LATHAM&WATKINSLLP

June 2, 2009



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File No. 039610-0003

VIA FEDEX

CALIFORNIA ENERGY COMMISSION Attn: Docket No. 08-AFC-9 1516 Ninth Street, MS-4 Sacramento, California 95814-5512

Re: City of Palmdale Hybrid Power Plant Project: Docket No. 08-AFC-9

Dear Sir/Madam:

Pursuant to California Code of Regulations, title 20, sections 1209, 1209.5, and 1210, enclosed herewith for filing please find a document entitled, "PHPP Inventory Report for Joshua Trees and California Junipers, City of Palmdale Native Desert Vegetation Ordinance."

Please note that the enclosed submittal was filed today via electronic mail to your attention and to all parties on the attached electronic proof of service list.

Very truly yours,

tul

Paul E. Kihm Senior Paralegal

Enclosure

cc: 08-AFC-9 Proof of Service List (w/encl. via e-mail and U.S. Mail) Michael J. Carroll, Esq. (w/encl.)



PALMDALE HYBRID POWER PROJECT (08-AFC-9)

INVENTORY REPORT FOR JOSHUA TREES AND CALIFORNIA JUNIPERS

CITY OF PALMDALE NATIVE DESERT VEGETATION ORDINANCE

Prepared for: **City of Palmdale, California and Inland Energy** Under subcontract to **AECOM Environment** 1220 Avenida Acaso Camarillo, California 93012-8738 Office: (805) 388-3775 Fax: (805) 388-3577

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Prepared by: **AMEC Earth & Environmental, Inc.** 3120 Chicago Avenue, Suite 110 Riverside, California 92507 Office: (951) 369-8060 Fax: (951) 369-8035

Principal Investigator: Matt Amalong, Wildlife Biologist <u>matt.amalong@amec.com</u>

May 2009 AMEC Project No. 6554000247



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PALMDALE HYBRID POWER PROJECT Inventory Report for Joshua Trees and California Junipers

1.0 INTRODUCTION

In response to the California Energy Commission's Palmdale Hybrid Power Project (08-AFC-9) Data Request #3, dated December 10, 2008, AMEC Earth & Environmental, Inc. (AMEC) prepared this Desert Vegetation Inventory Report in accordance with the City of Palmdale Native Desert Vegetation Ordinance (PNDVO or Ordinance) for the development of the proposed Palmdale Hybrid Power Project (PHPP or Project).

The purpose of the PNDVO is to protect and preserve desert vegetation, particularly Joshua trees (*Yucca brevifolia*) and California junipers (*Juniperus californica*), so as to retain the unique natural desert aesthetics in some areas of Palmdale, and to promote the general welfare of that plant community. The PNDVO also preserves other living plants protected by the California Desert Native Plants Act (CDNPA; Food and Agricultural Code section 80001, *et seq.*) or designated on any state or federal rare and endangered species list.

Although it may not be feasible, practicable, or in the public interest to preserve all healthy desert vegetation regulated under the PNDVO due to reasonable planning, development or property rights considerations, the design of development projects should strive to protect and maintain the most desirable and significant of the healthy desert vegetation in a manner consistent with the City General Plan (1993) and the California Environmental Quality Act.

The PNDVO requires that the inventory report depicts the location of each Joshua tree and California juniper, discusses their age and health, and identifies and locates all Joshua trees and California junipers in the City of Palmdale (City) that can be saved in place or relocated. This report will be included in the PHPP Desert Vegetation Preservation Plan, which will also describe landscaping use of Joshua trees and California junipers and a long-term maintenance program for native desert vegetation preserved onsite.

The PNDVO only applies within the City of Palmdale. Some portions of the PHPP occur within Los Angeles County; however, the County does not have an ordinance related to the preservation of Joshua trees or California juniper.

2.0 **PROJECT DESCRIPTION**

The City proposes to construct, own, and operate the Project, a nominal 570-megawatt (MW) hybrid combined-cycle and solar thermal electrical generation facility, and has contracted with Inland Energy, Inc. to develop the Project. The Project is located in the City of Palmdale and unincorporated areas of Los Angeles County, California (the power plant site and most linear facilities are within the City; portions of the transmission line route are within unincorporated areas). The Project includes a 333-acre power plant site, including both a power block and a solar array, 50-acre construction laydown area, 35.6-



mile transmission line, 7.4-mile reclaimed water pipeline, 8.7-mile natural gas supply pipeline, 1-mile sanitary wastewater pipeline, and 0.5-mile potable water pipeline (Figure 1). Throughout this report, the term "Project Site" refers to all Project elements in the aggregate (power plant site and all linear facilities); "linear facilities" refers to the various Project pipelines and the transmission line in the aggregate; all other references are to the specific Project component being addressed ("power plant site" or "plant site," "transmission line," "reclaimed water pipeline," "natural gas supply pipeline," "sanitary wastewater pipeline," and "potable water pipeline").

2.1 Habitat Communities

The biological composition of the Palmdale area presents a transition zone from montane and chaparral plant communities to communities more commonly found in the Mojave Desert. The results of the 2008 general biological field assessment indicate that nine habitat communities occur throughout the various areas of the Project Site. These include:

- Mojave Creosote Bush Scrub
- Joshua Tree Woodland
- Rabbitbrush Scrub
- Desert Saltbush Scrub
- Mojavean Juniper Scrub
- Mojave Riparian Forest/Southern Riparian Scrub
- Mojave Desert Wash Scrub
- Agricultural Land (active and fallow) and Orchards
- Urban and Disturbed/Developed Land germane

The plant communities on the Project, and in the City, that are relevant to the PNDVO are Mojave Creosote Bush Scrub, Joshua Tree Woodland, and Desert Saltbush Scrub. These communities are described in detail in the Biological Resources Technical Report (AMEC 2008), with aspects relevant to the PNDVO described below.

2.1.1 Mojave Creosote Bush Scrub

Mojave Creosote Bush Scrub (Holland 1986) is generally composed of widely-spaced shrubs of approximately 2 to 10 feet in height with bare ground between, and it typically intergrades with Joshua Tree Woodland and other desert scrub communities. This community is dominated by creosote bush (*Larrea tridentata*) and white bursage (*Ambrosia dumosa*). Other plant species present throughout this community within the Project site include Joshua tree. Mojave Creosote Bush Scrub is one of the three dominant vegetation communities of the power plant site, found primarily in the southeastern portion (approximately 35 percent of the 333-acre power plant site). Along the northern portion of the transmission line, it is found in small concentrations until becoming dominant in the southeastern portions. It is not found along the other linear facilities.

2.1.2 Joshua Tree Woodland

Joshua Tree Woodland (Holland 1986) is dominated by *Yucca* spp., evergreen shrubs (*Juniperus* spp.), semideciduous shrubs (*Eriogonum* spp., *Tetradymia* spp.),



semisucculents (*Lycium* spp.), and succulents (*Opuntia* spp.). It typically intergrades with Mojave Creosote Bush Scrub at lower elevations and Mojavean pinyon-juniper woodland at higher elevations. Joshua Tree Woodland is one of the three dominant vegetation communities of the power plant site, stretching diagonally from the northeast portion to the southwest portion (approximately 55 percent of the 333-acre power plant site). Although Joshua trees are present throughout the linear facilities, this habitat community is only dominant in a few areas.

2.1.3 Desert Saltbush Scrub

Desert Saltbush Scrub (Holland 1986) is characterized by low-growing, grayish, microphyllous shrubs and the presence of some succulent species. Although a variety of saltbush (*Atriplex* spp.) species can be present, this vegetation community is often dominated by a single saltbush species, with Joshua trees scattered throughout. Desert saltbush scrub is not present on the power plant site, reclaimed water pipeline, or natural gas supply pipeline. However, it is dominant along the northern and eastern portions of the transmission line.

2.2 **Project Disturbance**

A total of approximately 416 acres will be permanently impacted by the Project, including areas outside of the City. Table 1 shows the approximate acreages of each habitat community in the City hosting Joshua trees and/or California junipers that will be impacted by each Project component. All of transmission line segment 1 is included in the acreages, although approximately 5.5 miles are outside the City boundaries. All of transmission line segment 2 is outside of the City boundaries, and is not included.

Table 1. Direct permanent surface disturbance (in acres) per affected vegetation community and Project component in the City of Palmdale.

| Habitat Community | Power Plant Site | Transmission Line Segment 1 | TOTAL (acres) |
|-------------------------------|------------------|--------------------------------|------------------|
| Mojave Creosote Bush Scrub | 116.55 | 11.96 | 128.51 |
| Joshua Tree Woodland | 183.15 | 2.20 | 185.35 |
| Desert Saltbush Scrub | 0 | 4.62 | 4.62 |
| Total (acres) | 299.70 | 18.78 | 318.48 |

3.0 SURVEY METHODOLOGY

AMEC biologists knowledgeable in desert native plants conducted surveys in February and March 2009 to identify all Joshua trees and California junipers throughout the Project Site's disturbance areas within the City. Data were taken on all individuals (*e.g.*, height, width, diameter at breast height (DBH), health, and location using Global Positioning



System (GPS)). For Joshua trees with multiple trunks, the largest DBH was used. The GPS data were mapped using Geographic Information System (GIS) software.

Because Joshua trees are numerous on the power plant site, locating and assessing each individual was impractical. Instead, a valid, scientifically based approach was used to provide a projected density of individuals per acre. This approach, approved by the City, was based on accepted quantitative vegetation sampling techniques (*e.g.*, Mueller-Dumbois and Ellenberg 1974, Bonham 1989), wherein a site is sampled via a stratified-random approach, the results of which are then extrapolated to the entire site.

To achieve this sampling, the power plant site was stratified into 144 hectares. A 3x3 grid (9 cells) was arranged, with each cell containing 16 hectares. Within each cell, one hectare was randomly selected to be completely surveyed for all Joshua trees. Of the nine randomly selected hectares, six were located within Joshua Tree Woodland and three were located within Mojave Creosote Bush Scrub, which roughly equates to the percent composition of Joshua Tree Woodland (55 percent) and Mojave Creosote Bush Scrub (35 percent), respectively. The counts for each cell were extrapolated proportionately based on habitat type to provide a quantitative assessment of all Joshua trees on the power plant site.

For the transmission line, the individual disturbance sites (*e.g.*, pole locations, pull sites, work areas) were surveyed completely for Joshua trees and California junipers.

4.0 RESULTS

On the power plant site, 1,303 Joshua trees were counted and measured (Table 2; see Appendix 1 for individual measurements). Based on this count and using the scientifically based extrapolation technique, an estimated 16,325 Joshua trees are present on the 333 acre power plant site. No California junipers were identified on any portion of the power plant site.

| Joshua Tree | | | |
|-------------------|-------|--|--|
| Height Class (ft) | Count | Proportion of All Individuals Counted | |
| 0.0 - 2.0 | 164 | 0.126 | |
| 2.5 - 4.0 | 288 | 0.221 | |
| 4.5 - 6.0 | 222 | 0.170 | |
| 6.5 - 8.0 | 168 | 0.129 | |
| 8.5 - 10.0 | 153 | 0.117 | |
| 10.5 – 12.0 | 133 | 0.102 | |
| 12.5 – 14.0 | 82 | 0.063 | |
| 14.5 – 16.0 | 52 | 0.040 | |
| 16.5 – 18.0 | 20 | 0.015 | |
| 18.5 – 20.0 | 15 | 0.012 | |
| 20.5 - 22.0 | 3 | 0.002 | |
| 22.5 - 24.0 | 3 | 0.002 | |
| Total | 1,303 | 1.000 | |

Table 2. Joshua tree count for power plant site.



On the disturbance areas (*e.g.*, pole locations, pull sites, work areas) for those portions of the transmission line located in the City, 84 Joshua trees were counted and measured (Table 3; see Appendix 1 for individual measurements). Figure 2 shows the locations of these trees. If the disturbance areas outside the power plant site, depicted in Figure 2, change based on biological, engineering, or other Project-related issues, the counts of Joshua trees could also change. The counts stated in this report are approximations and are expected to be comparable to the final counts. No California junipers were identified on any portion of the transmission line located in the City.

| Joshua Tree | | | | |
|-------------------|-------|---------------------|--|--|
| Height Class (ft) | Count | Proportion of Total | | |
| 0.0 - 2.0 | 22 | 0.262 | | |
| 2.5 - 4.0 | 12 | 0.143 | | |
| 4.5 - 6.0 | 10 | 0.119 | | |
| 6.5 - 8.0 | 10 | 0.119 | | |
| 8.5 - 10.0 | 11 | 0.131 | | |
| 10.5 – 12.0 | 11 | 0.131 | | |
| 12.5 – 14.0 | 2 | 0.024 | | |
| 14.5 – 16.0 | 5 | 0.060 | | |
| 16.5 – 18.0 | 1 | 0.012 | | |
| Total | 84 | 1.000 | | |

Table 3. Joshua tree count for transmission line disturbance areas in the City of Palmdale.

The average annual growth of a Joshua tree is 0.5 inch per year, which indicates that the approximate ages of Joshua trees on the power plant site range from very young to over 500 years old; the approximate ages of Joshua trees on the transmission line disturbance areas range from very young to over 400 years old. As a comparison, the largest Joshua tree in Joshua Tree National Park is 40 feet in height, estimated to be over 900 years old (Joshua Tree National Park 2000). The age distribution of Joshua trees on the power plant site and transmission line disturbance areas is relatively young (Table 4).

Table 4. Approximate age distribution of Joshua trees on the power plant site and transmission line disturbance areas in the City of Palmdale.

| Height Class (ft) | Approximate Age (years) | Count | Proportion of Total |
|-------------------|----------------------------|-------|---------------------|
| 0.0 - 6.0 | 0 – 150 | 718 | 0.518 |
| 6.5 – 12.0 | 150 – 300 | 486 | 0.350 |
| 12.5 – 18.0 | 300 – 450 | 162 | 0.117 |
| 18.5 - 24.0 | 450 - 600 | 21 | 0.015 |
| Total | | 1,387 | 1.000 |

5.0 DISCUSSION

The City Ordinance sets a minimum preservation standard of two Joshua trees per gross acre covered by the development application, based on abiotic and biotic conditions. Preservation may occur by any combination of three options: (1) retention on-site;



(2) preservation off-site; or (3) payment of an in lieu fee, calculated on the minimum standard of 2 trees per acre, if preservation on-site or off-site is not feasible.

If off-site preservation is selected, the Project shall make available Joshua trees to other commercial, industrial or residential development projects for incorporation into another project's landscaping. The Project also shall make them available to the public or the City for use as landscaping. Joshua trees from the site shall remain available to the public for a minimum of thirty (30) days after appropriate public notice as determined by the City's planning director. Off-site preservation can also include transplanting of relevant species to a City-administered tree bank or acquisition of a native desert vegetation preserve.

5.1 Joshua Trees

The Project will impact approximately 319 acres of habitat in the City that could support Joshua trees, so 638 Joshua tree individuals would be required to be preserved, either by leaving individuals in place or by transplantation.

5.1.1 On-site Preservation

The 333-acre power plant site will be permanently disturbed, so very few, if any, Joshua trees will be left in place on-site. As many Joshua trees as possible will be used for landscaping along the site boundaries; however, these trees will need to be moved during construction activities and later replanted. The parcel of land where the proposed power plant site is located has been fragmented on all sides by highways, railroad, chain-link fencing, and commercial and residential development, so the removal of the young-growth, fragmented Joshua Tree Woodland will not have as significant an impact as if the site contained old-growth, continuous habitat.

To leave individuals in place on-site on the transmission line, disturbance areas (*e.g.*, pole locations, pull sites, work areas) can be moved, resized, and reshaped to minimize impacts and preserve as many Joshua trees as possible. A biologist will be present during all preconstruction and construction activities to assist engineers and work crews in delineating disturbance areas. To enhance the likelihood of survival, Joshua trees that cannot be fenced and left undisturbed will not be left in place while grading. The options for preserving trees on-site after grading are the following: move the trees to remain on-site to a holding area; after grading and other construction activities has been completed, move the trees once again to a permanent location.

5.1.2 Off-site Preservation

The Project shall make available Joshua trees identified as suitable by the Project arborist for use in landscaping for transplantation to any City property or facility. Any Joshua trees required to be preserved may be transplanted to an off-site location. The City shall provide areas for off-site tree banks. This measure shall be viewed as an interim solution with the ultimate goal of relocating the Joshua trees to permanent locations. Maintenance of vegetation transplanted to a city-administered tree bank is the responsibility of the City. The Project proponent shall be responsible for retaining a qualified consultant to provide initial watering of trees after transplantation to a tree bank.



The City proposes the establishment of a Joshua Tree Preserve just to the west of the PHPP site on City-owned property for permanent preservation of Joshua Tree Woodland (see the Conceptual Landscape Plan, AECOM Environment 2009). The City proposes that the preserve be established near the southwest corner of the solar arrays where the City would set aside enough land to encompass 1,300 trees (existing number of Joshua trees at this location is unknown), which would allow for development and full disturbance of the entire 319 acres of habitats relevant to the PNDVO (power plant site and transmission line segment 1). Since the PNDVO only requires the preservation of 638 Joshua trees, transplantation may not be necessary. However, the number of trees on the preserve is unknown, and if the preserve does not already have 638 Joshua trees, the best specimen Joshua trees, as selected by the Project arborist, from the land to be disturbed for the power plant site would be transplanted in the designated Joshua Tree Preserve.

Rick Reiling, a Joshua tree transplantation expert with Horizon Tree Transplanting, has extensive experience transplanting Joshua trees in southern California. He indicated (pers. comm. with Matt Amalong 2008):

- Joshua trees less than 3 ft. in height have a high mortality rate.
- Joshua trees 6-7 ft. in height have ~70% success rate.
- Joshua trees 8-12 ft. have better success rates than the 6-7 ft. height class.
- Joshua trees greater than 12 ft. in height have the best success rates.
- Early spring is the best season for transplanting Joshua trees, but success rates are more dependent on the climate during that particular year (*e.g.*, temperature, amount of rainfall).
- Joshua trees can be temporarily "stored" for long durations of time between removal and final transplantation. It is best to "store" them in the ground before moving them again to their final location. Maintenance is the most important factor - water every week or two if hot, and every month if cool. If it is not possible to "store" them in the ground, boxes can be used, but then they need to be watered every couple days (*i.e.*, drip system).
- Horizon Tree Transplanting, or another qualified individual or organization, can inspect the Joshua trees to determine which individuals have the best chance of survival after transplantation.

5.1.3 Payment of an In Lieu Fee

Only after all other options are exhausted, the Project proponent may pay an in-lieu fee to the City to fulfill the PNDVO obligation for preservation of Joshua trees. The in-lieu fee will be accepted only when preservation of Joshua trees is not possible due to site constraints that preclude their feasible preservation, and no alternative preservation options remain.



5.2 California Junipers

As noted above, no California junipers were found within Project disturbance areas within the City of Palmdale. Therefore, no preservation plan is expected to be needed with respect to the PNDVO.

6.0 **REFERENCES**

- AECOM Environment, 2009. PHPP Responses to CEC Data Requests Set 1 (1-88), Docket 08-AFC-9, Response to Data Request #80. January 12, 2009.
- AMEC. 2008. PHPP Biological Resources Technical Report. Document prepared for ENSR International in support of the AFC submitted to the CEC.
- Bonham, C. 1989. Measurements for terrestrial vegetation. John Wiley and Sons, Inc., New York. 338 pp.
- City of Palmdale. 1993. City of Palmdale General Plan. Adopted by City Council January 25, 1993.
- Holland, R.F. 1986. Preliminary descriptions of the terrestrial natural communities of California. Calif. Fish Game, Sacramento.
- Joshua Tree National Park. 2000. On-line at <u>http://www.joshua.tree.national-</u> park.com/info.htm#tree
- Los Angeles County Department of Regional Planning. 2007. Los Angeles County Draft Preliminary General Plan.
- Mueller, D. and H. Ellenberg. 1974. Aims and methods of vegetation ecology. John Wiley and Sons, Inc., New York. 547 pp.
- Palmdale Native Desert Vegetation Ordinance. 1992. Chapter 14.04: Joshua Tree and Native Desert Vegetation Preservation. Ord. 952 §2 (part).
- Reiling, R. 2008. Personal communication with AMEC Wildlife Biologist Matt Amalong. Dec 31, 2008.



FIGURES



Reclaimed Water Pipeline

Palmdale Hybrid Power Project Figure 1 Vicinity & Location 4 Miles

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Figure 2-L 0.18 0.27

0.36

Miles

Transmission Line Route Work Areas ○ 50ft Pole Buffers

1:14,000

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Date: 06/01/09 amec









Transmission Line Route Work Areas ○ 50ft Pole Buffers

0.18 0.27 0.36 0.09 Miles

1:14,000









APPENDICES

| Table A1. Joshua tree (| Yucca brevifolia |) measurements on the | power plant site. |
|-------------------------|------------------|-----------------------|-------------------|

| Hectare | Height (ft) | DBH (in) |
|---------|-------------|----------|
| 1 | 1 | na |
| | 1 | na |
| | 2 | na |
| | 3 | na |
| | 4 | na |
| | 5 | 3.2 |
| | 5 | na |
| | 5.5 | 10.2 |
| | 6 | 2.9 |
| | 6 | 3 |
| | 6 | 3.2 |
| | 6 | 3.3 |
| | 6 | 3.3 |
| | 6 | 3.4 |
| | 6 | 3.6 |
| | 6 | na |
| | 6 | na |
| | 7 | 2.9 |
| | 7 | 3.6 |
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| | 7 | 4 |

| Table A1. Joshua tree | Yucca brevifolia |) measurements on the | power plant site. |
|-----------------------|------------------|-----------------------|-------------------|

| Hectare | Heiaht (ft) | DBH (in) |
|---------|-------------|----------|
| | 7 | 4.9 |
| | 7.5 | 4.8 |
| | 8 | 4.3 |
| | 8 | 4.8 |
| | 8 | 6.7 |
| | 8.5 | 4.4 |
| | 8.5 | 5.6 |
| | 9 | 4.6 |
| | 9 | 4.7 |
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| | 10 | 7.1 |
| | 10 | 7.7 |
| | 11 | 5.2 |
| | 11 | 9 |
| | 11 | 9.2 |
| | 12 | 8.1 |
| | 13 | 9.7 |
| | 13 | 8.9 |
| | 14 | 6.5 |
| | 14 | 7.3 |
| | 14 | 9.4 |
| | 15 | 13.1 |
| | 17 | 10.4 |
| | 19 | 14.2 |
| | 20 | 14.3 |
| 2 | 1 | na |
| | 1.5 | na |
| | 1.5 | na |
| | 2 | na |

| Table A1. Joshua tree (| Yucca brevifolia |) measurements on the | power plant site. |
|-------------------------|------------------|-----------------------|-------------------|

| Hectare | Height (ft) | DBH (in) |
|---------|-------------|----------|
| | 2 | na |
| | 2.5 | na |
| | 2.5 | na |
| | 3 | na |

| Table A1. Joshua tree | (Yucca brevifolia) |) measurements on the | power plant site. |
|-----------------------|--------------------|-----------------------|-------------------|
|-----------------------|--------------------|-----------------------|-------------------|

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| 5 2.5 | | 45 | na |
| | | - . .5 | 2.5 |
| | | 5 | 2.5 |

| Table A1. Joshua tree (| Yucca brevifolia |) measurements on the | power plant site. |
|-------------------------|------------------|-----------------------|-------------------|

| Hectare | Height (ft) | DBH (in) |
|---------|-------------|----------|
| | 5 | 6 |
| | 5 | na |
| | 55 | 4.8 |
| | 5.5 | na |
| | 6 | 2.6 |
| | 6 | 2.0 |
| | 6 | 2.3 |
| | 6 | 2.3 |
| | 6 | 3 |
| | 6 | 3 |
| | 6 | 31 |
| | 6 | 3.7 |
| | 6 | 3.2 |
| | 6 | 3.5 |
| | 6 | 3.0 |
| | 6 | 3.9 |
| | 6 | <u> </u> |
| 1 | | |

| Table A1. Joshua tree (| Yucca brevifolia |) measurements on the | power plant site. |
|-------------------------|------------------|-----------------------|-------------------|

| Heatara | Lloight (ft) | |
|---------|--------------|-----|
| Hectare | | |
| | 6 | 5.0 |
| | 0 | 5.6 |
| | 6 | 6 |
| | 6 | 6 |
| | 6 | 6.2 |
| | 6 | 3.1 |
| | 6 | 5.1 |
| | 6.5 | 2.6 |
| | 6.5 | 3.3 |
| | 6.5 | 3.6 |
| | 6.5 | 3.6 |
| | 6.5 | 3.9 |
| | 6.5 | 4.2 |
| | 6.5 | 4.6 |
| | 6.5 | 5 |
| | 6.5 | 6 |
| | 7 | 3.4 |
| | 7 | 3.5 |
| | 7 | 4 |
| | 7 | 4 |
| | 7 | 4.3 |
| | 7 | 4.4 |
| | 7 | 4.5 |
| | 7 | 4.8 |
| | 7 | 5.1 |
| | 7 | 5.3 |
| | 7 | 5.3 |
| | 7 | 5.6 |
| | 7 | 6 |
| | 7 | 6.1 |
| | 7 | 6.4 |
| | 7 | 6.6 |
| | 7 | 6.9 |
| | 7 | 7.5 |
| | 7 | 7.5 |
| | 7 | 7.7 |
| | 7 | 5.8 |
| | 7.5 | 5 |
| | 7.5 | 6.1 |
| | 8 | 4 |
| | 8 | 4.6 |
| | 8 | 4.6 |
| | 8 | 4.7 |
| | 8 | 4.7 |
| | 8 | 4.8 |
| | 8 | 5 |
| | 8 | 5.1 |
| | 8 | 5.4 |
| | 8 | 5.5 |
| | 8 | 5.6 |

| Table A1. Joshua tree (| Yucca brevifolia |) measurements on the | power plant site. |
|-------------------------|------------------|-----------------------|-------------------|

| Heatara | Light (ft) | |
|---------|------------|-----|
| Hectare | | |
| | Ö | 5.ð |
| | 8 | 5.9 |
| | 8 | 6 |
| | 8 | 6 |
| | 8 | 6.3 |
| | 8 | 6.6 |
| | 8 | 6.9 |
| | 8 | 7.4 |
| | 8 | 8.5 |
| | 8.5 | 4.9 |
| | 8.5 | 5.3 |
| | 8.5 | 8.6 |
| | 8.5 | 6 |
| | 9 | 5 |
| | 9 | 5.5 |
| | 9 | 5.7 |
| | 9 | 5.7 |
| | 9 | 5.8 |
| | 9 | 5.8 |
| | 9 | 6.1 |
| | 9 | 6.3 |
| | 9 | 6.9 |
| | 9 | 8.1 |
| | 9 | 7 |
| | 9 | 6.7 |
| | 9 | 5.5 |
| | 9 | 9.1 |
| | 9.5 | 5.8 |
| | 9.5 | 6.5 |
| | 10 | 4.5 |
| | 10 | 5.1 |
| | 10 | 5.3 |
| | 10 | 5.4 |
| | 10 | 5.5 |
| | 10 | 5.5 |
| | 10 | 5.7 |
| | 10 | 5.7 |
| | 10 | 5.8 |
| | 10 | 6.7 |
| | 10 | 7.4 |
| | 10 | 8 |
| | 10 | 8.8 |
| | 10 | 5.9 |
| | 10 | 7.8 |
| | 10 | 9.1 |
| | 11 | 5 |
| | 11 | 5 |
| | 11 | 5.3 |
| | 11 | 5.6 |
| | 11 | 6 |

| Hectare | Height (ft) | DBH (in) |
|----------|-------------|----------|
| Tiootaro | 11 | 6.3 |
| | 11 | 6.3 |
| | 11 | 6.9 |
| | 11 | 9.9 |
| | 11 | 6.3 |
| | 11 | 7.1 |
| | 12 | 6.2 |
| | 12 | 6.3 |
| | 12 | 6.3 |
| | 12 | 6.4 |
| | 12 | 6.9 |
| | 12 | 7 |
| | 12 | 7.1 |
| | 12 | 7.7 |
| | 12 | 7.8 |
| | 12 | 8 |
| | 12 | 8.1 |
| | 12 | 8.7 |
| | 12 | 11.2 |
| | 13 | 6.9 |
| | 13 | 7.3 |
| | 13 | 7.3 |
| | 13 | 7.5 |
| | 13 | 7.6 |
| | 13 | 8 |

| | 11 | 6.3 |
|---|----|--------|
| | 11 | 6.9 |
| | 11 | 9.9 |
| | 11 | 6.3 |
| | 11 | 7.1 |
| | 12 | 6.2 |
| | 12 | 6.3 |
| | 12 | 6.3 |
| | 12 | 6.4 |
| | 12 | 6.9 |
| | 12 | / |
| | 12 | /.1 |
| | 12 | 1.1 |
| | 12 | 7.8 |
| | 12 | 8 |
| | 12 | 0.1 |
| | 12 | ŏ./ |
| | 12 | 6.0 |
| | 13 | 0.9 |
| | 13 | 7.3 |
| | 13 | 7.5 |
| | 13 | 7.0 |
| | 13 | 7.0 |
| | 13 | 0 0 |
| | 1/ | 62 |
| | 14 | 7.2 |
| | 14 | 7.7 |
| | 14 | 8 |
| | 14 | 67 |
| | 15 | 6.7 |
| | 15 | 7.4 |
| | 15 | 7.4 |
| | 15 | 8.2 |
| | 15 | 8.3 |
| | 15 | 8.6 |
| | 15 | 8.6 |
| | 15 | 15.5 |
| | 15 | 8.2 |
| | 15 | 7.2 |
| | 16 | 10.9 |
| | 18 | 8.1 |
| 3 | 1 | na |
| | 1 | na |

| Table A1. Joshua tree (| Yucca brevifolia |) measurements on the | power plant site. |
|-------------------------|------------------|-----------------------|-------------------|

| Hectare | Height (ft) | DBH (in) |
|---------|-------------|----------|
| | 1 | na |
| | 1.5 | na |
| | 1.5 | na |
| | 2 | na |
| 1 | 2 | na |

| Hectare | Height (ft) | DBH (in) |
|---------|-------------|----------|
| | 2 | na |
| | 2.5 | na |
| | 3 | na |

| Table A1. Joshua tree | (Yucca brevifolia) |) measurements on the | power plant site. |
|-----------------------|--------------------|-----------------------|-------------------|
|-----------------------|--------------------|-----------------------|-------------------|

| Hectare | Height (ft) | DBH (in) |
|---------|-------------|----------|
| | 3 | na |
| | 3.5 | na |
| | 4 | na |

| Table A1. Joshua tree | (Yucca brevifolia) |) measurements on the | power plant site. |
|-----------------------|--------------------|-----------------------|-------------------|
|-----------------------|--------------------|-----------------------|-------------------|

| Hectare | Heiaht (ft) | DBH (in) |
|---------|-------------|----------|
| | 4 | na |
| | 4.5 | na |
| | 5 | 4 |
| | 5 | na |

| Table A1. Joshua tree (| Yucca brevifolia |) measurements on the | power plant site. |
|-------------------------|------------------|-----------------------|-------------------|

| Hectare | Height (ft) | DBH (in) |
|---------|-------------|----------|
| | 5 | na |
| | 5.5 | 2.6 |
| | 5.5 | 2.7 |
| | 5.5 | 3.6 |
| | 5.5 | 5 |
| | 5.5 | 6.4 |
| | 5.5 | na |
| | 6 | 2.4 |
| | 6 | 2.5 |
| | 6 | 2.5 |
| | 6 | 2.5 |
| | 6 | 2.6 |
| | 6 | 2.8 |
| | 6 | 2.9 |
| | 6 | 2.9 |
| | 6 | 3 |
| | 6 | 3 |
| | 6 | 3 |
| | 6 | 3 |
| | 6 | 3 |
| | 6 | 3 |
| | 6 | 3 |
| | 6 | 3.1 |

| Table A1. Joshua tree (| Yucca brevifolia |) measurements on the | power plant site. |
|-------------------------|------------------|-----------------------|-------------------|

| Hectare | Height (ft) | DBH (in) |
|----------|-------------|------------|
| Tiootaro | 6 | 3.1 |
| | 6 | 3.2 |
| | 6 | 3.3 |
| | 6 | 3.3 |
| | 6 | 3.5 |
| | 6 | 4 |
| | 6 | 4.1 |
| | 6 | 4.1 |
| | 6 | 4.7 |
| | 6 | 4.7 |
| | 6 | 4.9 |
| | 6 | 6 |
| | 6 | na |
| | 6.5 | 2.9 |
| | 6.5 | 3.2 |
| | 6.5 | 3.8 |
| | 6.5 | 6.1 |
| | 6.5 | 2.8 |
| | 7 | 2.7 |
| | 7 | 3.3 |
| | 7 | 3.4 |
| | 7 | 3.4 |
| | 7 | 3.4 |
| | 7 | 3.5 |
| | 7 | 3.5 |
| | 7 | 3.6 |
| | 7 | 3.6 |
| | 7 | 3.6 |
| | 7 | 4 |
| | 7 | 4.3 |
| | 7 | 4.4 |
| | 7 | 4.8 |
| | / | 4.9 |
| | 7 | 4.9 |
| | 7 | 5 |
| | / | 5.7 |
| | 7 | 2.9 |
| | 7.5 | 0.0 1.1 |
| | 7.5 | 4.1 |
| | 7.5 | 3.5 |
| | 8 | 3.0 |
| | 8 | 3.2 |
| | 8 | 37 |
| | 8 | 4 |
| | 8 | 4 |
| | 8 | 4 1 |
| | 8 | 4.2 |
| | 8 | 4.3 |
| | 8 | 4.3 |

| Table A1. Joshua tree (| Yucca brevifolia |) measurements on the | power plant site. |
|-------------------------|------------------|-----------------------|-------------------|

| Hectare | Height (ft) | DBH (in) |
|----------|-------------|----------|
| Ticolarc | | 4.3 |
| | 8 | 4.5 |
| | 0 | 4.4 |
| | 0 | 4.5 |
| | 0 | 4.5 |
| | 0 | 4.5 |
| | 8 | 4.8 |
| | 8 | 4.9 |
| | 8 | 5.1 |
| | 8 | 5.5 |
| | 8 | 5.7 |
| | 8 | 5.7 |
| | 8 | 5.8 |
| | 8 | 7.2 |
| | 8 | 7.5 |
| | 8 | 2.7 |
| | 8 | 4 |
| | 8 | 4.5 |
| | 8.5 | 4.3 |
| | 8.5 | 5.3 |
| | 9 | 3.7 |
| | 9 | 4.2 |
| | 9 | 4.6 |
| | 9 | 4.8 |
| | 9 | 4.9 |
| | 9 | 5 |
| | 9 | 5.3 |
| | 9 | 5.3 |
| | 9 | 5.9 |
| | 9 | 6.4 |
| | 9 | 6.7 |
| | 9 | 5 |
| | 9 | 4.9 |
| | 9 | 5.4 |
| | 9 | 6 |
| | 10 | 4.2 |
| | 10 | 4.3 |
| | 10 | 5 |
| | 10 | 5 |
| | 10 | 5.3 |
| | 10 | 5.4 |
| | 10 | 5.5 |
| | 10 | 5.5 |
| | 10 | 5.6 |
| | 10 | 5.6 |
| | 10 | 5.6 |
| | 10 | 5.6 |
| | 10 | 5.8 |
| | 10 | 6 |
| | 10 | 6.2 |
| | 10 | 6.2 |

| Table A1. Joshua tree (| Yucca brevifolia |) measurements on the | power plant site. |
|-------------------------|------------------|-----------------------|-------------------|

| Hectare | Height (ft) | DBH (in) |
|---------|-------------|------------|
| | 10 | 6.3 |
| | 10 | 6.4 |
| | 10 | 6.5 |
| | 10 | 6.5 |
| | 10 | 6.6 |
| | 10 | 7 |
| | 10 | 7 |
| | 10 | 4.5 |
| | 10 | 3.3 |
| | 10 | 3.9 |
| | 10 | 4 |
| | 10 | 4.3 |
| | 10 | 5.3 |
| | 10 | 5.5 |
| | 10 | 6.2 |
| | 10 | 6 |
| | 10.5 | 4.4 |
| | 11 | 5 |
| | 11 | 51 |
| | 11 | 5.2 |
| | 11 | 5.5 |
| | 11 | 5.5 |
| | 11 | 5.6 |
| | 11 | 5.7 |
| | 11 | 5.8 |
| | 11 | 5.0 6.1 |
| | 11 | 6.2 |
| | 11 | 6.2 |
| | 11 | 6.4 |
| | 11 | 6.0 |
| | 11 | 6.0 |
| | 11 | 0.9 |
| | 11 | 7 1 |
| | 11 | 0 |
| | 11 | 0 |
| | 11 | 7.4 |
| | 11 | 6.9 |
| | 11.5 | <u> </u> |
| | 11.5 | 2.7 |
| | 12 | 5.2 |
| | 12 | 5.6 |
| | 12 | 5.0 |
| | 12 | 5.9 |
| | 12 | 6 |
| | 12 | 6.4 |
| | 12 | 0.4 |
| | 12 | 0.4 |
| | 12 | 0.0 |
| | 12 | 0.7 |
| | 12 | 7.1 |
| 1 | | 1.2 |

| Table A1. Joshua tree (| Yucca brevifolia |) measurements on the | power plant site. |
|-------------------------|------------------|-----------------------|-------------------|

| Hectare | Height (ft) | DBH (in) |
|---------|-------------|----------|
| | 12 | 7.2 |
| | 12 | 7.9 |
| | 12 | 8.5 |
| | 12 | 8.5 |
| | 13 | 5 |
| | 13 | 5.1 |
| | 13 | 5.4 |
| | 13 | 6.4 |
| | 13 | 6.6 |
| | 13 | 7.3 |
| | 13 | 7.3 |
| | 13 | 7.5 |
| | 13 | 7.5 |
| | 13 | 5.9 |
| | 13 | 6.4 |
| | 13 | 8.8 |
| | 14 | 6.4 |
| | 14 | 6.4 |
| | 14 | 6.5 |
| | 14 | 6.6 |
| | 14 | 6.7 |
| | 14 | 6.8 |
| | 14 | 6.8 |
| | 14 | 7.5 |
| | 14 | 7.6 |
| | 14 | 8 |
| | 14 | 10 |
| | 14 | 10.2 |
| | 14 | 5.5 |
| | 14 | 6.9 |
| | 14 | 7.3 |
| | 14 | 7.8 |
| | 15 | 6 |
| | 15 | 6.4 |
| | 15 | 7.2 |
| | 15 | 7.2 |
| | 15 | 1.2 |
| | 15 | 1.5 |
| | 15 | 0 |
| | 15 | 0.3 |
| | 15 | 6.2 |
| | 15 | 10.2 |
| | 15 | 73 |
| | 15 | 7.0 |
| | 15 | P.3 |
| | 16 | 7 |
| | 16 | 77 |
| | 16 | 8 |
| | 16 | 85 |

| Table A1. Joshua tree (| Yucca brevifolia |) measurements on the | power plant site. |
|-------------------------|------------------|-----------------------|-------------------|

| Hectare | Height (ft) | DBH (in) |
|---------|-------------|------------|
| | 16 | 8.7 |
| | 16 | 9.7 |
| | 16 | 7.8 |
| | 17 | 8 |
| | 17 | 8.7 |
| | 17 | 9.5 |
| | 17 | 10.9 |
| | 17 | 10.3 |
| | 18 | 7.4 |
| | 18 | 7.5 |
| | 18 | 8.3 |
| | 19 | 7 1 |
| | 19 | 8.5 |
| | 19 | 79 |
| | 19 | 7.6 |
| | 19 | 8.4 |
| | 20 | 11.8 |
| | 20 | 8.4 |
| | 20 | 11 4 |
| | 22 | 12.8 |
| | 22 | 11 |
| | 20 | 10 |
| 1 | 1 | na |
| 4 | 2 | na |
| | 3 | na |
| | 3 | na |
| | 4 | na |
| | 4 | na |
| | 4 | 2.0 |
| | 5 | 2.9 |
| | 7 | 3.1 |
| | 75 | 5.9 |
| | 7.5 | 5.0 |
| | 0 | 0.0 5.7 |
| | 9 | 6.1 |
| | 9 10 | 5.0 |
| | 10 | 6.7 |
| | 11 | 7.2 |
| | 11 | 7.0 |
| | 10 | 1.2 |
| | 12 | 0.0 |
| | 12 | 1.4 |
| | 12 | 0.3 |
| | 12 | 0.0 |
| | 12 | 7.8 |
| 1 | 12.5 | 9.9 |

| Table A1. Joshua tree (| Yucca brevifolia |) measurements on the | power plant site. |
|-------------------------|------------------|-----------------------|-------------------|

| Hectare | Height (ft) | DBH (in) |
|---------|-------------|----------|
| | 13 | 8.7 |
| | 13 | 6.9 |
| | 15 | 8.2 |
| | 19 | 11.8 |
| 5 | 1 | na |
| | 1 | na |
| | 1 | na |
| | 2 | na |
| | 3 | na |
| | 4 | na |

| Table A1. Joshua tree (| Yucca brevifolia |) measurements on the | power plant site. |
|-------------------------|------------------|-----------------------|-------------------|

| Hectare | Height (ft) | DBH (in) |
|---------|-------------|----------|
| | 4 | na |
| | <u> </u> | na |
| | 5 | na |
| | 5 5 | na |
| | 5 | na |
| | 5 5 | na |
| | 5 | na |
| | 5 5 | na |
| | 5 | na |
| | ວ | na |
| | 5 | na |
| | 5 5 | na |
| | 5 | na |
| | 5 5 | na |
| | 5 | na |
| | <u>ວ</u> | na |
| | 5 | na |
| | 5.5 | 2.6 |
| | 6 | 2.4 |
| | 6 | 2.6 |
| | 6 | 2.7 |
| | 6 | 2.7 |
| | 6 | 2.7 |

| Table A1. Joshua tree (| Yucca brevifolia |) measurements on the | power plant site. |
|-------------------------|------------------|-----------------------|-------------------|

| Hectare | Height (ft) | DBH (in) |
|---------|-------------|----------|
| | 6 | 2.8 |
| | 6 | 2.8 |
| | 6 | 2.9 |
| | 6 | 2.9 |
| | 6 | 3.1 |
| | 6 | 3.1 |
| | 6 | 3.5 |
| | 6 | na |
| | 6.5 | 3.1 |
| | 7 | 3 |
| | 7 | 3.5 |
| | 7 | 3.5 |
| | 7 | 3.6 |
| | 7 | 3.6 |
| | 7 | 3.6 |
| | 7 | 3.6 |
| | 7 | 3.9 |
| | 7 | 3.9 |
| | 7 | 3.9 |
| | 7 | 4 |
| | 7 | 4 |
| | 7 | 4.2 |
| | 7.5 | 3.6 |
| | 7.5 | 4.2 |
| | 7.5 | 5.6 |
| | 7.5 | 5.6 |
| | 8 | 3.7 |
| | 8 | 3.9 |
| | 8 | 4.5 |
| | 8 | 5.1 |
| | 8 | 5.2 |
| | 0 | 5.3 |
| | 0 8 | 5.5 |
| | 8 | 5.8 |
| | 8 | 5.8 |
| | 8 | 6.2 |
| | 8 | 6.7 |
| | 8 | 12.3 |
| | 8 | 7.1 |
| | 8.5 | 5.3 |
| | 8.5 | 5.8 |
| | 8.5 | 6.7 |
| | 8.5 | 4.9 |
| | 8.5 | 5.9 |
| | 9 | 5.5 |
| | 9 | 5.7 |
| | 9 | 6.1 |
| | 9 | 6.6 |
| | 9 | 6.8 |

| Table A1. Joshua tree (| Yucca brevifolia |) measurements on the | power plant site. |
|-------------------------|------------------|-----------------------|-------------------|

| Hectare | Height (ft) | DBH (in) |
|---------|-------------|---------------------|
| | 9 | 8.1 |
| | 9 | 5.1 |
| | 9 | 7.3 |
| | 9 | 6.6 |
| | 9.5 | 6 |
| | 9.5 | 7 |
| | 10 | 5 |
| | 10 | 5.3 |
| | 10 | 6 |
| | 10 | 6.1 |
| | 10 | 6.2 |
| | 10 | 6.3 |
| | 10 | 6.4 |
| | 10 | 6.5 |
| | 10 | 7 |
| | 10 | 71 |
| | 10 | 7.4 |
| | 10 | 7.4 |
| | 10 | 8 |
| | 10 | 81 |
| | 10 | 9.2 |
| | 10.5 | - <u>5.2</u> 6.3 |
| | 10.5 | 6.7 |
| | 10.5 | 8.7 |
| | 10.5 | 8.5 |
| | 10.5 | 6.4 |
| | 11 | 6.4 |
| | 11 | 6.6 |
| | 11 | 6.8 |
| | 11 | 0.0 |
| | 11 | 7 1 |
| | 11 | 8.2 |
| | 11 | 7.7 |
| | 11 | 5.4 |
| | 11 | 6.5 |
| | 11 | 7 1 |
| | 11.5 | 6.6 |
| | 12 | 6 |
| | 12 | 6 |
| | 12 | 6.4 |
| | 12 | 6.5 |
| | 12 | 6.6 |
| | 12 | 6.6 |
| | 12 | 7 |
| | 12 | 7.3 |
| | 12 | 7.0 |
| | 12 | 7.5 |
| | 12 | 7.0 |
| | 12 | 7.0 |
| | 12 | 7.9 Q 1 |
| 1 | 14 | 0.1 |

| Table A1. Joshua tree (| Yucca brevifolia |) measurements on the | power plant site. |
|-------------------------|------------------|-----------------------|-------------------|

| Hectare | Height (ft) | DBH (in) |
|---------|-------------|----------|
| | 12 | 8.1 |
| | 12 | 7.1 |
| | 12.5 | 7.3 |
| | 13 | 5.7 |
| | 13 | 7 |
| | 13 | 7.2 |
| | 13 | 7.2 |
| | 13 | 7.4 |
| | 13 | 7.6 |
| | 13 | 7.9 |
| | 13 | 6.2 |
| | 13.5 | 7.1 |
| | 14 | 6.9 |
| | 14 | 8.6 |
| | 14 | 9.1 |
| | 14 | 6.4 |
| | 14 | 7.6 |
| | 15 | 6.3 |
| | 15 | 8.7 |
| | 16 | 7.2 |
| | 16 | 8.3 |
| | 16 | 8.3 |
| | 16 | 8.4 |
| | 16 | 8.9 |
| | 16 | 7.1 |
| | 16 | 8.1 |
| | 17 | 7 |
| | 17 | 7.6 |
| | 17 | 8.3 |
| | 17 | 10 |
| | 18 | 7.4 |
| | 18 | 7.8 |
| | 19 | 8.9 |
| | 19 | 8.9 |
| | 22 | 10.1 |
| | 23 | 7.8 |
| 6 | 1 | na |
| | 2 | na |
| | 3 | na |
| | 3 | na |
| | 3 | na |

| Table A1. Joshua tree (| Yucca brevifolia |) measurements on the | power plant site. |
|-------------------------|------------------|-----------------------|-------------------|

| Hectare | Heiaht (ft) | DBH (in) |
|---------|-------------|----------|
| | 3 | na |
| | 3 | na |
| | 4 | na |
| | 5 | na |
| | 5.5 | na |
| | 6 | 3.8 |
| | 6 | 3.8 |
| | 6.5 | 4.3 |
| | 8 | 6 |
| | 9 | 82 |
| | 10 | 77 |
| | 10 | 92 |
| | 10 | 6.9 |
| | 11 | 77 |
| | 11 | 8.9 |
| | 11 | 7 1 |
| | 11.5 | 57 |
| | 11.5 | 8.6 |
| | 12 | 7.3 |
| | 13 | 8 |
| | 13 | 9.3 |
| | 13 | 9.8 |
| | 14 | 6.8 |
| | 14 | 7.7 |
| | 14 | 8.2 |
| | 14 | 8 |
| | 17 | 12.1 |
| | 19 | 10.5 |
| | 20 | 12.1 |
| 7 | 1 | na |
| - | 2 | na |
| | 3 | na |
| | 3 | na |
| | 3 | na |
| | 4 | na |

| Table A1. Joshua tree (| Yucca brevifolia |) measurements on the | power plant site. |
|-------------------------|------------------|-----------------------|-------------------|

| Hectare | Height (ft) | DBH (in) |
|---------|-------------|----------|
| | 4 | na |
| | 5 | na |
| | 6 | 2.7 |
| | 6 | 3.1 |
| | 6 | 3.7 |
| | 6 | 4 |
| | 6 | 7.5 |
| | 6.5 | 7.5 |
| | 7 | 3.5 |
| | 7 | 3.6 |
| | 7 | 4 |
| | 7 | 7.5 |
| | 7 | 4.1 |
| | 8 | 4.7 |
| | 8 | 4.8 |
| | 8 | 6 |
| | 8 | 7.6 |
| | 8 | 5.7 |
| | 8 | 4.7 |
| | 8 | (|
| | 8.5 | 8 |
| | 8.5 | / |
| | 9 | 4.7 |
| | 9 | 0.ŏ |
| | 9 | 0.0 |
| | 9 | 7.9 |
| | 9 | 5.2 |
| | 9.0 | 7.2 |
| | 9.0 | 0.2 |
| | 10 | 5.5 |
| | 10 | 6.1 |
| | 10 | 6.2 |
| | 10 | 7 |
| | 10 | 8.3 |
| | 10 | 8.4 |
| | 10 | 8.4 |
| | 10 | 5.9 |
| | 10.5 | 9 |
| | 11 | 7.1 |
| | 11 | 7.3 |

| Table A1. Joshua tree (| Yucca brevifolia |) measurements on the | power plant site. |
|-------------------------|------------------|-----------------------|-------------------|

| Heatara | Hoight (ft) | |
|----------|-------------|------|
| Tiectare | 11 11 | 7.6 |
| | 11 | 7.0 |
| | 11 | 12.4 |
| | 11.5 | 7 4 |
| | 11.5 | 8.2 |
| | 12 | 7 |
| | 12 | 72 |
| | 12 | 7.3 |
| | 12 | 7.8 |
| | 12 | 7.8 |
| | 12 | 8 |
| | 12 | 81 |
| | 12 | 8.5 |
| | 12 | 9.9 |
| | 13 | 7.6 |
| | 13 | 7.9 |
| | 13 | 8 |
| | 13 | 82 |
| | 13 | 8.5 |
| | 13 | 9.4 |
| | 13 | 9.4 |
| | 13 | 10.7 |
| | 14 | 7.9 |
| | 14 | 8.9 |
| | 15 | 7.2 |
| | 15 | 8 |
| | 15 | 8.6 |
| | 15 | 9.5 |
| | 15 | 10.5 |
| | 15 | 11.4 |
| | 16 | 7.9 |
| | 16 | 8.1 |
| | 17 | 10.3 |
| | 18 | 10.8 |
| | 18 | 11 |
| | 19 | 11.6 |
| 8 | 2 | na |
| | 5 | na |
| | 7 | 4.2 |
| | 8 | 7.4 |
| | 9.5 | 5.7 |
| | 10 | 8.1 |
| | 11 | 7.9 |
| | 11 | 7.5 |
| | 13 | 6.2 |
| 9 | 2 | na |
| | 8.5 | 7 |
| | 10.5 | 8.7 |
| | 12 | 9.1 |
| | 12 | 9.2 |

Table A1. Joshua tree (Yucca brevifolia) measurements on the power plant site.

| Hectare | Height (ft) | DBH (in) |
|---------|-------------|----------|
| | 12 | 8.1 |
| | 14 | 10.5 |
| | 15 | 12.2 |

Table A2. Joshua tree (Yucca brevifolia) measurements on the transmission line disturbance areas in the City of Palmdale.

| GPS # | Lat | Long | Elev (ft) | Height (ft) | DBH (in) |
|-------|-----------|-------------|-----------|-------------|----------|
| 11 | 34.58741 | -117.91624 | 2697 | 1 | na |
| 11 | 34.58741 | -117.91624 | 2697 | 1 | na |
| 378 | 34.64662 | -118.102541 | 2495 | 1 | na |
| 11 | 34.58741 | -117.91624 | 2697 | 1.5 | na |
| 1 | 34.66043 | -118.07281 | 2398 | 2 | na |
| 1 | 34.66043 | -118.07281 | 2398 | 2 | na |
| 6 | 34.66034 | -117.95111 | 2524 | 2 | na |
| 11 | 34.58741 | -117.91624 | 2697 | 2 | na |
| 11 | 34.58741 | -117.91624 | 2697 | 2 | na |
| 11 | 34.58741 | -117,91624 | 2697 | 2 | na |
| 377 | 34.646295 | -118,102442 | 2493 | 2 | na |
| 378 | 34.64662 | -118.102541 | 2495 | 2 | na |
| 378 | 34,64662 | -118,102541 | 2495 | 2 | na |
| 378 | 34.64662 | -118,102541 | 2495 | 2 | na |
| 378 | 34.64662 | -118,102541 | 2495 | 2 | na |
| 378 | 34.64662 | -118,102541 | 2495 | 2 | na |
| 378 | 34.64662 | -118,102541 | 2495 | 2 | na |
| 378 | 34.64662 | -118,102541 | 2495 | 2 | na |
| 378 | 34.64662 | -118.102541 | 2495 | 2 | na |
| 378 | 34.64662 | -118.102541 | 2495 | 2 | na |
| 379 | 34,646669 | -118,102915 | 2494 | 2 | na |
| 380 | 34.646528 | -118.102737 | 2493 | 2 | na |
| 378 | 34.64662 | -118.102541 | 2495 | 2.5 | na |
| 1 | 34,66043 | -118.07281 | 2398 | 3 | na |
| 1 | 34,66043 | -118.07281 | 2398 | 3 | na |
| 376 | 34.64617 | -118.102649 | 2498 | 3 | na |
| 377 | 34.646295 | -118,102442 | 2493 | 3 | na |
| 378 | 34.64662 | -118.102541 | 2495 | 3 | na |
| 378 | 34.64662 | -118.102541 | 2495 | 3 | na |
| 378 | 34.64662 | -118.102541 | 2495 | 3 | na |
| 378 | 34.64662 | -118.102541 | 2495 | 3.5 | na |
| 377 | 34.646295 | -118,102442 | 2493 | 4 | na |
| 377 | 34.646295 | -118,102442 | 2493 | 4 | na |
| 378 | 34.64662 | -118.102541 | 2495 | 4 | na |
| 10 | 34.586 | -117.95118 | 2662 | 4.5 | na |
| 1 | 34.66043 | -118.07281 | 2398 | 5 | na |
| 376 | 34.64617 | -118.102649 | 2498 | 5 | na |
| 377 | 34.646295 | -118.102442 | 2493 | 5 | na |
| 378 | 34.64662 | -118.102541 | 2495 | 5 | na |
| 378 | 34.64662 | -118.102541 | 2495 | 5 | na |
| 378 | 34.64662 | -118.102541 | 2495 | 5.5 | na |
| 1 | 34.66043 | -118.07281 | 2398 | 6 | 3.5 |
| 378 | 34.64662 | -118.102541 | 2495 | 6 | 2.8 |
| 378 | 34.64662 | -118.102541 | 2495 | 6 | 3.3 |
| 12 | 34.5877 | -117.91654 | 2692 | 7 | 4.7 |
| 378 | 34.64662 | -118.102541 | 2495 | 7 | 3.7 |
| 378 | 34.64662 | -118.102541 | 2495 | 7 | 3.1 |
| 378 | 34.64662 | -118.102541 | 2495 | 7 | 3.9 |
| 3 | 34.66053 | -117.98654 | 2489 | 8 | 5.1 |
| 11 | 34.58741 | -117.91624 | 2697 | 8 | 6.9 |

Table A2. Joshua tree (Yucca brevifolia) measurements on the transmission line disturbance areas in the City of Palmdale.

| GPS # | Lat | Long | Elev (ft) | Height (ft) | DBH (in) |
|-------|-----------|-------------|-----------|-------------|----------|
| 11 | 34.58741 | -117.91624 | 2697 | 8 | 7.4 |
| 11 | 34.58741 | -117.91624 | 2697 | 8 | 7.5 |
| 11 | 34.58741 | -117.91624 | 2697 | 8 | 7.4 |
| 12 | 34.5877 | -117.91654 | 2692 | 8 | 5.2 |
| 2 | 34.66049 | -117.99808 | 2470 | 8.5 | 5 |
| 9 | 34.58663 | -117.95122 | 2662 | 9 | 9.5 |
| 11 | 34.58741 | -117.91624 | 2697 | 9 | 6.8 |
| 12 | 34.5877 | -117.91654 | 2692 | 9 | 6.8 |
| 378 | 34.64662 | -118.102541 | 2495 | 9 | 5 |
| 11 | 34.58741 | -117.91624 | 2697 | 9.5 | 7.4 |
| 11 | 34.58741 | -117.91624 | 2697 | 9.5 | 7.5 |
| 11 | 34.58741 | -117.91624 | 2697 | 10 | 8 |
| 378 | 34.64662 | -118.102541 | 2495 | 10 | 5 |
| 378 | 34.64662 | -118.102541 | 2495 | 10 | 5.8 |
| 379 | 34.646669 | -118.102915 | 2494 | 10 | 7.8 |
| 11 | 34.58741 | -117.91624 | 2697 | 10.5 | 8.5 |
| 4 | 34.66061 | -117.95112 | 2516 | 11 | 6.8 |
| 5 | 34.66045 | -117.95108 | 2526 | 11 | 8.4 |
| 11 | 34.58741 | -117.91624 | 2697 | 11 | 8.6 |
| 11 | 34.58741 | -117.91624 | 2697 | 11 | 8.9 |
| 378 | 34.64662 | -118.102541 | 2495 | 11 | 5.7 |
| 378 | 34.64662 | -118.102541 | 2495 | 11 | 7 |
| 11 | 34.58741 | -117.91624 | 2697 | 12 | 8.7 |
| 11 | 34.58741 | -117.91624 | 2697 | 12 | 8.9 |
| 378 | 34.64662 | -118.102541 | 2495 | 12 | 7.5 |
| 378 | 34.64662 | -118.102541 | 2495 | 12 | 5.4 |
| 8 | 34.5922 | -117.95119 | 2643 | 14 | 9.9 |
| 378 | 34.64662 | -118.102541 | 2495 | 14 | 8.1 |
| 4 | 34.66061 | -117.95112 | 2516 | 15 | 7.1 |
| 7 | 34.66068 | -117.95128 | 2518 | 15 | 14.4 |
| 376 | 34.64617 | -118.102649 | 2498 | 15 | 7.7 |
| 12 | 34.5877 | -117.91654 | 2692 | 16 | 8.9 |
| 12 | 34.5877 | -117.91654 | 2692 | 16 | 10.6 |
| 378 | 34.64662 | -118.102541 | 2495 | 17 | 7.6 |

STATE OF CALIFORNIA ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

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In the Matter of:

Application for Certification, for the CITY OF PALMDALE HYBRID POWER PLANT PROJECT Docket No. 08-AFC-9

PROOF OF SERVICE

(Revised April 30, 2009)

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PALMDALE HYBRID POWER PROJECT CEC Docket No. 08-AFC-09

DECLARATION OF SERVICE

I, Paul Kihm, declare that on June 2, 2009, I served and filed copies of the attached:

PHPP INVENTORY REPORT FOR JOSHUA TREES AND CALIFORNIA JUNIPERS, CITY OF PALMDALE NATIVE DESERT VEGETATION ORDINANCE

to all parties identified on the Proof of Service List above in the following manner:

California Energy Commission Docket Unit

Transmission via electronic mail and by depositing one original paper copy with FedEx overnight mail delivery service at Costa Mesa, California, with delivery fees thereon fully prepaid and addressed to the following:

CALIFORNIA ENERGY COMMISSION

Attn: DOCKET NO. 08-AFC-09 1516 Ninth Street, MS-4 Sacramento, California 95814-5512 docket@energy.state.ca.us

For Service to All Other Parties

Transmission via electronic mail to all email addresses on the Proof of Service list; and

by depositing one paper copy with the United States Postal Service via first-class mail at Costa Mesa, California, with postage fees thereon fully prepaid and addressed as provided on the Proof of Service list to those addresses **NOT** marked "email preferred."

I further declare that transmission via electronic mail and U.S. Mail was consistent with the requirements of California Code of Regulations, title 20, sections 1209, 1209.5, and 1210.

I declare under penalty of perjury that the foregoing is true and correct. Executed on June 2, 2009, at Costa Mesa, California.

Luc Kee

Paul Kihm