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Energy Resources Conservation
and Development Commission

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In the Matter of:

APPLICATION FOR CERTIFICATION
FOR THE RIO MESA SOLAR
ELECTRIC GENERATING FACILITY

DOCKET NO. 11-AFC-4

**INTERVENOR CENTER FOR BIOLOGICAL DIVERSITY'S
RESPONSE TO STAFF'S ISSUES IDENTIFICATION REPORT**

January 31, 2012

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In response to the issues identification report filed by staff on January 25, 2012, and other recently filed documents, Intervenor Center for Biological Diversity submits the following additional information regarding identification of issues and concerns.

1. **The data adequacy finding was premature:** The finding of data adequacy by the Committee two days before the REAT recommendations were released to the public raises serious concerns about the Commission's internal communication procedures. The timing of these events is more than unfortunate; it is untenable. Before the December 14 hearing, the Commission was working with the other REAT agencies on specific recommendations for additional survey and other data gathering requirements for the Rio Mesa project and knew that those requirements had not yet been met by the applicant. Nonetheless, the Commission Staff recommended a "data adequacy" finding first on December 6, 2011 for some resources except water resources and then revised the data adequacy recommendation on December 12, 2011 to include all categories and the Commission made a data adequacy finding on December 14 – two days before the Interagency Recommendations were provided to the applicant and the public. The timing of these events raises significant questions about veracity of statements made in the Staff's Second Revised Data Adequacy recommendation dated December 12, 2011 with regards to biological issues. While it may be possible that "one hand does not know what the other is doing" --- that is, the Commission did not know about the work that the Commission itself was participating in, in formulating REAT recommendations (which seems highly unlikely)-- or the Commission simply ignored these significant concerns regarding the *lack* of adequate data when it made the finding "data adequacy" finding on December 14. The Center requests that the Commission investigate this matter and provide a full public explanation of this blatant inconsistency. In the interests of fairness, the Center requests that the Committee seek reconsideration of the Commission's untimely and premature "data adequacy" finding.

The premature data adequacy finding, which ignored the recommendations of the REAT, is now causing significant conflict between the parties regarding scheduling and may prejudice full and fair CEQA review of the proposed project. In order to provide the needed data it is

clear, as Staff noted in the report, that any decision on the application will need to be significantly delayed. The Applicant's comments filed January 30, 2012, reject the Staff's proposed schedule and points to the existence of two "approved" PPA contracts as well as the CEC's 12 month statutory review schedule as reasons the review should not be delayed and it need not provide the recommended survey data *before* the PSA/DEIS is issued. However, the PPAs were entered into and approved by the CPUC *without any CEQA compliance* and, therefore, the existence of PPAs cannot be allowed to undermine full and fair CEQA compliance by the Commission in this matter. The Applicant's reliance on the premature "data adequacy" finding and the Applicant's so-called "compromise" proposal and schedule would eviscerate the recommendations of the REAT regarding avian and bat survey data needed to evaluate the project and require the PSA/DEIS to be issued without the needed information-- this is unacceptable to the Center. As discussed further below, the tactic that the Applicant suggests, where additional survey data is provided only "as available" undermines meaningful CEQA review and the ability of the public and the decisionmakers to fairly review the whole of the project's significant impacts and alternatives that would avoid those impacts.

2. All data requested in the REAT Interagency Recommendations and additional data regarding other species is needed before meaningful environmental analysis can be undertaken by the Commission staff. The environmental review cannot and should not move forward until all of the recommended data requirements have been fulfilled. Without this critical information from the outset, the environmental review would be incomplete and therefore inadequate. Phasing new data and information into the process as it moves forward, as suggested by the applicant, is not acceptable as it creates a moving target which leaves the parties and the public in the position of constantly playing "catch up". In addition, if environmental review based on the incomplete data moves forward there is a substantial risk of creating bureaucratic momentum which undermines the ability to respond to new data in a meaningful way. Such was the case with the ISEGS project proposed by this same applicant—environmental intervenors (including the Center) raised significant questions about the accuracy and adequacy of the desert

tortoise surveys and sponsored expert testimony on this point. Although Staff rejected these concerns, ultimately, intervenors' concerns were shown to be well founded and additional surveys were required *after* the project had been approved by the CEC. Similarly, recent new information regarding cultural resources on the Genesis project site also shows the risks of moving forward with incomplete data. In the proceedings for the Genesis project, intervenor CURE provided expert testimony that the cultural resource data collected was insufficient but staff argued to the contrary and the Committee and Commission approved the project without additional cultural data being collected. Now, after construction has begun, it is the Center's understanding that significant additional cultural resources have been found and the project construction may be delayed on that basis. The Center believes that the lesson to be learned is clear – robust survey data must be provided at the outset and the Commission should not rush through this critical stage of the environmental review process.

3. **Alternatives Analysis cannot be limited by the Applicant's choices.**

The staff report states:

“Staff is preparing data requests to better understand the alternatives the applicant considered during their development of their application and may also request additional information related to alternatives not included in the AFC, such as other sites or technologies.”

This sentence appears to imply that the applicant's prior consideration of alternatives will largely control the analysis rather than the Commission (and BLM) considering a range of reasonable alternatives to the proposed project that would avoid significant impacts—including alternate sites and other technologies at this site and elsewhere. The Applicant's comments similarly focus on the alternatives that the applicant considered in the AFC. However, under CEQA (and NEPA), while the applicant may suggest alternatives it is *the Commission* that must consider alternatives to the proposed project to avoid significant impacts, then minimize and mitigate remaining impacts. It is improper for the Commission to limit the range of alternatives to those considered by the applicant. Whether or not any particular alternatives were rejected from consideration in the AFC is not a proper basis for the Commission to reject those alternatives out

of hand. The alternatives analysis and the range of alternatives considered should be guided by the identification of the significant impacts of the project and be formulated/developed by the agencies to avoid significant impacts where feasible. The ability to formulate a coherent set of meaningful alternatives also depends on the identification of the significant impacts *at the outset* of the environmental review and not based on later-provided data. The alternatives analysis another aspect of the environmental review that risks being undermined by the premature “data adequacy” finding of the Committee.

4. **Biological Resources: Avian and Bat Issues.**

REAT Agency Requested Survey Data and Risks to Avian and Bats. The Center supports the REAT recommendations for additional survey data to be collected regarding birds and bats in the proposed project area. The letter submitted by the US FWS on January 17, 2012 also notes the need for additional risk assessment analysis regarding the impacts of the project and the potentially far-reaching cumulative impacts to species including those protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. In fact, the additional surveys for birds and bats suggested by the REAT appear to be *the bare minimum* that is needed to begin to adequately address the risks to avian and bat species.

That there are significant risks from the power tower technology to birds was clearly shown in the only published study to date. (*See McCrary et al., Avian Mortality at a Solar Energy Power Plant, J. Field Ornithol., 57(2): 135-141. 1986. Solar One 4 km east of Daggett, San Bernardino County, California.*)

“The most frequent form of avian mortality was from collisions with Solar One structures. . . . From the location of birds in relation to structures, most (>75%) died from colliding with the mirrored heliostats. . . . Thirteen (19%) birds (7 species) died from burning . . . “

(*Id.* at pp. 136-37.) The majority of bird deaths were due to collisions with mirrors and other structures. For those birds that appeared to be burned or singed, the study assumed birds were burned or singed by flying into the “standby” points, but there were no direct observations of when or how the birds were burned or singed. (*Id.* at pp. 137-38.)

The McCrary study estimated 1.7 birds deaths per week on a 32 ha (79 acres) site with one 86 m tower. In contrast, the proposed project of 750 MW on over 5,750 acres of land with 3 towers approximately 750 feet tall, and is over 70-times larger than the site studied by McCrary et al. As the authors cautioned:

Since Solar One is only a 10 megawatt pilot facility, future projects designed to produce hundreds of megawatts will require several thousand heliostats and much taller receiver towers. The greater magnitude of these facilities may produce non-linear increases in the rate of avian mortality when compared to Solar One and extrapolations from this study should be made with caution.

(*Id.* at pp. 140.)

The McCrary observations noted that the presence of birds at the site was due *in part* to the evaporation ponds which attracted birds, the Rio Mesa site is near even greater attractants to birds including significant habitat along the lower Colorado River valley and the nearby Cibola National Wildlife Refuge (approximately 5 miles from the project boundary) which is a key component of the pacific flyway. Avian species that utilize three other National Wildlife Refuges could also be significantly affected by the proposed project: Havasu (70 miles away), Bill Williams (65 miles to the northeast), and Imperial (18 miles to the south).

Notably, the same applicant (in the hearings and briefing for the ISEGS project) attempted to discount the findings in McCrary by stating that the McCrary results were highly dependent on the fact that at the study site was near evaporation ponds attracting birds. Here, given the proximity of the Rio Mesa proposed site to areas that are known to attract significant migratory and resident bird populations the risks to such species (as well as bats) from the proposed project are potentially enormous and therefore additional survey data are clearly warranted. The Center believes that the surveys for birds and bats suggested by the REAT are the *bare minimum* that is needed to begin to adequately address these risks.

The Applicant's statements implying that the REAT agencies and others concerned about this issue do not fully understand the threat posed by the applicant's technology are misleading. The McCrary study, which the REAT agencies are well aware of, showed significant impacts to

birds from the power tower technology at a much smaller scale than those being proposed here. Moreover, as far as the Center is aware, although the applicant has other approved power tower projects under construction no other power tower projects that have been constructed or operated to date have gathered similar data on these impacts and there are no other published scientific studies that would in any way refute the findings of McCrary.

Availability of Mitigation and the Ability of the Applicant to Provide Mitigation. The Center concurs with Staff's concerns regarding the availability of sufficient compensatory mitigation lands for desert washes. While the Center supports some use of enhancement and restoration as part of compensatory mitigation in theory—in practice these types of mitigation for wetlands in general, and in the desert in particular, have proven to be far less successful than expected. (See Ambrose, R. F., J. C. Callaway, S. F. Lee. 2007. An Evaluation of Compensatory Mitigation Projects Permitted Under Clean Water Act Section 401 by the California State Water Resources Control Board, 1991-2002. California State Water Resources Control Board. <http://www.swrcb.ca.gov/>). While wetland mitigation (including mitigation for seasonal wetlands and desert washes) can be beneficial, it is not a substitute for native wetlands. The Ambrose study, prepared for the SWRCB, documented the success of compensatory mitigation projects throughout the State of California. The study found that only about 19% of the projects assessed were considered successful and that “it is clear that few mitigation wetlands have the same conditions as relatively undisturbed natural wetlands.” (Ambrose et al. 2007.)

Additionally, a quarter to a half of all projects examined failed to entirely replace the impacted acreage of destroyed wetlands, and wetter acreage that was replaced tended to be replaced by drier riparian and upland habitats. (Ambrose et al. 2007.) Moreover, it is our understanding that most attempts to “create” wetlands and washes in the California desert have been largely unsuccessful. For example, mitigation projects, which commonly place an emphasis on re-creating habitat, do not re-create the same water quality benefits that native wetlands provide. (Ambrose et al. 2007.) For instance, recreated wetlands often do not have the same capacity to remove pollutants from water or to provide floodwater retention. (Ambrose et

al. 2007.) Furthermore, because mitigation projects can occur in a different locale than the wetlands they are meant to replace, they may not provide the same habitat connectivity that was lost with the native wetland, and mitigation wetlands were frequently found to have inferior buffers and habitat connectivity to nearby wetlands. (Ambrose et al. 2007.)

In addition, the Center is concerned with this applicant's ability to provide compensatory mitigation given the applicant's failure to obtain appropriate mitigation to date for the Ivanpah SEGS project currently under construction which was approved by the Commission over 16 months ago.

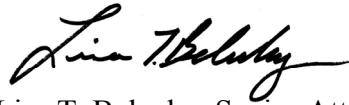
5. **Facility Design is a major issue:** The Center agrees with most of the major issues identified by staff in the report. However, the report does not identify facility design as a major issue but notes that the facility design may need to be reconsidered to avoid or minimize impacts to various resources including bald and golden eagles and cultural resources. Because facility design is closely tied to many of the other impacts of the project as well it is a "major issue" in and of itself. For example, the specific facility design contributes to or causes significant impacts to birds and bats and water resources because other facility designs, including other technologies, have far different impacts on these resources. Similarly, the proposed layout of the project causes impacts to the designated utility corridor and the Bradshaw trail although those impacts do not depend on type of technology chosen.

6. **Biological Resources: Kit Fox:** The staff report fails to address an issue that we believe may have grave biological consequences. With the 193 desert kit fox burrow complexes identified on site, we have great concerns about the impact to desert kit fox which are a fully protected species under California law, 14 C.C.R. § 460. As the Committee should be aware, the first documented outbreak of canine distemper in desert kit foxes was recently identified on the Genesis solar project site. While the cause of the outbreak is not yet known, the possibility that the disease outbreak was exacerbated or caused by "passive relocation" of kit foxes where their burrow complexes are destroyed and foxes has not been disproven. The risks to kit fox from the proposed project must be fully evaluated particularly in light of the fact that the Rio Mesa

project site is closer to potential vectors of canine distemper (i.e. domestic dogs) than the remote Genesis location and, therefore, the project impacts could be a much greater than the current outbreak.

Dated: January 31, 2012

Respectfully submitted,



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**APPLICATION FOR CERTIFICATION
FOR THE RIO MESA SOLAR
ELECTRIC GENERATING FACILITY**

**DOCKET NO. 11-AFC-04
PROOF OF SERVICE
(Revised 1/23/12)**

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DECLARATION OF SERVICE

I, Lisa Belenky, declare that on, January 31, 2012 I served and filed copies of the attached Response to Staff's Issues Identification Report, dated January 31, 2012. These documents are accompanied by the most recent Proof of Service list, located on the web page for this project at:

[<http://www.energy.ca.gov/sitingcases/riomesa/index.html>].

These documents have been sent to the other parties in this proceeding (as shown on the attached Proof of Service list) and to the Commission's Docket Unit or Chief Counsel, as appropriate, in the following manner:

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OR, if filing a Petition for Reconsideration of Decision or Order pursuant to Title 20, § 1720:

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I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.



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