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Western Environmental Law Center

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RE: Comments on Proposed Federal Implementation Plans for the Four Corners Power Plant, (EPA-R09-OAR-2006-0184), 71 Fed. Reg. 53,631 (Sept. 12, 2006), and the Navajo Generating Station, (EPA-R09-OAR-2006-0185), 71 Fed. Reg. 53,639 (Sept. 12, 2006).

Dear Ms. Rosen,

We are writing on behalf of the Grand Canyon and Rio Grande Chapters of the Sierra Club, the Tribal Partnerships Program of the Sierra Club, Dine CARE, Dooda Desert Rock, San Juan Citizens Alliance, Grand Canyon Trust, Black Mesa Water Coalition and Dine for the C-Aquifer, regarding the proposed Federal Implementation Plans ("FIPs") for the Four Corners Power Plant and the Navajo Generating Station.

We appreciate that the EPA is finally issuing FIPs for the two power plants, and believe that the proposed FIPs represent a framework to protect the air quality of the region. However, the draft FIPs contain some serious deficiencies that need to be addressed in order to make them comply with law and to protect the regional air quality and the health of the people who live in this area.

Comments Applicable to Both Power Plants:

The FIPs Fail to Be Based On Required Modeling

The first significant deficiency with the draft FIPs is that the proposed emissions limitations for the two power plants were not tested against state-of-the-art dispersion modeling to guarantee, at a minimum, the maintenance and

attainment of national and state ambient air quality standards and the prevention of significant deterioration increments.

According to EPA's Clean Air Act tribal implementation rule at 40 C.F.R. § 49.11:

Notwithstanding any determination made on the basis of authorities granted the [EPA] Administrator under any other provision of this section, the Administrator, pursuant to the discretionary authority explicitly granted to the Administrator under [Clean Air Act] sections 301(a) and 301(d)(4):

(a) Shall promulgate without unreasonable delay such federal implementation plan provisions as are necessary or appropriate to protect air quality, consistent with the provisions of sections 301(a) and 301(d)(4), if a tribe does not submit a tribal implementation plan meeting the completeness criteria of 40 CFR part 51, Appendix V, or does not receive EPA approval of a submitted tribal implementation plan.

In other words, because there is no tribal implementation plan applicable to the Four Corners and Navajo facilities, it is EPA's legal obligation to promulgate federal implementation plans for these sources that are consistent with the requirements of Sections 110 and 301 the Clean Air Act (state and tribal implementation plan requirements) and satisfy the state implementation plan completeness criteria set forth in 40 C.F.R. § 51, Appendix V.

The regulations promulgated that set forth the standards for state implementation plans under the Clean Air Act, applicable here, require that each proposed plan:

(a) must demonstrate that the measures, rules, and regulations contained in it are adequate to provide for the timely attainment and maintenance of the national standard that it implements.

(1) The adequacy of a control strategy shall be demonstrated by means of applicable air quality models, data bases, and other requirements specified in appendix W of this part (Guideline on Air Quality Models).

40 C.F.R. § 51.112. The regulations go on to require:

(b) The demonstration must include the following:

(1) A summary of the computations, assumptions, and judgments used to determine the degree of reduction of emissions (or reductions in the growth of emissions) that will result from the implementation of the control strategy.

(2) A presentation of emission levels expected to result from implementation of each measure of the control strategy.

(3) A presentation of the air quality levels expected to result from implementation of the overall control strategy presented either in tabular form or as an isopleth map showing expected maximum pollutant concentrations.

(4) A description of the dispersion models used to project air quality and to evaluate control strategies.

(5) For interstate regions, the analysis from each constituent State must, where practicable, be based upon the same regional emission inventory and air quality baseline.

Id.

Furthermore, EPA's completeness criteria plainly require modeling to support the emission limits in any implementation plan submission. Pursuant to 40 C.F.R. Part 51, Appendix V, "the following shall be included in plan submissions for review by EPA":

2.2 Technical Support

(d) The State's demonstration that the national ambient air quality standards, prevention of significant deterioration increments, reasonable further progress demonstration, and visibility, as applicable, are protected if the plan is approved and implemented. For all requests to redesignate an area to attainment for a national primary ambient air quality standard, under section 107 of the Act, a revision must be submitted to provide for the maintenance of the national primary ambient air quality standards for at least 10 years as required by section 175A of the Act.

(e) Modeling information required to support the proposed revision, including input data, output data, models used, justification of model selections, ambient monitoring data used, meteorological data used,

justification for use of offsite data (where used), modes of models used, assumptions, and other information relevant to the determination of adequacy of the modeling analysis.

EPA's draft FIPs do not discuss or rely on modeling information to justify the agency's chosen emission limits, and therefore are unacceptable. Without modeling, which should show not just the effect of emissions from the two power plants but also all other sources of air pollution in the region, the FIPs simply can not assure compliance with applicable air quality standards and increments necessary to protect the health and welfare of the people of the Navajo Nation and the rest of the region. It has been estimated that power plant emissions kill 39 New Mexicans per year, and the EPA needs to ensure that this number will be reduced as a result of the FIPs. See <http://www.cleartheair.org/dirtypower/map.html>.

The fundamental problem with EPA's approach to establishing emission limits for the plants is that the agency simply relied on the emission rates that the plants are currently achieving rather than what the plants must achieve to assure compliance with all applicable federal and state ambient standards and PSD increments. Plainly this is not the approach envisioned by the Clean Air Act, and EPA needs to determine through modeling what limitations are required to meet ambient air quality standards. EPA's failure to use modeling to determine the efficacy of its chosen emission limits also deprived the public of the opportunity to review and comment upon EPA's modeling assumptions and protocols. Any revised FIPs should provide such an opportunity.

Need for a Reservation-Wide Implementation Plan

The source-specific plans for the two power plants are an excellent first step towards improved air quality in the Four Corners. However, source-specific plans do not negate EPA's duty to promulgate a comprehensive implementation plan for the Navajo Nation. See 40 C.F.R. § 49.11(a). As you know, such state-wide, reservation-wide, or regional plans are the primary modes for implementation plans, with source-specific plans being supplementary. EPA should explain how and when it plans to fulfill its duty to issue a reservation-wide FIP to regulate all significant sources of air pollution within the boundaries of the Navajo Nation, such as oil and gas development sources.

Ozone

Ozone is a serious problem resulting from NO_x and VOC precursor emissions from power plants, creating severe health effects for those exposed to it. See Attachment A at 24 ("Dirty Kilowatts- America's Most Polluting Power Plants," Environmental Integrity Project); Attachment B ("Exposure to Ozone and Health")

by Barbara Malczewska-Toth and Glenna Hubbard); Attachment C (“Ozone Air Quality Analysis in the PSD permit Application for the Desert Rock Energy Facility” by Jana Milford); Attachment D at 9 (“Comments on the Air Quality and Visibility Impact Analyses of the PSD Permit Application for the Desert Rock Energy Facility” by AMI International). San Juan County NM, where the Four Corners Power plant is located, already exceeds the 8-hour ozone health standard on a regular basis, as do Grand Canyon and Mesa Verde National Parks, which are affected by the power plants. Attachment E at 12 (“Clearing California’s Coal Shadow from the American West” by Center for Energy Efficiency and Renewable Technologies et al.). While the proposed Four Corners FIP contains NOx limitations, the Navajo Generating Station FIP does not (see also below), and neither addresses VOC emissions or ozone creation. Both FIPs should address ozone precursors and contain a plan for controlling ozone creation generally.

Mercury

As you know, power plants are the largest producers of environmental mercury, and these two power plants are no exception. Four Corners Power Plant is the 36th-largest mercury emitter amongst power plants in the country emitting at least 625 pounds per year, and Navajo Generating Station emits at least 303 pounds per year. See Attachment D at 34; Attachment H at 11,15 (“Emissions of Mercury by Plant” by EPA, 1999). This is in addition to the Mercury emitted by San Juan Generating Station, which is number 24 in the country at 770 pounds. Id. Mercury is, of course, a very toxic substance with serious health effects. See Attachment D at 30. Mercury should be addressed in the FIPs in order to control this toxic substance.

Carbon Dioxide

Lastly, although CO2 is not currently controlled by the Clean Air Act, the Navajo Generating Station is the seventh-largest power plant producer of CO2 in the country at 20 million tons per year, and Four Corners Power Plant is twenty first-largest at 16 million tons, making them very large greenhouse gas contributors. Attachment A at 21. EPA should assess the impacts to global warming from these plants, and study the feasibility of replacing the two power plants with cleaner burning plants elsewhere, renewable energy sources, reducing electrical demand through a similar investment in efficiency and conservation, and of installing carbon capture technology to the existing plants.

