May 7, 2009

DOCKET 07-AFC-8	
DATE	MAY 07 2009
RECD.	MAY 08 2009

STATE OF CALIFORNIA State Energy Resources And Development Commission

Subject:Carrizo Energy Solar Power Plant (07-AFC-08)Intervener Michael Strobridge's Concerns and Comments pertaining to noise
pollution generated from Carrizo Energy

I am resubmitting these documents to the Commission per the advice of Mr. John Kessler as I initially submitted my noise response to the project manager in error.

In Carrizo Energy's Objection to the Intervener Petitions for the extension of the 180 day Discovery process Carrizo states on page 5 section C" that the petition fails to demonstrate the reasonableness of the proposed project design modification." On March 13th I submitted a review of Carrizo's Noise Mitigation Plan from Bollard Acoustical. Mr. Bollard found discrepancies in Carrizo's Noise Mitigation Plan in regards to the Strobridge Residence such as db levels from the Air Cooled Condenser Fans. Since Carrizo seems to feel that excessive noise at nearby residences is not a reasonable reason to relocate the power block I had Bollard Acoustical review the April 14th Objection submitted by Carrizo. As you will see I am fully warranted in my request to move the Power Block to the center of the Carrizo Site. I have the right under California Code of Regulations, Title 20, Section 1723.5(c) to request a plant modification to ensure public health and environmental quality, ensure safe and reliable operation, or to meet the standards, policies, and guidelines established by the commission. One of these guidelines would be Noise 4 established in the PSA which limits noise at the Strobridge Residence to 39db. Carrizo goes on to state that Mr. Strobridge has not presented further technical analysis or studies to support the claim that moving the power block will avoid "the potential harmful effects of Noise Pollution." I adamantly disagree as the March 13th Noise Review provided by Bollard Acoustical is an example of further analysis as is the April 14th Response also provided by Bollard Acoustical. I urge the Commission to take into account the Bollard Acoustical Reports. I still request that the Power Block be relocated to the center of the Carrizo Energy Site. I firmly believe I am justified with this request as Bollard Acoustical has found errors in Carrizo's noise evaluations at the Strobridge Residence showing noise levels at a minimum of 9db higher than the 39db required by the Commission for just the Air Cooled Condensers alone. Attached is the new April 17th Response from Bollard Acoustical.

Thank you for your time,

Michael Strobridge



BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA 1516 NINTH STREET, SACRAMENTO, CA 95814 1-800-822-6228 – WWW.ENERGY.CA.GOV

APPLICATION FOR CERTIFICATION FOR THE CARRIZO ENERGY SOLAR FARM PROJECT

APPLICANT

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APPLICANT CONSULTANT

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COUNSEL FOR APPLICANT

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INTERESTED AGENCIES

California ISO <u>e-recipient@caiso.com</u>

INTERVENORS

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Mr. Michael Strobridge 9450 Pronghorn Plains Road Santa Margarita, California 93453 <u>mike 76@live.com</u>

California Unions for Reliable Energy (CURE) c/o Tanya Gulesserian Adams Broadwell Joseph & Cardozo 601 Gateway Boulevard, Suite 1000 South San Francisco, CA 94080 tqulesserian@adamsbroadwell.com

John Burch Traditional Council Lead Salinan Tribe 8315 Morro Road, #202 Atascadero, California 93422 <u>salinantribe@aol.com</u>

Environmental Center of San Luis Obispo (ECOSLO) c/o Babak Naficy P.O. Box 13728 San Luis Obispo, California 93406 babaknaficy@sbcglobal.net

Docket No. 07-AFC-8

PROOF OF SERVICE (Revised 4/10/2009)

ENERGY COMMISSION

JEFFREY D. BYRON Commissioner and Associate Member jbyron@energy.state.ca.us

Gary Fay Hearing Officer <u>Gfay@energy.state.ca.us</u>

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*indicates change

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DECLARATION OF SERVICE

I, Michael Strobridge, declare that on MAY 7,2009, I served and filed copies of the attached

Strobridge Noise Response_. The original document,

filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at:

[http://www.energy.ca.gov/sitingcases/carrizo/index.html]. The document has been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

(Check all that Apply)

For service to all other parties:

___X___sent electronically to all email addresses on the Proof of Service list;

____by personal delivery or by depositing in the United States mail at Sacramento, California with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service list above to those addresses **NOT** marked "email preferred."

AND

For filing with the Energy Commission:

___X___sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (preferred method);

OR

____depositing in the mail an original and 12 paper copies, as follows:

CALIFORNIA ENERGY COMMISSION

Attn: Docket No. 07-AFC-8

1516 Ninth Street, MS-4

Sacramento, CA 95814-5512

docket@energy.state.ca.us

I declare under penalty of perjury that the foregoing is true and correct.

____/S/____

Michael Strobridge



Friday, April 17, 2009

Mr. John Kessler Project Manager Attn: Docket No. 07-AFC-8 California Energy Commission 1516 9th Street, MS-15 Sacramento, CA 95814-5512

Subject: Bollard Acoustical Consultants, Inc. (BAC), response to Objection to Intervenor's Petitions (April 14, 2009) for the Carrizo Energy Solar Farm Project on behalf of Michael Strobridge

Dear Mr. Kessler:

I respect that you are receiving considerable interest and information on this project from many directions, so I very much appreciate your diligence in evaluating the potential environmental consequences of the project, and not just the project benefits. I respect that the applicants believe they have endured what they believe are more than reasonable delays, and that they want to move forward, so I appreciate the opportunity to briefly comment on the above-referenced objection letter. I will try to be brief with my comments.

The noise-related comments in the objection are mainly contained within pages 7 and 8. On page 7, the objection specifically states that Mr. Strobridge has not presented any further technical analysis or studies to support his claim that moving the power block will avoid the potential harmful effects of noise pollution. I respectfully disagree, and point to my March 13, 2009 letter to you as a specific example of "further technical analysis". What is lacking in the objection is "further technical analysis" that the applicant cannot reasonably relocate the power block.

In response to the statement in the objection that the BAC analysis "does not consider the highly directional propagation characteristics of noise from this equipment as provided in the manufacturers specifications", I say where, exactly was that information provided? I did not see such information included in any of the noise-related documentation for the project, so it appears to me that this statement is completely unsupported.

Just so my purposes are clear, it's important to note that I want the applicants calculations to be correct and the ultimate noise levels to be as low as projected at all of the nearby residences. So if, in fact, the ACC fan equipment noise propagation is highly directional, then I agree that directionality should be accounted for in the noise modeling. But rather than take the applicants word that the directional nature of the noise source was properly accounted for, I'd like to see the exact directionality coefficients and analysis (manufacturer's data, as well as CADNA input and output files) for this equipment, and verify the results for myself. As I stated, this information was NOT provided in the earlier analysis, as asserted by the applicant. I'm professionally curious as to how horizontally-mounted fans with openings 69 feet in the air are so directional, as I am not currently convinced.

Mr. John Kessler April 17, 2009 Page 2

I reiterate the findings of my earlier analysis. That is, using industry standard sound propagation algorithms and using very conservative estimates (i.e. favorable for the applicant) of attenuation by distance, the atmosphere, and the intervening ground, the noise level computed level at the Strobridge Residence from the ACC units alone would be approximately 9 dB higher than levels predicted by the applicant for the entire facility! This is not simply a minor technical difference of opinion, but a major divergence in analysis. A 9 dB difference in noise levels is comparable to the difference in noise generation between one (1) Carrizo plant and eight (8) Carrizo plants. This is well beyond a minor difference of professional opinion or analysis methodologies.

As noted in my previous letter, at the position currently proposed for the power block, the noisiest project component (ACC) would be approximately 3200 feet from the Strobridge Residence. If the power block were relocated to the center of the site, the distance would increase to approximately 5,400 feet. The resulting decrease in noise would be approximately 8 dB based on spherical spreading of sound and 1.5 dB attenuation due to atmospheric absorption and excess ground attenuation. An 8 dB difference would nearly negate the 9 dB difference in analysis results described above should the applicants assumptions about the directionality of the ACC units prove incorrect.

In the applicant's objection, the applicant states that the relocation of the power block (a distance of approximately 2,200 feet), would only result in a reduction of 2-3 dB at the Strobridge Residences. Analytically, this equates to a sound decay rate of 4 dB (3.97) per doubling of distance from the noise source. If this decay rate is completely inconsistent with the rate used by the applicant to predict noise levels at the Strobridge Residence from the project. If the same decay rate had been used, project noise levels predicted at the Strobridge Residence would have been DRAMATICALLY higher. Specifically, the 112 dB Sound Power Level reported by the applicant for the ACC Unit would only attenuate by approximately 46 dB, to a level of 66 dB at the Strobridge, which is nearly 30 dB higher than the applicants predictions. As a result of this huge difference, there has to be an error in either the applicants noise propagation coefficients initially used to predict project noise impacts, or an error used in predicting the 2-3 dB difference cited in the objection for the relocation of the power block. Scientifically, it simply can't be both ways.

Because of the huge technical inconsistencies in the applicants modeling results, and the considerable level of faith nonetheless placed on those modeling results, I am frankly surprised at the applicant's confidence in dismissing such a difference so casually. Given the considerable financial gamble that is at stake here associated with acoustically retrofitting the facility following project start up should their modeling prove incorrect, it escapes me as to why the applicant, and their noise consultant who is ultimately responsible for the computations, would not want to err on the site of caution and seriously consider relocating the power block in the center of the site. But because this is, apparently, a risk they seem willing to take, I want to reemphasize the importance of the follow-up testing program to ensure that the considerable faith that has been placed in the applicant's noise modeling effort is justified.

Mr. John Kessler April 17, 2009 Page 3

As I stated earlier, I hope the applicants computations are correct, and that the project's noise impacts will be fully mitigated at the nearby neighbors. I am highly concerned however, that if the applicants computations are incorrect and the power block is constructed at the northern edge of the site as proposed, feasible options for post-project mitigation will be limited, and the opportunity which exists now to create greater setbacks from the nearest residences will have been lost.

In conclusion, I continue to understand that this is a very complex acoustical situation, and I appreciate your willingness to work with Mr. Strobridge and his neighbors to ensure that the project is ultimately successful in achieving compatibility between the power plant and those neighbors. I do not, however, share the applicant's noise consultant's unwavering faith that their noise models will prove infallible.

Please contact me at (916) 663-0500 or PaulB@bacnoise.com if you have any questions regarding this letter, or if I can otherwise be of assistance to you.

Sincerely,

Bollard Acoustical Consultants, Inc. (BAC)

Kollard Paul Bollard

President