoe (possible)

2.1.2 Necessity

Operation of the BEPTL has triggered the need to relocate or modify structures along the B-EM transmission line to provide the ability to maintain Edison structures without requiring multiple crossings, provide sufficient wire to wire clearances, provide adequate ground clearance under contingency operating conditions for modified structure spans, and provide adequate wire to structure clearance under regulatory and extreme wind condition. In order to access the Edison structures with normal line equipment, the structures must be at least 75 feet from the BEPTL. To accomplish this, the existing H-frame structures at these two crossing points need to be shifted and replaced with slightly taller structures. As noted above, because the new structures are taller, additional changes to the hardware and support for adjacent structures are required to accommodate increased line span.

2.1.3 New Information

At the time of certification, Edison had not conducted a detailed study of all structural changes necessary to accommodate the BEPTL. Now that Edison has completed that study, they have requested that Blythe Energy include their proposed changes, which are required as a result of the BEPTL, in this Insignificant Change request.

2.2 BEPTL Structure Replacements

2.2.1 Description

The BEPTL is presently configured as a single-circuit 230kV transmission line using concrete or steel monopoles to support the three phases in a ‘Delta’ configuration. The BEPTL is under

construction now and all 34 poles proposed for replacement have already been installed. These poles would be replaced with similar poles, but taller and stouter, that could accommodate two 230kV circuits.

Structure Relocations and Modifications

Figure 2-2 shows the locations of the BEPTL structures proposed for removal and replacement. Structures 88 through 121 cover 5.5 miles in a straight east-west line, with Project Genesis' proposed intertie line departing the BEPTL at structure 121 and heading northwest towards Ford Dry Lake. The existing structures are 105- to 115-foot concrete poles with an above ground height of 88 to 102 feet. The replacement structures will be a 125 to 130-foot double circuit concrete pole with an above ground height of 105 feet. These new structures will be self-supporting, direct-embed poles, please see Figure 2-4 for a comparison of the structures.

Construction details

Conductors will not be present when this work is conducted, and will be strung after the structure replacement is complete. Therefore, this section describes only the changes needed to replace the structures themselves.

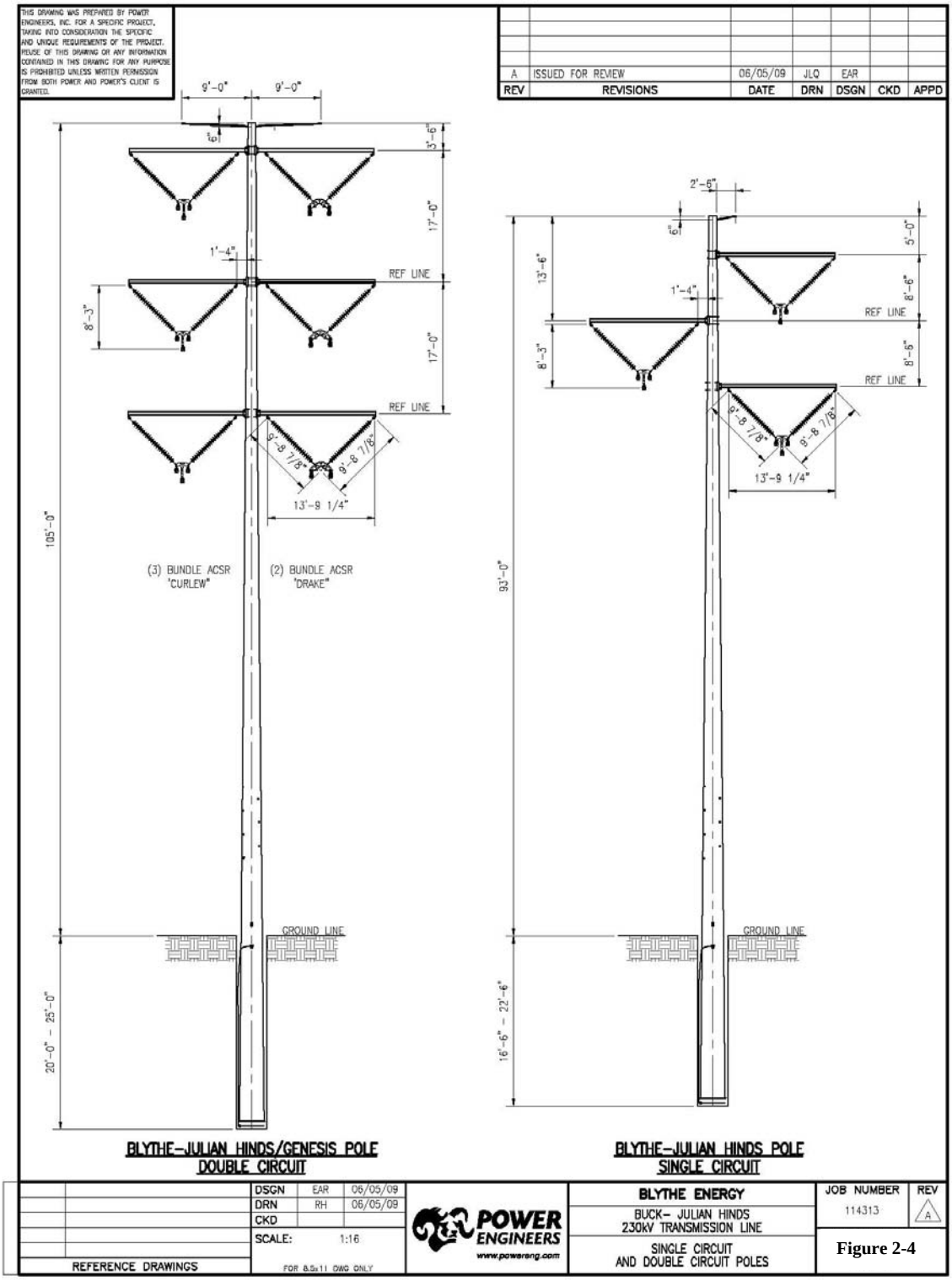
A new direct-embed excavation approximately 6 feet in diameter and 20-25 feet in depth will be made with power drilling equipment immediately adjacent to the existing structure. A truck-mounted power auger or backhoe will be used to excavate for the structure foundations. No blasting was required to set these poles initially and no blasting is planned for these structures. The hole will be cleaned out prior to the placement of the new pole. As many of these structures are located in very sandy areas, Blythe Energy anticipates that the contractor may use water either alone or with polymer additives and corrugated metal pipe to complete the hole and hold its shape until the new pole is set.

When the new excavation is complete, the existing poles would be cut off at ground height using a specialized concrete saw. The pole would be held during cutting by a crane. The crane would then place the pole on the ground within the construction pad area. Davit arms and insulation hardware would be removed from the pole.

A new double-circuit-ready concrete pole would be delivered by a pole truck to the pad. On the pad, the insulators, hardware, and stringing sheaves would be installed on the pole and the pole would be lifted into position, inserted into the foundation hole and gravel and/or concrete would be poured in to backfill the hole and create a foundation. The entire process would take about 5 hours for each replacement.

After the new structure is in place, the pole truck will be loaded up with the old pole. The old pole would be hauled to the Blythe Airport staging area, where it will be stored until needed on Project Genesis for the remaining intertie transmission line. Davit arms and insulators would also be stored.

Figure 2-4. Comparison of Existing and Replacement Structures.



The construction workforce would consist of laborers, craftsmen, supervisory personnel, support personnel, and construction management personnel who would perform the construction tasks. It is anticipated that a crew of 6 would be needed to complete the replacement of the structures for each of the 34 structures.

Because the pads and access roads are already constructed, no new clearing and grading would be needed to accommodate the proposed change. Equipment needed for the structure replacement activity would include drill rigs, truck-mounted augers, flatbed trucks, boom trucks, rigging and mechanic trucks, small wheeled cranes, concrete trucks, and crew trucks. The concrete pole structures would also require the use of a large crane. Air compressors and generators would be needed to cut the old pole off and to install the cross-arms, insulators, and travelers. Table 2-5 summarizes the needed construction personnel and equipment for these minor modifications.

Table 2-5. BEPTL Construction Personnel and Equipment Summary

Construction Element	Personnel	Days	Equipment Requirements
At each BEPTL structure removal and replacement site	6	2	Air compressor Generators Drill rig Large crane Truck-mounted auger Flatbed trucks Boom trucks Rigging and mechanic trucks Small wheeled crane Concrete truck Crew trucks

2.2.2 Necessity

Project Genesis, proposed by Boulevard Associates LLC (a subsidiary of FPL Group, as is Blythe Energy, LLC), is a solar energy project that would be located entirely on Public Lands administered by the BLM just north of Interstate 10 and about 24 miles west of Blythe, CA. Project Genesis is in the early stages of permitting with the CEC and the BLM and anticipates filing an Application for Certification to the CEC later this year. The original intent for delivery of the solar energy was to utilize the BEPTL from an interconnection point south of Ford Dry Lake to Julian Hinds substation, and to interconnect to Edison at that point.

However, Edison recently informed the Project Genesis development team that Edison would be unable to accept the output from Project Genesis at the Julian Hinds substation without multiple downstream upgrades in their system between Julian Hinds and the Palm Springs area. These downstream upgrades could include tower replacement and reconductoring, all of which would require substantial new disturbance in sensitive areas, potentially including tortoise habitat and habitat for the Coachella Valley milk vetch.

Edison recommended that Project Genesis make its interconnection to the Edison system at the Colorado River Substation, planned for construction on parcel 879-080-025, which is owned by the BLM.

2.2.3 New Information

Edison had not completed its studies for Project Genesis before the BEPTL project started construction. Edison had never indicated to Project Genesis developers that the solar energy output could not be accommodated at Julian Hinds until late May 2009. Now that Edison has indicated an acceptable interconnection point, the double circuit structure replacement is the least ground-disturbing of all options for making this interconnection.

3 Environmental Analysis of Proposed Project Changes

This section details, by resource, the potential impacts of the proposed project changes on the environment of Edison's B-EM transmission line followed by those of the BEPTL. All references to the Conditions of Certification are to the CEC's FSA (CEC 2006a). Resources along the B-EM transmission line were, for the most part, analyzed in the CEC's environmental assessment for BEP as an alterative route for the BEPTL (CEC 2006a). This section draws on findings made in that environmental assessment and provides new information where appropriate.

3.1 Air Quality

3.1.1 Edison Structure Relocations and Modifications

Impacts to air quality from the proposed changes to Edison's B-EM transmission line will be essentially the same as or less than the impacts associated with the BEP as currently approved, because there are no proposed changes in construction methods, including dust control and management of construction vehicle emissions. There will be no changes in operations or maintenance activities due to the proposed changes. An estimated additional 0.96 acres of disturbance will occur.

The short-term air quality impacts from construction associated with the installation of new or replacement of existing structures would thus not be significant as long as the construction of these additional structures is monitored and controlled in a manner consistent with the proposed air quality conditions of certification for BEPTL. With respect to the operational phase of the relocated or modified structures, the impacts would be limited to the emissions created by maintenance vehicles.

Because the guy anchor installation truck does not require an access road or grading prior to being able to back up to the installation area, additional dust generation due to guy anchor installation is not anticipated. Additionally, no new laydown areas will be required. Therefore, the proposed changes will not cause any substantial additional adverse air quality impacts above and beyond those already identified. No changes to, or deletions of, any air quality Conditions of Certification are required.

3.1.2 BEPTL Structure Replacements

Impacts to air quality from the proposed changes to the BEPTL will be similar to or less than the impacts associated with the Project as currently approved, because there are no proposed changes in construction methods, including dust control and management of construction vehicle emissions. There will be no changes in operations or maintenance activities due to the proposed changes.

The short-term air quality impacts from construction associated with the replacement of existing structures would thus not be significant as long as the construction of these additional structures is monitored and controlled in a manner consistent with the proposed air quality conditions of

certification for BEPTL. With respect to the operational phase of the relocated or modified structures, the impacts would be limited to the emissions created by maintenance vehicles.

Because the guy anchor installation truck does not require an access road or grading prior to being able to back up to the installation area, additional dust generation due to guy anchor installation is not anticipated. Additionally, no new laydown areas will be required. Therefore, the proposed changes will not cause any substantial additional adverse air quality impacts above and beyond those already identified. No changes to, or deletions of, any air quality Conditions of Certification are required.

3.2 Biological Resources

3.2.1 Edison Structure Relocations and Modifications

Project impacts to biological resources will be essentially the same as or less than that those currently approved project impacts for the BEP. Therefore, the proposed changes will not substantially change the impacts to biological resources above and beyond those already identified and mitigated for in the existing CEC Decision and Conditions of Certification.

All proposed B-EM structure relocations and modifications needed to accommodate the BEPTL crossings were covered in the various biological surveys and literature reviews conducted for the original BEPTL project. Field surveys consisted of CEC-level general biological surveys conducted in March of 2005, which included two 100-foot wide pedestrian transects along either side of the BEPTL ROW, and meandering pedestrian surveys extending out to 1,000 feet from both ROW edges (Karl 2005). The purpose of the ROW transects was to detect the presence of any special status species in the project ROW; the outer, meandering transects were conducted in order to determine the continuity of habitat in addition to noting any special status species encountered.

In May 2005, surveys consistent with U.S. Fish and Wildlife Service protocol for desert tortoises were also conducted along the BEPTL route which provided 100 percent coverage of the ROW including 30-foot belt transects on either side of the ROW centerline plus additional belt transects at 100, 300, 600, and 2,400 feet from the ROW edges. All special status species potentially occurring along the BEPTL were sought during this effort (Tetra Tech 2005).

Structures 124603, 124604, 124605, 124606, and 4100304 are located in disturbed agricultural land. Structures 124609 and 1795065/5066 are located on agricultural lands used for a vineyard. The area traversed by the realignment was previously cultivated heavily and has been graded in some areas or is used for a vineyard, impacts to biological resources associated with native vegetation are minor and are comparable with those associated with BEPTL structures 2 - 11.

Burrowing owl and Harwood's milk vetch are the sensitive species most likely to be encountered from along this portion of the B-EM where changes are proposed. Surveys conducted in 2005 did not identify burrowing owl sign in these areas, though they could use the habitats within this section (CEC 2006a). Harwood's milk vetch was documented along Hobsonway and between

Hobsonway and I-10 (Karl 2005). Because the milk vetch is found prolifically in this area during good rain seasons, and because it thrives in disturbed soil, there will be no permanent impact on the population of Harwood's milk vetch in the area.

The proposed structure relocations and modifications will increase ground disturbance by a very minor amount—about 0.96 acre. These proposed changes simply move or modify structures along the current alignment, and no additional disturbance would occur outside of the ROW, therefore they occur within the environmental survey boundaries for the approved alignment in similar vegetation and habitat. Thus, the net impact to biological resources as a result of the proposed changes is expected to be negligible. No changes to, or deletions of, any biological resources Conditions of Certification are required.

3.2.2 BEPTL Structure Replacements

Project impacts to biological resources will be essentially the same as or less than that those currently approved project impacts for the BEP. Therefore, the proposed changes will not substantially change the impacts to biological resources above and beyond those already identified and mitigated for in the existing CEC Decision and Conditions of Certification.

Structures 88 through 121 are located in a combination of dunes, partially stabilized dunes and creosote brush scrub land, with intermittent desert wash woodlands. Construction areas at each structure and access roads for structures 88-121 are already cleared and graded. No additional habitat disturbance will occur due to the structure replacement.

The BEPTL structure replacements will occur within the Chuckwalla Desert Wildlife Management Area, as well as within USFWS Designated Critical Habitat for desert tortoise. Mojave fringe-toed lizard is the sensitive species most likely to be encountered from along the portion of the BEPTL under consideration. Surveys conducted in 2005 identified Mojave fringe-toed lizard in these areas (Blythe Energy 2004). As noted in the FSA (CEC 2006a) Blythe Energy will implement mitigation measures to decrease the likelihood of direct or indirect impacts to Mojave fringe-toed lizard.

The proposed structure replacements will not increase ground disturbance. These proposed changes simply move or modify structures along the current alignment, and no additional disturbance would occur outside of the ROW, therefore they occur within the environmental survey boundaries for the approved alignment in similar vegetation and habitat. Thus, the net impact to biological resources as a result of the proposed changes is expected to be negligible. No changes to, or deletions of, any biological resources Conditions of Certification are required.

3.3 Cultural Resources

3.3.1 Edison Structure Relocations and Modifications

Impacts to cultural resources due to the proposed changes will be essentially the same as the impacts associated with the BEP as currently approved. Based on a review of previous reports, inventories, and evaluations of cultural resources there are no cultural resources in the areas

where insignificant changes are proposed. Therefore, the proposed changes will not cause new cultural resource impacts above and beyond those already identified and mitigated for in the existing CEC Certification and will not alter any existing or call for any new Conditions of Certification.

The locations of proposed B-EM structure relocations and modifications were evaluated for cultural resources during several past efforts. These efforts, which involved literature reviews, records searches, and field surveys include:

- The original field surveys for the BEP power plant site conducted in 1999 (Pigniolo et al. 1999);
- Background research and initial cultural resources reconnaissance conducted in 2005 along the proposed and alternative BEPTL routes, including the B-EM (Carrico et al. 2004);
- Intensive Class III archaeological surveys, including pedestrian surveys and cultural resource inventories, conducted in 2005 along the preferred BEPTL alignment (Carrico and Eckhardt 2006); and
- An additional record search and a Class III cultural resources survey along the BEPTL for proposed realignments and associated changes as an amendment to the 2005 cultural resource investigation (Carrico et al. 2008).

The 2005 Area of Potential Effect (APE) was defined as a 300-foot-wide corridor for the transmission line, a 100-foot-wide corridor for all access and spur roads, and the footprint and a 200-foot buffer in all directions from the perimeter of the footprint of substations, staging areas, and other project components. In addition, any sensitive resources within 0.25 mile, for which setting is an important aspect of the integrity of the resource, are also considered to be within the APE. The 2008 surveys covered areas not previously included in the APE.

The locations where relocations and modifications to B-EM structures are proposed occur in an area that has been graded and no resources exist. The cultural surveys conducted in 2008 did not result in the identification of previously unidentified cultural resources within the APE; therefore, the proposed structure relocations and modifications will not impact any new cultural resources. Therefore, no changes to, or modifications of any cultural resource Conditions of Certification are required.

3.3.2 BEPTL Structure Replacements

Impacts to cultural resources due to the proposed changes will be essentially the same as the impacts associated with the BEPTL as currently approved. Therefore, the proposed changes will not cause new cultural resource impacts beyond those already identified and mitigated for in the existing CEC Certification and will not alter any existing or call for any new Conditions of Certification.

The locations of proposed BEPTL structure replacements were evaluated for cultural resources during several past efforts. These efforts, which involved literature reviews, records searches, and field surveys include:

- Background research and initial cultural resources reconnaissance conducted in 2005 along the proposed and alternative BEPTL routes, including the B-EM (Carrico et al. 2004);
- Intensive Class III archaeological surveys, including pedestrian surveys and cultural resource inventories, conducted in 2005 along the preferred BEPTL alignment (Carrico and Eckhardt 2006); and
- An additional record search and a Class III cultural resources survey along the BEPTL for proposed realignments and associated changes as an amendment to the 2005 cultural resource investigation (Carrico et al. 2008).

The 2005 Area of Potential Effect (APE) was defined as a 300-foot-wide corridor for the transmission line, a 100-foot-wide corridor for all access and spur roads, and the footprint and a 200-foot buffer in all directions from the perimeter of the footprint of substations, staging areas, and other project components. In addition, any sensitive resources within 0.25 mile, for which setting is an important aspect of the integrity of the resource, are also considered to be within the APE. The 2008 surveys covered areas not previously included in the APE.

The locations where BEPTL replacement structures are proposed occur in an area that has been surveyed. Resources that were identified are outside the ROW and have been flagged and avoided during construction of the BEPTL. Similar avoidance will be practiced during structure replacement, therefore, the proposed structure relocations and modifications will not impact any new cultural resources. Furthermore, properly qualified cultural resource monitors will be present during BEPTL structure replacement activities, ensuring that the Conditions of Certification are met and that the Cultural Resources Mitigation and Monitoring Plan is followed. No changes to, or modifications of any cultural resource Conditions of Certification are required.

3.4 Geology and Paleontology

3.4.1 Edison Structure Relocations and Modifications

Literature and archival reviews conducted for the approved project did not provide evidence of any paleontological resources that will be impacted by the Edison structure modifications. All areas affected by the proposed B-EM structure relocations and modifications were included in the original literature and archival reviews. Because the proposed changes involve minor guyed structure adjustments and only 0.96 additional acres of disturbance for structure installation and removal, they will not cause any new geological or paleontological impacts above and beyond those already identified and mitigated for in the existing CEC Decision and Conditions of Certification. No changes to, or additions of, any geological or paleontological resource Conditions of Certification are required.

3.4.2 BEPTL Structure Replacements

Literature and archival reviews conducted for the approved project did not provide evidence of any paleontological resources that will be impacted by the Project in the area of the proposed structure replacement. All areas affected by the proposed BEPTL structure replacements were included in the original literature and archival reviews. The proposed changes will not cause any new geological or paleontological impacts above and beyond those already identified and mitigated for in the existing CEC Decision and Conditions of Certification. No changes to, or additions of, any geological or paleontological resource Conditions of Certification are required.

3.5 Hazardous Materials Management

3.5.1 Edison Structure Relocations and Modifications

The proposed B-EM structure relocations and modifications will not change the impact that the Project will have on hazardous materials management. All materials, including minor quantities of hazardous materials such as fuels and lubricants, will be staged at the Blythe Substation as necessary and standard Storm Water Pollution and Prevention Plan measures will be applied. No changes to or additions of any hazardous materials management Conditions of Certification are required.

3.5.2 BEPTL Structure Replacements

The proposed BEPTL structure replacements will not change the impact that the Project will have on hazardous materials management. All materials, including minor quantities of hazardous materials such as fuels and lubricants, will be staged at the Blythe Airport or Ford Dry Lake approved laydown areas as necessary and standard Storm Water Pollution and Prevention Plan measures will be applied. No changes to or additions of any hazardous materials management Conditions of Certification are required.

3.6 Land Use

3.6.1 Edison Structure Relocations and Modifications

Impacts to land use from the Project as modified with the proposed changes will be essentially the same as the impacts associated with the Project as currently approved. The four relocated or replaced H-frame structures increases the amount of disturbance by 0.96 acre, all of which would occur on privately owned land. The installation and removal of guy anchors which would not result in additional ground disturbance would also occur on private land. It will be the responsibility of Edison to ensure that proposed changes on private land have been agreed to by landowners. No changes proposed will impact current or future land use. Therefore, the proposed changes will not cause any new land use impacts above and beyond those already identified and mitigated for in the existing CEC Decision and Conditions of Certification. No changes to or additional Conditions of Certification are required.

3.6.2 BEPTL Structure Replacements

Impacts to land use from the Project as modified with the proposed changes will be essentially the same as the impacts associated with the Project as currently approved. The 34 replaced structures do not increase the amount of disturbance. It will be the responsibility of Blythe Energy to ensure that proposed changes on private land have been agreed to by landowners. No changes proposed will impact current or future land use. Therefore, the proposed changes will not cause any new land use impacts above and beyond those already identified and mitigated for in the existing CEC Decision and Conditions of Certification. No changes to or additional Conditions of Certification are required.

3.7 Noise and Vibration

3.7.1 Edison Structure Relocations and Modifications

The proposed B-EM structure relocations and modifications will not change the noise impact of the Project. The proposed modifications are located in areas that have no permanent residents and there are no additional activities that will generate substantial sustained noise events. No changes to or additional Conditions of Certification are required.

3.7.2 BEPTL Structure Replacements

The proposed BEPTL structure replacements will not change the noise impact of the Project. The proposed modifications are located in areas that have no permanent residents and there are no additional activities that will generate substantial sustained noise events. No changes to or additional Conditions of Certification are required.

3.8 Public Health

3.8.1 Edison Structure Relocations and Modifications

The transmission line will not be substantially closer to any residence or other sensitive receptor. The proposed modifications will not change the impact the Project will have on public health. No changes to or additional Conditions of Certification are required.

3.8.2 BEPTL Structure Replacements

The transmission line will not be substantially closer to any residence or other sensitive receptor. The proposed modifications will not change the impact the Project will have on public health. No changes to or additional Conditions of Certification are required.

3.9 Socioeconomics

3.9.1 Edison Structure Relocations and Modifications

The proposed modifications will not change the impact the Project will have on socioeconomics or on schools, housing, law enforcement, emergency services, hospitals, or utilities. No changes to or additional Conditions of Certification are required.

3.9.2 BEPTL Structure Replacements

The proposed modifications will not change the impact the Project will have on socioeconomics or on schools, housing, law enforcement, emergency services, hospitals, or utilities. No changes to or additional Conditions of Certification are required.

3.10 Soil and Water Resources

3.10.1 Edison Structure Relocations and Modifications

The proposed B-EM structure relocations and modifications will not substantially change the impacts the Project will have on soil and water resources or be different from those already identified and mitigated for in the existing CEC Decision and Conditions of Certification.

Table 2-1 summarizes the overall change in estimated disturbance footprint. The additional 0.96 acres of ground disturbance associated with structure removal and installation is within a previously disturbed level area with very little vegetation. No vegetation clearing or access road construction is required to reach the structures. Therefore the proposed changes will not cause a different impact from the existing use of these areas. In addition, should a staging area be required, the Blythe Substation will be used for this purpose which has also been leveled and graded. This area will be free of trash at the end of its temporary use. No additional laydown areas are required. Mitigation measures found in the Drainage, Erosion and Sedimentation Plan/Storm Water Pollution Prevention Plan will be implemented for all areas included in the proposed modifications. No changes to or additional Conditions of Certification are required.

3.10.2 BEPTL Structure Replacements

The proposed BEPTL structure replacements will not substantially change the impacts the Project will have on soil and water resources or be different from those already identified and mitigated for in the existing CEC Decision and Conditions of Certification. There is no additional disturbance anticipated.

No vegetation clearing or access road construction is required to reach the structures. Therefore the proposed changes will not cause a different impact from the existing use of these areas. No additional laydown areas are required. Mitigation measures found in the Drainage, Erosion and Sedimentation Plan/Storm Water Pollution Prevention Plan will be implemented for all areas included in the proposed modifications. No changes to or additional Conditions of Certification are required.

3.11 Traffic and Transportation

3.11.1 Edison Structure Relocations and Modifications

The proposed modifications will not change the impact the Project will have on traffic and transportation. Access from state and county roads will be similar to the approved project and the proposed modifications will not cause substantial changes to construction or operation traffic. The proposed modifications will not require the reconfiguration of any access or stub roads. All proposed modifications are accessible via I-10, existing interchanges, and the existing Edison maintenance routes. Therefore, no traffic or circulation impacts will occur from the proposed modifications. No changes will occur in type of vehicles or equipment traveling on these routes, or their structural or cargo specifications. The proposed B-EM structure relocations and modifications will not cause substantial changes to traffic or circulation in the area over that evaluated in the initial application.

Edison will be responsible for obtaining the required permits for the freeway crossing (structure 1795065/1795066), and any additional measures required will be dictated by Caltrans and are the responsibility of Edison to implement. Facilities crossing Hobsonway or Butch Avenue will not be affected because all work at these locations will be off the road. No changes to or additional Conditions of Certification are required.

3.11.2 BEPTL Structure Replacements

The proposed structure replacements will not change the impact the Project will have on traffic and transportation. Access from state and county roads will be similar to the approved project and the proposed modifications will not cause substantial changes to construction or operation traffic. The proposed modifications will not require the reconfiguration of any access or stub roads. All proposed modifications are accessible via I-10, existing interchanges, and the existing BEPTL access and construction roads. Therefore, no traffic or circulation impacts will occur from the proposed modifications. No changes will occur in type of vehicles or equipment traveling on these routes, or their structural or cargo specifications. The proposed BEPTL structure replacements will not cause substantial changes to traffic or circulation in the area over that evaluated in the initial application. No changes to or additional Conditions of Certification are required.

3.12 Visual Resources

3.12.1 Edison Structure Relocations and Modifications

The proposed B-EM structure relocations and modifications occur within the existing B-EM alignment and therefore will not change the appearance of the overall project from key observation points. The proposed addition of guy lines within areas visible from I-10 will result in changes that will not be readily apparent to the casual observer from the freeway, especially at freeway speeds. Therefore, there will be no change in visual impacts resulting from these guyed

structures as compared to the originally proposed project. No changes to or additional Conditions of Certification are required.

3.12.2 BEPTL Structure Replacements

The proposed BEPTL structure replacements occur within the existing BEPTL alignment and therefore will not change the appearance of the overall project from key observation points. The proposed addition of poles that will average 20 feet taller within areas visible from I-10 will result in changes that will not be readily apparent to the casual observer from the freeway, especially at freeway speeds. There are no identified sensitive viewpoints in the vicinity of the proposed changes. Therefore, there will be no change in visual impacts resulting from the double-circuit structures as compared to the originally proposed project. No changes to or additional Conditions of Certification are required.

3.13 Waste Management

3.13.1 Edison Structure Relocations and Modifications

There will be no change to waste management practices during the construction and operation of the proposed modifications. No changes to or additional Conditions of Certification are required.

3.13.2 BEPTL Structure Replacements

There will be no change to waste management practices during the construction and operation of the proposed structure replacements. No changes to or additional Conditions of Certification are required.

3.14 Worker Safety and Fire Protection

3.14.1 Edison Structure Relocations and Modifications

Construction and operation of the proposed modifications will not change the impact the Project will have to worker safety or cause a change in fire hazard. No changes to or additional Conditions of Certification are required.

3.14.2 BEPTL Structure Replacements

Construction and operation of the proposed replacements will not change the impact the Project will have to worker safety or cause a change in fire hazard. No changes to or additional Conditions of Certification are required.

4 Ability to Comply With LORS

The proposed project changes discussed in this IPCR are minor and are consistent with all applicable LORS. The findings and conclusions contained in the Commission Decision for BEP (CEC 2001) and the Blythe Transmission Line (CEC 2006b) are still applicable to the Project as modified. Neither of the proposed modifications will require any changes to the Conditions of Certification.

5 Potential Effects on the Public

Construction and operation of either of the proposed modifications will not change the impact of the proposed project or have a significant adverse impact to the public.

6 List of Property Owners

Appendix A provides a list of all property owners whose property is located within 1,000 feet of the proposed project modifications in accordance with the CEC Siting Regulations (Title 20, CCR, Section 1769[a][1][H]).

7 Potential Effects on Property Owners

The areas where relocations and modifications to B-EM and BEPTL structures are proposed have already received easements from affected property owners. No structures with guyed wires are located outside the B-EM or BEPTL ROWs. All proposed modifications on private property are subject to voluntary agreements negotiated with the landowner. Any additional or different negotiations with landowners as a result of changes to the B-EM transmission line will be the responsibility of Edison. Likewise, any additional or different negotiations with landowners as a result of changes to the BEPTL will be the responsibility of Blythe Energy. However, no change in overall impact to property owners has resulted from the proposed modifications.

8 References Cited

Blythe Energy. 2004. Blythe Energy Project Transmission Line Modifications Petition for Post-Certification Amendment [99-AFC-8]. Prepared by Tetra Tech FW, Inc., for Blythe Energy, LLC.

Carrico. R., W. Eckhardt, and K. Walker. 2004. Cultural resource survey of the proposed Blythe transmission line project, Riverside County, California. Prepared by Mooney/Hayes Associates, LLC, for Southern California Edison.

Carrico, R., and W. Eckhardt. 2006. Final Draft Cultural Recourse Inventory of the Proposed Blythe Energy Transmission Project, Riverside County, California. Prepared by Mooney/ Jones & Stokes, San Diego, California. Submitted to the BLM, CEC, and Western. Submitted to the Docket on June 14, 2006.

Carrico, R., F. Budinger, and J. Farrell. 2008. Final amendment to cultural resources inventory of the proposed Blythe Energy Project transmission line, Riverside County, California. Prepared by Tetra Tech, EC Inc. Submitted to the Bureau of Land Management.

CEC. 2001. Commission Decision for the Blythe Energy Project (99-AFC-8).

CEC. 2006a. Revised Staff Assessment/ Draft Environmental Assessment.

CEC. 2006b. Commission Decision on Amendment Petition for the Blythe Energy Project (99-AFC-8).

Karl, A. 2005. Blythe Energy Transmission Line project supplementary survey of special-status species.

Pigniolo, A.R., M. Baksh, and J. Dietler. 1999. Cultural Resource Survey for the Blythe Energy Project, Riverside County, California. Manuscript on file at Tierra Environmental Services.

Tetra Tech. 2005. Combined desert tortoise survey report, conducted for Southern California Edison, Inc., Desert Southwest Energy, LLC, and Blythe Energy, LLC. Submitted to the Docket on October 6, 2005.

Western and BLM. 2007. Finding of No Significant Impact and Floodplain Statement of Findings – Blythe Energy Project Transmission Line Modifications Project, Riverside County, California. Western/DOE EA-1522.

Appendix A-1

List of Property Owners within 1,000 Feet Affected by Edison Project Change

The Holt Group

1601 North Imperial Avenue, El Centro, CA 92243

Phone (760) 337-3883, Fax (760) 337-5997

BTL TRANSMISSION PROJECT

THG Project No.:	**632.030E**
Project Title:	**Blythe Transmission Line**
Sheet Content:	**Assessor's Parcel Numbers & Owners List**
Date:	**April 10, 2009**
Prepared by:	**Jesús Villegas**

NOTES:

Assessor's Parcel Number	Property Owner(s)	Address
824-090-024	COCOPAH NURSERIES	81880 ARUS AVE, INDIO CA 92201
824-101-016	SUN WORLD INTERNATIONAL, CA	16350 DRIVER RD, BAKERSFIELD CA 93308
824-101-007	COUNTY OF RIVERSIDE	3133 7TH ST, RIVERSIDE CA 92501
824-101-015	SUN WORLD INTERNATIONAL, CA	16350 DRIVER RD, BAKERSFIELD CA 93308
824-101-012	CAITHNESS BLYTHE II	565 5TH AVE #29TH, NEW YORK NY 10017
824-080-003	SUN WORLD INTERNATIONAL, CA	16350 DRIVER RD, BAKERSFIELD CA 93308
824-102-027	SUN WORLD INTERNATIONAL, CA	16351 DRIVER RD, BAKERSFIELD CA 93308
824-090-028	SUN WORLD INTERNATIONAL, CA	16352 DRIVER RD, BAKERSFIELD CA 93308
824-090-018	DAWSON RONALD E / DAWSON RITA D	16275 W HOBSONWAY, BLYTHE CA 92225
824-080-004	COUNTY OF RIVERSIDE	3133 7TH ST, RIVERSIDE CA 92501
824-102-025	SUN WORLD INTERNATIONAL, CA	16350 DRIVER RD, BAKERSFIELD CA 93308
824-090-034	NORDELL THOMAS E / NORDELL SANDRA L	16531 W HOBSONWAY, BLYTHE CA 92225
824-101-021	BLYTHE ENERGY	700 UNIVERSE BLVD, JUNO BEACH FL 33408
824-090-009	MESA VINEYARDS INC	PO BOX 355, THERMAL CA 92274
824-101-013	CAITHNESS BLYTHE II	565 5TH AVE #29TH, NEW YORK NY 10017
824-102-020	SUN WORLD INTERNATIONAL, CA	16350 DRIVER RD, BAKERSFIELD CA 93308
824-102-026	SUN WORLD INTERNATIONAL, CA	16350 DRIVER RD, BAKERSFIELD CA 93308
824-090-037	DAWSON RONALD E / DAWSON RITA D	16275 W HOBSONWAY, BLYTHE CA 92225

Appendix A-2

List of Property Owners within 1,000 Feet Affected by BEPTL Change

The Holt Group

BTL TRANSMISSION PROJECT

1601 North Imperial Avenue, El Centro, CA 92243

Phone (760) 337-3883, Fax (760) 337-5997

		NOTES:
THG Project No.:	**632.030E**	
Project Title:	**Blythe Transmission Line**	
Sheet Content:	**APN & Owners List along Str 88-119 for Double-Circuit Information**	
Date:	**June 15, 2009**	
Prepared by:	**Jesús Villegas**	

Structure Number	Assessor Parcel Number	Property Owner(s) Name
88	879-080-022	USA
89	879-080-022	USA
90	879-080-022	USA
91	879-080-022	USA
92	879-080-002	BLYTHE ENERGY, LLC
93	879-080-001	BLYTHE ENERGY, LLC
94	879-030-007	BLYTHE ENERGY, LLC
95	879-030-007	BLYTHE ENERGY, LLC
96	879-030-007	BLYTHE ENERGY, LLC
97	879-030-014	USA
98	879-030-014	USA
99	879-030-014	USA
100	879-030-013	USA
101	879-030-013	USA
102	879-030-013	USA
103	879-030-002	ETHEL WEINING
104	879-030-002	ETHEL WEINING
105	879-030-001	BLYTHE ENERGY, LLC
106	879-030-012	USA

Structure Number	Assessor Parcel Number	Property Owner(s) Name
107	879-030-012	USA
108	879-030-012	USA
109	879-030-012	USA
110	879-030-012	USA
111	879-030-012	USA
112	879-020-025	USA
113	879-020-025	USA
114	879-020-025	USA
115	879-020-025	USA
116	879-020-025	USA
117	879-020-025	USA
118	879-020-008	ROBERT DESSUREAUT LAPERLE
119	879-020-008	ROBERT DESSUREAUT LAPERLE
120	879-020-007	BLYTHE ENERGY, LLC
121	879-020-006	BLYTHE ENERGY, LLC

Appendix B

Details on Relocated and Modified Structures

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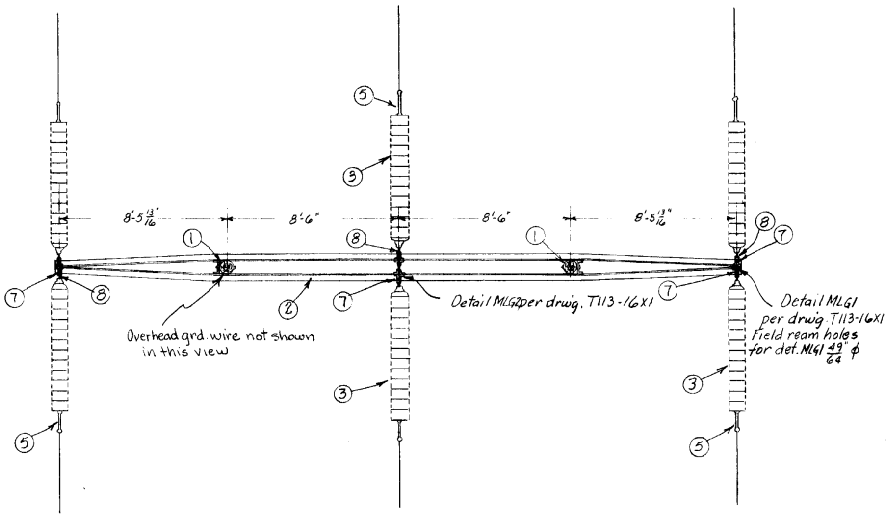
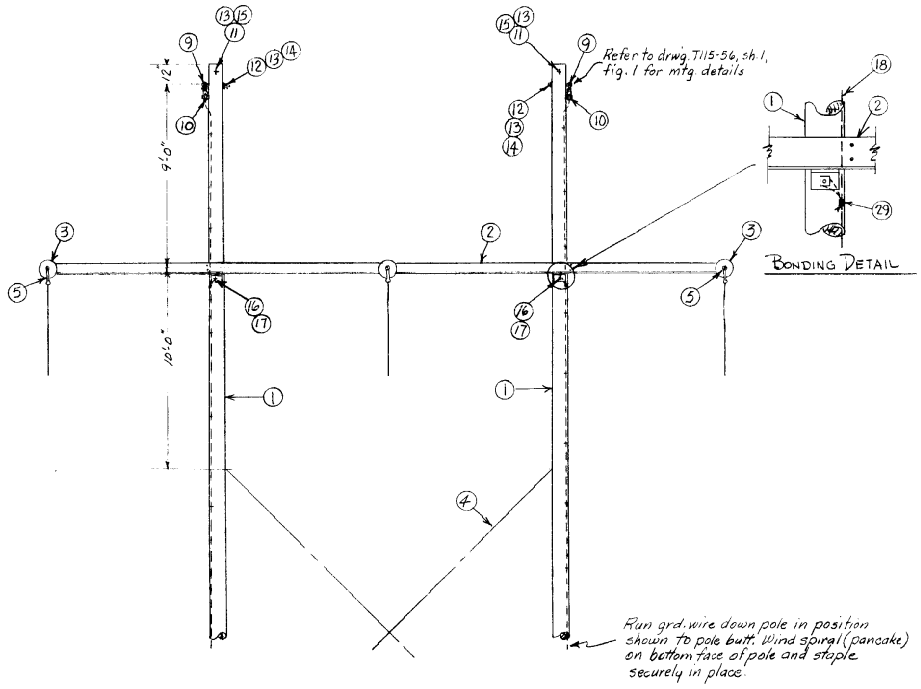


PLAN VIEW

BILL OF MATERIAL

Item	Reqd	Description	
1	2	Poles, F.T., height as specified on data sheet	
2	1	Steel crossarm, per drwg. T161-52	
3	78	Insulators, 10" disc, ball & socket	25,000#
4	1	X-brace, 17'-0" spacing	
5	6	Deadend clamps, for 336 ACSR	
6	—	Connectors, compression, for 336 ACSR	Jumper
7	6	Clevises, galv.	Hubb. 6800
8	6	Clevises, ball, galv.	
9	2	Clevises, 2", galv.	Hubb. 6793
10	2	Clamps, suspension, galv.	Lapp 9301-U
11	2	Bolts, mach, 5/8" x 10", galv.	
12	2	Bolts, eye, 3/4" x 10", galv.	
13	8	Washers, 3 1/4" sq., stubbing, 13/16" hole	
14	2	Palnuts, 3/4", galv.	
15	2	Palnuts, 5/8", galv.	
16	4	Bolts, mach. 7/8" x 12", galv.	
17	4	Palnuts, 7/8", galv.	
18	200'	Wire, #4 str., b.c.	
19	1#	Staples, 1 1/2", galv.	
20	2	Steel deadend detail, Det. MLG2 drwg. T113-16X1	
21	4	Steel deadend detail, Det MLG1, drwg T113-16X1	
22	8	Bolts, mach., 3/4" x 3 1/2", galv.	
23	8	Bolts, mach., 5/8" x 2", galv.	
24	16	Tapered washers, 3/4", galv.	
25	8	Tapered washers, 5/8", galv.	
26	8	Lockwashers, 3/4", galv.	
27	8	Lockwashers, 5/8", galv.	
28	2	Washers, 3 1/4" sq. stubbing, 15/16" ϕ hole	
29	2	Connectors, #2 str., split-bolt	



POLE TOP DETAILS
FOR
HLDE/G CONSTRUCTION
161 KV "BD" LINE

California Electric Power Company
RIVERSIDE, CALIFORNIA

REVISIONS	BY	DATE	APP'D	REFERENCES	DRAWING	SIZE
5						
4						
3						
2						
1						

SCALE 1/4" = 1'-0" DATE 8-28-57 DRAWN TRACED CHECKED C. K. APPROVED DRAWING NUMBER T113-17

7-67 438749-0 INV. 3

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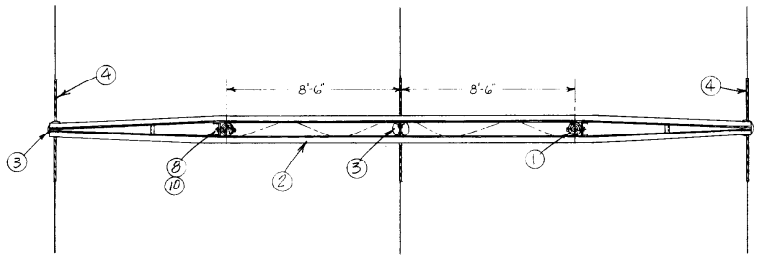
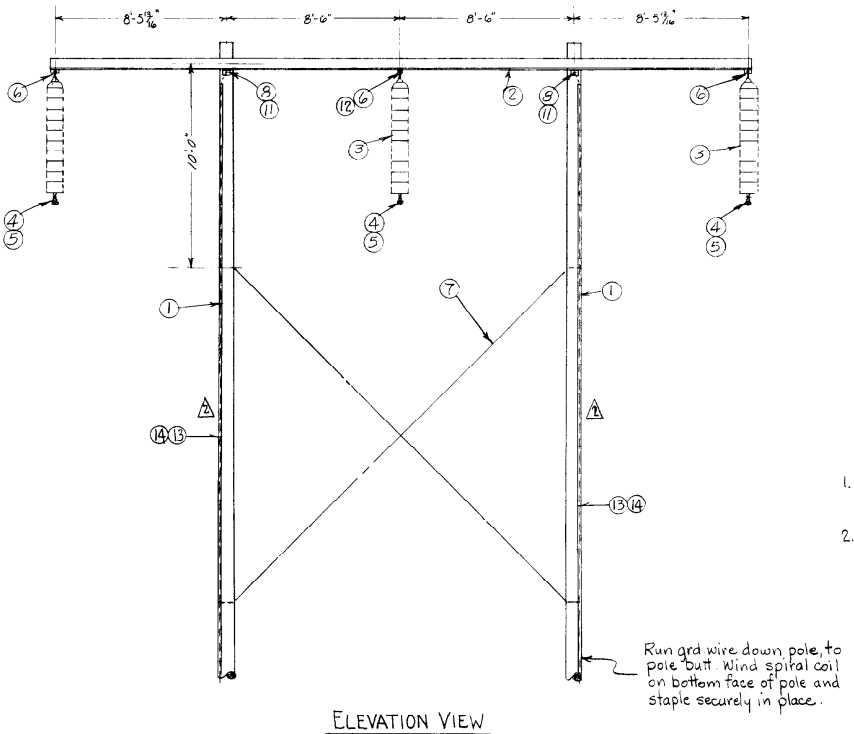


PLAN VIEW

BILL OF MATERIAL

Item	Reqd	Description
1	2	Poles, F.T., Cl.3 min., as specified on data sheet, class 3
2	1	Steel angle crossarm, complete per drwg. T161-52
3	33	Insulators, 10" disc., ball & socket 15000* * unit st.
4	3	Preformed armor rods
5	3	Clamps, suspension
6	3	Ball clevises, galv. J.D.1211
7	1	X-brace, complete, 17'-0" pole spacing, drwg. T115-54
8	4	Bolts, mach., 7/8" x 12", or 14", galv.
9	2	Palnuts, 7/8", galv.
10	2	Washers, 3/4" sq., galv., w/ 15/16" hole
11	——	Washers, 4"x4"x1/2", galv.
12	1	Clevis, 3", galv
△2 13	120'	Moulding, 1", grd. wire
△2 14	160'	Wire, #4 str., b.c.

* Use 9 units on 138 kv - 11 units on 161 kv



ELEVATION VIEW

Notes

1. Poles will be supplied with only one hole bored, which is for bottom crossarm bolt. Top crossarm bolt hole and two holes for X-brace, are to be bored in field.
2. Steel crossarms will not fit directly on poles, with top diameters less than 8", so where tops are less than 8", item 11 will be used as shims

TYPE "HLS"

POLE TOP DETAILS

138/161 KV. CONSTRUCTION

California Electric Power Company
RIVERSIDE, CALIF.

5			
4			
3			
△2 Added moulding & grd. wire	JK	11-7-58	JK
△1 Chg. item 7	JK	4/19/57	—
REVISIONS	BY	DATE	APP'D

REFERENCES	DRAWING	SIZE
Coining & Boring	T111-6549	D

SCALE 1/4" = 1'-0"	DRAWN	O.K. W.J.L.	DRAWING NUMBER
DATE 3-4-57	TRACED	JK	T161-12
	CHECKED MRB	APPROVED MER	

438968-2

DIETERICH-POST CLEARPRINT 1000H

438968

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL℠ Company

Raymond Paz
Manager of Programs
TDBU Project Management Organization

March 10, 2009

Gary L. Hickey
NextEra Energy Resources – Blythe Energy, LLC
Executive Director - Development
1152 Greenbrier Drive
Forsyth, Illinois 62535

Re: SCE Pole Relocation – Email dated January 27, 2009 @ 4:46 PM

Dear Mr. Hickey:

In response to your email sent to various SCE personnel, noted below are answers to questions poised in the following paragraph:

> *When SCE has completed the relocation design and can provide the map and drawing for each, as well as a description of the construction steps in removing the old structures and installing the new structures, we will submit the package to the CEC to meet the CEQA requirements. We will need details on whether the work will be conducted "hot" or de-energized, whether there will need to be work at other structures to re-splice or tension longer conductor lengths, whether any changes in conductor during construction will require traffic control or temporary crossing structures for I-10, Hobsonway or Butch Ave., how the old structures will be disposed of, workforce and equipment needs, schedule, and types of equipment to be used. These latter details can be wrapped up in a few paragraphs, as long as we touch on all the subjects. We will be responsible for all the biological and cultural surveys, for putting the final package together, and for obtaining CEC approval of the package.*

The answers have been set up in sequential form with questions from NextEra in slate and responses from SCE in blue.

1. *Relocation design of the SCE pole relocations.*
   Word file provided under separate cover.
   BEP – Structure Relocations on Blythe Eagle Mountain Line

2. *Map and drawing of each relocated pole.*
   Word file provided under separate cover.
   BEP – Structure Relocations on Blythe Eagle Mountain Line

3. *Description of the construction components in removing old structures and installing new ones.*
   Word file provided under separate cover.
   BEP – Structure Relocations on Blythe Eagle Mountain Line

4. *Will the work be conducted "hot" or de-energized?*
   This work will be conducted with the line de-energized. An outage will be required for the Blythe-Eagle Mountain 161kV line in order to complete the relocations. Outages may also be required from the FPL Energy while the relocations inside their facility are being performed.

5. *Will work need to be done at other structures to re-splice or tension longer conductor lengths?*
   Word file provided under separate cover.
   BEP – Structure Relocations on Blythe Eagle Mountain Line

6. *Will any changes in the conductor during construction require traffic control or temporary crossing structures for the I-10, Hobsonway, or Butch Avenue?*
   Permits will be required for the freeway crossing. Any additional measures at the freeway crossing will be dictated by Caltrans. No facilities crossing Hobsonway or Butch Avenue will be affected; all work at these locations will be off the road.

7. *How the old structures will be disposed?*
   The old structures will be cut and placed in disposal bins. The bins will then be disposed of at an approved hazardous waste facility.

8. *What type of workforce, equipment needs, schedules, and types of equipment will be required for this project?*
   Each location will require one ten man construction crew. The crew will have one line truck; one material truck; one 30 ton truck mounted crane; two bucket trucks; and two 3/4 ton crew trucks. Depending on the location of the structure, an Auger truck or backhoe may be necessary to dig the proper depth for pole setting. Each location requires approximately two working days to set the new structures; transfer the conductor; and remove the old structures.

Should you have any questions, please contact Warnetta Logan, Project Manager at (626) 302-8879.

Most Sincerely,

Digitally signed by Ray Paz
DN: cn=Ray Paz, o=PMO, ou=TDBU, email=raymond.paz@sce.com, c=US
Date: 2009.03.10 18:51:08 -07'00'

Raymond Paz
Manager of Programs

c: De Leon, S.
Franzo, R.
Jufer, N.
Logan, W.
Tucker, J.

Blythe Eagle Mountain Transmission Line
Structures to be Modified or Moved to Accommodate the Blythe Energy T/L Crossings

	Geographic Location (Lat/Long)				Cal State Plane Coordinates							
	As Is		Relocated		As Is		Relocated		Distance	Guy Anchor Distance		
Structure No.	Lat	Long	Lat	Long	Northing	Easting	Northing	Easting	Relocated	From Pole	Relocation Note	Structure Notes
124603	33.61164596	114.6850317	N/A	N/A	2169757.366	7038120.651	N/A	N/A	N/A	65' E & W	N/A	possible hardware change from suspension insulators to dead end insulators accompanied with addition of back and ahead guys and guy anchors.
124604	33.61140656	114.6871096	N/A	N/A	2169660.776	7037489.388	N/A	N/A	<4' east	Use Existing	Replace at same location	Replace with a 95' H-Frame (84' above ground). Use existing guy anchors for three way guying + a span guy to H-frame on other side of crossing
124605	33.61130848	114.6879609	33.61123725	114.6885791	2169621.206	7037230.778	2169592.468	7037042.965	190' in line to west	85' W, N, & S	Relocate in line to west.	Replace with a 110' H-frame (98' above ground). Add three way guys (west, north, and south) and a span guy across the crossing.
124606	33.6109808	114.6908044	N/A	N/A	2169489.023	7036366.903	N/A	N/A	N/A	55' E & existing anchor on west	N/A	Replace suspension insulators with dead ending hardware. Add back and ahead in-line guys.
124609	33.60829136	114.6965001	N/A	N/A	2168484.609	7034647.55	N/A	N/A	N/A	55' N & S	N/A	Replace suspension insulators with dead ending hardware. Add back and ahead in-line guys.
1795065 1795066	33.60709018	114.6965009	33.60738129	114.6965007	2168047.564	7034653.829	2168153.483	7034652.307	106' in line to north	N/A	Relocate to north in line 106'	Replace with an 85' H-frame (75' above ground level). Use suspension hardware and a Grade A crossing structure strength
4100304	33.60626518	114.6965014	N/A	N/A	2167747.394	7034658.141	N/A	N/A	<4' north	N/A	Replace at same location on north side.	Replace with an 80' H-frame (70' above ground level). Use suspension hardware and the structure should be a Grade A crossing structure in strength.

Notes

1 All existing structures are wood pole H-Frames with 17' pole spacing and 35' crossarms, or, where noted, 3 pole dead end structures.
2 Structure replacements and modifications are necessary to meet the following conditions:
a) Ability to maintain SCE structures without requiring multiple foreign line outages.
b) Provide sufficient wire to wire clearances
c) Provide adequate ground clearance under contingency operating conditions for modified structure spans.
d) Eliminate any excessive insulator swing (provide adequate wire to structure clearance under regulatory and extreme wind conditions.
3 Assume guys will have a lead to height ratio of 1 so guy anchors will be set a distance from the pole equal to the crossarm height.
The lead distance could be less.

Structure Relocations on Blythe Eagle Mountain Line

Relocation of Structure at Crossing of IID and WAPA 161 KV lines

Figure 1 shows the present location of structure 124605 on the Blythe Eagle Mountain (B-EM) line relative to the Blythe Energy Transmission Line (BETL). The BETL turning structure shown below is structure 6 and is adjacent to the power plant property. To accommodate this crossing and allow for future maintenance of the SCE structure requires that it be relocated to the west on the existing alignment by 190 feet. The existing structure is a 90 foot Wood Pole H-Frame structure with the top of pole approximately 79' above the ground (see the attached drawing . The replacement structure will be a geometrically similar 110 foot steel H-Frame with the top of pole 98 feet above ground surface. Its location is shown in Figure 2.

The centerline coordinates (State Plane Coordinates) of the existing and replacement structures are in the following table:

	Existing Structure	Replacement Structure
Northing	2169621.206	2169592.468
Easting	7037230.778	7037042.965

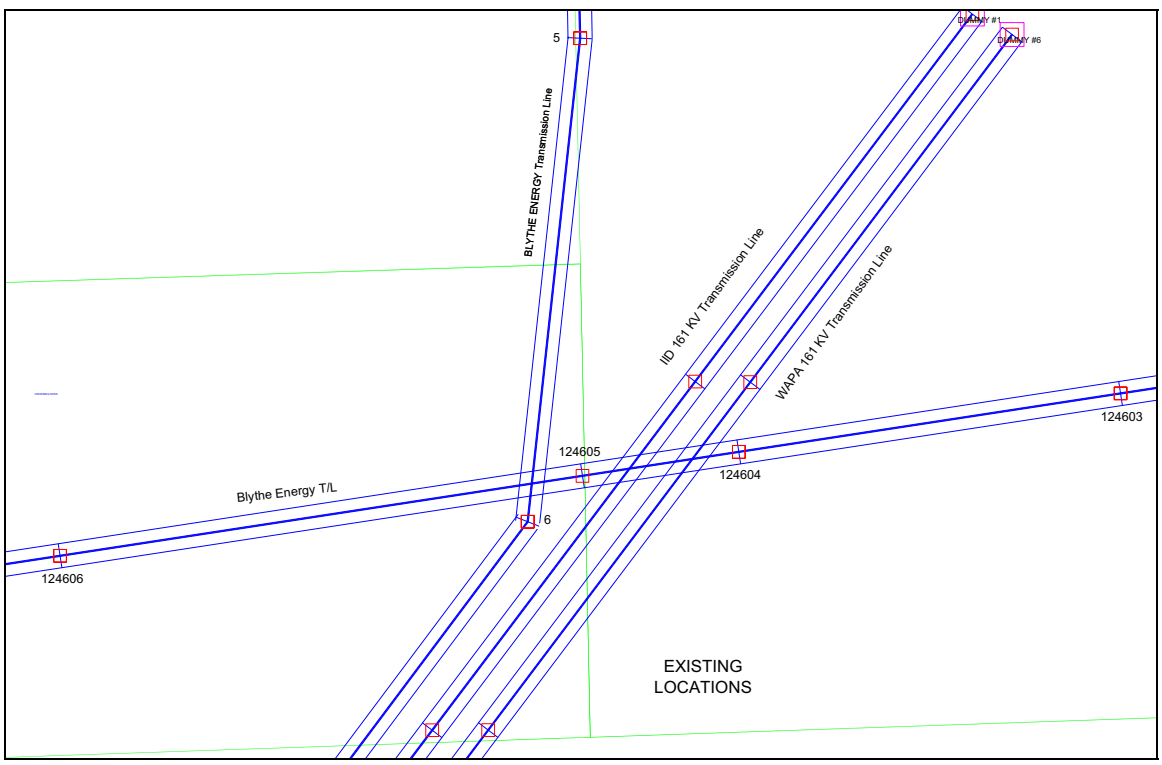


Figure 1: Existing Locations of B-EM Structure 124605 Relative to Other Lines

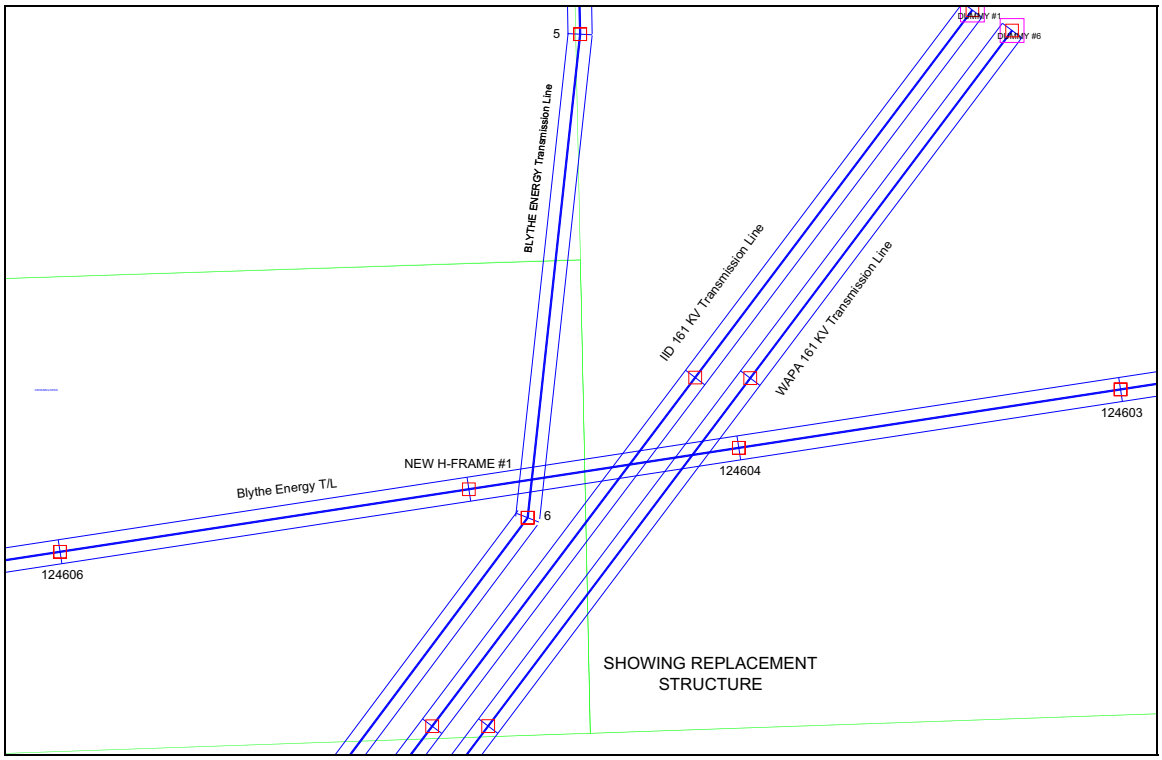


Figure 2: Showing Replacement For 124605

The physical work associated with this relocation will involve the following:

1. Installation of New H-Frame with three way guying in place of 124605 but 190 feet to west.
2. Install a replacement steel H-frame of the same configuration but 5' taller at existing location of 124604.
3. Move conductor to new structures. Replacement of suspension hardware at structure 124606 with dead ending hardware. Ahead and back guying of this structure will be required.
4. Remove existing structure 124605.
5. Change suspension hardware on 124603 to dead end hardware and add back and ahead guys.

Structure relocation at Freeway Crossing

The BETL crosses the SCE line again about mile one of the BETL just before their structure 11. The SCE structure at this location is directly below their line (SCE structures 1795065E & 5066E). In order to have a structure which can be accessed with normal line equipment the structure needs to be at least 75 feet from the BETL. In order to achieve this the existing H-frame structure will be replaced by an equivalent but taller steel H-frame approximately 106 feet north of the existing structure and 10 feet taller. The existing and replacement structures are shown in Figures 3 and 4.

The centerline coordinates (State Plane Coordinates) of the existing and replacement structures are in the following table:

	Existing Structure	Replacement Structure
Northing	2168047.564	2168153.483
Easting	7034653.829	7034652.307

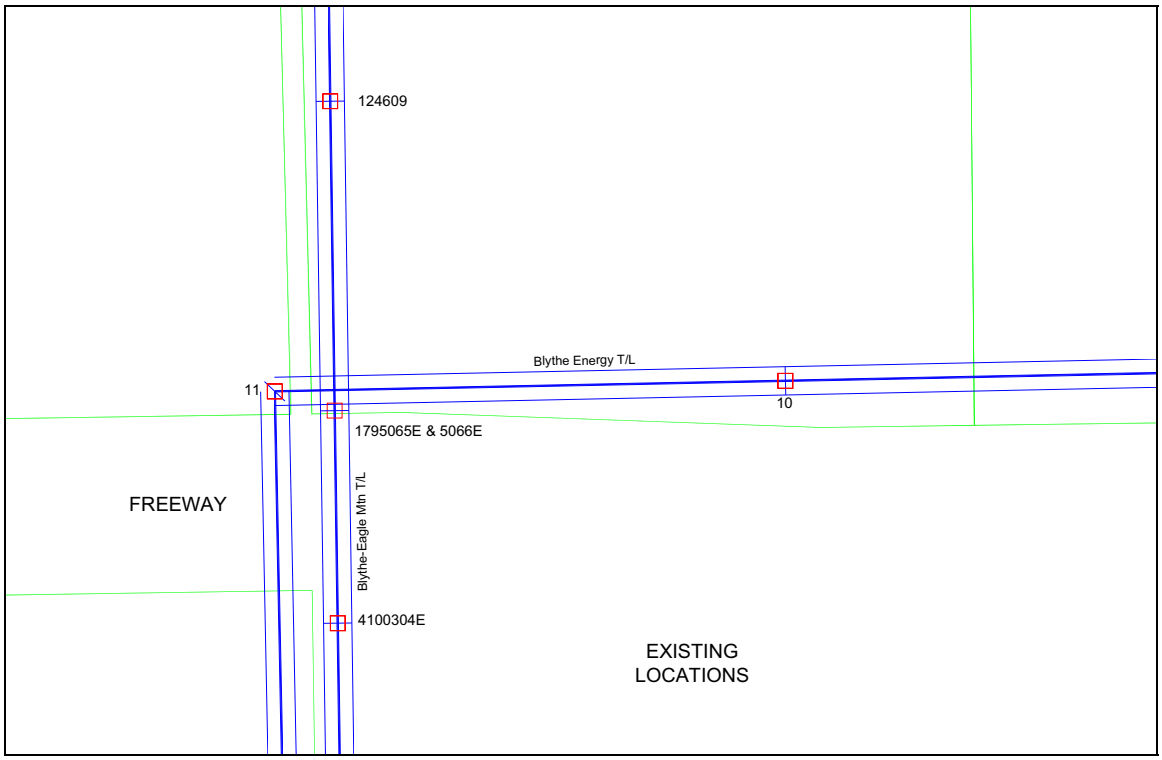


Figure 3: Existing Structure Location at Freeway Crossing

The existing SCE structure on the north side of the freeway crossing is a wood pole H-frame with suspension hardware (see attached drawing 438968). The poles are 75 foot long with an above ground height of 66 feet. The replacement structure will be geometrically similar but constructed of steel poles and top of poles will be 71 feet above the ground. The taller structure will necessitate changing hardware on the next structure north to dead end hardware and add back and ahead guys to it (structure 124609 on the Figures).

Due to the increased span the structure on the south side of the freeway will need to be replaced with a taller structure to accommodate sags under broken wire conditions. The taller structure will be placed at the existing location and will be 80' (70' above ground level). The physical work associated with this relocation will involve the following:

1. Installation of the New H-Frame 106' north of existing structure 1795065E/1795066E.
2. Installation of 80' H-frame at locatin of structure 4100304E south of the freeway.
3. Attach wires to new structure.
4. Remove existing structures.

5. Replace hardware on 124609 and add guys to north and south.

Equipment will be normal wood pole line equipment and disturbances at each work location will be typical of that required to replace subtransmission poles and hardware.

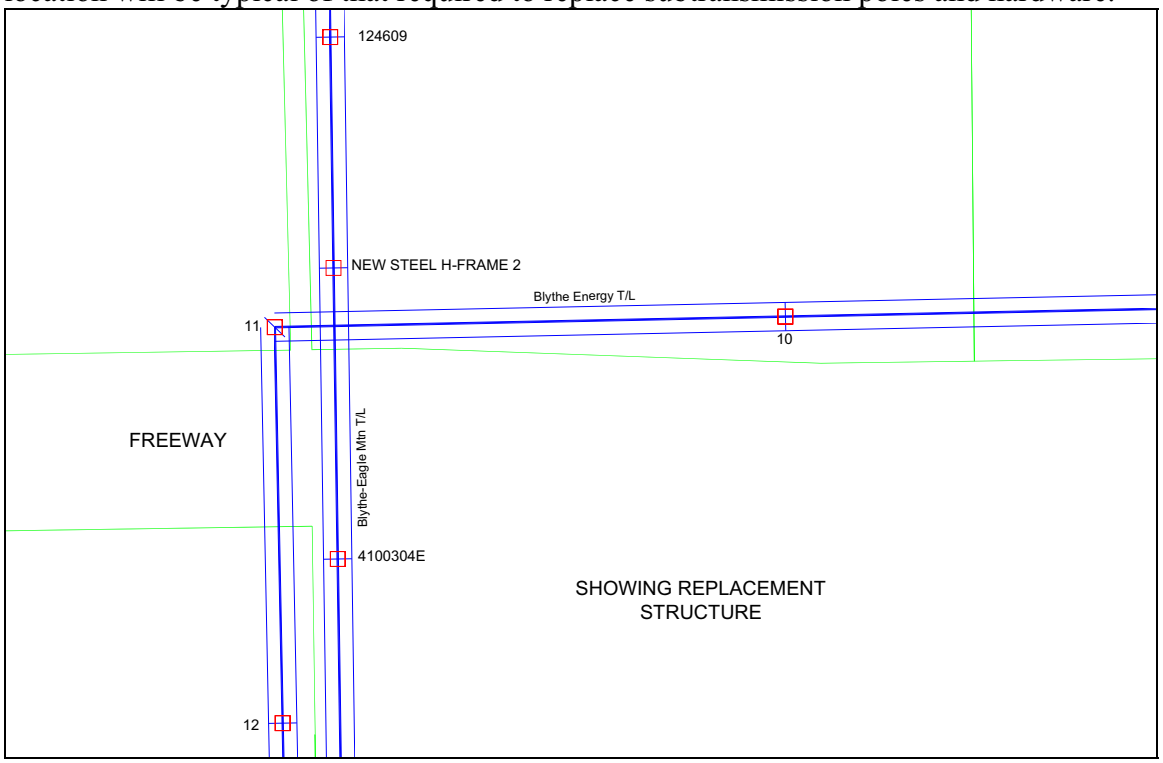


Figure 4: New Freeway Crossing Structure Location