



OCT 10 2008

Mr. Robert J. Meyers
Principal Deputy Assistant Administrator
Office of Air and Radiation
Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington DC 20460

Dear Mr. Meyers:

The National Marine Fisheries Service (NMFS) has received and reviewed the Environmental Protection Agency's letter dated October 3, 2008, regarding issuance of "Prevention of Significant Deterioration" permits for power plants pursuant to the requirements of the Clean Air Act, 42 U.S.C. § 7401 *et seq.* EPA has analyzed the effects of operation of a model coal-fired power plant that would entail emissions of approximately 14.1 million metric tons of carbon dioxide (CO₂). The letter presents a scientific analysis of potential impacts of the anticipated emissions on global average temperatures and global atmospheric concentration of CO₂ and predicted change in ocean pH. The letter also sets forth EPA's conclusion that the proposed action does not present impacts that would require consultation under Section 7 of the Endangered Species Act (ESA) regarding listed coral species¹. EPA requests NMFS indicate whether it agrees with this conclusion.

As an initial matter, NMFS reiterates that, under ESA Section 7(a)(2) and its implementing regulations at 50 C.F.R. Part 402, it is the purview and obligation of the agency proposing to take an action to determine whether the action "may affect" listed species. See 50 C.F.R. § 402.14(a).

The regulations do not require that NMFS, as the consulting agency, endorse the action agency's conclusion at this threshold stage. Thus, NMFS does not review such determinations. However,

¹ Elkhorn (*Acropora palmata*) and staghorn corals (*A. cervicornis*) were listed as "threatened" in May 2006. 71 Fed. Reg. 26,852 (May 9, 2006). Thirteen "stressors," or specific conditions causing adverse impacts, were identified that were either affecting or have the potential to affect coral persistence. Three of these were identified as "major stressors": (1) disease (e.g., white-band and white pox disease); (2) elevated sea surface temperature, which causes temperature-induced "bleaching" and may exacerbate occurrence of diseases; and (3) hurricanes, which cause breakage and abrasion. Other stressors included: sedimentation; human-caused abrasion and breakage; competition; excessive nutrients; predation; contaminants; loss of genetic diversity; African dust; elevated carbon dioxide levels (which leads to ocean acidification); and sponge boring. Sea surface level rise was indicated as a potential future stressor. "Climate variability and change" was identified as a "source" process leading to creation of some of the stressors. Since release of the final listing rule, additional evidence linking increasing global temperatures and concentrations of CO₂ in the ocean to coral mortality has become available. See, e.g., Report of IPCC Working Group II (April 2007); "Coral Reefs Under Rapid Climate Change and Ocean Acidification," *Science Magazine* (December 14, 2007). Increases in global atmospheric temperature and CO₂ concentrations are known to be related to increases in sea surface temperature and ocean acidification, but the precise relationship is not defined and it is not possible to predict impacts for specific geographic areas.



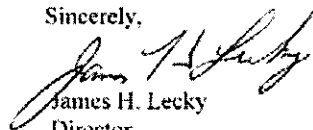
NMFS recognizes that the proposed action you have described presents an important issue of first impression that is of national significance. In light of the importance of the issue we believe that providing guidance in this situation could be useful for other agencies contemplating similar actions.

In its letter EPA estimated the maximum mean global temperature increase resulting from the model power plant ranges from 0.00022 to 0.00035 degrees Celsius (°C) (0.00037 to 0.00063°F) occurring approximately 50 years after the facility begins operation. Similarly, the maximum predicted global increase in atmospheric CO₂ is approximately 0.06 ppm as a result of the project and the computed reduction in ocean pH is approximately 0.0001 units in 2070. Not only are these predicted global changes extremely small, scaling these global results to attempt to estimate localized impacts would be an untested application of the model, with even greater uncertainty in the predicted outcomes. In addition, EPA's letter noted the Fish and Wildlife Service's determination, in the context of its decision to list the polar bear as a threatened species, that current science is not sufficient to establish a causal link between specific sources of CO₂ emissions and specific climate impacts for ESA purposes. NOAA agrees that current models do not allow us to trace a link between individual actions that contribute to atmospheric carbon levels and localized climate impacts relevant to a consultation.

EPA has described a situation that presents at most a remote risk of harm to listed corals or their habitat, given the infinitesimal impact on global temperatures and CO₂ concentrations that it estimated the action will have. In light of the purpose of Section 7(a)(2) to insure that proposed agency actions do not pose a likelihood of jeopardy, the Ninth Circuit has interpreted the "may affect" standard to not reach situations where the potential for actual harm to the species is so exceedingly remote. See *Ground Zero Center for Non-Violent Action v. Navy*, 383 F.3d 1082, 1091-92 (9th Cir. 2004). The facts as you have presented them would seem to fall within the ambit of the *Ground Zero Center* case and therefore consultation would not be required.

If you have any questions, please contact the NMFS Office of Protected Resources at 301-713-2322.

Sincerely,



James H. Lecky

Director

Office of Protected Resources