



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX 75 Hawthorne Street San Francisco, CA 94105-3901

November 22, 2011

Mr. Joe Incardine Bureau of Land Management Phoenix District Office Sonoran Solar Energy Project 21605 N 7th Ave. Phoenix, AZ 85027

Subject: Final Environmental Impact Statement (FEIS) for the Sonoran Solar Energy Project, Maricopa County, Arizona (CEQ #20110356)

Dear Mr. Incardine:

The U.S. Environmental Protection Agency (EPA) is providing comments on the subject document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. We thank you for agreeing to accept our letter one day after the deadline, as noted in your November 22, 2011 email message to Tom Kelly.

EPA provided comments on the Draft Environmental Impact Statement (DEIS) on May 25, 2010, and comments on the Notice of Intent to prepare a DEIS on August 28, 2009. We rated the DEIS Environmental Concerns – Insufficient Information (EC-2) due to our concerns regarding water resources, but our letter also raised concerns about biological resources, alternatives analysis, greenhouse gas emissions and economic analysis.

We are pleased that the Bureau of Land Management (BLM) created and selected Subalternative A1: Photovoltaic, as the preferred alternative. Compared with the proposed alternative, the preferred alternative reduces many environmental impacts, including:

- water use by 98.5%;
- the area of disturbance by 44%, which provides a variety of benefits, including the avoidance of the only two floodplains in the project area;
- operational air emissions (e.g. a 19.9 ton per year reduction in particulate matter less than 10 microns) and elimination of the need for a Title VI permit; and
- the size and number of on-site evaporation ponds, from two ponds covering 30 acres to one pond covering one acre.

These improvements addressed most of the concerns presented in our DEIS comment letter. We note, however, that there are still additional opportunities to further reduce project impacts, as described below.

We recommend that mitigation measures described in the FEIS for the preferred alternative be fully adopted in the Record of Decision (ROD). We further suggest the ROD establish specific success criteria, where appropriate. We offer two examples where such success criteria could ensure

minimization of project impacts. First, the FEIS acknowledges the uncertain long-term effectiveness of hazing to discourage birds from the one-acre pond, containing the reverse osmosis reject stream. Therefore, we recommend that failure to meet the success criteria, as defined for this mitigation measure within the ROD, trigger the submission of revised mitigation measures. If success criteria cannot be met with revised hazing mitigation measures, the ROD should require the project proponent to consider alternative methods to dispose of the reverse osmosis reject stream.

Another impact that can be minimized through the incorporation of success criteria is the impact on downstream drainages from the storm water management system. We recommend the ROD require periodic inspection of downstream drainages for comparison with pre-development conditions documented prior to project construction. This periodic inspection by an appropriate professional (e.g. geologist or hydrologist) could lead to operational changes to the storm water management system if drainages are eroded by excessive quantities of water or appear to no longer receive water.

Finally, EPA is also concerned about the potential impact of herbicides (pre-emergents) in the project area, as quantities are much higher than expected. The DEIS did not provide estimates for anticipated herbicide use; however, the FEIS states the proposed alternative would use more than 37,000 pounds of pre-emergent annually, and even the reduced footprint of the photovoltaic alternative would use more than 20,000 pounds annually (Table 2.16). We recommend BLM use the ROD to encourage alternative management practices that limit herbicide use to a last resort, focusing instead on other methods to limit vegetation and decrease fire risk. Possible alternatives include mowing and weed control fabric, which may need a layer of soil to prevent degradation due to ultra violet light.

We appreciate the opportunity to review the FEIS. Once the ROD has been signed, please send one copy to the address above (Mail Code: CED-2). If you have any questions, please contact me at (415) 972-3521, or Tom Kelly, the lead reviewer for this project, at (415) 972-3856 or kelly.thomasp@epa.gov.

Sincerely,

/s/

Kathleen Martyn Goforth, Manager Environmental Review Office (CED-2)