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February 6, 2009

VIA EMAIL

Mike Monasmith
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California Energy Commission
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DOCKET

07-AFC-6

DATE FEB 06 2009

RECD. FEB 06 2009

Re: Center for Biological Diversity Comments on the Preliminary Staff
Assessment for Carlsbad Energy Center Project, Docket 07-AFC-6

Dear Mr. Monasmith,

On behalf of the Center for Biological Diversity (“Center”), this letter comments on the Preliminary Staff Assessment (“PSA”) for the Carlsbad Energy Center Project.¹

The PSA is fundamentally flawed because it finds that Project’s **new** emissions of greenhouse gases (“GHG”) are not a significant cumulative effect pursuant to the California Environmental Quality Act (“CEQA”). The PSA estimates that the Project will emit 846,076 CO₂-equivalent metric tonnes per year based on the operational limitations proposed by the applicant. (PSA, p. 4.1-101). Yet, the PSA concludes that “it would be speculative to conclude that the project would result in a cumulatively significant GHG impact.” (PSA, p. 4.1-97). This finding is misplaced and is contrary to CEQA. The Air Resources Board (“ARB”) has proposed that any emissions of more than 7,000 tons of GHG for an industrial facility are significant.²

It is now well-established that a project’s contribution to global warming impacts is subject to CEQA. As noted by the Office of Planning and Research (OPR) in its recent technical advisory, “Senate Bill 97, enacted in 2007, amends the CEQA statute to clearly establish that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis.”³ Similarly, ARB in a proposal for a greenhouse gas threshold summarizes the legal effect of adding additional greenhouse gases to the atmosphere:

There is a scientific consensus that human activities, chief among them the burning of fossil fuels, profoundly affect the world’s climate by increasing the atmospheric concentration of GHG beyond natural levels. Contributing additional

¹ On January 30, the Center provided preliminary comments on the PSA. For convenience this letter includes the comments from that letter and provides additional comments.

² Preliminary Draft Staff Proposal Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act (“CARB Threshold Proposal”), California Air Resources Board (Oct. 24, 2008) at 7.

³ Technical Advisory, CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality (CEQA) Review, Office of Planning and Research (June 19, 2008) (“OPR Technical Advisory”) at 3.

GHG pollution to the atmosphere leads to higher global average temperatures, changes to climate, and adverse environmental impacts here in California and around the world. Climate change, caused by ‘collectively significant projects taking place over a period of time,’ is a quintessential cumulative impact.⁴

The staff reliance on a theory that since the CECP is more efficient than existing boilers, that the project will result in no environmental effect strains credulity and is not supported by substantial evidence. The proposition that the new fossil fuel commitments resulting from power plant construction simply displaces existing higher carbon intensive energy supply has already been rejected under analogous circumstances. In *Center for Biological Diversity v. City of Desert Hot Springs*, RIC 464585, Riv. Sup. Ct. (Aug. 8, 2008), the trial court rejected an EIR’s assertion that a residential and commercial development would have a “beneficial impact on CO₂ emissions” because California homes are more efficient than those elsewhere in the country absent any showing that existing homes would be demolished or remain unoccupied. Here, the staff can make a showing that Units 1-3 will be shut down as a result of the project. As a result, the Project maybe be able to take some credit for the reductions,⁵ but without similar proof of other displacement, the staff must find that the emissions from the Project are cumulatively significant.

The efficiency theory proposed by staff also uses the wrong frame of reference for analyzing the effects of the greenhouse gas emissions from the project on global warming. Staff look at the current portfolio of fossil fuel generating power plants and argues that the CECP will be a more efficient generator, but the PSA ignores that the project will last for the next forty years. CEQA analyzes impacts over the life of the project, not one particular instant. CEQA Guidelines § 15126.2(a) (“Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects.”). Simultaneously, Executive Order S-3-05 requires an eighty percent reduction of greenhouse gas emissions from 1990 levels by 2050, the same 40 year time period. The PSA fails to analyze how creating a new 40 year fossil fuel commitment is consistent with the drastic reductions in carbon emission that need to be made in the same time period.

Moreover, the executive order references the now outdated IPCC recommendation that atmospheric levels of greenhouse gases must be stabilized around 450 parts per million (ppm) by 2050 and that this can be achieved by reducing emissions 80 percent below 1990 levels by 2020. The growing consensus is that both of these recommendations were overly optimistic. Scientists, including NASA’s James Hansen, believe that we are already beyond a sustainable level of greenhouses gases in our atmosphere and that stabilization requires a reduction from current levels to 350 ppm. *See Hansen, J. et al., Target Atmospheric CO₂: Where should Humanity Aim?* (April 2008) available at <http://arxiv.org/ftp/arxiv/papers/0804/0804.1126.pdf>. Certainly these conclusions should come as no surprise given the accelerating impacts of global warming

⁴ *Id.* at 3 (citing the IPCC 4th Assessment Report, Working Group II, Summary for Policymakers, Figure 2 and 14 Cal. Code Regs. (“CEQA Guidelines”) § 15355(b)).

⁵ The emissions from the decommissioned Unit 1-3 would need to substitute reductions on one for one basis. The closing of Unit 1-3 should only partially count in any calculation because those Units will not have remained in operation for the projected lifetime of the CECP.

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that we are already seeing. Similarly, scientists are also questioning the belief that the 80 percent reduction in emissions below 1990 levels by 2050 will be sufficient. A recent paper by Matthews, H.D., and Caldeira, K. "Stabilizing climate requires near-zero emissions," 35 *Geophys. Res. Letters* L04705 (2008), suggests that in order to stabilize atmospheric levels of greenhouse gases, CO₂ emissions must be reduced not just to 80 percent below 1990 levels but to "nearly zero" by mid-century.

The PSA's argument that the AB 32 regulatory setting is the better forum to address the greenhouse gas emissions from the CECP (PSA at 4.1-105) is misplaced. First, AB 32 only regulates emissions through 2020; its time frame is too short for the analysis required by this project. Second, AB 32 does not substitute for CEQA analysis and does not provide a basis for exempting greenhouse gases from CEQA review. AB 32 explicitly states that nothing in that statute shall be construed to relieve a state entity from complying with its existing legal obligations or limit its existing authority "to adopt and implement greenhouse gas emissions reduction measures." Health and Safety Code § 38598.

The PSA's apparent claim that compliance with SB 1368 emission performance standards is an appropriate standard for significance is also flawed. SB 1368's standard for energy procurement, while helpful in influencing the carbon intensity of out-of-state energy projects, are simply business as usual for new power plants in California. *See, e.g., City of Antioch v. City of Council of Pittsburg*, 187 Cal.App. 3d 1325, 1332 (1986) ("conformity with the general plan for the area, does not insulate a project from the EIR requirement, where it may be fairly argued that the project will generate significant environmental effects.") While limiting the procurement of energy from the most heavily polluting sources, SB 1368 was not designed to inform the determination of significance under CEQA.

In addition to relying on an inappropriate theory, the PSA also fails to quantify all of the greenhouse gas emissions from the CECP. The first step in a greenhouse gas analysis under CEQA is to quantify the emissions resulting from the proposed project. *See* OPR, Technical Advisory, CEQA & Climate Change at 5 (June 2008); CEQA Guidelines § 15144 (a lead agency must "use its best efforts to find out and disclose all that it reasonably can."). The additional use of LNG at the CECP may result in increased emissions that may be associated with this type of fuel and should be evaluated in the greenhouse gas analysis. CEQA Guidelines § 15358(a) (defining "effects" or "impacts" of a project to include "[i]ndirect or secondary effects which are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable."); *accord* ARB Staff Workshop Presentation, "Staff Proposal on Greenhouse Gas Thresholds of Significance under CEQA Potential Performance Standards and Measures" (Dec. 9, 2008) at slide 6 (encouraging "lead agencies to include lifecycle emissions where appropriate."). The staff should include a lifecycle analysis of the major components of the project including the cement and steel. The PSA should also incorporate the emissions of HFCs quantified by the applicant in its response to CBD's data requests.

Although the PSA quantifies construction impacts, the PSA improperly dismisses them as insignificant. The PSA provides no analysis of why additional contributions of CO₂ are not considered part of the cumulative effect of the project. *See Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 120 (to make a

significance finding, the EIR must determine whether proposed Project's *incremental contribution* is cumulatively considerable in light of the existing environment).

Moreover, the PSA fails to account for the fact that the Project is designed to supplement future growth in energy use. As new growth occurs – facilitated in part by the construction of the project – actual greenhouse gas emissions will increase. While the CECP may be more efficient than previous generations of power plants, significant quantities of emissions are still generated that could be further reduced through the adoption of alternatives and mitigation measures. *See, e.g., Center for Biological Diversity v. NHTSA*, 538 F.3d 1172, 1216 (9th Cir. 2008) (noting that new fuel economy rule “will not actually result in a decrease in carbon emissions, but potentially only a decrease in the rate of growth of carbon emissions.”). Because significant greenhouse gas emission reductions from existing levels are necessary to stabilize the climate, we cannot afford to squander any opportunity to adopt feasible mitigation and alternatives that reduce the greenhouse gas emissions from proposed projects. The failure to make a finding of significance improperly cuts off any analysis of project alternatives and mitigation measures. *See Laurel Heights Imp. Ass'n of San Francisco, Inc. v. Regents of University of California*, 47 Cal.3d 376, 403 (1988) (“[A]n environmental impact report must include a meaningful discussion of both project alternatives *and* mitigation measures”). This failure deprives the public of the opportunity to weigh early in the process on feasible mitigations and alternatives that could potentially reduce the impact of the project on global warming. One obvious potential mitigation that should be considered is the shut down Units 4 and 5, in addition to Units 1-3.

In addition, the PSA's analysis fails to discuss the effects of global warming on the CECP. For example, a rise in sea level could have an adverse effect on the operation of the CECP.

The PSA's analysis of power plant efficiency is also fundamentally flawed. Even though the project will dramatically increase the use of natural gas, the PSA argues “that the construction and operation of the project would not create indirect impacts (in the form of additional fuel consumption), that would have not otherwise occurred without this project.” (PSA at 5.3-6). Yet, in the aggregate, the CECP will use much more natural gas than Units 1-3 that it replaces. In 2008, Units 1, 2 & 3 used 1,305,100 MMBtu/yr natural gas while new units 6 & 7 will use 7,980,000 MMBtu/yr natural gas each. (Response to CBD Data Requests, Table A7; AFC, Table 5.1b-16).

Moreover, this section improperly dismissed analysis of turbines that are more efficient than the turbines proposed by applicant. The PSA argues the GE H-class next generation turbine that has a fuel efficiency of sixty percent should be not be considered because of lack of commercial experience and project load requirements. However, these turbines are available in other countries and would meet the project load requirements. These turbines have been in operation in Balgan Bay, Wales since 2003 and at the Tokyo Electric Power Company's Futtsu Thermal Power Station in Japan since 2007.⁶

⁶ See http://www.gepower.com/prod_serv/products/gas_turbines_cc/en/h_system/index.htm

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Finally, the staff should incorporate into their air analysis the new proposed moderate designation of the San Diego Air Basin for the 8-Hour Ozone National Ambient Air Quality Standard. *See* 74 Fed. Reg. 2936, 2944 (Jan. 16, 2009).

In sum, this is no ordinary project in a world facing the increasingly dire consequences of global warming. The scientific evidence and projections continue to reveal that the effects of global warming are occurring at rates faster than predicted.⁷ The global climate is on the verge of catastrophic tipping points that could irreversibly affect the climate.⁸ The CEC staff has a legal duty pursuant to CEQA to ensure that the CECP's effects on climate are accurately described, analyzed, and mitigated. The PSA fails to do this. The significance of the emissions of greenhouse gases from the CECP is not speculative. What is speculative is the PSA's argument that the Project will not have a cumulative significant effect on global warming.

Sincerely,

A handwritten signature in black ink that reads "Will Rostov". The signature is written in a cursive style with a long horizontal line extending to the right from the end of the name.

Will Rostov

⁷ David Adam, "World CO2 levels at record high, scientists warn," *guardian.co.uk* (May 12, 2008) at <http://www.guardian.co.uk/environment/2008/may/12/climatechange.carbonemissions> (last visited July 8, 2008).; CNN World News, *North Pole Could Be Ice-Free This Summer, Scientists Say* (June 27, 2008), at <http://www.cnn.com/2008/WORLD/weather/06/27/north.pole.melting/> (last visited July 8, 2008).

⁸ James Hansen, "Tipping Point: Perspective of a Climatologist," in *State of the Wild 2008-2009; A Global Portrait of Wildlife, Wildlands, and Oceans*, Wildlife Conservation Society (Kent Redford, Eva Fearn eds., April 2008). *See also* Bill McKibben, "Civilization's last chance," *L.A. Times* (May 11, 2008) at <http://www.latimes.com/news/printedition/opinion/la-op-mckibben11-2008may11,0,2392815.story> (last visited July 8, 2008).



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**APPLICATION FOR CERTIFICATION
FOR THE *CARLSBAD ENERGY
CENTER PROJECT***

**Docket No. 07-AFC-6
PROOF OF SERVICE
(Revised 1/12/2009)**

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DECLARATION OF SERVICE

I, Sarah Jackson declare that on February 6, 2009, I transmitted a copy of the attached PSA Comments via electronic mail, consistent with the requirements of California Code of Regulations, title 20, sections 1209, 1209.5, and 1210. All electronic copies were sent to all those identified on the Proof of Service list above.

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


