UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION

DINÉ CARE, *et al.*, Plaintiffs, v. ROBERT PERCIASEPE, Acting Administrator, *et al.*, Defendants, and SALT RIVER PROJECT AGRICULTURAL IMPROVEMENT & POWER DISTRICT, Intervenor/Defendant.	No. C-12-03987 JSW **DELARATION OF COLLEEN MCKAUGHAN IN SUPPORT OF DEFENDANTS' CROSS-MOTION FOR SUMMARY JUDGMENT AND OPPOSITION TO PLAINTIFFS' MOTION FOR SUMMARY JUDGMENT**

1. I, Colleen McKaughan, declare that the following statements are true and correct to the best of my knowledge and belief and that they are based upon my personal knowledge or on information contained in the records of the Unites States Environmental Protection Agency ("EPA") or on information supplied to me in my official capacity by the employees under my direction and employees in other EPA offices.

2. I am an Associate Division Director in the Air Division of the Region 9 office of the EPA, a position I have held since 1997. I have been employed by EPA for 29 years. I have a B.S from the University of Michigan in Resource Planning and Conservation and a Masters of Business Administration from the University of Illinois – Chicago Circle.

3. The Air Division in Region 9 is the EPA office that, among other responsibilities, reviews State Implementation Plans ("SIPs") that may be submitted to comply with the Clean

Air Act ("CAA")and regional haze regulations ("RHR") for Arizona, Nevada, California, and Hawaii. If a State fails to submit a SIP meeting the requirements of the CAA, EPA has authority to promulgate a Federal Implementation Plan ("FIP") to ensure all applicable requirements are met.

4. My specific responsibilities within the Air Division include managing the Regional Haze Program and Tribal air quality issues for 148 federally-recognized Native American Tribes within Region 9. As a management official (as defined in Section 7103(a)(11) of Title V of the U.S. Code), I formulate, determine, and influence the organization's policies. This means creating, establishing, or prescribing general principles, plans, or courses of action for the organization, or bringing about a course of action. I actively participate in shaping EPA's policies, in addition to interpreting laws and regulations, giving resource information or recommendations, or serving as an expert or highly trained professional who implements or interprets the EPA's policies and plans.

5. As part of my duties as Associate Director of the Air Division in Region 9, I am involved in prioritizing our resources to meet the legal requirements of the CAA as well as the air quality needs of the States and Tribes in Region 9. Given the funding and other resource constraints upon Region 9, the Air Division must allocate resources and prioritize projects based on several factors, including: 1) whether or not a project must be completed by a time certain (e.g. a deadline mandated by statute, regulation or Consent Decree), 2) the environmental and public health impact of proceeding with a particular project compared to other projects and 3) the amount of resources needed to complete a particular project.

6. The allocation of the Air Division's scarce resources to promulgate a FIP under the discretionary authority exercised in EPA's Tribal Authority Rule under 40 C.F.R. § 49.11 for the Navajo Generating Station ("NGS"), therefore, must be balanced with the Air Division's need to review SIPs required under the RHR for the States in Region 9.

7. In November 2011, EPA entered into a proposed Consent Decree with one of the Plaintiffs in this action, the National Parks Conservation Association (NPCA Consent Decree). The NPCA Consent Decree was not entered until March 2012 and has been modified several

times. Pursuant to the NPCA Consent Decree, the Air Division is required to meet Court ordered deadlines to take action (approval or disapproval) on Regional Haze SIPs required under the RHR, and as appropriate promulgate full or partial Regional Haze FIPs, for the States in Region 9 made up of California, Nevada, Hawaii and Arizona. A true and correct copy of the NPCA Consent Decree entered in April 2012 is attached as Exhibit A.

8. In contrast to the States, the CAA deadline for submitting RHR plans does not apply to Tribes. Under the Tribal Authority Rule (TAR), which EPA promulgated in 1998, the deadline for submission of an implementation plan addressing regional haze does not apply to Indian tribes. Before or concurrently with making Federal plans for emissions sources in Indian country, EPA exercises its authority under the TAR to determine whether it is necessary or appropriate to promulgate a FIP to protect air quality. In addition, any proposed FIP may address only a portion or selected provisions of the RHR as necessary or appropriate to protect air quality.

9. NGS is a unique coal fired power plant. It was constructed in the 1970s as part of an overall plan, referred to as the Central Arizona Project or CAP, to provide water from the Colorado River to a variety of water users throughout Arizona, including numerous Tribes. Because NGS was constructed as a necessary element of implementing CAP, the Bureau of Reclamation under the Department of the Interior, owns the largest share of NGS (approximately 24%). Excess power owned by the Department of the Interior and not used by CAP has been sold and the benefits of and proceeds from the sale have been used to implement water rights settlement agreements with Tribes in Arizona.

10. EPA has promulgated two prior FIPs to regulate NGS. In 1991, EPA amended a part of the visibility FIP for Arizona to include requirements for NGS to install sulfur dioxide (SO2) scrubbers to improve visibility at the Grand Canyon National Park. 56 Fed. Reg. 50,172 (Oct. 3, 1991). This action was upheld by the 9th Circuit in *Central Arizona Water Conservation District v. United States Environmental Protection Agency*, 990 F.2d 1531 (9th Cir. 1993). After EPA promulgated the TAR setting forth EPA's authority to promulgate FIP provisions for sources in Indian country upon a final determination that it was necessary or appropriate, Region

9 proposed a FIP in 1999 to incorporate State law requirements that NGS had historically followed into a federally enforceable rule. 64 Fed. Reg. 48,731 (Sept. 8, 1999). Although EPA has not approved the State of Arizona to administer CAA programs in Indian country, NGS had historically followed certain requirements of State law. EPA did not finalize the proposed 1999 FIP. Instead, seven years later EPA proposed a new FIP in 2006 to make the lowered SO2 emissions limits from the scrubber operations and the State law requirements that NGS had historically followed federally enforceable. 71 Fed. Reg. 53,639 (Sept. 12, 2006). EPA finalized the 2006 proposed FIP approximately four years later in 2010. 75 Fed. Reg. 10,174 (Mar. 5, 2010).

11. Under my direction, Region 9 has spent considerable time and resources moving toward the promulgation of a regional haze FIP for controlling emissions of oxides of nitrogen (NOx) from NGS. While EPA has been trying to develop a FIP for NGS, several Tribal Leaders have expressed concerns that the costs associated with additional NOx pollution controls could cause the owners of NGS to decide to close the plant. Many if not all of the benefits associated with NGS and CAP might be eliminated if NGS closed. EPA exercised its discretion to hire a contractor with expertise in economics to evaluate whether the cost of electricity generation including the cost of new NOx controls would be more expensive than purchasing an equivalent amount of the power on the wholesale electricity market.

12. Because EPA was aware that any action we proposed concerning NGS (and to a lesser extent Four Corners Power Plant) would have economic impacts to Tribes, EPA decided to conduct an extensive technical analysis and issue an Advanced Notice of Proposed Rulemaking (ANPR), which contained information about the cost of NOx controls and likely visibility improvement that would be part of EPA's BART evaluation for NGS and Four Corners Power Plant, on August 28, 2009. 74 Fed. Reg. 44,313 (Aug. 28. 2009).

13. In response to the ANPR, EPA received extensive comments and numerous requests for consultation meetings with Tribal Leaders in Arizona in addition to the Tribal Leaders for the Navajo Nation and Hopi Tribe. Some of these requests are listed in the recent Notice of Proposed Rulemaking (NPRM) and the Technical Support Document (TSD) for the

NPRM. 78 Fed. Reg. 8,274, 8,277-78; TSD at 25. An example of the type of the correspondence received by EPA from Tribal Leaders is attached as Exhibit B, which is a true and correct copy of the letter contained in EPA's official records. Region 9 also received correspondence and requests for meetings from the various owners of NGS, the Central Arizona Water Conservation District, which operates the CAP to distribute water from the Lower Colorado River throughout Arizona, and other federal agencies, particularly within the Department of the Interior. *Id*. 8,278-79. A true and correct copy of a letter received by EPA from the Department of the Interior following the ANPR is attached as Exhibit C. In addition, Region 9 received correspondence from Federal and State Representatives, the Governor and Treasurer of Arizona, State and local agencies and numerous quasi-governmental entities, non-governmental organizations, industry representatives and individuals. *Id*.

14. Several Tribal Leaders requested Region 9 to extend the time to submit comments on the ANPR, and the deadline was extended until March 2010. During this time, the Hopi Tribe had commissioned an economic study by ICF International of the impacts of NOx controls at NGS. The coal mine supplying coal to NGS is partially located on the Hopi Tribe's reservation lands. The ICF Study, which the Hopi Tribe submitted with its comments on the ANPR, predicts that a stringent BART determination, in combination with other potential EPA requirements related to the control of mercury and greenhouse gases, would cause NGS to close.

15. On February 11, 2010, the operator of NGS, Salt River Project (SRP), requested a meeting with EPA during which it proposed to conduct an ammonia monitoring study. It is my understanding that the amount of "background ammonia" (i.e. ammonia in the ambient air) may be an important factor for modeling projected impacts on visibility degradation associated with the emissions from NGS. If SRP could demonstrate there was less background ammonia than EPA estimated, the NOx emissions from NGS would not form the estimated amount of ammonium nitrate thereby lowering the anticipated visibility impacts. SRP submitted the results of the ammonia monitoring study in September 2010. The Study did not provide conclusive information concerning background ammonia.

16. During the time SRP was conducting the ammonia monitoring study, my staff and I were also working on a proposed regional haze FIP for the Four Corners Power Plant, the other large coal fired power plant located on the Navajo Nation. At the time, Four Corners Power Plant was the largest stationary source of NOx in the United States. The proposed regional haze FIP for the Four Corners Power Plant was published on October 19, 2010. 75 Fed. Reg. 64,221 (Oct. 19, 2010). The proposed regional haze FIP required significant and complex technical analysis by Air Division staff. On November 24, 2010, the operator of the Four Corners Power Plant responded to our proposed regional haze FIP by submitting a plan to retire the three oldest and most polluting units at the plant. After careful consideration of whether the alternative proposal would meet the requirements of the RHR, we drafted a Supplemental Notice of Proposed Rulemaking that was published in February 2011 to give the public an opportunity to review and comment on the alternative strategy.

17. Meanwhile, with respect to NGS, in February 2011, SRP submitted updated CALPUFF modeling for predicting the visibility improvements that would be anticipated from installation of various control technologies on NGS. The submission of additional CALPUFF modeling required the Air Division staff to independently evaluate the assumptions, the data used as inputs and the results, which was detailed and time-consuming work.

18. On July 12, 2011, the Deputy Secretary of the Department of the Interior sent a letter to Region 9 seeking confirmation that EPA would not issue a NPRM for NGS until the National Renewable Energy Laboratory (NREL) completed Phase I of a two-phase study concerning issues related to the power sector that are relevant to a BART evaluation for NGS. A true and correct copy of the letter from the Deputy Secretary is attached as Exhibit D. On July 18, 2011, the Regional Administrator for Region 9 confirmed that EPA would not issue the NRPM until Phase I of the NREL Study was complete. A true and correct copy of the Regional Administrator's letter is attached as Exhibit E. The NREL Study was not released until February 2012.

19. In November 2011, EPA received an Economic Impact Study submitted by the Gila River Indian Community addressing the impacts of possible EPA BART determinations on

the community. It is my understanding that the Gila River Indian Community receives the largest allotment of CAP water and also derives substantial benefits from the Development Fund maintained by the Department of the Interior based on its sale of excess electricity. The Gila River Indian Community submitted a revised Economic Impact Study in March 2012. Our contractor provided a review of this study in its economic report to EPA.

20. In January 2012, SRP submitted an updated BART analysis to EPA that included new information for consideration of whether Selective Non-Catalytic Control Technology (SNCR) would qualify as BART. SRP's submittal required EPA to conduct additional analysis concerning SNCR.

21. On February 2, 2012, Arizona State University released an economic impact report concerning the anticipated costs to water settlements and tribal development if Region 9's NPRM for NGS required the most stringent pollution reduction controls, known as Selective Catalytic Reduction (SCR) technology.

22. On February 17, 2012, Administrator Jackson sent a letter to the Secretaries of the Department of the Interior and Department of Energy requesting a 3-Agency process to work on issues concerning the long term outlook for NGS. A true and correct copy of the Administrator's letter is attached as Exhibit F.

23. Between publication of the ANPR in August 2009 and the NPRM in February 2013, meetings and correspondence concerning NGS occupied a considerable portion of my time. I was also managing the staff working on NGS, including the engineers and modelers in the Air Division. I attended frequent meetings telephonically with the Air Division staff working on NGS. I assisted staff in reviewing the economic analysis prepared by contractors. I also reviewed drafts of the NPRM and the detailed and thorough TSD. Although the Air Division in Region 9 was the lead in preparing the NPRM that was signed on January 17, 2013, we coordinated closely with several other offices, particularly EPA's Office of Air and Radiation, Office of Air Quality Planning and Standards and Office of General Counsel.

24. The technical lead, air quality modeler, and regional counsel responsible for performing the technical analysis, drafting the NPRM, and preparing the administrative record

for the NGS regional haze FIP, also have been working on the SIP approvals and/or FIPs for the RHR requirements being promulgated to meet the deadlines in the NPCA Consent Decree, or the regional haze FIP for the Four Corners Power Plant.

25. A list of the actions the Air Division in Region 9 has taken to address regional haze since 2008 includes:

a. The Advanced Notice of Proposed Rulemaking for the Best Available Retrofit Technology (BART) for the Four Corners Power Plant and NGS in August 2009. 74 Fed. Reg. 44,313 (Aug. 28, 2009);

b. The proposed rule requiring BART for NOx for the Four Corners Power Plant in October 2010, 75 Fed. Reg. 64,221 (Oct. 19, 2010), and the supplemental proposal in February 2011. 76 Fed. Reg. 10,530 (Feb. 25, 2011);

c. The proposed rule approving the regional haze SIP for California in March 2011; 76 Fed. Reg. 13,944 (Mar. 15, 2011);*[1]

d. The final rule approving the regional haze SIP for California in June 2011; 76 Fed. Reg. 34,608 (June 14, 2011);*

e. The proposed rule approving the regional haze SIP for Nevada in June 2011; 76 Fed. Reg. 36,450 (June 22, 2011);*

f. The final rule partially approving the regional haze SIP for Nevada in December 2011.[2] 77 Fed. Reg. 17,334 (Mar. 26, 2012);*

g. The proposed rule approving and disapproving the BART provisions for the Reid Gardner Generating Station in Nevada, and proposing a partial FIP in April 2012; 77 Fed. Reg. 21,896 (Apr. 12, 2012);*

h. The proposed regional haze FIP for Hawaii in May 2012. 77 Fed. Reg. 31,692 (May 29, 2012);

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[1] All items showing an * are subject to Consent Decree deadlines for taking final action pursuant to the Settlement Agreement with Plaintiff National Parks Conservation Association.

[2] This rule was signed on December 13, 2011, but publication was delayed until March 26, 2012.

i. The proposed rule approving and disapproving the regional haze SIP for Arizona and proposing a FIP for BART for certain coal fired electrical generating units in July 2012, 77 Fed. Reg. 42,834 (July 20, 2012) and notice of additional public hearings and extension of public comment period; 77 Fed. Reg. 45,326 (July 31, 2012);*

j. The final partial approval and FIP for Reid Gardner in August, 2012. 77 Fed. Reg. 50,936 (Aug. 23, 2012);*

k. The final FIP for the Four Corners Power Plant in August 2012. 77 Fed. Reg. 51,619 (Aug. 24, 2012);

l. The final regional haze FIP for Hawaii in September 2012. 77 Fed. Reg.61,447 ((Sept. 14, 2012);*

m. The final partial approval and FIP for Arizona in December 2012, 77 Fed. Reg. 72,511 (Dec. 5, 2012);*

n. The proposed BART determination for NGS in February 2013. 78 Fed. Reg.8,274 (Feb. 5, 2013).

26. I have directed the Air Division staff working on most of the regional haze SIPs and FIPs listed above. Needless to say, Region 9's resources have been fully devoted to the completion of the above-listed matters, and there has not been any unutilized capacity. The majority of the work on those SIPs and FIPs has centered on the BART analyses for coal-fired power plants in the Region 9 States or on the Navajo Nation. The BART analysis requires a source-specific evaluation of five factors. Two of the five factors, the cost of compliance and the degree of visibility improvement, are typically the most difficult and time consuming aspects of the analysis. The evaluation of these two factors for each coal-fired power plant depends on a number of source-specific characteristics, such as the type of combustion boilers, the composition of the coal, the location of the equipment at the facility, how raw materials are transported to the facility, the location of the Class I areas around the facility and that location's particular meteorology and atmospheric characteristics.

27. The proposed BART determination for NGS is unique among these source-specific evaluations because of the extensive analysis required for the second factor concerning

the energy and non-air quality impacts from the action. *See* 78 Fed. Reg. 8,281. Based, in part, on the unique purpose and ownership interest in NGS described above, the Air Division hired a contractor with expertise in economic analyses to estimate how the cost of air pollution controls at NGS would affect the price of water, as well as the price of electricity in relation to the market price of electricity to assess whether the cost of controls would cause NGS to close.

28. I have read the opinions contained in Mr. Howekamp's Declaration. In Mr. Howekamp's estimation, the Air Division should have been able to propose action on NGS at the same time as the proposal on Four Corners Power Plant because in his opinion the technology options, modeling approaches and cost calculations should have been the same for both. Mr. Howekamp's opinion is wrong for several reasons. NGS has completely different combustion boilers than the Four Corners Power Plant. In addition, the coal supply is different. As a result, issues associated with the choice of BART are different for each plant. In particular, NGS voluntarily installed new-generation LoNOx Burners in 2009-2011, installing one new burner each year. This voluntary installation reduced NOx emissions substantially, resulting in a reduction of NOx from approximately 30,500 tons per year in 2009 to less than 20,000 tons per year in 2011. A true and correct copy of Table 2, which identifies the annual NOx emissions from NGS, of the Technical Support Document from the NPRM is attached hereto as Exhibit G. EPA considered this factor in evaluating a "better than BART" alternative for NGS. Four Corners Power Plant did not install any technology voluntarily before the BART determination.

29. Mr. Howekamp also offers his opinion that both BART determinations would "have similar tribal consultation requirements." Again, I disagree with his opinion. As noted above, the Air Division's analysis for Factor 2 of the BART determination for NGS was extraordinarily complex because of NGS' unique relationship to Arizona's water system and Tribes, and thus, necessitated consultation with all tribes located in Arizona, not just the Navajo Nation, as was the case with the Four Corners Power Plant. Two tribes, the Hopi Tribe and Gila River Indian Community, submitted economic analyses of potential BART options to EPA. In July 2011, the Department of the Interior, which manages water settlement agreements between tribes and the United States, requested the Air Division to postpone issuing any NPRM until the

Department of Energy completed Phase 1 of the NREL Study. This Study was relevant to Tribal consultation because it would evaluate whether it would be more economical for NGS to close rather than install NOx controls for BART. That Study was not completed until 2012. EPA and the Departments of the Interior and Energy also issued a Joint Statement in 2012, stating that the 3 Agencies "will work together to support Arizona and tribal stakeholders' interests in aligning energy infrastructure investments made by the Federal and private owners of NGS (such as upgrades that may be needed for NGS to comply with Clean Air Act emission requirements) with long term goals of producing clean, affordable and reliable power, affordable and sustainable water supplies, and sustainable economic development, while minimizing negative impacts on those who currently obtain significant benefits from NSG, including tribal nations." A true and correct copy of the Joint Statement is attached as Exhibit H.

30. I also disagree with Mr. Howekamp's opinion that it would be reasonable for the Court to order EPA to issue a Notice of Final Rulemaking (NFRM) within one year from February 5, 2013. At the request of several stakeholders, including the Navajo Nation and the Gila River Indian Community, EPA has extended the public comment period on the NPRM to August 5, 2013. EPA is expecting to hold at least 4 public hearings on the Navajo Nation and in Arizona during the week of July 22, 2013. EPA will then respond to all significant public comments, including testimony from the public hearings. Given the extent of the public interest in NGS and the competing stakeholder interests, I anticipate it will take a substantial staff effort to draft responses to the comments. In addition, SRP has convened a stakeholder group to determine if that group can submit an alternative to BART to EPA. If EPA receives such a submission that we then determine to be approvable, a new or supplemental proposal for public comment would then need to be published for public comment.

31. Based on my experience working on the ANPR and NPRM for NGS, I consider the Air Division and EPA to have worked diligently and expeditiously to produce a thorough technical analysis of enormously complex issues affecting a diverse group of stakeholders. The extent of EPA's Tribal consultation and public outreach for the NPRM is the most time

consuming and complex that I have experienced during my almost 30 years of working at Region 9.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Executed on April ___, 2013 _____

COLLEEN MCKAUGHAN