

## Comment Letter I21

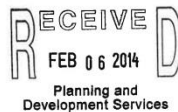
## DRAFT DOCUMENT

## RESPONSE AND COMMENTS TO SOITEC SOLAR DEVELOPMENT DRAFT EIR REPORT

The Soltec PEIR construction water estimates are defined in the PEIR Chapter One, page 41, table 1-6. These estimates use a construction work breakdown activity based estimating method. The PEIR Construction Water estimates for all four sub-project locations total: 42,851,000 gallons.

We (the report team) were astonished by the very significant construction water activities construction water estimates missing in Table-6. Some of our identified missing work activities are, however, reflected in the "Construction Schedule" shown in PEIR Chapter One, tables - 8 and 9, page 43. Our identified missing construction water work activities are shown below. The missing construction water estimate activities that are also shown in the Construction Schedule Table are identified below with the PEIR elapsed time estimate in days for the Tierra Del Sol and the Rugged Projects These are shown after the missing work item (Tierra Del Sol first separated by a dash and then Rugged). The **totally** missing construction water work activity estimates are:

- Road building , (shown in construction schedule, but mixed with other activities)
- Underground Electric, 70-100 days
- Site Substation Construction, 25-35 days
- Operations and Maintenance Buildings, 60-80 days
- Punch list and cleanup, 20 – 60 days
- Fencing, drainage and culvert construction, missing from both water and schedule tables
- Electrical Equipment foundations **other** than Trackers and Substation (such as transformers, invertors, electrical pole foundations), missing from both water and schedule tables.
- 10 acre cement and rock crushing plant on Rugged site operating 6 days a week over a 2 year period, missing from both water and schedule tables. **This is a huge amount of water, not estimated.**
- 14 acre cement plant and rock crusher, about a mile from the 10 acre plant, shared with Tule Wind for gen tie line. Missing from both water and schedule table. **Huge amount of water, not estimated.**
- Seven mile gen tie line between Boulevard SS and Tierra Del Sol site, missing from both water and schedule tables. **A major water use**
- Gen Tie Line between Rugged and Boulevard Substations, missing from both water and schedule tables.



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## Response to Comment Letter I21

Howard Cook  
February 6, 2014

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The County of San Diego agrees that revisions to the construction and operational water demand estimates are required. Please refer to common response WR1. County staff has not revised the estimate of operational water demands because the estimate has accounted for long-term dust control, panel washing, potable use, and the landscape buffer. The County disagrees with the alternative estimate of construction related-water use. Applying a water use factor derived from the ECO Substation Project to the entire Proposed Project area is inappropriate and is discussed in response to another comment letter you submitted under I32-8. However, certain construction work activities delineated in the comment are not addressed in construction or operational water demand estimates for the Proposed Project because they are not part of the Proposed Project. The cement plant and rock crusher for the Tule Wind gen-tie line and the Tule Wind gen-tie line to Boulevard Substation are not part of the Project. The commenter refers to the "Gen Tie Line between Rugged and Boulevard Substations." The applicants have not proposed a gen-tie line between the Rugged solar farm and Boulevard Substation as part of the Project. Rather, the Rugged

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**RESPONSE AND COMMENTS TO SOITEC SOLAR DEVELOPMENT DRAFT EIR REPORT**

- Increased Construction for Lan West and Lan East scaled to Rugged and TDS. The missing construction items above for other two projects must be projected to Lan East and West, missing from both water and schedule tables.

We have difficulty in assigning gallons of water estimates to the "Missing construction water work activities" shown above. Given the magnitude impact of these missing activities we also, therefore suspect major under estimating for the water gallonage estimates for the included work activities shown in the PEIR and as referenced above.

We therefore, to measure the water usage, have developed a reasonable total project construction water estimating method. This method uses SDG&E's published 10/11/13 water usage projections to complete the Eco/Boulevard substation project (Tule Wind) with Gen Tie Line. This SDG&E document with "projected water to complete" data is included as Exhibit A. This method and our new revised project wide construction water estimate is shown below in our section C.

**C. Alternate total construction water usage method and poor estimating record on water usage**

The two substations (Eco, Boulevard) and the gen-tie between them are an integral part of the Soitec electrical delivery system as pointed out in the Soitec PEIR. This Eco/Boulevard substation and gen-tie project are midway towards completion and the heavy early water using activities of the project are drawing to a close. We therefore can use the actual water history for the Eco/Boulevard project in projecting a total Soitec project water construction estimate. A comprehensive Work (activity) Breakdown is always best for estimating, but as shown above in our Water Section B we don't have a good or reasonably accurate work (activity) breakdown estimate.

The official SDG&E work change form for the Eco/Boulevard is attached as Exhibit A. It shows an initial water estimate from the Eco/Boulevard project EIR of **30 million gallons of water**. After construction was well along and actual water use was compiled, The 10/11/2013 SDG&E change order records a new projection of **90-95 million gallons of water to complete**. It is instructive, to determine the reasons for the over three times increase in construction water. This will be done later. We, however, will use the Eco/Boulevard Project actual construction water usage in the Eco/Boulevard and project these to a NEW Soitec Construction water estimate. This new estimate is based on the following elements:

- Every one of the five construction activities reflected in the Soitec PEIR table 1-6 plus 10 of the twelve "missing" activities reported in our Section B are also reflected in the mostly complete Eco/Boulevard construction effort, including gen-tie lines. The two "missing" activities not seen in the Eco/Boulevard project are the two cement batch plants planned on site for The Soitec Project whereas the Eco/Boulevard Project purchased their cement.

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solar farm will connect to the Tule Wind gen-tie line, passing adjacent to the Rugged site. Water demand for these elements of the Tule Wind project, both the cement plant and rock crusher and the gen-tie line between the Tule Wind project and Boulevard Substation, has been fully evaluated in the Tule Wind Environmental Impact Report. While the Rugged project will connect to the Tule Wind gen-tie line, this line, and the associated Tule Wind cement plant, will be constructed and will operate independently of the Proposed Project. These components of the Tule Wind project are therefore not components of the Project and their impacts were not evaluated in the DPEIR.

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- The Eco/Boulevard Project roughly totals 100 acres. The projected construction water usage based on actuals to date is 100 million gallons (100,000,000).
- Therefore, the total projected construction water use for the 1500 acre Soitec Project (without two cement batch plants) = 1,500,000,000 (One billion five hundred million) gallons.
- The water usage of two cement and rock crushing plants covering 25 acres on the Tule/Walker Creek watershed aquifers both operating an estimated 15 hours a day for two years must be in the multiple hundreds of millions of gallons of water. This estimate must also be added to the over a billion gallons total above.

The question of why the SDGE Eco/Boulevard project water use **jumped by over three hundred percent** after actual experience was discovered is instructive for the Soitec Project construction water estimates. Both Eco/Tule and Soitec projects used the same consultants/ engineers (Dudek and Aecom) and the County Engineering/hydrology teams. The SDGE change document says that errors in judging the depth and the dryness of the alluvial ground of the project were at fault. This does not speak well to the carefulness or the experience level of the consultant/county construction water estimating team on the Soitec Project PEIR. Another reason to not believe the construction water PEIR.

The huge increase in construction water usage estimates and the surrounding facts bring the PEIR estimates further in to question and cause us to insist that the Soitec PEIR team move the Water and Hydrology section of the PEIR from "Not Significant to the Environment" to the "Significant to the Environment" category.

**D. Estimated operational water usage and analysis**

The Soitec PEIR in table 1-7 projects a total of 5,698,267 gallons of operational water a year. We believe that the operational estimates are also grossly underestimated and therefore will cause further depletion and environmental damage to our aquifers and therefore to our local environment and to our water supplies.


We question the PEIR Table 1-7 estimates for nine tracker washings a year. We provide the following factors to show that the true CPV washing interval estimates should be closer to 52 times a year because of the following reasons:


- The absence of any other operational Soitec CVP farms mean that all estimates are also "experimental" and judgemental by the Soitec Marketing team.
- The 2014 Soitec website under Soitec CPV Operations and Maintenance says "The modules must be cleaned periodically" also it continues "Module cleaning frequency depends very much on the amount of dust and humidity"

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**EAST COUNTY SUBSTATION PROJECT**  
 Planning and  
 Development Services  
**MINOR PROJECT REFINEMENT  
 REQUEST FORM**



<b>Date Submitted:</b>	09-20-13 (Originally Submitted) 10-01-13 (Resubmitted)	<b>Request #:</b>	8
<b>Date Approval Required:</b>	10-01-13	<b>Landowner:</b>	Not Applicable (N/A)
<b>APN:</b>	N/A		
<b>Refinement from (check all that apply):</b>			
<input type="checkbox"/> Mitigation Measure <input type="checkbox"/> APM <input checked="" type="checkbox"/> Project Description <input type="checkbox"/> Drawing <input type="checkbox"/> Other			
<b>Identify source (mitigation measure, project description, etc.):</b>			
Pages B-3 and B-37 of Section B Project Description of the Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) and the Construction Water Supply Plan, which was approved by the California Public Utilities Commission on January 31, 2013, for the East County (ECO) Substation Project (Project) describe the water usage required during construction of the Project. The information in this Minor Project Refinement (MPR) request describes a change in the amount of construction water consumption that was previously estimated in the Final EIR/EIS and the Construction Water Supply Plan. A description of and justification for the requested refinement are provided on pages 1 and 2 of this MPR request.			
<b>Attachments (check all that apply):</b>			
<input checked="" type="checkbox"/> Refinement Screening Form (provided as Attachment A: Minor Project Refinement Request Screening Form)			
<b>Under Order 3 of the Decision Granting SDG&amp;E Permit to Construct the East County Substation Project (D.12-04-022), the CPUC may approve minor project refinements under certain circumstances. In accordance with Order 3 of the Decision, respond "yes" or "no" to the following questions (a) through (d).</b>			
(a) Is the proposed refinement outside the geographic boundary of the EIR/EIS study area? No. The proposed refinement requests a change to the Project description than what was presented in the Final EIR/EIS, which provided an estimated volume of water to be used during construction, and will not result in any change in geographic location.			
(b) Will the proposed refinement result in a new significant impact or a substantial increase in the severity of a previously identified significant impact based on the criteria used in the EIR/EIS? No. No change in impacts to any resource area evaluated in the Final EIR/EIS is anticipated to result from the requested refinement. The following resource areas apply to the Project's construction water usage and are discussed in detail in Attachment A: Minor Project Refinement Request Screening Form: air quality, climate change, water resources, public services and utilities, and transportation and traffic.			
(c) Does the proposed refinement conflict with any mitigation measure or applicable law or policy? No.			
(d) Does the proposed refinement trigger an additional permit requirement? No. Construction water usage was contemplated in Section B. Project Description of the Final EIR/EIS. No additional permits will be required.			
<b>Describe refinement being requested (attach drawings and photos as needed):</b>			
SDG&E is requesting an increase in the total water usage that will be needed throughout construction of the Project. This MPR request proposes that the total construction water usage be increased to an estimated 90 million gallons. While the Final EIR/EIS included an estimate of 30 million gallons for total construction water use, SDG&E increased this estimate to 50 million gallons prior to the start of construction as part of its January 2013 Construction			

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The East County Substation Project Minor Project Refinement Request Form provided by the commenter is not relevant to the Proposed Project, including anticipated water demand. Please refer to common response WR1.

Water Supply Plan. This increase was found to be consistent with the language in the Final EIR/EIS in light of the selection of the ECO Partial Underground 138 kV Transmission Route Alternative (UG Alternative).

**Provide need for refinement (attach drawings and photos as needed):**

This MPR request has been prepared as a result of the necessity to increase the Project's overall construction water usage in order to continue to meet soil compaction standards and dust control requirements associated with the Project's Mitigation Monitoring, Compliance, and Reporting Program. The conditions at the ECO Substation site, which is currently under construction, have differed from what was originally anticipated, resulting in a higher Project demand for construction water. Based on the geotechnical report, the contractor estimated that remedial removal and recompaction of alluvial soil at the ECO Substation site was expected to reach a maximum depth of 10 feet. However, during mass-grading of the ECO Substation site, remedial removal and recompaction of alluvium in excess of 20 feet in depth across most of the site was necessary to reach the formational, hard pan soils under the 230/138 kilovolt (kV) and 500 kV pad areas. The deeper than expected alluvial removal also triggered the need to construct a buttress slope outside of the grading limits on the south side of 500 kV pad to accommodate proper compaction of the soils within the grading limits.

In addition, the moisture content of the in-situ soils were lower than anticipated, resulting in higher water usage for recompaction and dust control. The anticipated amount of water to provide the optimum moisture content for compaction prior to the start of construction was estimated at 30 gallons per cubic yard, based on a typical project at this elevation with similar soils and climate, but the actual water required to achieve the optimum moisture content for compaction has been approximately 45 gallons per cubic yard. In total, SDG&E's construction contractor now estimates handling approximately 50 percent more material than was originally planned in order to complete grading at the ECO Substation site. These differing site conditions will result in the use of approximately 50 to 55 million gallons of water during mass grading of the ECO Substation site alone.

Accordingly, an increase in the water needed to complete construction of the ECO Substation along with the other Project components is necessary. SDG&E's construction contractor estimates that approximately 40 to 45 million additional gallons of water will be needed to complete construction of the ECO Substation following mass grading and for construction activities at the Boulevard Substation, the underground and overhead portions of the transmission line, the SWPL Loop-in, and the other associated Project components, such as the construction yards. At the end of August 2013, the Project had used approximately 42 million gallons of water. Therefore, approximately 40 million gallons of water, in addition to the 50 million gallons already approved through the January 2013 Construction Water Supply Plan, will be needed to complete construction of the Project.

**Date refinement is expected to be implemented:** 10-02-13

**SDG&E Approvals**

Title	Name	Approval Initials	Date	Conditions (see attached)	
Environmental Project Manager	Don Houston	DH	09/19/13	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Environmental Compliance Lead	Kirstie Reynolds	KR	09/19/13	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Substation Project Manager	Matt Huber	MH	09/19/13	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Environmental Field Supervisor	Jeffrey Coward	JC	09/19/13	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

**Landowner Approval (if required)**

Landowner Name	Signature or Other Consent
No landowner approvals are required as a result of the requested refinement.	

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