| DOCKETED | | | | |
|------------------------|---|--|--|--|
| Docket Number: | 09-AFC-07C | | | |
| Project Title: | Palen Solar Power Project - Compliance | | | |
| TN #: | 203109 | | | |
| Document Title: | Pat Flanagen Comments: Project description invalid: CEC approval would be illegal | | | |
| Description: | N/A | | | |
| Filer: | System | | | |
| Organization: | Morongo Basin Conservation Association/ Pat Flanagen | | | |
| Submitter Role: | Public | | | |
| Submission Date: | 9/26/2014 9:01:10 AM | | | |
| Docketed Date: | 9/26/2014 | | | |

Comment Received From: Pat Flanagen

Submitted On: 9/26/2014 Docket Number: 09-AFC-07C

Project description invalid: CEC approval would be illegal

Additional submitted attachment is included below.



P.O. Box 24
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September 25, 2014

Karen Douglas, Commissioner David Hochschild, Commissioner California Energy Commission

Submitted: e-filing

Subject: Palen Solar Energy Generating System <u>Docket No. 09-AFC-07C</u>
Project Description Invalid: CEC approval would be illegal

Dear Commissioners:

In November 2013 I communicated to you my perception, based on my review of the Final Staff Assessment (FSA), that the Palen Solar Energy Generating System (PSEGS) tower height is 880 feet. My perception rested on the description in the FSA Part A, page 4.12-4

1) a 750 foot tall tower topped by a 130 foot tall solar receiver.

Attorney Martin-Gallardo, in her December 2013 letter to me referenced a separate document, the Petition to Amend (PA), for the correct dimensions:

2) 130 foot tall SRSG <u>atop</u> a 620 foot tall tower resulting in an <u>overall height</u> of approximately 750 feet.

Ms. Martin-Gallardo, acknowledged that the FSA description 'may be ambiguous' and suggested I consult the more 'straightforward' FSA Visual Resources Table 1 Power Block #1 And #2

3) Solar Tower including Solar Receiver Steam Generator – 75 (diameter) 750 (height)

Statements #1 and #3 in the FSA speak in opposites: we can't know if the receiver is inside or on top. We conclude from #3 that the unknown heights of the tower and receiver add up to 750 feet. But maybe that is a typo? The clarifying statement (#2) is in a separate document, the Petition to Amend, and there is no direction within the FSA to consult it. With only statements #1 and #3 available in the FSA I wrote my comments bringing this inconsistency to your attention.

As I reviewed additional documents -- the Preliminary Staff Assessment (PSA), the Presiding Members Proposed Decision (PMPD), and the Revised Presiding Members Proposed Decision (RPMPD) -- I found myself in the same quandary because the most commonly used description for the combined solar receiver/tower is a variation of

4) ...on a solar receiver/steam generator (SRSG) atop a 750-foot solar tower located near..."

I continue to follow Miss Martin-Gallardo's instructions to clarify the unclear since all four ambiguous descriptive statements are now contained within the recent documents. Using the Adobe search function I find the most common description is #4, "SRSG atop a 750-foot tower," with the appearance of 5)...includes two 750-foot tall solar towers topped by 130 foot-tall solar receivers (SRSGs)." Yet, I have been told that the 130 foot solar receiver atop the 750 foot tower does not equal an 880 foot tall structure. If it doesn't, then why not just say so? For whatever reason, what is meant is not being said and I (the public) cannot be absolutely certain of the correct dimensions. CEQA guidelines intend the public to be informed not confused.

The CEC has a writing problem that becomes a logic problem, which I will analyze to clarify the nature of the ambiguity.

Let X = 750 foot tower, Y = 130 foot receiver, and W=620 tower, and Z = the sum

Statement equations

| #1 X | X + Y = Z | 750 + 130 = 880 |
|------|-------------|-------------------------|
| #2 Y | ' + W = X | 130 + 620 = 750 |
| #3 X | X + Y = 750 | 750 + 130 = 750 wrong |
| Or W | / + Y = X | 620 + 130 = 750 correct |
| #4 Y | Y + X = Z | 130 + 750 = 880 |
| #5 X | X + Y = Z | 750 + 130 = 880 |

#1, #4, and #5 the sum Z follows logically to equal 880 but, we know from Ms. Martin-Gallardo's letter that is incorrect. This commonly used equation is not analyzed in the documents.

#2 is a complete equation and the only unambiguous statement.

#3 the sum is given, 750, and substituting for the unknowns ultimately provides the correct answer. Why must the reviewer (the public) have to go through this exercise to no purpose?

Our minds seek order. This syllogism is a simple demonstration mirroring how the reviewer (the public) struggles to make sense of the CEC PSEGS descriptions. The mind may not always be successful. Throughout the five documents, CEC staff routinely uses 'atop', 'topped', and 'include' synonymously. This is not correct: 'atop' and 'topped' mean on top of; while, 'included' means within. The words are antonyms and using them as synonyms is confusing, and misleading. Without clarification this reviewer (the public) could be analyzing a different project. The CEC staff did not eliminate the ambiguity by solving the 'equations' so the public does not have access to the correct heights for the tower and receiver.

The Solar Receiver height is buried

The height of the solar receiver - 130 feet – is either not provided (PA), provided only once (FSA Part A), twice (PSA), three times (PMPD), and four times (RPPD) in documents with over a thousand pages each. The height of the receiver, when mentioned, is buried in the visual description section. When the considerable effects of the project are described at great length the height of the solar receiver is nowhere to be seen.

In Addition

¹ See Appendix 1: Table of Adobe search results of CEC PSEGS documents

- 1) Rio Mesa SEGS Preliminary Staff Assessment Part A (9/2012) and Hidden Hills SEGS Final Staff Report (12/2012) both suffered from the same inconsistencies as the Palen Solar Energy Project does. This inability to describe projects with consistent, intelligible, and enlightening prose appears to be systemic at least for solar power tower projects. It is imperative, as the lead agency under CEQA for licensing thermal power plants 50MW and over, that you get it right. The ecological functioning and cultural heritage of the California Desert are at stake.
- 2) The public confidence in the CEC process would be improved if the homepage for the Palen Solar Energy Project were updated: eliminate the defunct solar trough project and provide PSPEG details. The public needs an accurate and concise description of the Palen project including the correct heights of the solar tower and the solar receiver (SRSG).

CEC Project and BLM Project are not the same

In past correspondence I have also brought to your attention the differences between the CEC tower/receiver dimensions and the BLM as analyzed in the DEIS. ² I continue to inquire: which of the projects is correct and which project will be built? There has been no update on this problem. CEQA and NEPA are required to match.

| Document | Tower /feet | Location | SRSG/feet | Total Height | Reference |
|-----------|-------------|-----------|-----------|--------------|----------------------|
| CEC | 620 | Topped by | 130 | 750 | PA, PSA, PMPD, |
| Documents | | | | | RPMPD |
| BLM-DEIS | 750 | Including | 68 | 750 | Page 4.18-7 (7/2013) |

The CEC-FSA and BLM-DEIS Are Fatally Defective

Without knowing the correct height of the solar receiver it is impossible to calculate the rates of solar flux-related avian mortality and injury. The correct height of the receiver also determines the operational glare and bright haze of the solar flux field that would compromise visibility with regard to auto travelers, pilots, National Park visitors, and the setting, feeling, and association aspects of the Chuckwalla Valley sacred landscape.

In Conclusion

The Palen Solar Energy Generating System, provisionally approved by the CEC, is not accurately described to the public and therefore the analysis is not valid. The CEC must describe the project accurately and provide an analysis based on the correct project description for review and comment by the public. The CEC approval would be contrary to law and invalid.

Sincerely,

Pat Flanagan

Par Henryan

Board member, Morongo Basin Conservation Association

² See Figure 1: Visualization of the inconsistency between the BLM DEIS and the CEC FSA

Cc:

Argonne National Laboratory — Jim May

Audubon Society – Gary George

Basin and Range Watch – Laura Cunningham and Kevin Emmerich

Big Morongo Canyon Preserve - David Miller

Bureau of Land Management—Jim Kenna and Frank McMenimen

CAlifornians for Renewable Energy (CARE) - Michael Boyd

Center for Biological Diversity – Lisa Belenky and Ileene Anderson

Defenders of Wildlife - Stephanie Dashiell

Desert Protective Council – Terry Weiner

Desert Protection Society - Donna Charpied and Larry Charpied

Desert Survivors - Bob Ellis

National Parks Conservation Association — David Lamfrom and Seth Shteir

National Park Service – Jon Jarvis, David Smith, Andrea Compton

Mojave Desert Land Trust - Danielle Segura and Frazier Haney

The Wildlands Conservancy – April Sall

Tourism Economics Commission – James Harvey

Western Lands Project - Janine Blaeloch

Robert Lundahl - RL | A

ReWire-Chris Clarke

The Sun Runner—Steve Brown

Ah-Mut Pipa Foundation – Preston J. Arrow-weed

Chemehuevi Indian Tribe-Cultural Director, Jay Cravath PhD

Fort Mojave Indian Tribe-Councilwoman, Linda Otero

La Cuna de Aztelan –Alfredo Figueroa

San Pasqual Band of Mission Indians-Councilman, David L. Toler

Viejas Band of Kumeyaay Indians-Chairman, Anthony R. Pico

Figure 1 - Visualization showing the difference between the BLM DEIS and the CEC FSA



Appendix 1 Table of Adobe Search results of CEC PSEGS Documents

| Descriptor | PA | PSA | FSA Part A | PMPD | RPMPD |
|-----------------|------------------|---------------------|----------------------|--------------------|----------------------|
| | 258 pages | 1367 pages | 1640 pages | 1022 pages | 1122 pages |
| SRSG | 30 (6 w/ 'atop') | 115 (16 w/ ' atop') | 158 (18 w/ 'atop') | 53 (9 w/ 'atop') | 55 (9 w/ 'atop') |
| Solar Receiver | 3 w/ SRSG | 20 w/ SRSG | 27 w/ SRSG | 11 w/ SRSG | 11 w/ SRSG |
| | 0 w/ 'atop' | 4 w/ 'atop' | 6 w/ 'atop' | 4 w/ 'atop' | 4 w/ 'atop' |
| 130 foot | 0 | 1 w/ 750 topped | 1 w/ tower topped by | 2 w/ 'topped by' | 3 w/ 'topped by' 130 |
| | | by 130 | 130' SRSG | 130 foot SRSG tall | foot SRSG tall |
| 130 feet | 1 (620+130) | 1 (620+130) | 1 – 'top of tower' | 1- 'overall' | 2-'overall' 620+130 |
| | | | 2 - unrelated | 620+130 | |
| 750 foot tall | 4 | 30 | 31- towers, SPT | 26 (2 w/ 750+130) | 27 (3 w/ 750+130) |
| 750 feet | 1 (620+130) | 1 (620+130) | 7 – towers, PT | 1- 620 +130 | 2- 620 +130 |
| | 1 - unrelated | 3 - unrelated | 1 - unrelated | 2 - unrelated | 4 - unrelated |
| 760 feet | 0 | 1 | 9 (FAA) | 5 (FAA) | 5 (FAA) |
| 620 foot | 0 | 0 | 0 | 0 | 0 |
| 620 feet | 1 (620+130) | 1 (620+130) | 0 | 1 (620+130) | 2 (620+130) |
| Tower | 2–Table 2 | 2– Visual | 2–Visual Resources | 2– Visual | 2– Visual Resources |
| including solar | Power Blocks | Resources Table 1 | Table 1 Power Blocks | Resources Table 1 | Table 1 Power Blocks |
| receiver | 1 & 2 | Power Blocks 1 & 2 | 1 & 2 | Power Blocks 1 & | 1 & 2 |
| | | | | 2 | |

CEC documents

- Petition to Amend (PA) 12/2012
- Preliminary Staff Assessment (PSA) 6/2013
- Final Staff Assessment (FSA) 9/10/2013
- Presiding Members Proposed Decision (PMPD) 12/13/2013
- Revised Presiding Members Proposed Decision (RPMPD) 9/12/2014

Words and phrases used with Adobe search for each document - words must be precise

- solar receiver, receiver, SRSG to find all the locations where the receiver and tower/receiver are mentioned
- 130 feet tall, 130 foot tall to find where the height of the receiver is specifically mentioned
- 750-foot tall, 750 feet to find all the locations where the 750-foot tall tower is mentioned
- 620 feet tall to determine if the complete description (620 + 130) is included.
- Tower including solar receiver to find all the locations where the receiver is within the tower.
- Petition to Amend to find if the reader is directed to the PA for the complete description of the solar power tower