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August 19, 2014

California Energy Commission
Dockets Unit, MS-4
Docket No. 08-AFC-4C
1615 9th Street
Sacramento, CA 95814-5512

Re: Petition to Amend the California Energy Commission Decision for the
Orange Grove Power Project (08-AFC-4C)

To Whom It May Concern:

These comments on the “Petition to Amend the California Energy Commission Decision for the Orange Grove Power Project (08-AFC-4C)” (“Petition”) are provided to the California Energy Commission (“CEC”) on behalf of our client, the Pala Band of Missions Indians (“Pala Band”). The Pala Band is a federally recognized Native American Tribe, and a sovereign government entity.

With the Petition, Orange Grove Energy LP (“OGE”) seeks the CEC’s approval to change the primary source of water for the Orange Grove Power Plant project (“Project”) to groundwater from the current source, which is recycled and potable water that OGE trucks to the Project site from facilities operated by the Fallbrook Public Utilities District (“FPUD”). OGE proposes to obtain groundwater for the Project from a well owned by the San Diego Gas & Electric Company (“SDGE”). That well is on land owned by the Pala Band (the “Pala Property”) located directly across State Route 76 (“SR 76”) from the Project site (the “Power Plant Parcel”). Groundwater pumped from the SDGE well is proposed to be piped through the Pala Property and under SR 76 to the Power Plant Parcel for use in the Project.

The Pala Band has a direct interest in the change in the source of water for the Project proposed in the Petition because the Pala Reservation is located just east of the Project site and, critically, because the SDGE well is located on the Pala Property. While

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the Pala Band did not oppose the initial certification of the Project by the CEC, as discussed in these comments, the Pala Band takes issue with the behind-the-scenes process that led to the proposal to use the SDGE well as the primary source of water for the Project. The Pala Band characterizes the process as behind the scenes because neither OGE nor SDGE ever discussed the issue with the Pala Band. The Pala Band also rejects the assumption in the Petition that SDGE or OGE have the legal right to use groundwater from the SDGE well for the Project. Consequently, the Pala Band opposes the Petition because the proposed change in the source of water for the Project would not be in accordance with applicable laws, ordinances, regulations or standards. As such, the CEC should reject the Petition and not amend the certification.

I. Introduction

OGE's proposal to use groundwater pumped from the SDGE well on the Pala Property for the Project is a significant change from the initial Project authorized by the CEC and from the analysis of water resources provided during those proceedings. Indeed, it does not appear that the idea of using water from the SDGE well ever was considered during the initial certification process, and it did not show up as one of the alternative sources of water for the Project.

The proposal to use groundwater conflicts dramatically with representations and findings made during the certification process regarding the use of groundwater for the Project. For example, OGE's 2008 "Application for Certification" ("Application") concluded that using groundwater for the Project "was judged not feasible because use of local ground water is not likely to be permissible or acceptable, since ground water in the area is heavily used and in short supply." (Application at 5-7). Similarly, in OGE's "Response to Comments by the County of San Diego County Department of Environmental Health, Land and Water Quality Division" dated April 2, 2009, OGE stated that "evidence establishes that use of groundwater as a source for the Project is unreliable and environmentally undesirable." (Exhibit A at 9).

The "Final Commission Decision on the Orange Grove Power Plant" ("Final Decision") agreed with OGE's conclusions. The Final Decision included an Alternatives Table 3 ("Water Supply Alternatives") taken from the OGE Application that concluded that the "limited supply and ongoing use of groundwater in the San Luis Rey basin are judged to make it not likely that this source of water would be permissible or acceptable." (Final Decision at 28-29). The CEC's finding supported the Project's use of water from FPUD.

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Likewise, throughout the proceedings and in response to challenges to the use of FPUD water, OGE and CEC staff supported using FPUD water by citing State Water Resources Control Board (“State Board”) Resolution 75-58 “Water Control Policy on the Use and Disposal of Inland Waters Used for Powerplant Cooling” and the CEC’s “2003 Integrated Energy Policy Report.” Those documents express a similar intent that fresh water should not be used to cool powerplants. OGE’s January 9, 2009, “Opening Brief” explained that the CEC’s policy allows fresh water to be used for powerplant cooling purposes “only where alternative water supply sources and alternative cooling technologies are shown to be ‘environmentally undesirable’ or ‘economically unsound.’” (Exhibit B at 13).

But now, after being characterized as not “permissible or acceptable” and as “unreliable and environmentally undesirable,” and in the midst of an extended drought, groundwater from the SDGE well on the Pala Property is proposed to be the sole source of all water for the Project, including cooling water. Suddenly in the Petition, it is determined that the use of groundwater would not “affect any environmental resource” and in fact would provide “environmental benefits in the area of water resources, traffic, noise, air quality and non-renewable resource preservation.” (Support for Petition to Address Water Truck Complaints by Using an Alternate Water Source at 17). The Petition does not state how circumstances have changed to allow such a drastic revision of the effects of pumping groundwater for the Project.

The Petition also fails to explain or provide evidence to support a finding that the use of FPUD water is “environmentally undesirable” or “economically unsound” and more importantly why the use of groundwater suddenly is not. Indeed, a finding now that the use of FPUD water is “environmentally undesirable” or “economically unsound” would raise serious questions about the analysis of the issue in the certification proceedings. Given these State Board and CEC policies, a valid reason for using fresh water for cooling the Power Plant needs to be provided.

Similarly, the Pala Band does not agree that the proposal to “offset” the use of fresh water for the Project is a sufficient or acceptable method of overcoming these very specific policies of the State Board and the CEC. Even if an offset was appropriate, the Pala Band questions why an offset project that would favor the Vallecitos Water District is being considered given that its service area is not within the Pala Basin (and likely not within the San Luis Rey River basin) where the water supply would be directly impacted.

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Condition of Certification SOIL & WATER-10 authorized the Project to use a maximum of 100.7 acre-feet of water per year (“AFY”), approximately 325,000,000 gallons of water. While the Petition claims that the “expected use” is more likely to be approximately 33 AFY, the closure of the San Onofre Plant makes it more likely that the Project will operate more frequently and require more water. The Pala Band believes that increased operation, not complaints or the threat from wildfires as the Petition alleges, is the underlying reason for the Petition.

Critically, the Petition does not discuss the basis for OGE’s claim that it can pump groundwater from the Pala Property for use on the Power Plant Parcel. For example, the Petition contains no analysis of the scope of the easement in favor of SDGE that allowed it to pump groundwater from the Pala Property and pipe it to irrigate orange groves on the north side of SR 76, and does not identify when SDGE stopped that irrigation. The Petition also ignores the issue of whether OGE (or SDGE) has the legal right to use groundwater from that well for the Project on the Power Plant Parcel. Because the Pala Band shows below that neither entity has the legal right to use groundwater from the SDGE well for the Project, the Petition must be denied.

A. Neither OGE nor SDGE Contacted the Pala Band Concerning the Proposal to Use the SDGE Well for the Project

Prior to providing specific comments on the Petition, the Pala band wishes to comment on the process that led to the filing of the Petition and the operation of the Project since its certification. This brief discussion is provided in the following sections.

Although the record shows that OGE was considering using wells in the Pala area at least as early as 2013, if not before, the Pala Band was not contacted by either OGE or SDGE to discuss the potential use of the Pala Property to supply water for the Project. Notably, the Petition only mentions the Pala Band in passing, identify the Pala Band in Table 3-2 as the owner of “affected” but unidentified parcels. (Support Document at 15). The Petition does not acknowledge that the Pala Band actually owns the property on which the SDGE well and pipeline are located.

Not only was the Pala Band not consulted regarding the use of the well, it was not notified before OGE’s consultants accessed the Pala Property to test and upgrade the well. The Pala Band discovered that the work was being done only when large trucks and other equipment were seen on the Pala Property by Chairman Smith as he drove by the site on SR 76. It took a number of after-the-fact phone calls with OGE’s consultants and

SDGE representatives for the Pala Band to find out that testing and work on the well was being done to determine if the well could be used to supply groundwater for the Project. Although an Access Agreement was executed to allow that work to be completed, that agreement has now expired.

In addition, the Pala Band was not notified that OGE's consultants were going to enter and had entered the Pala Property to conduct the biological and cultural resource surveys that are included in and support the Petition. The Pala Band was not aware of the extent of this unapproved access to the Pala Property by OGE's consultants until it reviewed Figure 4.6.1 of the Support Document, and Figure 2 of Appendix J to the Support Document. Those figures show the area on the Pala Property where these surveys were conducted.

Assuming that the areas shown on those exhibits were surveyed as represented, the areas are well outside the scope of the six-foot wide easement granted to SDGE for the well and pipeline. The scope of the easement is discussed in more detail below. The bottom line is that the Pala Band did not consent to OGE's consultants entering the Pala Property and accessing the areas of the property they did. Such unauthorized entry onto private property is not acceptable.

B. OGE Has Failed to Comply With Conditions Related to the Installation of Screening Landscaping

The Pala Band did not oppose the initial certification of the Project. But, it has watched during the five years since the Final Decision was issued on April 14, 2009, as OGE has ignored critical conditions of the CEC certification addressing the mitigation of aesthetic impacts. Specifically, OGE has failed to plant required screening landscaping around the Project, which has made the facility even more of an eye sore along SR 76. The Pala Band and the Pala Pauma Sponsor Group have expressed their concerns regarding the issue with SDGE.

Now, without public notice, OGE has requested that the CEC "modify" the verification for Condition of Certification VIS-2 to allow OGE to further delay the installation of the required screening landscaping. The Pala Band is aware of OGE's request only because, through a Public Records Act ("PRA") request to CEC, the Pala Band obtained the letter from OGE to the CEC dated April 14, 2014, making this request. (Exhibit C).

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The verification for compliance with Condition VIS-2 in the Final Decision required that the screening and other required planting occur “during the first optimal planting season following site mobilization” and that notice be provided within seven days of completion of that installation to allow the CEC and the County to inspect the work. (Final Decision at 420). As indicated in the OGE letter, that inspection did not occur until May of 2011, more than two years after Project certification. The letter states that, at that time, “staff agreed that postponement of planting was reasonable due to plans for solar generation development.” (Exhibit C). We are not aware that any public notice of this change in the mitigation measures was provided.

Now, three years later, OGE is requesting the CEC to allow a further delay. While the attachment to the letter identifies the plantings that OGE has never installed but now is requesting approval to delay, other areas of the site also have not be planted in accordance with the Landscaping Plan attached to the letter and included in the Final Decision.

The Pala Band rejects OGE’s attempt to have the CEC waive compliance with this mitigation measure years after OGE has failed to comply with it and through a letter request. Any alteration to this important mitigation measure deserves public notice and comment through a formal petition to change the Conditions of the Certification. The CEC should require that such a process be followed.

II. The Evidence Does Not Support the Proposed Change in the Source of Water for the Project

The Petition states that OGE is seeking to amend the Conditions of the Final Decision so that OGE can use groundwater for the Project to “address water truck complaints from neighbors near the water supply location.” (Petition at pg. 1). The Petition claims that these neighbors “have expressed concerns about the impact from the trucks driving nearby,” including impacts from “emissions, noise, dust, traffic, and wear and tear on the roadways.” (*Id.*) The Petition argues that the “only way to resolve the concerns of the neighbors is to find a new water supply for the Project.” (*Id.*) As discussed below, the complaints only concerned OGE’s obtaining recycled water from the FPU D treatment plant, not potable water.

The other reason identified in the Petition for the need to change the source of water for the Project is that “recent fires in Southern California threatened” FPU D’s “water treatment plant, the water pick-up station and the truck supply route.” (*Id.*) As a

result, the Petition claims that the Project “ran low on water and had to scramble for an adequate supply.” (*Id.* at 2). As discussed below, neither reason is adequate to support the requested amendment of the certification.

A. The Public Complaints Do Not Support OGE’s Claim That a New Source of Water is Needed

The Petition states that the Support Document contains “a short summary” of the complaints received by the CEC, SDGE, and FPUD from neighbors living near the “water supply location.” (Petition at 1). That “short summary” repeats the claim that residents along the water truck route have expressed concerns about the “impacts of the truck traffic including dust, noise, emissions and wear and tear on the roads.” (Support Document at 1).

The Support Document confirms that “the limit of two water truck deliveries per hour imposed by Condition of Certification TRANS-4” has not been exceeded and that there have been no accidents or major incidents. (*Id.* at 4). But, it states, complaints regarding the truck traffic “began to be received by FPUD and SDG&E in 2012, and since that time complaints have continued to be expressed to these entities as well as to OGE and the CEC.” (*Id.* at 4). The Support Document states that three of those complaints involved driver actions and that those complaints were resolved with reprimands or other instructions being issued to the drivers. (*Id.*)

Unfortunately, while the Petition cites to the “Compliance Log” numbers for the various complaints, copies of the complaints filed or the responses provided were not included with the Petition. Again, in response to our request PRA request, the CEC provided copies of these documents. Exhibit D contains the complaints related to driving issues from June, September and December of 2013. The complaints by the resident are discussed further below.

1. The Complaints and the Responses

Based on the records we received, the initial non-driving complaint was submitted in an e-mail dated October 29, 2012, to Sempra Utilities by a resident of Alturas Road near the FPUD water treatment plant where OGE obtains recycled water. (Exhibit E). As shown on Figure 1 of the Final Decision, the water trucks use Alturas Road for only a short stretch south from Ammunition Road to the facility. (Exhibit F). That initial complaint indicated that “neighbors of Alturas” had met with FPUD and had identified four specific problems with the FPUD plant: (1) the water trucks were using all of

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Alturas Road; (2) dust from FPUD's eight-acre lot was causing air problems; (3) there were dead plants along the road; and (4) the area was being invaded by rats from the "fields and barn area." (Exhibit E). Only the first issue appeared to concern the use of the site by OGE's water trucks.

As to the water trucks, the e-mail first challenged the CEC's pre-certification analysis of the impacts that trucking water would have on that residential area, noting that "a few important areas were glossed or not addressed at all" because the "impact study spent more emphasis on Highway 76 and 15, rather than the local neighborhood of Alturas, Ammunition and Mission Road in Fallbrook." (*Id.*) The e-mail also complained that water trucks "have run as late as 2 am in the morning in a residential area" and that the weight of the trucks was damaging Alturas Road. (*Id.*) The e-mail did not identify how many "neighbors" had the same complaints. Because the complainant's address was redacted when it was provided to us, the location of the complainant's residence in relation to the FPUD facility cannot be determined.

A response to the e-mail was provided in a letter dated November 6, 2012, from Mr. Bluse, Manager of Asset Management for OGE. (Exhibit G). Mr. Bluse responded by asserting that CEC staff engineers had properly determined that the trucking would have a "less than significant impact" on the neighborhood given "the low number of trips per hour" and "because there are no substandard geometric features or conditions that would be incompatible with the types of trucks . . . used . . ." (*Id.* at 1).

As to the issue of trucks accessing the facility at 2 A.M., the OGE letter stated that there was no time limit on when trucks could access the FPUD facility because the time limit only applied during construction. (*Id.* at 2) The response also challenged the complainant's allegation that the OGE water trucks had caused the claimed damage to Alturas Road given its use by other heavy vehicles. (*Id.*)

In effect, OGE refuted all of the complaints. However, the letter did acknowledge that OGE "has been seeking alternative water sources since the project planning stages," and would continue to do so "with the goal of reducing the number of truck trips" from the FPUD facility. (*Id.*) The response did not state how many trucks per day were accessing the facility or how great the reduction might be.

A nearly exact copy of the October e-mail complaint was sent to the CEC's Public Adviser's Office six months later in a May 23, 2013, e-mail. (Exhibit H). Although the

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sender's name is redacted, it was signed by "The Neighbors of Alturas" and claimed that truck traffic had increased since the initial complaint was filed.

The CEC responded in an e-mail later that day to a redacted recipient, stating that the CEC had contacted OGE to tell them "they have to reply to the Commission and find a resolution to the problem." (Exhibit I). The CEC's response to our PRA request did not include any documents that constituted OGE's response to this CEC directive.

That e-mail string also included a redacted e-mail signed by "Jan and Brian" stating that OGE's Mr. Bluse had visited the area and that a mechanical engineer had shown him several alternative ways for the trucks to continue using the FPU D facility while limiting the impacts. Among the alternatives listed were to (1) load the reclaimed water through the "North Gate," (2) extend a pipeline and use a vacant adjacent lot which would provide an easy turn-around area, (3) tap into the reclaimed water pipeline along south Mission Road, and (4) upgrade the reclaimed water plant of the Rainbow Municipal Water District ("RMWD"). (*Id.*) No documents we have been provided to us that indicate that OGE ever tried to implement any of these alternatives to address the complaints. Instead, in that same e-mail string, an undated e-mail from Mr. Bluse states that OGE had "settled on two potential well sites in the Pala area that we believe could be viable options" and that OGE had "released legal counsel to begin review of the associated ownership rights and water draw provisions for each site." (*Id.*)

The records we have been provided do not contain any additional correspondence regarding these complaints after May of 2013. The Petition should have discussed what actions OGE took in response to these discussions with the neighbors. OGE also should confirm that its trucks have been using the route identified in the certification documents, and provide information on the location of the "two potential well sites" in the Pala area mentioned in the e-mail.

2. The Complaints Concerned Only the Recycled Water Facility

Based on the information provided to the Pala Band, the record shows that the complaints only concerned the FPU D recycled water pick up location, not the potable water facility. The documents also show that the complaining resident(s) (OGE does not make clear how many residents actually were involved) offered OGE a number of ways to reduce the claimed impacts of the trucking on the residents. It is also important to note that OGE initially dismissed these complaints outright based on the CEC's analysis that obtaining the water from the FPU D facility would not cause a significant impact.

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In fact, the CEC's conclusion that the obtaining the recycled water from the FPUD facility would not have a significant impact is supported by the fact that only a small number of trucks need to access the FPUD site to obtain the water. While OGE has not provided any information describing the schedule for water pickups from the site, based on OGE's "expected use" scenario, the Project would use only 12.1 AFY (3.9 million gallons) of recycled water annually. Assuming that each water truck holds 6500 gallons, approximately 600 trucks would need to access the FPUD facility annually to pick up water for the Project. If water was obtained from the FPUD facility 300 days per year, only two trucks per day would need to access the facility. Even if OGE picked up the water only 100 days per year, that still would result in only six trucks per day. If OGE's procedure is to have a large number of trips to the facility during a shorter period, there would be lengthy periods where no trucks would need to access the site.

The limited use of the FPUD facility, the options for eliminating the impacts that were offered by the residents, and the fact that no complaints have been received for more than a year belie OGE's claims that these complaints cannot be resolved and require that the CEC approve OGE's use of the SDGE well to supply water for the Project. These complaints do not provide substantial evidence to support the proposed amendment of the certification.

B. The Claimed Threat From Fires Also Is Not a Basis to Change the Source of Water

The Petition also claims that a new source of water is needed because recent wildfires presented "a serious threat to the FPUD water treatment facility plant" and disrupted OGE's "ability to run water trucks." (Support Document at 2). We assume that the Petition is claiming that the potential disruption of water supply due to OGE's trucks not being able to access the FPUD facilities is the basis for the request, not some that a new source of water is needed because a fire could destroy the FPUD facilities by fire. That latter rationale would be wholly speculative.

Unfortunately, the Petition again does not provide sufficient information on the effects of these recent "firestorms" to support this "threat" as a reason for amending the certification. For example, there is no information in the Petition stating how long OGE was unable to access the FPUD facilities because of the fires. Moreover, given that fires had impacted the area in 2003 and 2007, the possibility that a fire could interrupt access to those sites should have been addressed in the Project certification analysis if it was a valid reason for not using the FPUD facilities.

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But it appears such concerns were addressed by requiring sufficient water to be stored on the site for operational and fire-fighting purposes. The Final Decision stated that, if potable water deliveries were interrupted, the facility “could still continue to operate at full load for approximately four 12-hour operating days using water stored in the raw water and demineralized water storage tanks (assuming the tanks are full and excluding water reserved for fire protection).” (Final Decision at 294). The CEC also stated that water from the recycled tank would allow “an additional 39 hours of operation.” (*Id.*) That appears to be more than three days of 24-hour/day operation.

The Support Document also confirms that there is on-site storage capacity for nearly one million gallons of water. (Support Document at 9). At the maximum operating rate of approximately 65 gallons per minute (“gpm”) identified in the Support Document, approximately 100,000 gallons of water would be needed for a full day of operation. Even if there was only half of the maximum storage, there still should be enough water to operate the Project for five days, 24 hours per day.

Again, the Petition claims that the Project “ran low on water and had to scramble for an adequate supply” but does not explain why there was not sufficient water at the Project site to supply its operational needs. (Petition at 2). The unanswered question that OGE must address is how much water was stored on site, and how much is normally stored. A related question that OGE’s comment raises is where it obtained the “adequate supply” of water it claims was needed. Additional information needs to be provided on those claims as well.

Because of the lack of information provided in the Petition and the stage of proceedings, the Pala Band reserves its right to provide additional comments when that information is made available. But even without adequate information on the fire issue especially, it is questionable that having the SDGE well as the primary source of water would provide more security. A well can break down, and if the pump is electric, it could become unusable if electric service is interrupted due to a fire. Adequate storage is still required, and the current FPUD sources of water appear to be more reliable as the primary source of water.

III. The Petition Fails to Adequately Analyze if OGE Has the Legal Right to Use Water Pumped from the SDGE Well for the Project.

The claimed reasons for OGE’s Petition are not supported by any real evidence in the record. Even if they were, the Petition fails to include an adequate analysis of OGE’s

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rights to access and use water from the SDGE well. Those critical issues are addressed below

A. Background Information on the SDGE Well in the Support Document

The Support Document states that the existing SDGE well is located on the south side of SR 76, that the well was constructed in 1995 with a 12-inch diameter steel casing and to a total depth of 75 feet, and that the well was last used to irrigate the orange groves on the Project site and to help establish habitat around the Pala substation. (Support Document at 10). Figure 3.1 of the Support Document provides a graphic showing the location of the well and the pipeline on both sides of SR 76. The Petition needs to identify when SDGE last used water from the well to irrigate the orange groves or to establish the habitat around the Pala substation.

The Support Document states that a new vertical turbine well pump would be installed in the existing well and that a three or four-inch diameter high-density polyethylene (“HDPE”) pipe would be installed underground from the well, across the Pala Band’s property, under SR 76, and to the plant. The Support Document claims that “beneath and south of SR-76, the pipeline would be routed to follow the existing pipeline route.” (*Id.* at 13).

The Support Document also states that a “boring pit and a receiving pit would be needed on respective ends of the horizontally drilled segment” of SR 76, but that these boring and receiving pits “would be outside the Caltrans ROW [right-of-way].” (*Id.* at 15). Although the Support Document does not identify the size of either the boring or the receiving pits, if the pits are outside of the Caltrans’ ROW, at least one of those features must be on the Pala Property.

Finally, the Support Document states that the well would remain the property of SDGE but that the “pump and pipeline would be owned and operated by OGE.” (*Id.* at 15). The Support Document does not identify if OGE has entered into an agreement with SDGE that grants OGE the right to own a pipeline within the SDGE easement or to use the SDGE easement at all. If there is such an agreement, it should be provided to support the Petition.

The Petition also does not provide any information on any agreement between OGE and SDGE that allows OGE to use groundwater pumped from the SDGE well. As a mere tenant of the SDGE property, OGE has no inherent right to divert and use water

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from the SDGE well on the Power Plant Parcel without a permit to appropriate water from the State Water Resources Control Board (“State Board”).

Consequently, although the Pala Band rejects any claim that SDGE has the legal right to pump groundwater for use on the Power Plant Parcel, SDGE at least has a colorable claim as owner of the property. That means that the only way for OGE to use water for the Project (without first obtaining an appropriative rights permit from the State Board) would be for it to buy the water from SDGE. But the Petition does not state that SDGE will sell water to OGE and it contains no information on the arrangement under which OGE would use the water. That information must be provided. The Petition also should discuss what regulatory approvals SDGE might need for it to sell its property (the water) to OGE.

B. The Easement Granted to SDGE Does Not Allow Groundwater From the SDGE Well to be Used for the Project

As stated above, the Pala Band does not agree that SDGE has any right to pump groundwater for OGE’s to use on the Power Plant Parcel under either (1) the terms of its easement across the Pala Property or (2) any water rights theory. Each of those issues is discussed below.

1. The Terms of the Easement

SDGE has certain rights to access the Pala Property and use the SDGE well under an Easement Agreement dated January 6, 1998, between SDGE and H. G. Fenton (“Fenton”), the former owner of the Pala Property (“Easement”) (Exhibit J). Fenton granted SDGE the Easement when SDGE sold the Pala Property to Fenton in 1998. At that time, SDGE retained ownership of the property it owned on the north side of SR 76, including the Power Plant Parcel where the Project is located. In 1998 when the Pala Property was sold to Fenton, the SDGE property on the north side of SR 76 was planted in orange groves which had been irrigated by water from the SDGE well. The Easement was granted to allow SDGE to continue to continue to irrigate the orange groves.

The intent of the parties to allow SDGE to have continued access to the well to irrigate the orange groves was reflected in the language of the Easement. For example, in Paragraph 1.a, Fenton (the “Grantor”) granted to SDGE (the “Grantee”) the following:

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An easement to exclusively pump, export, take, use and remove the water from the existing well and through the existing water pipeline currently located within a strip of land six (6) feet in width generally as depicted on Exhibit "C" hereto.

(Exhibit J at 2). Paragraph 1.b of the Easement continued in that vein and granted to SDGE the following:

Incidental rights of ingress and egress and [sic] for the laying of pipeline and necessary appurtenances in, upon, over, under and across a portion of the Servient Tenement or as said ways of ingress and egress, pipelines and appurtenances may be relocated to the extent necessary to use the easement described in paragraph 1.a hereof.

(*Id.*) This Paragraph 1.b referred to the possible relocation of the pipeline and appurtenances because Fenton was actively mining the area that now constitutes the Pala Property.

Paragraph 2 of the Easement addressed the relocation of the well and its appurtenances by stating that:

[t]he well and appurtenances may be relocated at any time and from time to time upon the following terms and conditions: whenever Grantee in its reasonable judgment believes that solely as a result of any action or activity on the part of Grantor the output of the well is less than 450 gallons per minute and/or the quality of the water is an inferior quality for agricultural irrigation purposes, or if the Grantor at any time and from time to time wishes to effect a relocation.

(*Id.*) Thus, Paragraph 2 of the Easement allowed for the well and appurtenances to be relocated if and only if (1) the Grantor's (Fenton's) actions caused the well to produce less than 450 gpm of water or to produce water of an "inferior quality" or (2) the Grantor (Fenton) chose to relocate the well, most likely because it wanted to conduct mining or related operations in the area where the well was located.

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2. There is No Basis Under the Easement to Relocate the Well or the Pipeline

Neither of the conditions identified in the Easement allowing the relocation of the well and/or the pipeline apply now because (1) the actions of the Grantor (now the Pala Band) have not affected the ability to pump the well or the quality of the water in the well or the pipeline, and (2) the Pala Band as Grantor does not want to relocate the well or the pipeline. Simply put, under the unambiguous terms of the Easement, SDGE has no right to relocate the well or the pipeline.

Exhibit C of the Easement shows the location of the six-foot wide easement for the well and the pipeline granted to SDGE. While the exhibit states that the measurements are “approximate,” if one compares the location of the pipeline shown on Exhibit C of the Easement with the location of the pipeline shown on Figure 3.1 of the Support Document it is not clear that these are in the same location. That raises questions about the claim in the Petition that the upgraded “pipeline would be routed to follow the existing pipeline route.” (Support Document at 13). Given the apparent discrepancy between the recorded Easement and the figure in the Petition, OGE must provide additional information showing that the new pipeline would be located within the six-foot wide easement identified in Exhibit C. Neither OGE nor SDGE has the right to install a new pipeline outside the granted easement.

3. The Easement Only Allowed Groundwater to be Pumped From the SDGE Well to Irrigate the Orange Groves

As discussed above, Paragraph 2 of the Easement allowed for the relocation of the well and/or the pipeline if Grantor’s actions reduced the output of the well to below 450 gpm and/or reduced the quality of the water in the well so that the groundwater was of “an inferior quality for agricultural irrigation purposes.” If that condition was met, Grantor was required (1) to bear the costs associated with relocating the well and the pipeline and (2) to ensure that the new well pumped at a rate not less than 450 gpm and provided groundwater of a quality “not less than that necessary to provide satisfactory irrigation for agricultural purposes on the Dominant Tenement.” The “Dominant Tenement” referred to was and is the SDGE property located on the north side of SR 76 where the orange groves were planted.

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These references in the Easement to irrigation and agriculture confirm that the parties entered into the agreement so that SDGE could continue to use groundwater from the well to irrigate the orange groves on the north side of SR 76. To the Pala Band's knowledge, SDGE has only used water from well for irrigation purposes since the Easement was recorded, although it is not clear when SDGE last used water from the well to irrigate land on the north side of SR 76.

Consequently, OGE's claim in the Petition that it can pump water from the SDGE well for use in operating the Power Plant conflicts with the clear intent of the Easement that the pumped groundwater would be used by SDGE "for agricultural irrigation purposes." There is no language in the Easement to indicate that the parties envisioned that the groundwater from the well would be used for any industrial purposes, including the operation of an electrical generation facility. While the Easement might be amended to allow the water to be used for such industrial purposes, that would require the Pala Band's written agreement, which has not be requested or provided.

Even if it was considered, for the sake of argument, that the Easement was ambiguous regarding the allowed use of the water, the fact that SDGE only used the water to irrigate the orange groves established how it can use the water under the Easement. In *Winslow v. City of Vallejo* (1906) 148 Cal. 723, an easement granted the city the right to install "any water-pipes or mains which may be laid by the city" to serve its residents, and under the easement, the city installed a single pipeline. But nine years later, with the city growing rapidly, it sought to add an additional pipeline in the Easement, and the easement grantor objected. (*Id.* at 724-725).

The California Supreme Court agreed that the easement did not allow the city to install another pipeline, stating that:

the rule is well settled that where a grant of an easement is general as to the extent of the burden to be imposed on the servient tenement, an exercise of the right would be acquiescence and consent of both parties, in a particular course or manner, fixes the right and limits it to the particular course or manner in which it has been enjoyed.

(*Id.* at 725). Thus, the Supreme Court held, the city "having elected to lay one [pipeline], is bound by this election" and the easement did not grant it the right to lay an additional pipeline. (*Id.* at 727). The Supreme Court also rejected the argument that, because the

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pipe supplied municipal water, the parties must have envisioned that additional water and pipelines might be needed. (*Id.*)

Similarly, applying *Winslow*, the court in *Snodgrass v. Crane* (1943) 57 Cal. App. 2d 565, 567, held that an easement holder's decision to take water from a particular spring limited his right to use another spring on the servient property. Again, the court stated that the easement holder's right to use springs on the property, "although not limited by the grant, became fixed by the manner of the use, and he could not enlarge it now without the consent of all of the parties who may be affected. This qualification is not met, and therefore he is bound by his original election." (*Id.*) As another court put it, "where the right not definitely limited by grant, has become fixed by the manner of its use, it cannot be enlarged without the consent of the parties who may be affected." (*Goubert v. Pomona Valley Water Company* (1955) 137 Cal.App.2d Supp. 852, 853).

While the Pala Band would argue that the specific terms of the Easement limit SDGE use of water from the well to irrigation purposes and that the holdings in these cases are unnecessary, the decisions confirm that SDGE's use of the water to irrigate the orange groves fixed its rights under the Easement. The fact that it is OGE and not SDGE which proposes to use water from the well for industrial purposes makes the argument that SDGE has the right to use water under the Easement for any purpose even less defensible. Again, changing the use of the water from irrigation to industrial purposes or changing the location of the well or the pipeline would require an amendment of the Easement and the written approval of the Pala Band.

IV. The Petition Fails to Provide Evidence Showing That Either SDGE or OGE Have the Legal Right to Use Water From the Well on the Power Plant Parcel.

Not only did the Petition fail to discuss the limitations on the use of groundwater from the SDGE well and on the relocation of the well and/or the pipeline found in the clear terms of the Easement, the Petition never identified the legal basis for OGE's claim that it has the right to use groundwater from the SDGE well for the Project on the Power Plant Parcel. Instead, the Petition assumes that OGE has the legal right to use groundwater from the SDGE well for the Project. Although OGE stated in a 2013 e-mail to the Alturas residents that it had engaged legal counsel to "begin review of the associated ownership rights and water draw provisions" for the two unnamed well sites (Exhibit I), the Petition is silent on these issues as they concern the SDGE well. As OGE bears the burden of showing that it or SDGE has the legal right to use water from the

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SDGE on the Power Plant Parcel, it is telling that the issue was not even raised in the Petition.

The issue of whether OGE has the right to use groundwater from the SDGE well on the Power Plant Parcel is guided by California law. Under California law, groundwater is presumed to be “percolating” groundwater that can be used for reasonable and beneficial purposes by the overlying landowner. This “overlying right” is based on the ownership of the land, and the right is appurtenant to that land. (*City of Barstow v. Mojave Water Agency* (2000) 23 Cal.4th 1224, 1234). Groundwater can be pumped for such use by an overlying landowner without the need for a permit from the State Board. But as the Pala Band and not OGE or SDGE owns the land where the SDGE well is located, neither entity has shown that it has an overlying right to use groundwater from the SDGE well.

Moreover, the right to use groundwater changes if the groundwater is determined to be in a “subterranean stream flowing through known and definite channels.” If that is the case, the subterranean stream is subject to the jurisdiction of the State Board, and the right to use such water is the same as the right to use water from a surface stream. (*North Gualala Water Company v. State Water Resources Control Board* (2006) 139 Cal.App.4th 1577, 1580, 1593).

That is the case here. In 2002, the State Board issued a decision finding that groundwater in the alluvium of the Pala Basin is flowing in a subterranean stream from Frey Creek east of the Pala Reservation to the Monserrate Narrows west of the Pala Property. (State Board Decision 1645, “Determination of the Legal Classification of Groundwater in the Pauma and Pala Basins of the San Luis Rey River”). The State Board’s decision confirmed that its jurisdiction over groundwater in the Pala Basin alluvium was the same as its jurisdiction over the surface water of the San Luis Rey River and other surface sources. There is no dispute that the SDGE well takes groundwater from this subterranean stream.

Because groundwater in the Pala Basin subterranean stream is treated like surface water, groundwater can be pumped from the SDGE well for use on the Power Plant Parcel only if (1) OGE or SDGE obtains a permit from the State Board to appropriate the groundwater, or (2) SDGE proves that the Power Plant Parcel abuts the subterranean stream and that, as the owner of the Power Plant Parcel, it has the right to use groundwater from the subterranean stream under the riparian water rights theory. (*Id.* at 1592-1593 and fn. 11). The key element that a party must prove to show it has a right to

use water under the riparian water rights theory is that the land on which the water is to be used is riparian to (abuts) the water source. In this case, that would be the subterranean stream. Under a riparian water right, the water can be used only on land that is riparian to the water source. (*Id.*)

The Petition does not acknowledge under which water rights doctrine OGE intends to use water from the SDGE well. For example, the Petition does not state if either OGE or SDGE has filed an application for or obtained an appropriative rights permit from the State Board to divert water from the subterranean stream for use for any purpose on the Power Plant Parcel. Without a permit from the State Board, use of the water would be illegal unless OGE or SDGE can prove that the Power Plant Parcel abuts the subterranean stream.

A. The Power Plant Parcel Does Not Abut the Subterranean Stream

The Petition does not address at all whether the Power Plant Parcel abuts the subterranean stream and so does not provide any evidence that OGE has the right to use groundwater from the SDGE well for the Project. In fact, because OGE does not own the Power Plant Parcel, it has no right to claim a riparian right at all because only SDGE can make that claim. Notwithstanding that overall problem with OGE's claim, OGE's Application for Certification did contain helpful information concerning the location of the Power Plant Parcel with relation to the Pala Basin's water-bearing alluvium, the subterranean stream.

For example, Figure 6.5-4 of the Application showed that the Power Plant Parcel is not within the 100-year flood zone, which the figure shows is located entirely south of SR 76 on the Pala Property. (Exhibit K). That is evidence that the Power Plant Parcel is not riparian to the surface flow of the San Luis Rey River and that even in very high flows, water from the river does not touch the Power Plant Parcel.

As to the subterranean stream, Figure 6.5-5 of the Application provides a hydrogeologic cross-section of the area where the Pala Property and the Power Plant Parcel are located. (Exhibit L). The location of the cross-section included in Figure 6.5-5 is identified on Figure 6.5-2 of the Application, which is also included in Exhibit L. Figure 6.5-2 shows that the cross-section depicted on Figure 6.5-5 runs through the Pala Property and directly across the area where the Power Plant is located.

The cross-section reflected in Figure 6.5-5 shows the subterranean stream (the Pala Basin alluvium) in a gold color, which the figure identifies as the "water-Bearing"

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alluvium. Figure 6.5-5 also shows that the “water-Bearing” alluvium is located entirely on the south side of SR 76. Conversely, the Power Plant Parcel (identified as the “Site” on the graphic) is shown to be underlain by “Very Old Alluvium” that is “Not Water-Bearing.” Both areas are underlain by the “Plutonic Basement Rock.”

The description in the text of the Application confirmed what was shown on Figure 6.5-5. Specifically, the text stated (with emphasis added) that:

Very Old (approximately 500,000 to 2 million years old) alluvium overlays the basement rock in the Site vicinity that also does not yield significant groundwater With the non-water-bearing rock that underlies it, the Site is not located over any ground water basin.

(Application at 6.5-3). The discussion in the Application then stated (again, with emphasis added) that:

[i]n the Project Area, the San Luis Ray Valley Ground Water Basin . . . is located on the south side of SR 76. This Basin is an alluvial aquifer extending along the San Luis Rey river bed . . . comprised primarily of alluvial deposits that are younger than 10,000 years. . . . In the Project vicinity, the river bed alluvium is within the Pala Subbasin. . . . North of SR 76, where the Site is located, geologic material above the basement rock consists of Very Old alluvium and the subbasin is not present.

(*Id.*) The Application also stated that groundwater beneath the “Site” is “expected to occur at an elevation of approximately 330 feet, which is about 50 to 100 feet below the ground surface, depending on the location on site.” (*Id.* at 6.5-4).

The conclusions stated in the Application and shown graphically on Figure 6.5-5 that the subterranean stream does not abut the Power Plant Parcel were confirmed by the installation of a test well on the Power Plant Parcel in September of 2013 by TRC Solutions (“TRC”). TRC also had prepared the Application, other certification documents, and the Figures discussed above. The test well was installed to a depth of approximately 75 feet below ground surface (“bgs”) on the edge of the Power Plant Parcel close to SR 76. (Exhibit M at 1, Figure 2).

In the report it prepared, TRC stated that groundwater in the test well was present at a depth of approximately 44.18 feet bgs, and although the report did not provide a very

detailed description of the consultant's conclusions about the well, it did state that the well was pumped at one and at 1.5 gpm. (*Id.* at 3). TRC opined that “[i]t is possible that further development could remove more fine material from the adjacent formation and potentially increase water yield.” (*Id.* at 3). The conclusion is that the installed well could only produce groundwater at these very low yields which is in stark contrast to the 450 gpm that can be obtained from the SDGE well. That difference can be explained by the fact that the SDGE well, but not the TRC test well of the Power Plant Parcel, was installed into the water-bearing subterranean stream.

The TRC report also included a boring log of the test well in Appendix C. That boring log shows that “large broken igneous cobbles” were encountered at a depth of about eight feet bgs and that “highly weathered igneous rock” was encountered at 20 feet bgs and below, including in the area where the groundwater was encountered. This data further confirms the conclusions of the hydrogeologic cross-section in Figure 6.5-5 of the Application.

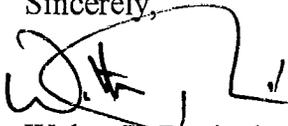
The TRC test well confirmed what Figure 6.5-5 shows: the Power Plant Parcel does not abut the subterranean stream. As a result, SDGE as the owner of the Power Plant Parcel does not have the right as a riparian owner to divert water from the SDGE well for use on that parcel. Instead, SDGE or OGE must obtain an appropriative rights permit from the State Board in order to divert water from the SDGE well for use on the Power Plant Parcel. That this issue was not addressed in the Petition is a fatal flaw in the analysis.

V. Conclusion

In the Petition, OGE has failed (1) to provide evidence to support the claimed need for the proposed amendment of the certification and (2) to properly analyze its ability to use groundwater pumped from the SDGE well for the Project on the Power Plant Parcel. The simple fact is that no evidence supports either the claimed need for a new source of water for the project or OGE's right to use groundwater from the proposed new source, the SDGE well. Even so, as these comments have been provided without the benefit of supporting information from OGE or the analysis of the Petition by CEC Staff, the Pala Band again reserves the right to submit additional comments if OGE continues to pursue its proposal to use groundwater from the SDGE well for the Project.

California Energy Commission
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The Pala Band appreciates the opportunity to provide these comments. Please address any responses to these comments or questions to our office.

Sincerely,

Walter E. Rusinek

cc: Robert Smith, Chairman, Pala Band of Mission Indians
Shasta Gaughen, TPHO and Director, Pala Environmental Department

EXHIBIT A

DOCKET

08-AFC-4

DATE APR 02 2009

RECD. APR 02 2009

**BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA**

**APPLICATION FOR
CERTIFICATION FOR THE
ORANGE GROVE POWER PLANT
PROJECT BY ORANGE GROVE
ENERGY, LP**

DOCKET NO. 08-AFC-4
(AFC filed 06/20/08)

**ORANGE GROVE ENERGY, L.P.'s RESPONSE TO COMMENTS BY THE
COUNTY OF SAN DIEGO DEPARTMENT OF ENVIRONMENTAL HEALTH,
LAND AND WATER QUALITY DIVISION**

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Attorneys for Orange Grove Energy, LP

April 2, 2009

“governmental entities which may have regulatory jurisdiction over the re-use site...be provided with a copy of the Title 22 Engineering Report for review and comment.” (California Department of Health Services, *Guidelines for the Preparation of an Engineering Report for the Production, Distribution and Use of Recycled Water* [March 2001] at 6.⁴) The Engineering Report will identify hand washing and drinking as uses onsite requiring potable quality water, and that bottled potable water will be provided for these uses to assure the sanitary needs of employees.

Furthermore, safety showers and eye wash stations will be self-contained units meeting all applicable safety LORS. Self-contained safety showers and eye wash stations are readily available on the market and are currently in widespread use for these purposes. Through SOIL & WATER-8, SOIL & WATER-9, SOIL & WATER-11, and other assurances in the PMPD identified above, the PMPD ensures that all applicable LORS will be followed through final project design, construction, and operations.

D. A Water Well is Not Needed To Provide an Adequate Potable Water Supply.

The DEH Letter suggests that the only alternative appears to be the installation of a water well to meet the needs for the potable water supply. (DEH Letter at 2.)

The record shows that substantial analysis was devoted to alternative water supplies. (Ex. 1 at 5-6, 5-7, 5-8; Ex. 200 at 6-10; PMPD at 28 to 30.) The evidence establishes that use of groundwater as a source for the Project is unreliable and environmentally undesirable. (Ex. 1 at 5-7; PMPD at 31.) The existing proposed water sources were selected in order to minimize potential impacts to the environment, while still meeting the Project’s water supply needs. (See PMPD at 31.) The evidence shows that no feasible water supply has been identified other than those currently proposed for the Project. (Ex. 1 at 1-5, 5-8; PMPD at 30-31.) The Project site is located on very old alluvium and plutonic basement rock which does not yield significant groundwater to wells. (Ex. 1 at 6.5-3, 6.5-4, Figure 6.3-2, Figure 6.3-3, Figure 6.5-5.) In contrast, the water-bearing formation in the area where wells do yield significant water is the younger alluvium that occurs south of SR-76. (*Id.*) This formation does not occur at the site.

⁴ Available at <http://www.cdph.ca.gov/certlic/drinkingwater/Documents/Recharge/ERGUIDE2001.PDF>.

(*Id.*) Orange Grove does not hold a right to the water in the aquifer south of SR-76. For these reasons, groundwater would not provide a reliable supply.

E. The Project As Proposed Already Incorporates Mechanisms for Operating During Interruptions to Potable Water Supplies.

As described in the PMPD, a lack of potable water at the Project site is already addressed. (PMPD at 289-230.) The Project's potable water option agreement with FPUD requires that in times of drought, Disinfected Tertiary Recycled Water be substituted for certain uses. (PMPD at 289.) Orange Grove anticipates that FPUD will declare that such a drought condition exists sometime during the summer of 2009. (3/16/09 RT at 41:21-42:17.) Condition of Certification SOIL & WATER-9 requires the Project owner to "ensure that project use of recycled water in lieu of potable water for landscaping, fire protection, facility wash down, safety showers/eye wash, sanitary systems, and any other non-turbine water uses will comply with all applicable LORS, and identify what operational changes would be necessary if recycled water is used in the raw water storage tank during interruptions of potable water supplies." (PMPD at 308-309.) Therefore, the Project will only be able to use recycled water for these purposes as permitted by law. The Project is incorporating such facility design and operational changes as are necessary to respond to SOIL & WATER-9 now, rather than as provided for in the Verification (30 days prior to the start of project operation).

F. Residual Chlorine will be Addressed in the Engineering Report.

The DEH Letter further identifies residual chlorine as a parameter that will need to be addressed for the onsite septic system to assure that the system functions properly. (DEH Letter at 2.)

Orange Grove intends to address this issue through the Engineering Report required by SOIL & WATER-8. (PMPD at 308.) The residual chlorine content of the Disinfected Tertiary Recycled Water is expected to be low when the water is received and, since chlorine is unstable, residual chlorine is expected to be near zero concentration by the time water reaches the septic system. Orange Grove expects that that the Engineering Report will adequately demonstrate that

EXHIBIT B

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA

APPLICATION FOR
CERTIFICATION FOR THE
ORANGE GROVE POWER PLANT
PROJECT BY ORANGE GROVE
ENERGY, LP

DOCKET NO. 08-AFC-4
(AFC filed 06/20/08)

DOCKET

08-AFC-4

DATE JAN 09 2009

RECD. JAN 09 2009

ORANGE GROVE ENERGY, L.P.'s
OPENING BRIEF

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Attorneys for Orange Grove Energy, LP

January 9, 2009

II. The Project Makes Efficient Use of Water In Accordance With State Law and Policy

DFI contends that the Project as proposed violates State law because it fails to make efficient use of water. (DFI Letter Brief at 11-12.) DFI cites the California Water Code's requirement that "water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented." (Cal. Water Code § 100.) Other state laws, applicable specifically to power plant operations, reflect this policy by limiting the consumption of fresh water for power plant cooling to that minimally essential for the welfare of the citizens of the State. (SWRCB Resolution No. 75-58, Water Quality Control Policy on the Use and Disposal of Inland Waters Used for Powerplant Cooling [1975] at 2.) The Commission's own energy policy and the Warren-Alquist Act recognize SWRCB Resolution 75-58's concern with limiting the use of fresh water for power plant cooling purposes. (See California Energy Commission, 2003 Integrated Energy Policy Report at 41; Cal. Pub. Res. Code § 25008.) The Commission has adopted a policy of approving the use of fresh water for power plant cooling purposes only where alternative water supply sources and alternative cooling technologies are shown to be "environmentally undesirable" or "economically unsound." (California Energy Commission, 2003 Integrated Energy Policy Report at 41.)

DFI incorrectly asserts that the Project will use potable water for its cooling needs. (DFI Letter Brief at 12.) Orange Grove responds that, to address statewide concern for the conservation of potable water, the Project will use nonpotable recycled water for its cooling needs - a practice that the California Legislature has strongly encouraged in order to avoid the waste or unreasonable use of water. (Cal. Water Code § 13550[a]; Exhibit 200 at 4.9-10 and 26.) If not used by the Project, this recycled water would otherwise be discharged to the Pacific Ocean via a pipeline. (Exhibit 1 at 6.5-7.) With regard to the potable water used by other aspects of the Project, the Project would not impact the water supply to other users. FPUD has indicated that it has the excess capacity within existing infrastructure to supply the Project. (Exhibit 1 at 6.5-13.) Therefore, the Project's use of potable and recycled water is efficient and complies with state law and policy.

DFI comments that the Project is inefficient because it proposes to import bottled potable water by truck rather than by pipeline. (DFI Letter Brief at 12.) As described above in Section VII of Part A of this brief, a water pipeline was extensively pursued for this project, but is not feasible at this time.

III. Staff and Orange Grove Have Adequately Addressed the Impact of a 100 Year Flood on the Natural Gas Pipeline

DFI suggests that sections of the natural gas pipeline that will service the Project are within a 100 year floodplain, and that the Assessment fails to discuss the potential for damage to the pipeline during a 100-year flood. (DFI Letter Brief at 11.) Orange Grove responds that the AFC addresses this very issue, stating that where the gas pipeline occurs within the 100-year flood zone, it will be below the ground surface. (Exhibit 1 at 6.5-14.) Therefore, the pipeline will not be affected by flooding. (Exhibit 1 at 6.3-8 and 9.) Furthermore, isolation valves exposed on the ground surface will be designed such that they would not be adversely impacted in the event that they are inundated by flooding. (*Id.*) The gas pipeline is located at the edge of the flood plain, far from the active river channel, where flood plain sediments are most stable against reclamation by flood flows. (*See* AFC at 6.3-10.) At the only location where the pipeline will be close to the active river channel there is an engineered riprap embankment stabilizing the channel bank and, therefore, no impact on the pipeline from flooding is expected (*Id.*)

IV. Other Comment

DFI notes a discrepancy in the water usage figures between the Soil and Water Resources and Alternatives sections. (DFI Letter Brief at 11.) The 87.3 acre-feet per year (AFY) figure in the Alternatives section (Exhibit 200 at 6-9) is an error. The correct figures are provided in the Soil and Water Resources section of the Assessment, which are as follows. For recycled water use, the Project would require an expected 12.1 AFY and a maximum of 38.7 AFY. (Exhibit 200 at 4.9-22.) For potable water use, the Project would require an expected 21.1 AFY and a maximum of 62 AFY. (*Id.*)

EXHIBIT C



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April 4, 2014

OGP Compliance Log # 2014-05

Mr. Joe Douglas
(Docket No. 08-AFC-4C)
California Energy Commission
1516 Ninth Street (MS-2000)
Sacramento, CA 95814

**Subject: Orange Grove Project (08-AFC-4C)
Request for Modification of the Verification for Condition of
Certification VIS-2 - Timing for Planting of Visual Screening**

Dear Mr. Douglas:

Pursuant to recent correspondence with you, and on behalf of Orange Grove Energy, L.P., we are submitting this request for modification of the Verification schedule for Orange Grove power plant Condition of Certification VIS-2. The past two annual reports for the Orange Grove Power plant have reported that the planting of shrubs adjacent to Highway 76 has been postponed because of SDG&E plans to construct a solar generation facility in proximity to the planting area. The planting has been postponed due to concerns that the vegetation or associated irrigation system could be destroyed by solar generation facility construction activities, or the vegetation could conflict with optimal design or operation of the future solar generation facility. The status of landscape completion was discussed with CEC visual resource staff during their post-construction compliance inspection on May 10 and 11, 2011, when staff agreed that postponement of planting was reasonable due to plans for solar generation development (see Appendix A in 2011 and 2012 annual reports). The attached Sheets LP-2 and LP-3 from the final landscaping design drawings highlight the locations of the shrubs that have not yet been planted.

The verification for Condition of Certification VIS-2 states, in part, that "[t]he planting must occur during the first optimal planting season following site mobilization."

SDG&E is progressing plans for the proposed solar generation development in anticipation of a final conceptual design and submittal of a permit application to San Diego County in this year. Accordingly, we are requesting that the Verification of VIS-2 be modified by adding the following additional sentence at the end of the third paragraph:

"Planting of the shrubs located adjacent to Highway 76 between Pala Del Norte Road and the Project's secondary access road may be postponed in due consideration of planned solar generation development on the parcel, but shall not be postponed past the first optimal planting season in 2016 unless otherwise approved by the CPM for good cause shown"



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(e.g., imminent solar project construction). Planting status and plans for solar generation development shall be included in each annual report until such time that planting has been completed. Changes to the approved landscape design shall be approved by the CPM."

No change to the Condition of Certification or means of verifying compliance would be required. This change would only affect the timing for Verification of the postponed landscaping.

If you need additional information or have questions regarding this submittal, please contact me at (805) 528-6868, or jstenger@tresolutions.com with copy to Mr. John Hutson at jhutson@orangegroveenergy.com.

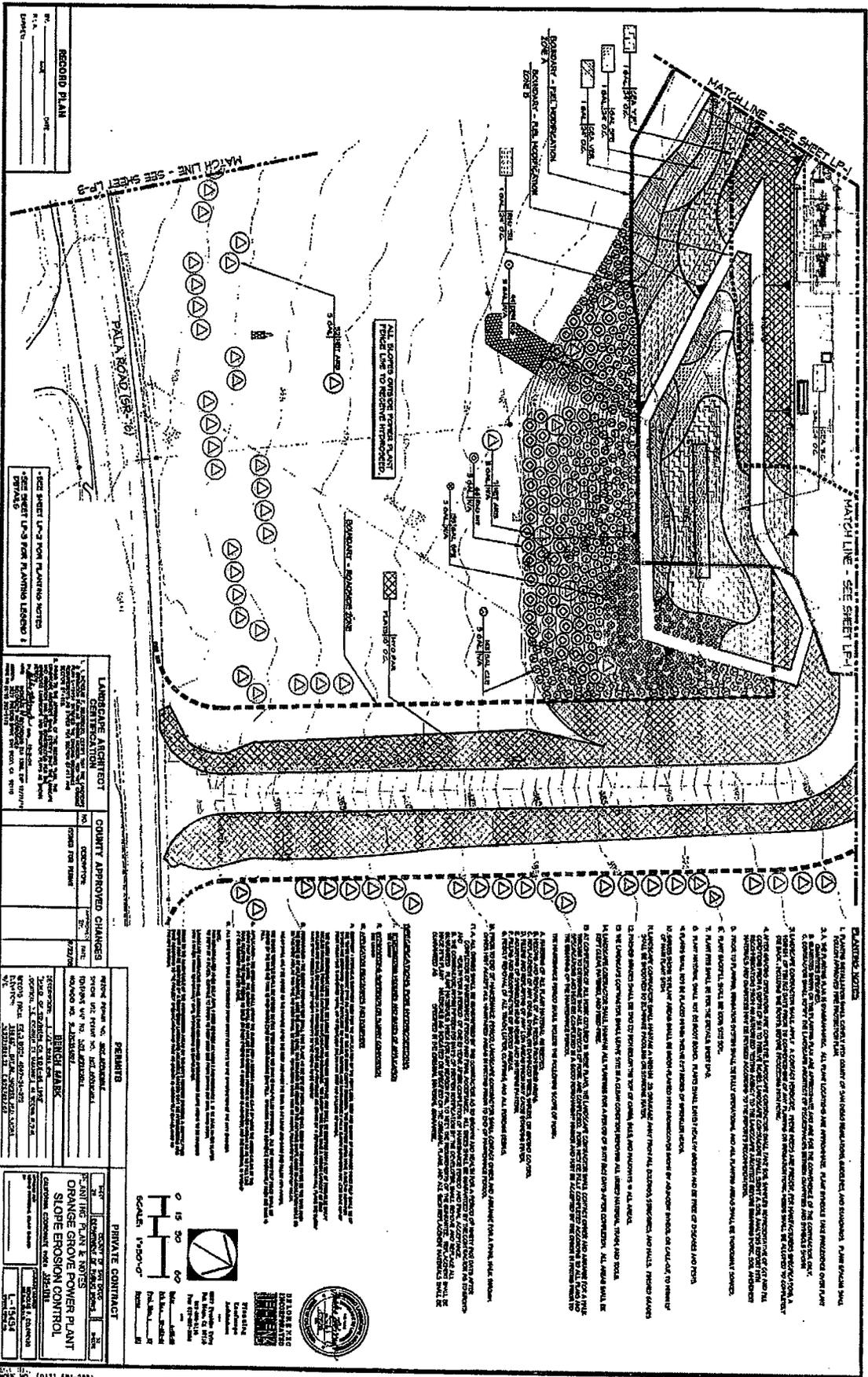
Sincerely,

A handwritten signature in black ink that reads "Joseph L. Stenger". The signature is fluid and cursive, with a long horizontal line extending from the end of the name.

Joseph L. Stenger, PG
Project Director

cc. John Hutson, Orange Grove Energy, L.P.
Chris Bluse, J-Power USA Development Co. Ltd.

Enclosures:
Highlighted Landscape Design Drawing Sheets LP-2 and LP-3



RECORD PLAN
 DATE: _____
 DRAWN BY: _____
 CHECKED BY: _____

SEE SHEET LP-3 FOR PLANNING NOTES
 SEE SHEET LP-3 FOR PLANNING LEGEND

LANDSCAPE ARCHITECT
 CENTRIFICATION
 1. I AM A LICENSED LANDSCAPE ARCHITECT IN THE STATE OF FLORIDA.
 2. I HAVE REVIEWED THE PLANS AND SPECIFICATIONS FOR THE PROJECT AND I AM SURE THAT THEY COMPLY WITH ALL APPLICABLE LAWS AND REGULATIONS.
 3. I HAVE REVIEWED THE PLANS AND SPECIFICATIONS FOR THE PROJECT AND I AM SURE THAT THEY COMPLY WITH ALL APPLICABLE LAWS AND REGULATIONS.
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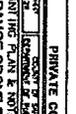
COUNTY APPROVED CHANGES
 NO. _____
 DATE: _____
 BY: _____

PERMITS
 PERMIT NO. _____
 DATE: _____
 BY: _____

PRIVATE CONTRACT

EXPLANATORY NOTES

1. PLANTING MATERIALS SHALL BE COUNTY AND STATE APPROVED. ALL PLANTING MATERIALS SHALL BE PLANTED IN ACCORDANCE WITH THE PLANNING NOTES AND SPECIFICATIONS.
2. ALL PLANTING MATERIALS SHALL BE PLANTED IN ACCORDANCE WITH THE PLANNING NOTES AND SPECIFICATIONS.
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19. ALL PLANTING MATERIALS SHALL BE PLANTED IN ACCORDANCE WITH THE PLANNING NOTES AND SPECIFICATIONS.
20. ALL PLANTING MATERIALS SHALL BE PLANTED IN ACCORDANCE WITH THE PLANNING NOTES AND SPECIFICATIONS.



SCALE: 1"=30'-0"



EXHIBIT D

**ATTACHMENT A
COMPLAINT REPORT/RESOLUTION FORM**

COMPLAINT LOG NUMBER: 006 DOCKET NUMBER: _____

PROJECT NAME: Orange Grove Power Plant

COMPLAINANT INFORMATION

NAME: Maryanne PHONE NUMBER: [REDACTED]

ADDRESS: _____

COMPLAINT

DATE COMPLAINT RECEIVED: December 24th 2013 TIME COMPLAINT RECEIVED: 10:40am

COMPLAINT RECEIVED BY: Kurt Pantera TELEPHONE IN WRITING (COPY ATTACHED)

DATE OF FIRST OCCURRENCE: December 24th 2013

DESCRIPTION OF COMPLAINT (INCLUDING DATES, FREQUENCY, AND DURATION): At 1040 am I received a call from Maryanne. It was hard to get all of what she was saying, as her cell phone was not getting the best reception and I didn't want to aggravate her by continually making her repeat herself. She said that truck #36 was traveling next to her at 50 mph (limit 55) and she couldn't tell if his turn signal was on and the lane ahead changed to one. She said she was in the right lane and the truck was in the left lane and cut her off. She started she would not have called, but she got mad when she honked and the driver threw his hands up in air like it was her fault.

FINDINGS OF INVESTIGATION BY PLANT PERSONNEL: The driver of the truck reported to the Control room after arriving at the plant and wanted to know if I received any complaints. I replied yes I just got off the phone with a lady. He then told me his version of what had happened. He said he was traveling under the speed limit and had his turn signal on for about 100 yards before the lane ended. A female driver was traveling next to the trailer and just stayed there. She wouldn't speed up to the speed limit to pass him nor slow down to get behind him. He said he had no choice, but to slowly start to move to the right as the lanes started to merge. He stated she then honked her horn and gave him the middle finger. He responded by throwing his hands up in the air.

DOES COMPLAINT RELATE TO VIOLATION OF A CEC REQUIREMENT? YES NO

DATE COMPLAINANT CONTACTED TO DISCUSS FINDINGS: 12/26/2013

DESCRIPTION OF CORRECTIVE MEASURES TAKEN OR OTHER COMPLAINT RESOLUTION: _____

Counseled driver to not use any sort of non-verbal communications with other upset drivers while driving.

DOES COMPLAINANT AGREE WITH PROPOSED RESOLUTION? YES NO

IF NOT, EXPLAIN: Have left voicemail with complainant.

CORRECTIVE ACTION

IF CORRECTIVE ACTION NECESSARY, DATE COMPLETED: _____

DATE FIRST LETTER SENT TO COMPLAINANT (COPY ATTACHED): _____

DATE FINAL LETTER SENT TO COMPLAINANT (COPY ATTACHED): _____

OTHER RELEVANT INFORMATION: _____

**ATTACHMENT A
COMPLAINT REPORT/RESOLUTION FORM**

COMPLAINT LOG NUMBER: 005 DOCKET NUMBER: _____

PROJECT NAME: Orange Grove Power Plant

COMPLAINANT INFORMATION

NAME: <u>David Sharpe</u>	PHONE NUMBER: <u>[REDACTED]</u>
ADDRESS: _____	

COMPLAINT

DATE COMPLAINT RECEIVED: <u>12/3/13</u>	TIME COMPLAINT RECEIVED: <u>10:08 am</u>
COMPLAINT RECEIVED BY: <u>Al Deluna</u>	<input checked="" type="checkbox"/> TELEPHONE <input type="checkbox"/> IN WRITING (COPY ATTACHED)
DATE OF FIRST OCCURRENCE: <u>12/3/2013</u>	
DESCRIPTION OF COMPLAINT (INCLUDING DATES, FREQUENCY, AND DURATION): <u>On 12/3/2012 David Sharpe described the water truck, registration number 9E42783, was traveling at a high speed, when it ran a red light on Mission Rd. in Fallbrook, skidded and swerved to avoid hitting other vehicles before the next light. Said this all happened near a High School where the speed limit is 25 mph. He also said the truck left skid marks on the road.</u>	
FINDINGS OF INVESTIGATION BY PLANT PERSONNEL: <u>Orange Grove Energy contracted with Garrett Trucking to drive on 12/3/2013. The driver of the truck was identified</u>	
DOES COMPLAINT RELATE TO VIOLATION OF A CEC REQUIREMENT? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
DATE COMPLAINANT CONTACTED TO DISCUSS FINDINGS: <u>12/5/2013</u>	
DESCRIPTION OF CORRECTIVE MEASURES TAKEN OR OTHER COMPLAINT RESOLUTION: <u>The truck driver was drug and alcohol screened, the physical location was inspected for skid marks, and the employee was verbally counseled as to safe driving expectations.</u>	
DOES COMPLAINANT AGREE WITH PROPOSED RESOLUTION? <input type="checkbox"/> YES <input type="checkbox"/> NO	
IF NOT, EXPLAIN: <u>Voicemail left with complainant offering to discuss resolution.</u>	

CORRECTIVE ACTION

IF CORRECTIVE ACTION NECESSARY, DATE COMPLETED: _____
DATE FIRST LETTER SENT TO COMPLAINANT (COPY ATTACHED): _____
DATE FINAL LETTER SENT TO COMPLAINANT (COPY ATTACHED): _____
OTHER RELEVANT INFORMATION: _____

"This information is certified to be correct."

PLANT MANAGER SIGNATURE: [Signature] DATE: 12/5/13

**ATTACHMENT A
COMPLAINT REPORT/RESOLUTION FORM**

COMPLAINT LOG NUMBER: 004 DOCKET NUMBER: _____

PROJECT NAME: Orange Grove Power Plant

COMPLAINANT INFORMATION

NAME: Mike PHONE NUMBER _____

ADDRESS: _____

COMPLAINT

DATE COMPLAINT RECEIVED: 9/3/13 TIME COMPLAINT RECEIVED: 08:46 am

COMPLAINT RECEIVED BY: Chester Dvorak TELEPHONE IN WRITING (COPY ATTACHED)

DATE OF FIRST OCCURRENCE: 9/3/13

DESCRIPTION OF COMPLAINT (INCLUDING DATES, FREQUENCY, AND DURATION): 9/3/13

Mike described that the water truck was weaving in and out of traffic on Hwy 76 near the I15 intersection.

FINDINGS OF INVESTIGATION BY PLANT PERSONNEL: Orange Grove Energy temporarily hired Kenny Schober Trucking to drive on 9.3.13 and possibly 9.4.13 for Orange Grove Energy due to some mechanical issues with both of OGE's trucks. The driver was identified and counseling is planned.

DOES COMPLAINT RELATE TO VIOLATION OF A CEC REQUIREMENT? YES NO

DATE COMPLAINANT CONTACTED TO DISCUSS FINDINGS: Complainant didn't leave contact information.

DESCRIPTION OF CORRECTIVE MEASURES TAKEN OR OTHER COMPLAINT RESOLUTION: _____

OGE contacted Kenny Schober's drivers and let them know that driving safely is our number one priority, and to not rush to supply us with water. The particular driver that received the complaint was instructed not to weave in and out of traffic and to slow down and to be courteous to the other drivers around them.

DOES COMPLAINANT AGREE WITH PROPOSED RESOLUTION? YES NO

IF NOT, EXPLAIN: Planned resolution was explained with complainant and he agreed that it was a satisfactory resolution.

CORRECTIVE ACTION

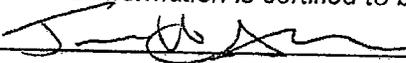
IF CORRECTIVE ACTION NECESSARY, DATE COMPLETED: 9.3.13

DATE FIRST LETTER SENT TO COMPLAINANT (COPY ATTACHED): Complainant didn't leave contact information

DATE FINAL LETTER SENT TO COMPLAINANT (COPY ATTACHED): _____

OTHER RELEVANT INFORMATION: _____

"This information is certified to be correct."

PLANT MANAGER SIGNATURE:  DATE: 9/3/13

(ATTACH ADDITIONAL PAGES AND ALL SUPPORTING DOCUMENTATION, AS REQUIRED)

**ATTACHMENT A
COMPLAINT REPORT/RESOLUTION FORM**

COMPLAINT LOG NUMBER: 003 DOCKET NUMBER: _____

PROJECT NAME: Orange Grove Power Plant

COMPLAINANT INFORMATION

NAME: Erin PHONE NUMBER: _____
ADDRESS: _____

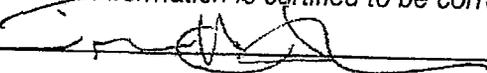
COMPLAINT

DATE COMPLAINT RECEIVED: 6/18/13 TIME COMPLAINT RECEIVED: 10:22 am
COMPLAINT RECEIVED BY: _____ TELEPHONE IN WRITING (COPY ATTACHED)
DATE OF FIRST OCCURRENCE: _____
DESCRIPTION OF COMPLAINT (INCLUDING DATES, FREQUENCY, AND DURATION): _____
Erin described water truck driver as using excessive speed, cutting off a man in a van and not using his turn signal while driving down S. Mission Road in Fallbrook, CA. She did not leave her last name or contact information.
FINDINGS OF INVESTIGATION BY PLANT PERSONNEL: _____
Driver identified, counseling planned.
DOES COMPLAINT RELATE TO VIOLATION OF A CEC REQUIREMENT? YES NO
DATE COMPLAINANT CONTACTED TO DISCUSS FINDINGS: Complainant didn't leave contact information
DESCRIPTION OF CORRECTIVE MEASURES TAKEN OR OTHER COMPLAINT RESOLUTION: _____
OGE contacted Garrett Trucking and informed Gary Hartsuyker to take follow up action with the driver.
DOES COMPLAINANT AGREE WITH PROPOSED RESOLUTION? YES NO
IF NOT, EXPLAIN: Complainant didn't leave contact information

CORRECTIVE ACTION

IF CORRECTIVE ACTION NECESSARY, DATE COMPLETED: _____
DATE FIRST LETTER SENT TO COMPLAINANT (COPY ATTACHED): Complainant didn't leave contact information
DATE FINAL LETTER SENT TO COMPLAINANT (COPY ATTACHED): _____
OTHER RELEVANT INFORMATION: See Attached Information

"This information is certified to be correct."

PLANT MANAGER SIGNATURE:  DATE: 6/19/13

(ATTACH ADDITIONAL PAGES AND ALL SUPPORTING DOCUMENTATION, AS REQUIRED)

EXHIBIT E

[REDACTED]

[REDACTED]

From: Sullivan, Daniel L. - E&FP [mailto:DSullivan@semprautilities.com]
Sent: Wednesday, October 31, 2012 12:48 PM
To: John Hutson
Cc: Chris Bluse; Taylor, Stephen R. - E&FP
Subject: FW: Orange Grove Project

John, the following email was forwarded to me from our Public Affairs Manager requesting that we address a complaint from a customer - Ms. Jan Scott. We concluded that J-Power should address the complaint because it deals directly with O&M requirements of the plant, and not with the tolling contract between SDG&E and OGE. But because we lease the property to OGE, we need to make sure that the plant is in compliance with environmental permits. So we would like to review your response before it is sent to Ms. Scott.

Therefore, could you please prepare a draft response to Ms. Scott's complaint and send it to me to review and comment (if necessary). Then our Public Relations will then forward your final response directly to her. However, if you prefer to respond to her directly, please allow us to review and comment on your response prior to sending it directly to Ms. Scott.

Please call me if you have any questions. Thanks.

Daniel L. Sullivan "Dan"

Senior Energy Administrator
Electric and Fuel Procurement
San Diego Gas & Electric Company
8315 Century Park Court, CP21D
San Diego, CA 92123-1548
(858) 636-5565 phone
(858) 650-6190 fax
(619) 252-2870 mobile

<http://www.sdge.com/index/>

From: [REDACTED]
Date: October 29, 2012, 8:06:42 PM PDT
To: "van der Leeden, Ronald" <RvanderLeeden@semprautilities.com>
Subject: Orange Grove Project

I am writing to you about the Orange Grove Project in Pala, but impacts Fallbrook and specifically the multitude of residents on Alturas. Our area consists of a large mobile home park, 8 apartment complexes and homes. Alturas has 3 zones, agriculture, commercial and residential. The road has not been rated.

We, the neighbors of Alturas, met with FPUD Director Dr Brian Brady and Jack Bebee in a meeting on October 15th. We touched upon several issues,

- 1) The water trucks driving in and out of a narrow driving, using the entire street of Alturas,
 - 2) The decrease in air quality caused by wind blowing over the 8 acre dirt lot,
 - 3) The dead plants along Alturas road which no longer act as a barrier, and are a fire hazard,
 - 4) The invasion of rats into our neighborhood coming from the fields and barn area.
- We trust that FPUD will resolve issues 2, 3, 4 per Brian Brady at the conclusion of the meeting. But a time frame was not established.

The water trucks (1) from the Orange Grove Project are another problem all to itself. After careful review of the impact study and other public information on line about the Orange Grove Project, I was dismayed as a few important areas were glossed over or not addressed at all. The impact study spent more emphasis on Highway 76 and 15, rather than the local neighborhood of Alturas, Ammunition and Mission Road in Fallbrook, The impact study did not address:

1. The loading and unloading of 4 daily school busses on Alturas and Ammunition. Although the study did mention the Bonsall School district (A)
2. There is supposed to be a maximum of 2 trucks per hour, within a time frame of 6:45 to 3:45 for a possible total of 16 per day. From what is gathered in the proposal from OGP, no more than 2 water trucks maximum in a one hour period. The trucks have run as late as 2 am in the morning in a residential area.
3. The impact of different weight limits on the highway were studied, but none addressed the weight limits of Alturas. Alturas is an older road and cannot bear the constant use of 20 water trucks on a daily basis. And although the study stated repairs would be done to 76, it is the corner or Alturas and Ammunition that is now heavily cracked and damaged (B)
4. Also, were verification reports filed (per TRANS - 4 requirements) with Cal Trans, the CHP and the local Sheriff Department?

I have had a chance to review SOME INFORMATION, and can see there are several areas in question... I request you look into this information if you could. This project has had adverse consequences to our health and welfare.

Thanks

Jan Scott


This email has been scanned by the Symantec Email Security.cloud service.
For more information please visit <http://www.symanteccloud.com>

EXHIBIT F

TRAFFIC AND TRANSPORTATION – FIGURE 1

Source: Ex. 200

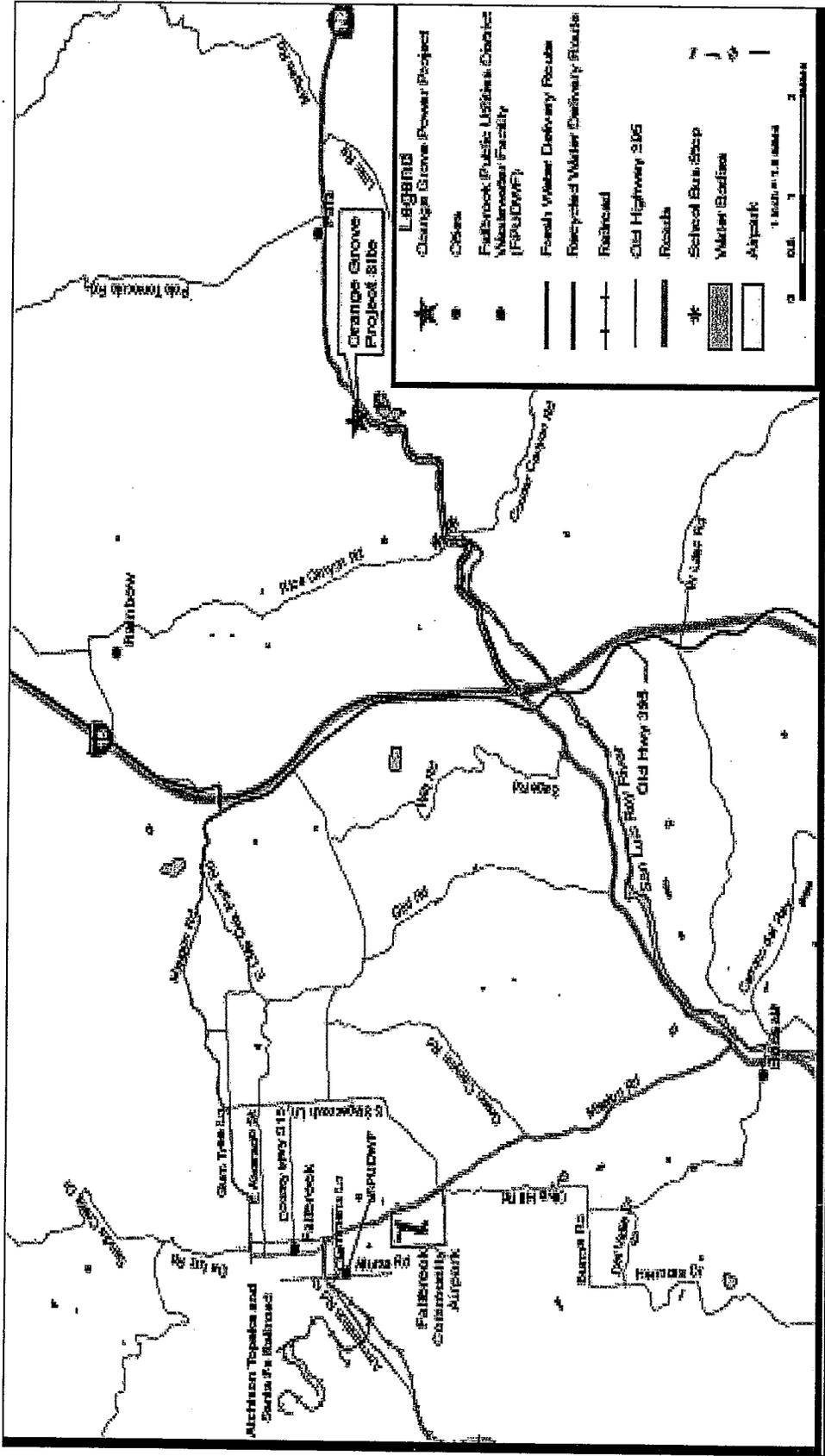


EXHIBIT G

November 6th, 2012

Jan Scott

[REDACTED]
[REDACTED]
[REDACTED]

Dear Ms. Scott:

It has recently come to my attention via correspondence submitted to the Fallbrook Public Utility District and San Diego Gas & Electric that you have concerns regarding Orange Grove Energy's water trucks. It is Orange Grove Energy's intent to be a good neighbor and make best efforts to limit the adverse impacts of operations.

I would like to assure you that throughout the construction and now the operation of the Orange Grove Energy facility that compliance with permit requirements has been a top priority and has been closely tracked. During the development of this facility, the construction and operating requirements were painstakingly reviewed by our compliance group and subsequently signed off on by the technical staff of the California Energy Commission ("CEC").

It is with great care and diligence that our company tries to mitigate as many outside impacts as possible while providing clean, reliable, cost effective power to the residents of California.

Below are clarifications that I have provided regarding the e-mail you sent to San Diego Gas and Electric on October 29, 2012 which is attached as Appendix 1.

Comment 1: CEC staff engineers evaluated the water truck traffic on Ammunition and Alturas Roads in the Final Staff Assessment ("FSA") and it was determined that the additional trucks that would be supplying water to the Orange Grove Facility would have less than a significant impact given the low number of trips per hour as stipulated in the permit and because "there are no substandard geometric features or conditions that would be incompatible with the types of trucks...used..." (Amended Staff Assessment, p 4.10-6)

Comment 2: Orange Grove Energy, under its CEC permit, is not limited in the hours that it may operate its trucks. For reliability purposes, the facility must have the ability to operate water trucks 24 hours a day if needed. The comment that was made in your email, "There is supposed to be a maximum of 2 trucks per hour, within a time frame of 6:45 to 3:45 for a possible total of 16 per day. From what is gathered in the proposal from OGP, no more than 2 water trucks maximum in a one hour period. The trucks have run as late as 2 am in the morning in a residential area." The limit on the hours of water truck operations was only a condition during construction and not operation.

Comment 3: It is well understood that a road that is not designed to handle specific weights will deteriorate more quickly if heavier than planned loads are traversing it. However, as you state, "Alturas is an older road..." and it is difficult to determine whether or not Orange Grove Energy's water trucks are specifically at fault for its degradation. That road has endured construction traffic to complete all of the homes in the area, daily trash trucks, school buses, cement trucks and others. It would be my suggestion to contact Caltrans with any questions you may have regarding the local roads as they are better versed in this area.

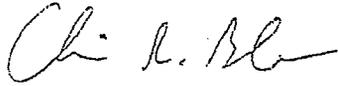
Comment 4: TRANS-4 required Orange Grove Energy to consult with Caltrans and this obligation was met and a written record filed with the CEC. With respect to your comment regarding the Sheriff and CHP, this came from a draft condition in the Amended Staff Assessment which is not the final environmental document. This condition was revised in the Final Commission Decision and the draft condition that would have required the Sheriff and CHP involvement was never adopted.

As stated above Orange Grove Energy, has done its best through all of the phases of this project to lessen the impact to surrounding communities while still fulfilling its obligation of providing clean, reliable and cost effective power to Californians.

Orange Grove Energy has been seeking out alternative water sources since the project planning stages. As the project continues to operate, we will continue to seek out alternative water sources to with the goal of reducing the number of truck trips from the Fallbrook Public Utility District water treatment plant.

Please let me know if I can answer any further questions that you may have.

Sincerely,



Chris R. Bluse

Manager of Asset Management – Orange Grove Energy, L.P.

Tel: 847.908.2862

E-Mail: cbluse@jpowerusa.com

EXHIBIT H

Douglas, Joseph@Energy

From: Energy - Public Adviser's Office
Sent: Thursday, May 23, 2013 1:58 PM
To: Douglas, Joseph@Energy
Cc: Roberts, Blake@Energy
Subject: FW: ORANGE GROVE PROJECT/SDGE

Hi Joe ...

PAO received the e-mail below from someone with serious concerns about the Orange Grove Energy project. Could you please respond?

Thank you,

Laura M.

From: [REDACTED]
Sent: Thursday, May 23, 2013 1:04 PM
To: Energy - Public Adviser's Office
Subject: ORANGE GROVE PROJECT/SDGE

To whom It may Concern, I am writing to you about the Orange Grove Project in Pala, but impacts Fallbrook and specifically the multitude of residents on Alturas. Our area consists of a large mobile home park, 8 apartment complexes and homes. Alturas has 3 zones, agriculture, commercial and residential. The road has not been rated.

We, the neighbors of Alturas, met with FPUD Director Dr Brian Brady and Jack Bebee In a meeting on October 15th 2012. .We touched upon several issues, BUT MOSTLY the discussion was directed at the Orange Grove Project and the water trucks driving in and out of a narrow driving, using the entire street of Alturas. We have also met Chris Bluse of J Power who holds the contract, and sent letters dated Oct 2012 to the CEC, Public Advisor, SDGE and more.

What we recently received was a letter from Chris Bluse asking I sign off for the CEC stating the situation has been resolved. NOTHING HAS CHANGED, IN FACT THE TRAFFIC HAS INCREASED.

The water trucks from the Orange Grove Project are a problem. After careful review of the impact study and other public information on line about the Orange Grove Project, I was dismayed as a few important areas were glossed over or not addressed at all. The impact study spent more emphasis on Highway 76 and 15, rather than the local neighborhood of Alturas, Ammunition and Mission Road in Fallbrook, The impact study did not address:

1. The loading and unloading of 4 daily school busses on Alturas and Ammunition. Although the study did mention the Bonsall School district (A)
2. There is supposed to be a maximum of 2 trucks per hour, within a time frame of 6:45 to 3:45 for a possible total of 16 per day. From what is gathered in the proposal from OGP, no more than 2 water trucks maximum in a one hour period. The trucks have run as late as 2 am in the morning in a residential area.
3. The impact of different weight limits on the highway were studied, but none addressed the weight limits of Alturas. Alturas is an older road and cannot bear the constant use of 20 water trucks on a daily basis. And although the study stated repairs would be done to 76, it is the corner or Alturas and Ammunition that is now heavily cracked and damaged (B)

4. Also, were verification reports filed (per TRANS - 4 requirements) with Cal Trans, the CHP and the local Sheriff Department?

I have had a chance to review SOME INFORMATION, and can see there are several areas in question... I request you look further into this information if you could. This project has had adverse consequences to our safety and welfare.

Please note, The Bonsall Road maintenance has already had to repair the bottom section of South Alturas due to the weight load of the trucks damaging the asphalt.

Thanks

The Neighbors of Alturas Road

Addendum:

(A) School Bus Route

As noted earlier, the Bonsall Unified School District provides school bus service to transport students to and from Bonsall and Pala. Staff contacted the District to confirm the times the buses use SR-76 east of I-15 (Bonsall Unified School District 2008). The buses pass by the OGP site at 7 and 7:30 a.m. and 3 and 3:30 p.m. Staff's proposed Condition of Certification TRANS-1 requires that project construction workers arrive at the site prior to 6:45 a.m. and depart after 3:45 p.m. to avoid encountering the school buses when they are using SR-76 east of I-15. If the school bus travel times on SR-76 east of I-15 change, worker arrival and departure times would need to change accordingly.

PUBLIC TRANSPORTATION

The Bonsall Union School District encompasses a large area including the communities of Bonsall and Pala. School bus service for elementary and middle school is provided and travels on SR-76. The applicant states that the construction workers arrival and departure (7 a.m. and 4 p.m.) would not overlap with the times the school buses would utilize the portion of SR-76 from I-15 to the project site. The bus stops are two or more miles west of the OGP site (OGP 2008a, pg. 6.11-18). Staff has been advised by the District that a school bus does use SR-76 to pick up students who live in the general area and near the community of Pala. There are two school bus stops near Rice Canyon Road (see Traffic and Transportation Figure 2). The bus travels by the OGP site at 7 and 7:30 a.m. and 3 and 3:30 p.m. (Bonsall Union School District 2008).

WHAT HAPPENED TO FALLBROOK IMPACT?

(B) EXISTING HIGHWAYS AND ROADS

I-15 is a north-south eight-lane freeway that connects the San Diego area with Riverside and San Bernardino counties to the north and ultimately crosses the California/Nevada border. Caltrans records show average daily traffic volume on I-15 in the project area is about 128,000 vehicles per day (Caltrans 2006). About 10% of the daily traffic involves truck movement. The corresponding volume for SR-76 is 13,400 with approximately 5% truck traffic (OGP 2008a, Table 6.11-2, pg. 6.11-6). SR-76 is a two-lane east/west road in the general project area. Bicycle travel is allowed for the entire length of SR-76 (Caltrans 2007, pg. 6.3), though there are no bike lanes near the project area. Pala Del Norte is not included in the list of County maintained roads (OGP 2008a, Table 6.11-1, pg. 6.11-4). Mission Road is a two-to-four lane north/south oriented road with about 24,000 to 18,000 vehicles per day depending on which road segment is analyzed. Ammunition Road is a two-to-three lane east/west oriented road with about 12,400 vehicles per day. Alturas Road is a two lane north/south oriented road with about 4,000 vehicles per day. East Mission Road is a two-lane east/west oriented road with about 20,500 vehicles per day (see Traffic and Transportation Figure 1 and OGP 2008a, Table 6.11-6, pg. 6.11-8).

TRAFFIC AND TRANSPORTATION

Testimony of James Adams

SUMMARY OF CONCLUSIONS

The Orange Grove Project (OGP) would be consistent with the Circulation Element in the San Diego County General Plan and all other applicable laws, ordinances, regulations, and standards (LORS). The project would not have a significant adverse impact on the local and regional road/highway network. During the construction and operation phases, local roadway and highway demand resulting from the daily movement of workers and materials would not increase beyond significance thresholds established by San Diego County. During the operational phase, the project would not

adversely affect aviation operations associated with any airport flight traffic pattern or agricultural spraying operations

EXHIBIT I

Douglas, Joseph@Energy

From: [REDACTED]
Sent: Friday, May 24, 2013 2:24 PM
To: Douglas, Joseph@Energy; brianweezyb@earthlink.net
Subject: Re: Orange Grove Water Truck Complaint

Mr Douglas, thank you for your quick response. I would like to add that Chris Bluse came to visit us. At that time JP Stenberg a mechanical engineer who works in the water field took Mr Bluse to several alternative sites for the trucks to load reclaimed water. 1)

Use the north gate 2) extend the pipeline to the corner of Aviation and Alturas and use the vacant lot which would also provide easy turn around, 3) tap into the reclaimed water pipeline along south mission AND 4) upgrade the the reclaimed water plant at Rainbow Municipal Water District which is located off the 76 and 15, has no housing surrounding it, and is definitely closer reducing fuel costs.

I have incuded the last communication with Chris Bluse and J POWER

Jan and Brian,

Happy New Year to both of you. I wanted to bring you up to speed on what is happening with the water truck situation.

- 1) Jan you should have received a Fed-Ex from me regarding the resolution of the water truck issue. As you can tell, the CEC does not move expeditiously in these matters as this was a request from them to add to their files. Please respond back at your earliest convenience with the self-addressed envelope that was enclosed in the package.
- 2) We have settled on two potential well sites in the Pala area that we believe could be viable options. Additionally, we have released legal counsel to begin review of the associated ownership rights and water draw provisions for each site.

Hope all is well with the both of you.

Best,

Chris
Chris R. Bluse
Assistant Director of Asset Management

J-POWER USA Development Co., Ltd.
T - 847.908.2862
F - 847.908.2888
C - 303.919.5198
E - cbluse@jpowerusa.com

As you can see, the water trucks issue has not been settled and the status quo is about to increase, which is unacceptable. What we thought was giving J POWER room to make a determination of the future, was inadvertently mistaken for the situation being resolved. Please note our efforts have now stepped up as one of the truck drivers informed my neighbor "the trucks are here to stay". Did they just lay down the gauntlet? I have received acknowledgement from Supervisor Bill Horns office which is investigating this, replies from SDGE and others. Thank you for your help in resolving this issue.

Jan Scott

-----Original Message-----

From: Douglas, Joseph@Energy <Joseph.Douglas@energy.ca.gov>
To: [REDACTED]
Sent: Thu, May 23, 2013 3:14 pm
Subject: Orange Grove Water Truck Complaint

Jan,

Thank you for your concern. I just called you and left a voice mail about this. We have contacted Orange Grove and informing them that they have to reply to the Commission and find a resolution to the problem. I have also forwarded this to our technical staff for review. We will continue to follow this issue to ensure compliance with the Final Decision. Please feel free to contact me for further information about this issue. I will be out of the office until Tuesday, but can answer e-mails.

Joseph Douglas
California Energy Commission
Compliance Office
916.653.4677

EXHIBIT J

7676 HAZARD CENTER DR., 7th FLR.
SAN DIEGO, CALIF. 92108

Recording Requested by
San Diego Gas & Electric Company

When recorded, mail to:

San Diego Gas & Electric Company,
P.O. Box 1831
San Diego, CA 92112
Attn: Office Services, EB 5

1111.454-1

DOC # 1998-0003909

Jan 06, 1998 8:00 AM

OFFICIAL RECORDS
SAN DIEGO COUNTY RECORDER'S OFFICE
GREGORY J. SMITH, COUNTY RECORDER

609

FEES: 48.00
DC: NA
WAYS: 2



SPACE ABOVE FOR RECORDER'S USE

Transfer Tax None
SAN DIEGO GAS & ELECTRIC COMPANY

A.P. NO. POR. 110-072-07,21&23
110-370-05

INDEX AS EASEMENT AND AGREEMENT

EASEMENT AGREEMENT

THIS AGREEMENT is entered into on 1-6-98, by and between H. G. FENTON MATERIAL COMPANY, a corporation (Grantor), and SAN DIEGO GAS & ELECTRIC COMPANY, a corporation (Grantee)

A. Grantor is the owner of certain real property situated in the unincorporated area of San Diego County, California, hereafter referred to as the Servient Tenement and more particularly described in Exhibit "A" which is attached to this Agreement and hereby incorporated by reference.

B. Grantee is the owner of certain real property situated in the unincorporated area of San Diego County, California, hereafter referred to as the Dominant Tenement and more particularly described in Exhibit "B" which is attached to this Agreement and hereby incorporated by reference.

C. Grantee desires to acquire certain rights in the Servient Tenement.

NOW, THEREFORE, for and in consideration of the recitals, covenants and other provisions set forth herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound, agree as follows:

WELL.SIG
Well & Distribution Easement
Execution Copy
12/8/97

1. GRANT OF EASEMENTS

610

Subject to the terms of this Agreement, Grantor grants to Grantee the easements described as follows:

a. An easement to exclusively pump, export, take, use and remove the water from the existing well and through the existing water pipeline currently located within a strip of land six (6) feet in width generally as depicted on Exhibit "C" hereto.

b. Incidental rights of ingress and egress and for the laying of pipeline and necessary appurtenances in, upon, over, under and across a portion of the Servient Tenement or as said ways of ingress and egress, pipelines and appurtenances may be relocated to the extent necessary to use the easement described in paragraph 1a hereof.

c. An easement in, upon, over, under and across the Servient Tenement of an area 12.00 feet in width, being 6.00 feet on each side of the center line of electric facilities as they exist at the date of execution of this easement, to erect, construct, change the size of, improve, reconstruct, relocate, repair, maintain and use electric facilities. The electric facilities will be installed at such locations and elevations upon, along, over and under the hereinafter described easement as Grantee may now or hereafter deem convenient or necessary. Grantee also has the right of ingress and egress, to, from and along this easement in, upon, over and across the Servient Tenement. Grantee further has the right, but not the duty to clear and keep this easement clear from explosives, buildings, structures and materials.

2. RELOCATION OF WELL AND APPURTENANCES TO WELL

The well and appurtenances may be relocated at any time and from time to time upon the following terms and conditions: whenever Grantee in its reasonable judgment believes that solely as the result of any action or activity on the part of Grantor the output of the well is less than 450 gallons per minute and/or the quality of the water is an inferior quality for agricultural irrigation purposes, or if Grantor at any time and from time to time wishes to effect a relocation. Any well and appurtenance relocation shall be at Grantor's sole cost and expense, must be constructed to maintain the existing connection and location of the line crossing under State Highway 76, and relocation shall occur only if at the relocated site, the well is capable of pumping water at a rate not less than 450 gallons per minute and of a quality not less than that necessary to provide satisfactory irrigation for agricultural purposes on the Dominant Tenement. If the relocation is initiated by Grantor, Grantor shall provide not less than forty-five (45) days advance written notice to Grantee of Grantor's intent to relocate the well, together with documentation satisfactory in Grantee's reasonable judgment that the quantity and quality requirements for water to be pumped from the relocated well will be met. Prior to the beginning of any construction to relocate the well, Grantor shall grant to Grantee a new easement for the well site and any additional water lines and/or electric facilities needed to operate said well. Notwithstanding anything in this paragraph to the contrary, Grantor shall not require relocation of the well at any time during a cultivation cycle where daily irrigation cannot be interrupted, including by way of example a time of extreme heat.

WELL.SIG
Well & Distribution Easement
Execution Copy
12/8/97

3. RESTRICTIONS ON GRANTOR'S ACTIVITIES

Grantor shall not erect, place or construct, nor permit to be erected, placed or constructed, any building or other structure, plant any tree, drill or dig any well, within this easement without prior written consent of Grantee, which consent shall not unreasonably be withheld.

Grantor shall not increase or decrease the ground surface elevations without prior written consent of Grantee, which consent shall not unreasonably be withheld.

Grantee shall have the right but not the duty, to trim or remove trees and brush along or adjacent to this easement and remove roots from within this easement whenever Grantee deems it necessary. Said right shall not relieve Grantor of the duty as owner to trim or remove trees and brush to prevent danger or hazard to property or persons.

4. ATTORNEYS' FEES

If any legal action or proceeding arising out of or relating to this Agreement is brought by either party to this Agreement, the prevailing party shall be entitled to receive from the other party in addition to any other relief that may be granted, its reasonable attorneys' fees, cost and expenses incurred in the action or proceeding.

5. ENTIRE AGREEMENT

This Easement Agreement implements provisions of that certain Agreement of Purchase and Sale dated October 1, 1997 entered into between the parties. This Easement Agreement and the Agreement of Purchase and Sale together constitute the entire agreement between Grantor and Grantee relating to the easements granted herein. Any prior agreements, promises, negotiations, or representations not expressly set forth in either this Easement Agreement or the Agreement of Purchase and sale are of no force and effect. No amendment to this Easement Agreement shall be of any force or effect unless it is in writing, signed by both Grantor and Grantee, and duly recorded.

6. BINDING EFFECT

This Easement Agreement shall be binding on and inure to the benefit of the heirs, executors, administrators, licensees, successors and assigns of Grantor and Grantee.

EXECUTED ON 12/3/97.

GRANTOR:
H.G. FENTON MATERIAL COMPANY

By: Henry F. Hunt
Henry F. Hunt
President and Chief Executive Officer

By: Michael P. Neal
Michael P. Neal
Vice President
R.E. Portfolio Management & Development

GRANTEE:
SAN DIEGO GAS & ELECTRIC COMPANY
A California Corporation

By: Kathryn A. Frost
Its: Acting Division Manager
Administrative Services

Drawn By: Love
Project No. Pala Sale

WELL.SIG
Well & Distribution Easement
Execution Copy
12/8/97

State of California

County of San Diego

On December 18, 1997 before me, Kathleen M. Babcock, Notary Public, personally appeared Kathryn N. Frost, personally known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her authorized capacity, and that by her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Kathleen M. Babcock
Signature



EXHIBIT "A"

614

PARCEL 1:

THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 29, TOWNSHIP 9 SOUTH, RANGE 2 WEST, SAN BERNARDINO MERIDIAN AND THAT PORTION OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 29, TOWNSHIP 9 SOUTH, RANGE 2 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM THAT PORTION LYING NORTHWESTERLY OF THE CENTER LINE OF PALA ROAD (CALIFORNIA STATE HIGHWAY ROUTE NO. 18, DIVISION NO. 2), AS SAID ROAD EXISTS ON THE DATE OF EXECUTION OF THIS DEED; THE APPROXIMATE LOCATION OF SAID PALA ROAD IS SHOWN AND DELINEATED ON STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION DISTRICT 11 RIGHT OF WAY MAP NO. S-339,S340 SIGNED BY A.E. HETHCOCK, DISTRICT RIGHT OF WAY ENGINEER, DISTRICT 11, RCE 13042 ON FILE IN THE OFFICE OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, DISTRICT 11.

PARCEL 2:

THAT PORTION OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 32, TOWNSHIP 9 SOUTH, RANGE 2 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO OFFICIAL PLAT THEREOF, LYING SOUTHEASTERLY OF THE CENTER LINE OF PALA ROAD (CALIFORNIA STATE HIGHWAY ROUTE NO. 18, DIVISION NO. 2), AS SAID ROAD EXISTS ON THE DATE OF EXECUTION OF THIS DEED; THE APPROXIMATE LOCATION OF SAID PALA ROAD IS SHOWN AND DELINEATED ON STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION DISTRICT 11 RIGHT OF WAY MAP NO. S-339,S340 SIGNED BY A. E. HETHCOCK, DISTRICT RIGHT OF WAY ENGINEER, DISTRICT 11, RCE 13042 ON FILE IN THE OFFICE OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, DISTRICT 11 AND LYING NORTH AND WEST OF A LINE DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF SAID NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 32; THENCE NORTH 45° EAST, 20.24 CHAINS TO A POINT THAT IS 6.66 CHAINS WEST AND 6.66 CHAINS SOUTH OF THE NORTHEAST CORNER OF SAID NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 32; THENCE NORTHEAST IN A STRAIGHT LINE TO THE NORTHEAST CORNER OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 32.

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EXHIBIT "B"

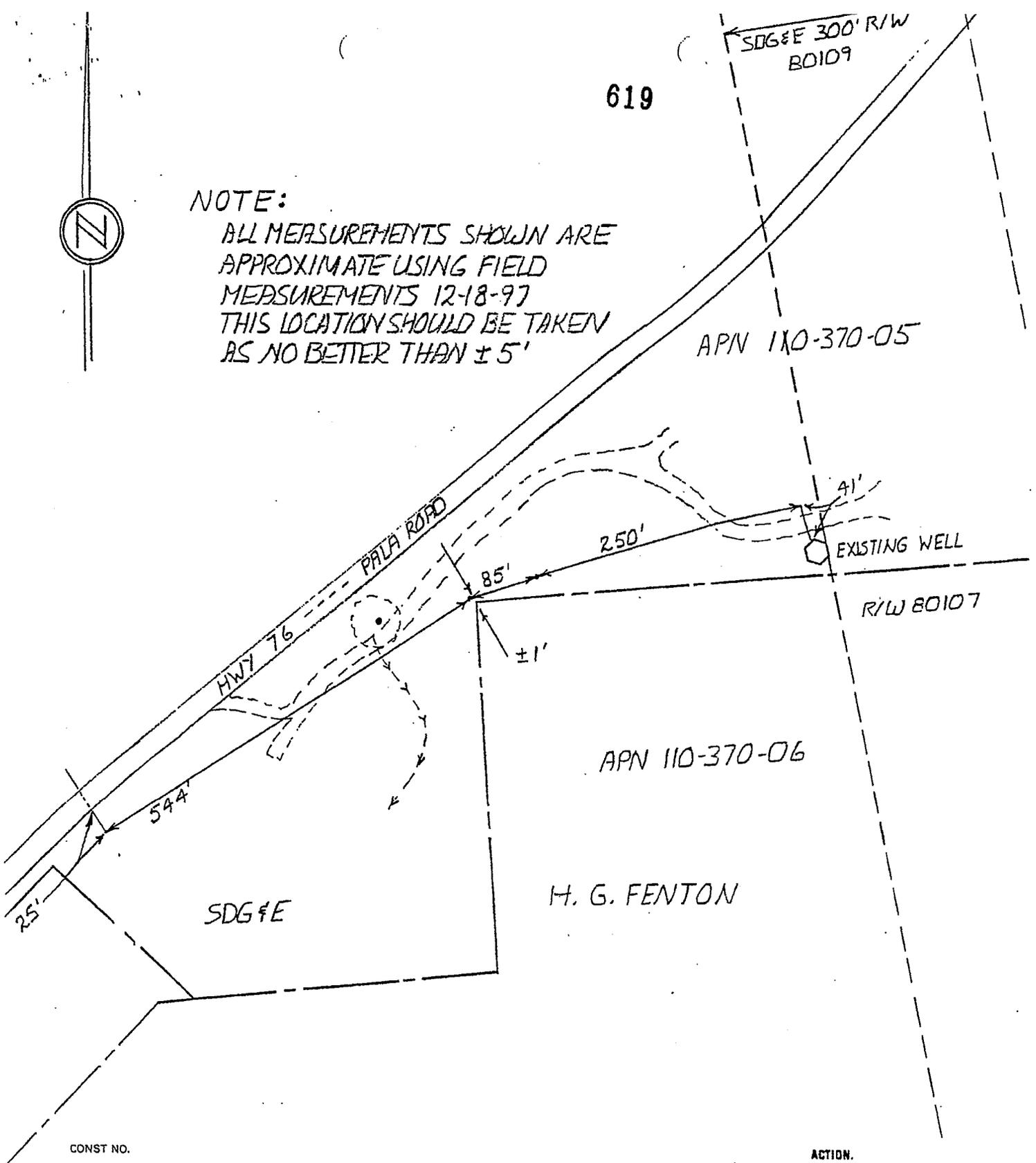
618

DEED; THE APPROXIMATE LOCATION OF SAID PALA ROAD IS SHOWN AND DELINEATED ON STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION DISTRICT 11 RIGHT OF WAY MAP NO... S-339,S340 SIGNED BY A. E. HETHCOCK, DISTRICT RIGHT OF WAY ENGINEER, ON FILE IN THE OFFICE OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, DISTRICT 11.

THE BEARINGS USED IN THE ABOVE DESCRIPTION ARE ON THE CALIFORNIA STATE COORDINATE SYSTEM, ZONE 6. ALL DISTANCES ARE GROUND LEVEL DISTANCES.



NOTE:
 ALL MEASUREMENTS SHOWN ARE
 APPROXIMATE USING FIELD
 MEASUREMENTS 12-18-97
 THIS LOCATION SHOULD BE TAKEN
 AS NO BETTER THAN $\pm 5'$



CONST NO.
 MOPAC-

ACTION.
 THOS. BROS. 1029-D6

SAN DIEGO GAS & ELECTRIC SAN DIEGO, CALIFORNIA APPROXIMATE LOCATION OF EXISTING 6" PVC & STEEL WATERLINE FROM WELL TO HIGHWAY CROSSING	DRAWN BY: <i>RAP</i>	OK TO INSTALL:	DRAWING NO.: COORDINATES
	DATE: <i>12-19-97</i>	R/W OK:	
	SCALE: <i>NONE</i>	APP'D BY:	

EXHIBIT "C"

CALIFORNIA ALL-PURPOSE KNOWLEDGMENT

State of California

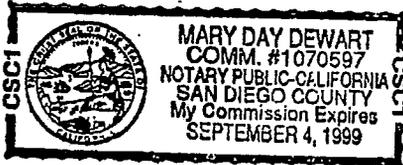
620

County of San Diego

On December 31, 1997 before me, Mary Day Dewart, Notary Public
Date Name and Title of Officer (e.g., "Jane Doe, Notary Public")

personally appeared Henry F. Munte and Michael P. Neal
Name(s) of Signer(s)

personally known to me - OR - proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



WITNESS my hand and official seal.

Mary Day Dewart
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

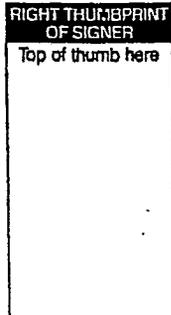
Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

- Individual
- Corporate Officer
Title(s): _____
- Partner — Limited General
- Attorney-in-Fact
- Trustee
- Guardian or Conservator
- Other: _____

Signer Is Representing: _____



Signer's Name: _____

- Individual
- Corporate Officer
Title(s): _____
- Partner — Limited General
- Attorney-in-Fact
- Trustee
- Guardian or Conservator
- Other: _____

Signer Is Representing: _____

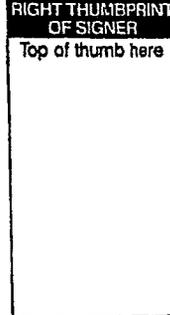


EXHIBIT K

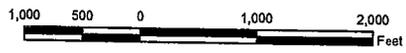


Figure 6.5-4
 100-Year Flood Zone
 Orange Grove Project
 San Diego County, CA

- Gas Pipeline
- Transmission Line Interconnection
- Site Boundary
- ▨ Area Inundated by 100-Year Floodplain



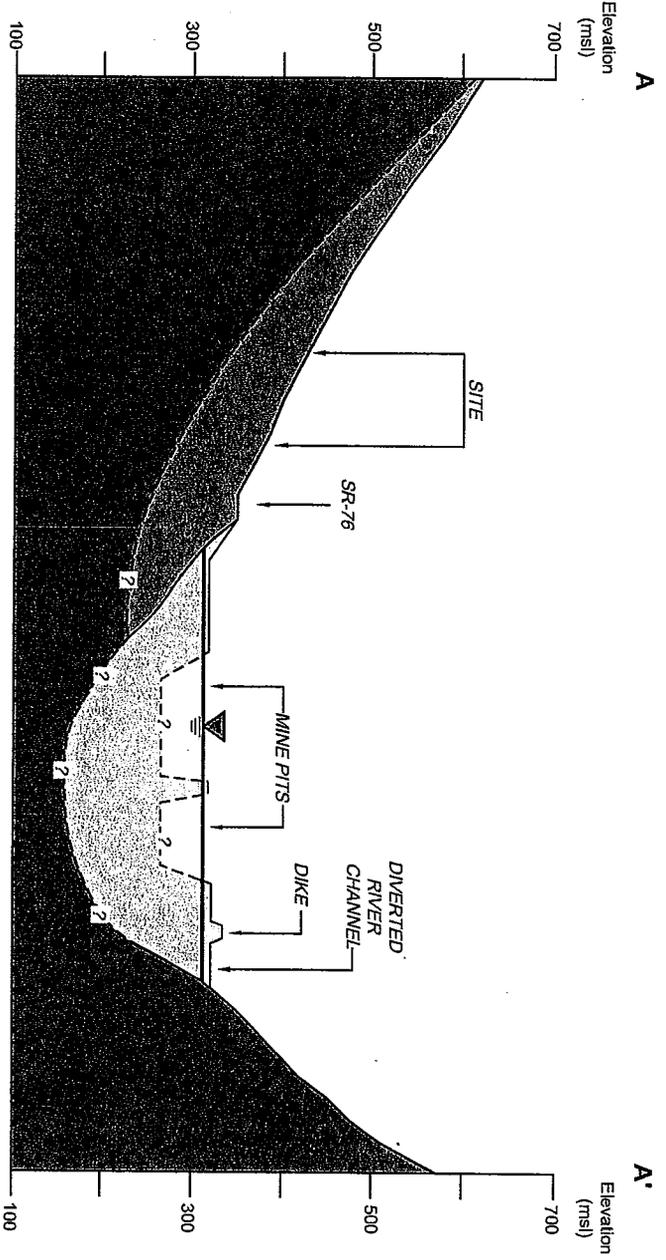
1" = 1,000'



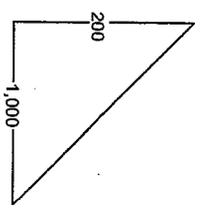
Source:
 Flood Plain Data: FEMA
 Aerial Photographs from ESRI imagery, World_3D



EXHIBIT L

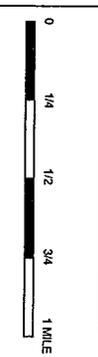
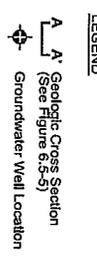
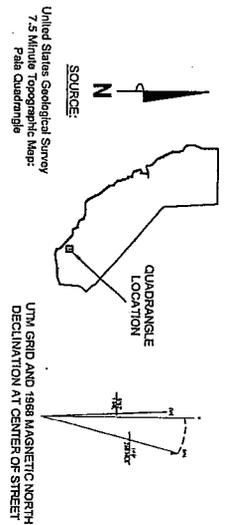
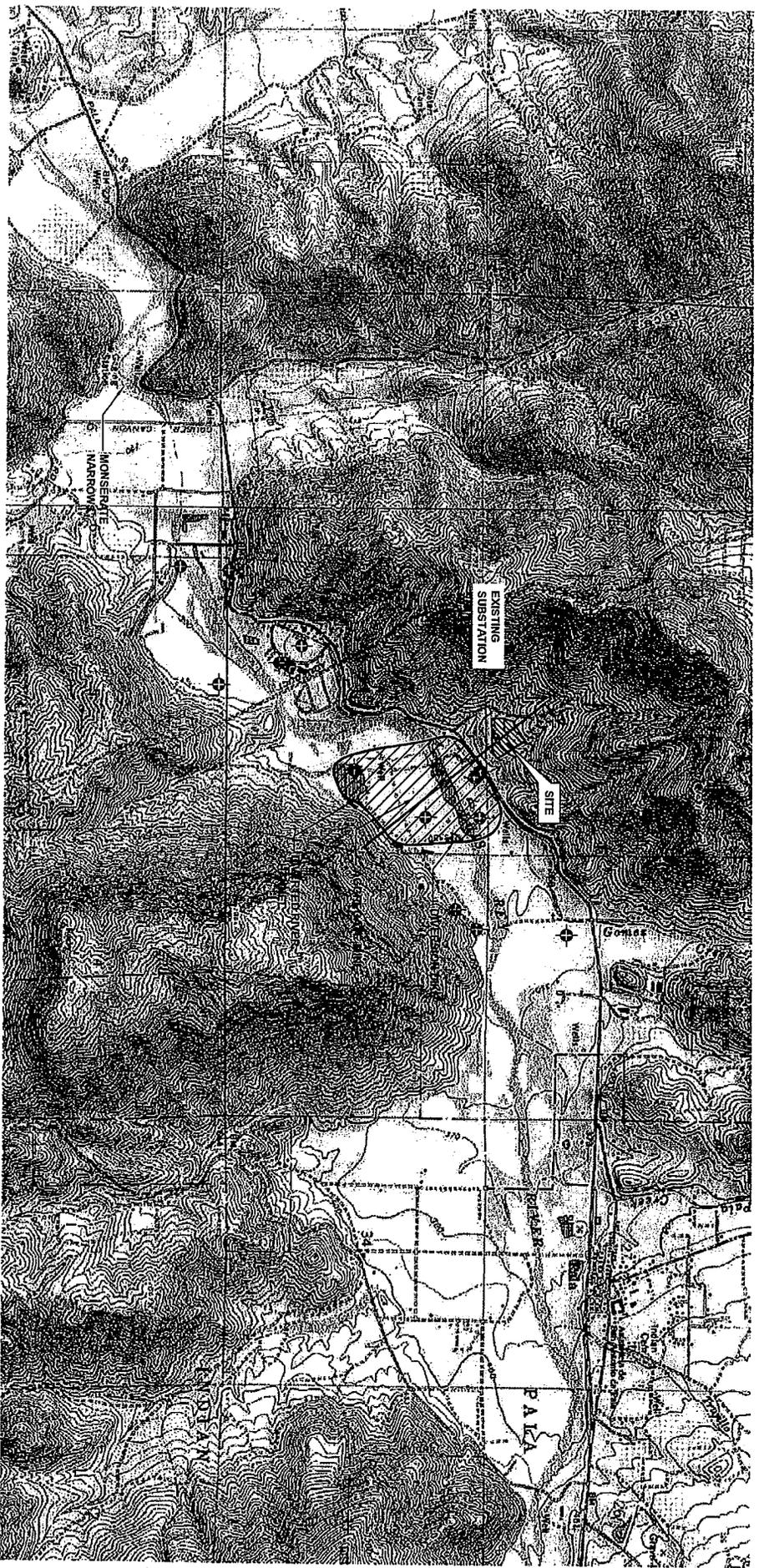


- LEGEND**
-  Plutonic Basement Rock
 -  Very Old Alluvium (Not Water-Bearing)
 -  Holocene Alluvium (Water-Bearing)
 -  Ground Water Table



- NOTES:**
- 1) Hydrogeologic units based on: California Division of Mines and Geology, 2000 and San Luis Rey Municipal Water District, 2006.
 - 2) Vertical Exaggeration 5x
Horizontal Scale 1:12,000 (1-inch = 1,000 feet)
Vertical Scale 1:2,400 (1-inch = 200 feet)

	PROJECT: 125158	HYDROGEOLOGIC CROSS SECTION A-A'
	FACILITY: ORANGE GROVE PROJECT SAN DIEGO COUNTY, CALIFORNIA	
FIGURE 6.5-5		



PROJECT: 128158
 FACILITY: ORANGE GROVE PROJECT
 SAN DIEGO COUNTY, CALIFORNIA

EXISTING REGIONAL SURFACE DRAINAGE AND TOPOGRAPHY
 FIGURE 6.5-2

EXHIBIT M



TEST WELL INSTALLATION ON PARCEL NUMBER 110-072-26
PALA, CALIFORNIA

December 3, 2013

Prepared For:

J-Power USA
1900 East Golf Road, Suite 1030
Schaumburg, Illinois 60173

By:

Joseph L. Stenger, PG 5964
Project Director

John Nordenstam, PG 7160
Senior Project Geologist



TRC SOLUTIONS, INC
123 Technology Drive, Suite 100
Irvine, California 92618

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2.0 TEST WELL INSTALLATION ACTIVITIES	1
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2.2 Well Permit.....	1
2.3 Well Installation	1
2.4 Well Development.....	2
3.0 SURVEY DATA.....	3

FIGURES

- 1 Site Location Map
- 2 Site Plan

APPENDICES

- A Geophysical Survey Report and Dig Alert Ticket
- B Well Permit Application
- C Boring Log, Well Construction Details, and Core Photographs
- D Survey Data

1.0 INTRODUCTION

This report documents the installation and development of a test well completed on Parcel Number 110-072-26 located in north San Diego County, approximately 3.5 (air) miles northeast of Interstate 15 on State Route (SR) 76, approximately two miles west of the community of Pala (see Figures 1 and 2). J-Power USA, through its operating subsidiary Orange Grove Energy, L.P., owns and operates a power plant on a leased portion of Parcel 110-072-26.

2.0 TEST WELL INSTALLATION ACTIVITIES

2.1 GEOPHYSICAL SURVEY

On July 31, 2013, a geophysical survey was conducted to locate any underground utilities present in the area of the proposed well location and the proposed well location was delineated with wooden stakes and flagging. On August 27, 2013, Dig Alert was notified; the owners of underground utilities in the area were notified by Dig Alert and the utilities present in the area of the proposed well were marked. Copies of the geophysical survey report and Dig Alert Ticket Number A32390856 are included in Appendix A.

2.2 WELL PERMIT

An application for a well permit with the County of San Diego, Department of Environmental Health, Land and Water Quality Division (County of San Diego DEH), was submitted on September 3, 2013. On September 9, 2013, the County of San Diego DEH approved of the well permit application and issued Well Permit Number DEH2013-LWELL-000259. A copy of the well permit application is included in Appendix B.

2.3 WELL INSTALLATION

On September 10 through 12, 2013, the test well was drilled and installed to a total depth of approximately 75 feet below ground surface (bgs) using sonic drilling techniques. The test well was drilled using a 10-inch-diameter outer casing and a 7-inch-diameter, 10-foot-long core barrel. No drilling fluids or additives were used during drilling activities. Soil/rock samples were collected continuously during drilling activities. For each sampling interval, field descriptions of the soil/rock type, moisture, color, and grading were recorded on the boring log. A copy of the boring log is provided in Appendix C.

Prior to well casing installation, the borehole annulus was drilled approximately one foot below the proposed bottom of casing (total depth of approximately 76 feet bgs). During well installation, the well casing was suspended and centralized (with stainless steel centralizers) within the outer drill casing and did not rest against the sides or bottom of the borehole annulus prior to being fixed in place. Simultaneously with the removal of the outer drill casing from the borehole, the filter pack, transition sand, and neat cement seal were emplaced.

Test Well Installation on Parcel Number 110-072-26, Pala, California
December 3, 2013

The test well was constructed with 6-inch-diameter, flush threaded, stainless steel blank casing and continuous wire wrap screen (0.050-inch slot size) with a filter pack composed of 8 x 16 (#8 Mesh) gravel. A 5-foot-long, Schedule 40, polyvinyl chloride (PVC) blank casing was installed beneath the screened interval. A 5.5-foot thick transition sand (#30 Mesh) was installed above the filter pack and an annular seal of neat cement was installed from the top of the transition sand to ground surface. A four-foot square, concrete well pad was installed with an aboveground locking well box (monument box) and a locking watertight cap to prevent unauthorized access to the well and to prevent infiltration of surface fluids. In addition, four crash posts were installed around the well pad to protect the wellhead. A summary of the well construction details is presented below.

Well ID	Casing Diameter	Blank (feet bgs)	Screen (feet bgs)	Filter Pack (feet bgs)	Transition Sand (feet bgs)	Seal (feet bgs)	Borehole Depth (feet bgs)
Test Well	6-inch	0 to 40 (SS) and 70 to 75 (PVC)	40 to 70	30 to 76	24.5 to 30	0 to 24.5	76
Notes: bgs = below ground surface SS = stainless steel PVC = polyvinyl chloride							

Drill cuttings (soil and rock) generated from continuous core collection activities were stockpiled near the well location. Groundwater and saturated drill cuttings generated during well installation activities were placed on the ground surface near the well location in such a manner that water infiltrated into the soil or evaporated; no surface water runoff was allowed to occur. Copies of the boring log, well construction detail, and photographs of the cores collected during drilling activities are included in Appendix C.

2.4 WELL DEVELOPMENT

On September 16 and 17, 2013, the test well was developed by bailing, surging, and pumping. Well development activities were conducted to remove any residual drill cuttings from within and adjacent to the newly installed well. The goals were to obtain water samples with turbidity measurements less than 5 Nephelometric Turbidity Units (NTUs) and stabilized temperature, pH, and electric conductivity (EC) measurements (variation within 10 percent of measured values).

During well development activities, fluid levels in the well were measured using a water level meter (electronic interface probe with conductance sensors). The depth to water and total well depth were measured relative to the top of the well casing. The well was bailed using a 4-inch diameter stainless steel bailer and the well was surged using a dedicated surge block appropriate for the diameter of the well. Surging was performed by running the surge block along the length of the well screen that penetrated the current groundwater level. Groundwater pumping was conducted by installing a submersible pump at the base of the well. Temperature, EC, pH, and turbidity measurements were recorded during bailing and pumping activities. Temperature, EC, and pH were measured using an Oakton™ CON 10 Series meter and turbidity was measured using a LaMotte™ Model 2020 turbidity meter. Groundwater generated during well development activities was applied to the ground surface near the well location to evaporate and infiltrate with no runoff.

A summary of the well development observations is presented below:

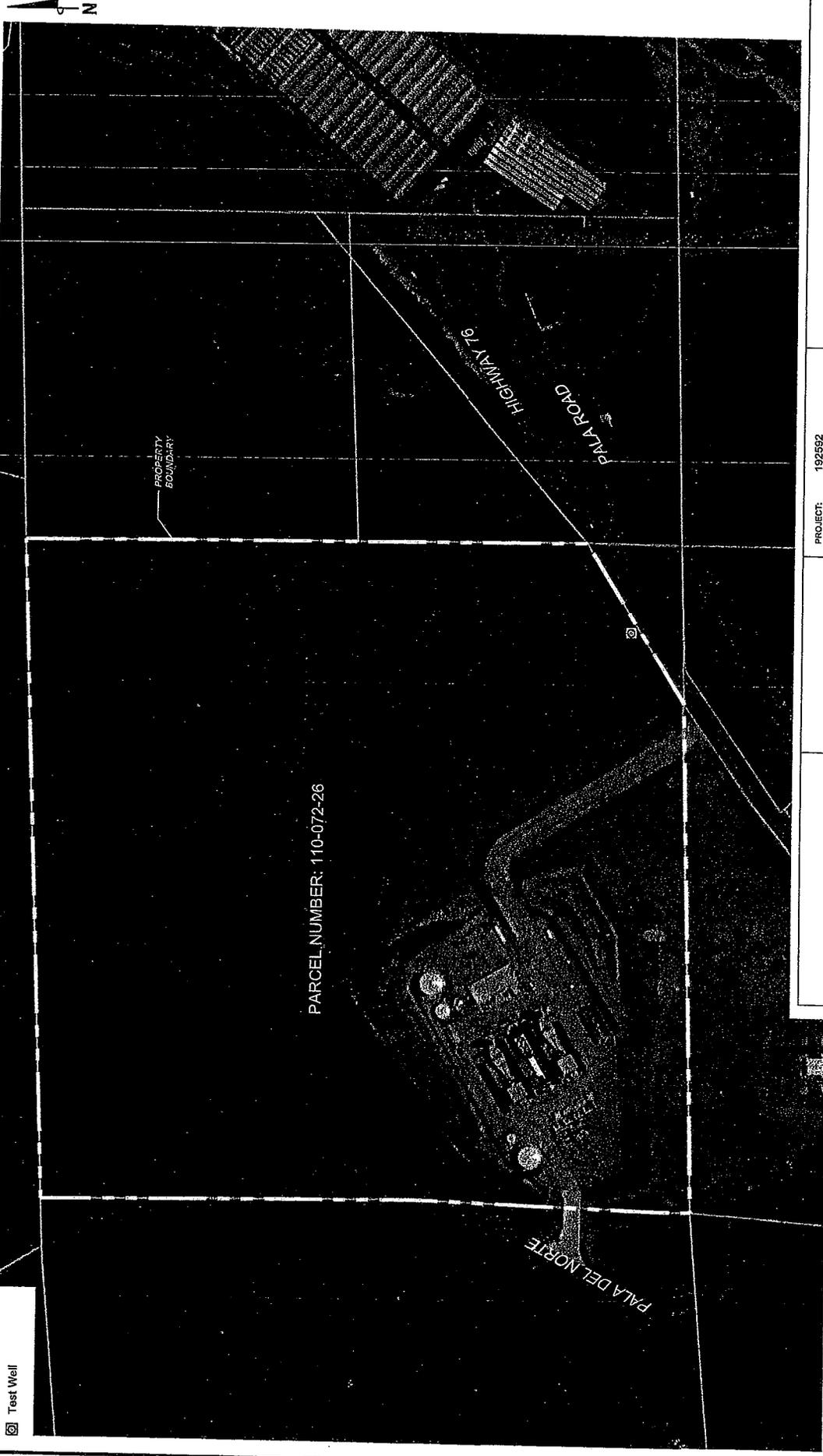
- Groundwater was present at a depth of approximately 44.18 feet bgs.
- At a pumping rate of approximately 1.0 gallons per minute (gpm), stabilized temperature, EC, and pH readings and a final turbidity reading of 4.8 NTUs were obtained after the removal of a total of approximately 250 gallons of water.
- At a pumping rate of approximately 1.5 gpm, stabilized temperature, EC, and pH readings and a final turbidity reading of 342 NTUs was obtained after the removal of a total of approximately 145 gallons of water. It is possible that further development could remove more fine material from the adjacent formation and potentially increase water yield.

3.0 SURVEY DATA

On October 18, 2013, the surface elevation of test well was surveyed vertically and horizontally with a precision of 0.001 foot by a California-licensed surveyor. The top of the well casing elevation was surveyed to be at an elevation of 357.373 feet above mean sea level (North America Vertical Datum, 1988). A copy of the survey data is included in Appendix D.

LEGEND

☒ Test Well



NOTE:

Modified from a map provided by Google Earth Professional, dated 8/23/2010.



PROJECT: 192592

FACILITY:
 ORANGE GROVE ENERGY PROJECT
 55435 EAST PALM DEL NORTE ROAD
 PALM, CALIFORNIA

SITE PLAN

FIGURE 2

N:\Graphics\Projects\Name\Orange Grove Energy\CADD\Boring_Logs\Orange Grove Eng-Test-Well.DWG Dec 03, 2013 - 11:47am Bs Schmidt

PROJECT NO.: 192592.0029	DATE DRILLED: Sept. 10, 11, 12, 2013
LOCATION: Orange Grove Energy Project	LOGGED BY: J. Nordenstam PG 7160
35435 East Pala Del Norte Road	APPROVED BY: J. Stenger PG 5964
Pala, California	DRILLING CO./RIG: Cascade/Sonic

BLOWS PER 6 INCHES	SAMPLE DEPTH (feet below grade)	DRILLING METHOD: Sonic 10-Inch Diameter SAMPLER TYPE: 7-Inch Diameter Continuous Core TOTAL DEPTH: 76 feet DEPTH TO WATER: 49 feet	USCS	GRAPHIC LOG	WELL CONSTRUCTION DETAIL
		DESCRIPTION			
	0	Hand-Augered to 1.5 feet. Surface Material: Soil			Monument Well Box Surface Completion
	5	GRAVELLY SAND: brown (10YR 5/3), dry, fine to coarse grained sand, fine and coarse gravel, some igneous cobbles (subangular) up to 6.5-inches, and silt, trace clay.	GM		Neat Cement
	10	At 8 to 9 feet, light gray (10YR 7/1), large broken igneous cobbles greater than 7-inches (subangular) moderately weathered.	GM		6" Blank Stainless Steel
	15	At 11 feet, decreasing igneous cobble and gravel content (subangular). At 12 to 14 feet, light gray (10YR 7/1), large broken igneous cobbles greater than 7-inches (subangular), moderately weathered.	GM		
	20	SILTY SAND: dark yellowish brown (10YR 4/6), slightly moist, fine to coarse grained sand, trace clay.	SM		
	25	At 19 feet, some igneous cobbles (subangular), moderately weathered.			
	30	HIGHLY WEATHERED IGNEOUS ROCK: silty sand, light gray (5Y 7/1), dry, fine to medlum grained, some coarse grained fragments of highly weathered igneous rock.	* SM		
	35	At 22 feet, gray (5Y 6/1).			Transition Sand #30 Mesh
	40	Gray (5Y 6/1), dry.			8x16 Gravel #8 Mesh
		Highly weathered cobble sized fragments of igneous rock with clay fracture filling.			6-Inch 0.05-Inch Continuous Wire Wrap Stainless Steel Screen
		Olive gray (5Y 5/2), dry.			



LOG OF EXPLORATORY BORING

Test Well

N:\Graphics\Projects\Orange Grove Energy\CADD\Boring Logs\Orange Grove Eng-Test-Well.DWG Dec 03, 2013 - 11:49am Bschmidt

PROJECT NO.: 192592.0029	DATE DRILLED: Sept. 10, 11, 12, 2013
LOCATION: Orange Grove Energy Project	LOGGED BY: J. Nordenstam PG 7160
35435 East Pala Del Norte Road	APPROVED BY: J. Stenger PG 5964
Pala, California	DRILLING CO./RIG: Cascade/Sonic

BLOWS PER 6 INCHES	SAMPLE DEPTH (feet below grade)	DRILLING METHOD: Sonic 10-Inch Diameter		USCS	GRAPHIC LOG	WELL CONSTRUCTION DETAIL
		SAMPLER TYPE: 7-Inch Diameter Continuous Core				
		TOTAL DEPTH: 76 feet DEPTH TO WATER: 49 feet				
DESCRIPTION						
	40	Gray (5Y 4/1), slightly moist, some fine gravel and cobble sized fragments of moderately weathered igneous rock.		*SM		
	45	Olive gray (5Y 5/2), slightly moist, some fine gravel and cobble sized fragments of moderately weathered igneous rock.				
	49	At 49 feet, Dark yellowish brown (10YR 4/4), moist.				
	50	Dark olive gray (5Y 3/2), moist.				
	55	Very dark olive gray (5Y 3/1), moist, some fine to coarse gravel and cobble sized fragments of moderately weathered igneous rock, some with clay filled fractures.				
	56	At 56 feet, dry, cobble sized fragments of moderately weathered igneous rock.				
	60	Very dark olive gray (5Y 3/1), moist, some fine to coarse gravel and cobble sized fragments of moderate weathered igneous rock.				
	65	Very dark gray (5Y 3/1), wet, trace coarse gravel sized fragments of highly weathered igneous rock.		BR		
	68	At 68 feet, cobble sized fragment of un-weathered igneous rock.				
	70	IGNEOUS ROCK.				
	75					
	80					

* = USCS description of weathered bedrock.
BR = Bedrock.



LOG OF EXPLORATORY BORING