

COMMENT #227



Office of Surface Mining Reclamation and Enforcement
Four Corners Power Plant and Navajo Mine Energy Project
Environmental Impact Statement (EIS)

Draft EIS Public Meeting Comment Form

Comments must be postmarked by May 27, 2014, for consideration in the final EIS. Comments may be submitted at the open house public meetings (being held April 30 through May 9, 2014), via email to FCPPNavajoEnergyEIS@osmre.gov or by postal mail, hand delivery or courier to the address below.

MEETING LOCATION: _____ DATE: _____

Please Print

I would like to take this opportunity to explain why the permit for Navajo Mine should go through. I am a young engineer that has worked for Navajo Mine for two years and in that time I have seen and heard some remarkable stories. There are those here that have spent many years here and in that time people have been able to buy homes, support their families, send their children to college for the first time in their families. I have seen amazing acts of kindness. People here have given back to their community through charities, relief work and time donated and all because they have strong stability through their time spent at Navajo Mine. These things are the impacts that are made on the people working at Navajo Mine. However these type of impacts don't stop there. It is perpetuated through the community. Real estate, doctors, dentists, local shops, restaurants, the list goes on all benefited from this mine. The goal is economic growth and Navajo Mine plays a key role in Fortington for people to achieve financial stability and to aid local. It is important to me to have the opportunity to make these kinds of impacts on Navajo Mine, Fortington, NM, the state of New Mexico, and lastly the United States of America.

227.001

1. NAME: Jennifer Ward
2. ORGANIZATION (if applicable): _____
3. EMAIL ADDRESS/PHONE NUMBER: _____
4. MAILING ADDRESS: _____

Do you wish to withhold your name or address from public review or from disclosure under the Freedom of Information Act (FOIA)? NO YES

Please give this completed form to one of the project team representatives or mail by May 27, 2014, to:
Mr. Marcelo Calle
Office of Surface Mining Reclamation & Enforcement, Western Region Office
1999 Broadway, Suite 3326
Denver, CO 80202-3050
Comments may be emailed to FCPPNavajoEnergyEIS@osmre.gov.

Comment Letter 227.....Ward, J.

Response 227.001

Thank you for your comment. A complete discussion of Socioeconomics is provided in Section 4.10 of the Draft EIS.



COMMENT #228

**Office of Surface Mining Reclamation and Enforcement
Four Corners Power Plant and Navajo Mine Energy Project
Environmental Impact Statement (EIS)**

Draft EIS Public Meeting Comment Form

Comments must be postmarked by **May 27, 2014**, for consideration in the Final EIS. Comments may be submitted at the open house public meetings (being held April 30 through May 9, 2014), via email to FCPPNavajoEnergyEIS@osmre.gov or by postal mail, hand delivery or courier to the address below.

MEETING LOCATION: _____ DATE: May 08, 2014

Please Print

I've been employed by BHP Billiton for 28 years. I worked at the San Juan and Navajo Mine. BHP is the best employer in the San Juan County. BHP is very important to the community as the company and the employees contribute to ST United Way and the Always United Way in thousands of dollars. BHP sponsors all types of events throughout the San Juan County and the Navajo Nation for many years. BHP supports education of the Navajo people in the scholarship program for our children at our local Chapter House. BHP provides coal face of checks for heating for all local communities during the winter months. Emp. from BHP provide volunteer services going back to the community in ways of coaching programs through Youth Centers, Community Trash Cleanups, San Juan and Navajo Nation Fairs and many other programs.

228.001

Without BHP the economy of the San Juan County and the Navajo Nation will suffer in many ways. New Mexico needs a company like BHP Billiton.

1. NAME: George Kelly
2. ORGANIZATION (if applicable): World Management Navajo Mine
3. EMAIL ADDRESS/PHONE NUMBER: [REDACTED]
4. MAILING ADDRESS: _____

Do you wish to withhold your name or address from public review or from disclosure under the Freedom of Information Act (FOIA)? NO YES

Please give this completed form to one of the project team representatives or mail by **May 27, 2014**, to:
Mr. Marcelo Calle
Office of Surface Mining Reclamation & Enforcement, Western Region Office
1999 Broadway, Suite 3320
Denver, CO 80202-3050
Comments may be emailed to FCPPNavajoEnergyEIS@osmre.gov.

Comment Letter 228..... Kelly, G.

Response 228.001

Thank you for your comment. A complete discussion of Socioeconomics is provided in Section 4.10 of the Draft EIS.

COMMENT #229

5/25/14

DEAR MR. COLLE -

IT'S DISTURBING TO THINK THAT THE DIRTY PLANTS IN OUR REGION WILL BE PERMITTED UNTIL 2041?

229.001

- PLEASE DENY PERMITS FOR COAL ACTIVITY - PLANTS, MINING, LEASES EXTENSIONS.
- IF YOU MUST PUT A SHORT PERIOD SAY 5 YEARS - TO LET DIPLOMATS KNOW THAT COAL HAS GOT TO BE REDUCED!
- WHY CAN'T WE USE ALL THE GAS THAT IS IN OUR REGION FOR POWER?
- FOR AIR QUALITY, ENVIRONMENT, PUBLIC HEALTH - PLEASE DENY PERMITS.
- NO NEW COAL AREA (MINING) - SHORTER LEASE EXTENSION - THIS WILL BE THE BEST SOLUTION.

229.002

T. Hoffmann

Brian Hoffmann

Comment Letter 229.....Hoffman, B.

Response 229.001

Thank you for your comment. Please see Master Response #3, Alternatives with Shorter Lease Term.

Response 229.002

Please see Master Response #2, Alternatives.

5/30/2014

DEPARTMENT OF THE INTERIOR Mail - Comments

COMMENT #230

FCPP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>



Comments

1 message

Harrison Billy

Fri, May 30, 2014 at 1:00 PM

To: FCPPNavajoEnergyEIS@osmre.gov

I have attended at least 8 of these types of hearings in the US, Mexico and Canada and I was directly involved in two of the hearings. I really like the way this hearing was structured with an open forum where the public can walk around the exhibits and ask questions as opposed to the hearings where the public is allowed to comment. Some people commandeer the microphone and take more than their allotted time, which just takes longer than necessary.

Since I came to the party a little late I just want to comment that my department (Navajo Nation Surface Mining Program) was glad to help and I think having Reclamation Specialists from our group to help was also an excellent idea.

Comment Letter 230..... Harrison, B.

Response

Thank you for your comment.

<https://mail.google.com/mail/?ui=2&ik=6ac25e16cb8view=pt&search=inbox&th=1464e81ddd044b68siml=1464e81ddd044b6>

1/1

COMMENT #231



Office of Surface Mining Reclamation and Enforcement
Four Corners Power Plant and Navajo Mine Energy Project
Environmental Impact Statement (EIS)

Draft EIS Public Meeting Comment Form

Comments must be postmarked by May 27, 2014, for consideration in the Final EIS. Comments may be submitted at the open house public meetings (being held April 30 through May 9, 2014), via email to FCPPNavajoEnergyEIS@osmre.gov or by postal mail, hand delivery or courier to the address below.

MEETING LOCATION: DURANGO, CO DATE: MAY 3, 2014
Please Print

WHILE I CAN APPRECIATE THE CREATIVE PLANS OF SCIENTISTS & ENGINEERS TO PROVIDE POWER TO OUR COUNTRY I FIRST CONSIDER PRESENT RESULTS OF OUR POWER GENERATION AND THE BUSINESS MODELS OUR COUNTRY LIVES BY, THAT IS, PROFIT FIRST. THE LIVES OF COMMUNITIES ESPECIALLY NEARER TO THESE OPERATIONS HAVE BORNE THE BRUNT OF HEALTH RISKS. WE ALL REAR HEALTH RISKS OF THESE ACTIVITIES. IT IS TIME FOR THESE CREATIVE SCIENTISTS AND ENGINEERS TO SERVE OUR COUNTRY BY INVENTION AND PRODUCTION OF ALTERNATIVE SOURCES OF CLEAN ENERGY. I URGE ACCEPTANCE OF ALTERNATIVE E² NO ACTION ALTERNATIVE. THE DECOMMISSIONING OF THE FOUR CORNERS POWER PLANT IMMEDIATE ATTENTION TO ALTERNATIVE POWER PRODUCTION IS LONG OVERDUE.

229.001

1. NAME: STEPHANIE JOHNSON
2. ORGANIZATION (if applicable): _____
3. EMAIL ADDRESS/PHONE NUMBER: _____
4. MAILING ADDRESS: _____

Do you wish to withhold your name or address from public review or from disclosure under the Freedom of Information Act (FOIA)? NO YES

Please give this completed form to one of the project team representatives or mail by May 27, 2014, to:

Mr. Marcelo Calle
Office of Surface Mining Reclamation & Enforcement, Western Region Office
1999 Broadway, Suite 3320
Denver, CO 80202-3050

Comments may be emailed to FCPPNavajoEnergyEIS@osmre.gov.

Comment Letter 231..... Johnson, S.

Response 231.001

Please see Master Response #2, Renewable Energy Alternatives.

COMMENT 232

My name is Shawn Benally and I am a member of Navajo Nation. I would like to start by saying that I support the Four Corners Power Plant and the Navajo Mine Energy Project. I am currently an employee at the Four Corners Power Plant. I have been employed at the Plant for the past 15 years. The Plant has provided me with an opportunity to return home to the Navajo Reservation after I received my bachelors of science in biochemistry and biology from the University of New Mexico. It is my belief that other Navajo employees that are currently employed at both the Plant and Navajo Mine appreciate the fact that both these enterprises provide a good-paying job with benefits close to home and family.

I have been able to develop my professional career over the last 15 years in a way that I became an expert on environmental air regulations as it relates to our facility and then only to move onto learning the standard work management processes for our industry. Today, I am continuing to learn more and more about this industry and for that, I am grateful. There obviously have been many others who have had this same opportunity throughout the life of this Plant. For one, I am proud to say that the Plant I work at has successfully created a reliable Navajo-produced product over the last 50 years. Not many companies on the Navajo Reservation can make that claim.

In addition to the personal impact that working at the Plant has had on me, these two enterprises also have a great positive economic impact to the local community. For example, the taxes and royalties paid by these two operations is a significant portion of the Navajo Nation's Gross Nation Product. In addition, the employees who work at these two operations are compassionate people and they contribute to the local organizations such as the Navajo United Way and San Juan United Way. These are only two examples of how these two operations contribute to the community. This economic impact just would not be possible with these two operations not being in existence.

Finally, Four Corners has worked to voluntarily reduce particulate and SO₂ emissions since the early 1970s. Voluntary Mercury and NO_x emissions soon followed in the 1980s and 90s. Four Corners' proposal to comply with the BART regulations by shutting down Unit 1, 2 and 3 and installing SCRs on Units 4 and 5 will finally address the significant NO_x emissions from Four Corners. The large NO_x emissions have been a difficult issue to address all these years until now. BART regulations will finally allow Four Corners to become cleaner coal plant. This final effort to reduce emissions to comply with stricter environmental regulations should most definitely provide the justification for Four Corners to continue operations beyond 2016.

232.01

232.02

*Collected at Nenahuezaad Meeting on
May 7, 2014*

Comment Letter 232.....Benally, S.

Response 232.001

Thank you for your comment.

Response 232.002

Thank you for your comment. The Federal Implementation Plan for FCPP is a separate action conducted by the EPA and is incorporated as part of the baseline environmental setting in the Draft EIS. OSMRE is considering all of the alternatives that were analyzed in the Draft EIS and will inform the public of its decision via the Record of Decision, anticipated in the spring of 2015.

COMMENT 233

Edward Michael

May 9, 2014
Mr. Marcelo Calle
Office of Surface Mining Reclamation and Enforcement
Western Regional Office
1999 Broadway, Ste. 3320
Denver, Colorado 80202-3050

Dear Mr. Calle:

This correspondence is submitted in support of the proposal to extend the term of the operation of the Four Corners Power Plant and the Navajo Mine by 25 years upon the end of the current agreements in 2016. As a primarily rural state, New Mexico is characterized by issues such as lack of industry, high unemployment rates, low median family incomes, a lack of jobs that provide a living wage, and the social and public health concerns that accompany chronic poverty.

The power plant and mine are major economic contributors for the northern New Mexico region, with an annual payroll exceeding \$800 million dollars. BHP Billiton, operator of the Navajo Mine, spends \$130 million annually on suppliers and vendors and \$1.6 million in community donations. The loss of these operations would be devastating to this community, both at the family, local, and state level. Negative fiscal impacts include the inability of employees to provide family support and greatly reduced personal, corporate, and gross receipts taxes, as well as severance, conservation, and resource excise taxes.

As a lifelong resident of nearby Cibola County and the chairman of the Board of County Commissioners for the last six years, I have seen first-hand the profound negative economic community impact of the closure of mining operations. During the uranium boom, Cibola County was a thriving prosperous community. In the approximate 30 years since uranium operations ceased, Cibola County has experienced a dramatic economic decline from which the community has yet to recover.

233.01

In New Mexico, I doubt that any community that could withstand the loss of 1,000 jobs and the direct, indirect, and induced economic benefits contributable to the operations of the Four Corners Power Plant and the Navajo Mine. I encourage the extension of operations for the economic health and wellbeing of northern New Mexico families and businesses, as well as the State of New Mexico.

Sincerely,


Edward Michael
Chairman, Board of County Commissioners

Comment Letter 233..... Michael, E.

Response 233.001

Thank you for your comment. A complete discussion of socioeconomics is provided in Section 4.10 of the Draft EIS. OSMRE is considering all of the alternatives that were analyzed in the Draft EIS and will inform the public of its decision via the Record of Decision, anticipated in the spring of 2015.

COMMENT #234

Edward Epp
[REDACTED]

June 2, 2014

Mr. Marcelo Calle
Office of Surface Mining Reclamation and Enforcement
Western Region Office
1999 Broadway – Suite 3320
Denver, CO 80202-3050

Re: Comment on Draft FCPP-NEP Draft Environmental Impact Statement

Thank you for the opportunity to comment on the Four Corners Power Plant – Navajo Energy Project Environmental Impact Statement. I am an employee of BHP Billiton - New Mexico Coal Company (NMC), but I write these comments as a private and concerned citizen of my community. My views do not represent those of the company.

Stewardship of the Land:

I am a coal miner. I am also an environmentalist. I work in the coal industry because I believe that if I want to make the largest difference possible toward a sustainable future, then I should apply my talents and abilities within an industry which, if managed poorly, can be very environmentally destructive, but which if managed properly, can limit its environmental impact. I believe that if I apply my talents to improving the environmental performance of NMC, and can communicate leading environmental practices to others in the industry, then by working within the industry, I can be far more productive as an environmental steward than without.

My work experience is in reclamation of mined lands. I cringe when I see the Frankenstein mountaintops of West Virginia, because I know that there is a better way of returning the land to a productive, erosionally stable, and aesthetically appealing final product than in the past. A mining engineer, focused only on streamlining the removal of ore from the ground, and with little experience in reclamation, might believe that one has to sacrifice profitability to improve reclamation. He or she might therefore reject change in practice. I know better. A coal mine operation, with sufficient advance planning, and effective and efficient execution, can improve its reclamation outcomes without unduly increasing costs.

New Mexico Coal's La Plata Mine, just 20 miles from Farmington, is an example of reclamation done well. Rather than reclaiming the land into box shaped piles of spoil, NMC replicated a landscape that would have been carved by natural stream channels. This reclamation reduces sediment runoff to waterways, and requires little to no long term maintenance, because it is erosionally stable over geologic time.

The Geo-Fluvial form of 'geomorphic' reclamation is an industry leading practice. On a recent visit, mined land reclamation specialists from Spain and Colombia called the La Plata mine "the best reclaimed mine in the world." During every tour I have ever given of La Plata Mine, I have heard a variation of the statement, "You wouldn't know anyone had ever mined here." Because NMC has adopted the same reclamation practices from La Plata Mine at its Navajo and San Juan Mines, there is no reason to believe that visitors won't be making similar comments when the Navajo and San Juan Mines have long since closed.

234.001

Comment Letter 234..... BHP Billiton

Response 234.001

The Draft EIS notes the benefits of geomorphic restoration techniques, and the timing of their implementation at the Navajo Mine.

COMMENT #234

Generations from now, the land on which NMC mined and reclaimed will remain erosionally stable. In addition, the majority of the land that NMC reclaims has vegetation cover and diversity values that, at least meet, if not exceed, the values of the land in pre-mined condition. (This statement can be verified by reviewing bond release application packages from NMC operations.) By utilizing proper rangeland management practices, the land will sustainably support livestock use. The U.S. Bureau of Land Management has already declared that many of the areas under its ownership, which NMC leased for coal mining, will be set aside as special wildlife management areas, upon bond release, because of the exceptional grazing habitat created by the reclamation.

NMC actively communicates its leading reclamation practices to the mining industry for adoption. It encourages active and productive relationships between industry and mining regulatory agencies. I am proud to be a part of this company and could not, in good conscience, be a part of NMC if the culture of success and stewardship of the land was not so deeply ingrained in the company.

Response to Climate Change:

As a geologist and scientist, I have no doubt that climate change is real. The evidence from ice cores and ocean and lake sediments don't lie. There is little scientific doubt that humankind is warming the planet, faster than it would be warming naturally in this interglacial period, due to the release of greenhouse gases stored in fossil fuels. There is also no doubt that coal is a major source of the nation's carbon dioxide emissions.

Yet coal, in economic terms, is the cheapest, large scale, domestic, and dependable, base load source of electricity in the U.S. It also supports hundreds of thousands of jobs in the U.S. In the debate over climate change, one has to weigh social justice with environmental stewardship. (The environmental movement often argues that it has the corner on the social justice market. It doesn't.)

For instance, I had a conversation with an official at the Nenahnezad Chapter (of the Navajo Nation) office in Fruitland, NM last year. During our talk he said to me, "I had a protester in my office telling me about the injustice of the coal companies on the Navajo people, and how the power plants are degrading their health and keeping them in poverty, to which I replied, and what would happen to the Navajo people you shut the plants down?"

If the mines and power plants were shut down, over a thousand Navajo, earning steady salaries, with health care and retirement benefits, would go unemployed. The follow-on effects to the rest of the community and the region would be profound.

In a second example, an article in the Tri-City Tribune on March 30th 2012 covered the Environmental Protection Agency's (EPA's) proposed action for the installation of pollution control equipment at the San Juan Generating Station. The EPA reportedly was going to require a \$750 million dollar retrofit of the plant that would have no visually perceptible benefit over a State of New Mexico Environment Department plan that would also meet Clean Air Act requirements, at a third of the cost. The cost of the EPA plan would be approximately \$80 per year, on average, to 2 million customers. \$80 spread over a year might not sound like a lot but it might make a difference to a struggling family between paying the electricity bill and putting food on the table.

A third example of social injustice is the Sierra Club's 'Beyond Coal' campaign. The goal of the campaign is to end all coal fired power generation by 2030. The Sierra Club employs thousands of lawyers and spends over \$300 million dollars each year in litigation, as part of this

234.001

234.002

Response 234.002

Thank you for your comment. Climate Change is addressed in Section 4.2 of the Draft EIS, as well as in Section 4.18, Cumulative Impacts. Socioeconomics is addressed in Section 4.10 of the Draft EIS.

COMMENT #234

campaign. The litigation forces coal mining and power companies to expend enormous amounts of money on legal defense, thereby driving up the cost of coal fired power generation so that it is on par with more expensive renewables. So I have to ask... what does the Sierra Club tell a family that has to make a decision between paying a more expensive electricity bill and purchasing new clothes for their kids before school starts, as a result, "To make an omelet you have to break some eggs!"?

Yes coal is old technology, and barring carbon capture, coal emits greater amounts of carbon dioxide than natural gas, solar, and wind generated electricity. But if getting rid of coal must be part of the solution to climate change, is society willing to pay the price that an accelerated coal industry shut down would cost? Are tens of thousands of miners to be put out of work so quickly, and the hundreds of thousands of others who depend on the mines and power plants for their livelihoods to be forced to retrain and find something else on short notice? I grew up in northeast Ohio. I saw what happened in Youngstown when 10,000 steel jobs were lost *literally* overnight in the 1980s. That community has never recovered.

My suggested solution to transforming society to the environmental outcomes a response to climate change demands would be to take a more moderate approach. The key to this would be to let the plants die a natural death. They have a finite lifespan. If coal must be replaced, let it be a generational shift. The Four Corners Power Plant recently shut down three of its furnaces built in the 1980s and plans to upgrade its two remaining units to have lower emissions. Those units will come to the end of their design lifespan in the 2040s. Declaring 2041 (the end of the lease extension being proposed in the FCPP-NEP EIS) as a hard closure date now would give the Navajo Nation and San Juan County approximately 25 years to figure out what options it has to replace those jobs with new economic opportunities. It will give the community that depends on the mines and power plant time to retrain, retool, and give a new generation a new set of economic expectations by the time of the power plant's closure.

Continued operation of the FCPP and Navajo Mine will preserve jobs and the economy in the region for decades. The required reductions to the FCPP's emissions will improve air quality. The environmental benefit of geomorphic reclamation by NMC is proven and will last indefinitely. I advocate for approval of the Proposed Actions being considered for the long term operation of the FCPP and Navajo Mine.

Sincerely,

Edward Epp

234.003

234.004
234.005
234.006
234.007

Response 234.003

Thank you for your comment. OSMRE is considering all of the alternatives that were analyzed in the Draft EIS and will inform the public of its decision via the Record of Decision, anticipated in the spring of 2015.

Response 234.004

Thank you for your comment. A complete discussion of Socioeconomics is provided in Section 4.10 of the Draft EIS.

Response 234.005

Thank you for your comment. A description of the change in air emissions as a result of the Federal Implementation Plan is provided in Section 4.1.3 of the Draft EIS.

Response 234.006

Thank you for your comment. A description of reclamation activities at the Navajo Mine is provided in Section 3.2.1.1 of the Draft EIS.

Response 234.007

Thank you for your comment. OSMRE is considering all of the alternatives that were analyzed in the Draft EIS and will inform the public of its decision via the Record of Decision, anticipated in the spring of 2015.

COMMENT #234

In addition to the above comments, I want to mention some minor technical details that I thought should be addressed in the Draft EIS document:

- Appendix D, Pages D-2 and D-3, Photos 3.4.5, 6., the author categorizes the plume emitted from the FCPP as 'smoke'. Smoke is made up of particulate matter as a result of combustion. FCPP is equipped with baghouses that capture most of the particulate matter from coal combustion, but releases an enormous amount of steam. It would be more accurate to categorize the visible white plume as 'steam'.

234.008

- Page 4.3-4, in the final paragraph on the page, the author writes that [the Grants Mineral Belt] *is home to numerous minerals*. A more appropriate phrasing would be to write 'This belt hosts numerous mineral deposits.'

In addition the author writes: 'A large reserve of uranium exists within the Grants Mineral Belt.' The use of the term 'reserve' in this case is inaccurate, because a mineral or ore 'reserve' is defined as: *valuable and legally and economically and technically feasible to extract*. Later in the paragraph the author writes that 'However, uranium is no longer extracted in New Mexico because it has been deemed uneconomical.' Though an increase in price, or shift in public perception or government policy on mining, might allow the uranium to be economically extracted, at this time it would be more appropriate to report that '*deposits*' or '*occurrences*' of uranium exist within the Grants Mineral Belt'.

234.009

- Page 4.3-12, In paragraph 1 on this page, a sentence reads 'The primary fossil yields from this formation include some of the earliest mammal and plant fossils found.' This isn't true. The Nacimiento Formation dates from the Paleocene Epoch. The first mammals evolved in the Triassic Period and vascular plants have existed since the Silurian Period. Both of these geologic periods occurred hundreds of millions of years prior to the Paleocene. The author may have intended the sentence to read something like, "...earliest mammal and plant fossils found (in the ROI), (in the post-Cretaceous), or (in the Paleocene)..."

Response 234.008

The term "smoke" is used in a generic sense to indicate the visible emissions from the smokestacks of the power plant. The comment is correct that the emissions from the power plant is primarily steam. However, in the context of the referenced appendix, the term "smoke" is appropriate because the specific constituents of the emissions are not being analyzed. See section 4.1 for an analysis of the air emissions from the power plant.

Response 234.009

Thank you for your comments. These revisions have been made to the Final EIS.

COMMENT #235

FROM THE FRONTLINES

Mrs. Marcela Calle
Office of Surface Mining Reclamation & Enforcement
Western Region Office
1999 Broadway, Suite 3320
Denver, Colorado 80202-3050

Dear Sirs

I do not want the Four Corners Power Plant
and Navajo mine energy project reauthorized.
We have so much pollution from those power plants
we cannot even see over mtns, sometimes it is
so bad, we are told our fish in this area of CO
are not safe to eat from pollution of our waters
in rivers & lakes. I personally am afraid
to be on oxygen from the many years we have
been polluted by soot & elements from coal
burning power plants in W. Va. & Ky. blowing here.

235.001

Please do not renew their project to slowly kill
all our citizens from coal burning pollution. We no
longer have frogs, snakes, lizards, turtles, water dogs, as
we used to have in our yards and area generally.

Mrs. Marcela M. Binkerhoff, [Redacted]

P.S. I thought
Indians were
supposed to care what they did to Mother Earth.

Comment Letter 235.....Binkerhoff, F.

Response 235.001

Thank you for your comment. OSMRE is considering all of the alternatives that were analyzed in the Draft EIS and will inform the public of its decision via the Record of Decision, anticipated in the spring of 2015. With regard to mercury, please see Master Response #4, Mercury in Fish in Nearby Lakes. In addition, Section 4.17 of the Draft EIS addresses potential impacts with regard to Health and Safety, including worker safety. Pages 4.17-22 through 4.17-24 summarize the human health risk assessment conducted for the project.

COMMENT #236

June 2nd 2014

Marcelo,

Thankyou for the opportunity to submit a comment regarding the Four Corners Power Plant and Navajo Mine Energy project. It is time to start the process of closing these operations. Instead, please convince the parties involved to invest in cleaner, renewable energy projects. The pollution from the coal fired power plants is too much of a price to pay. the time to stop is now.

236.001

Thank you, Sincerely

Randy Willis



Comment Letter 236.....Willis, R.

Response 236.001

Please see Master Response #2, Renewable Energy Alternatives.

6/12/2014

DEPARTMENT OF THE INTERIOR Mail - Four Corners Power Plant/Navajo Energy EIS

COMMENT #237



FCPP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>

Four Corners Power Plant/Navajo Energy EIS

1 message

Marilyn T. Brown [REDACTED]
To: fcppnavajoenergyeis@osmre.gov

Tue, Jun 3, 2014 at 3:12 PM



June 3, 2014

Marcelo Calle
OSM Western Region
1999 Broadway, Suite 3320
Denver, Colorado 80202-3050
fcppnavajoenergyeis@osmre.gov

Re: Four Corners Power Plant-Navajo Mine EIS Comments

The League of Women Voters of La Plata County (LWWLPC) in southwest Colorado applauds the U.S. Department of Interior's Office of Surface Mining (OSM) Reclamation and Enforcement for preparing an environmental impact statement (EIS) looking at the combined effects of the Four Corners Power Plant (FCPP) and the Navajo Mine. The OSM should also be commended for recognizing the regional environmental impact of the coal-fired power plant and mine operations on the entire Four Corners region and for hosting the four open house public meetings in New Mexico and Colorado.

The Environmental Protection Agency's (EPA) Federal Implementation Plan for the FCPP was supported by the LWWLPC as a first step in preserving the physical, chemical and biological integrity of our ecosystems and in protecting public health. However, we remain concerned that while closure of the oldest three units and planned improvements to the remaining two units would reduce coal consumption and air emissions, the proposed project would prolong the life of the still coal-fired power plant and delay transition to cleaner-energy technologies for an additional 25 years. We would prefer that capital planned for this project be redirected to energy conservation/efficiency and sourcing from renewables.

↓ 237.001

<https://mail.google.com/mail/#3494u0?ui=2&ik=6ac25e16cb&view=pt&search=info&th=1466393471dcb03&siml=1466393471dcb03>

1/3

Comment Letter 237..... League of Women Voters of La Plata

Response 237.001

Thank you for your comment. OSMRE is considering all of the alternatives that were analyzed in the Draft EIS and will inform the public of its decision via the Record of Decision, anticipated in the spring of 2015. With regard to renewable energy, please see Master Response #2.

6/12/2014

COMMENT 237
DEPARTMENT OF THE INTERIOR Mail - Four Corners Power Plant/Navajo EnergyEIS

We urge the OSM to consider the following specific impacts from the FCPP and Navajo Mine:

- **Climate Change.** Carbon dioxide, copiously emitted from the FCPP and all other coal-fired power plants, is now recognized as the most significant human-generated contribution to global warming. We encourage the OSM to weigh heavily the fact that approval of the mine expansion will stall for a significant period of time the transition to an alternative fuel (either natural gas or, better yet, renewable power sources)
- **Air Quality.**
 - o To date the FCPP has been producing the highest nitrogen oxide (NOx) emissions of any power plant in the country. NOx emissions are a key component of smog.
 - o Drier conditions are predicted for the Desert Southwest, which will accelerate dust storms carrying particulate matter and other pollutants long distances. Findings released from a mercury-monitoring project indicated a significant amount of mercury, a pollutant from burning coal, amiving under dry conditions in southwest Colorado, which impacts aquatic life and eventually human health.
 - o If approved, the proposed Pinabete Permit would expand the surface mining area up to 5,600 acres, which would increase the disturbed area allowing for transport of more particulates and pollutants.
- **Water Quality.** The FCPP and Navajo Mine use large amounts of water. As drier conditions prevail in the Desert Southwest, utilization, as well as protection of the quality, of that scarce resource must be criteria in energy decisions. Surface mining disturbs the soil allowing pollutants to enter the environment by wind as well as runoff, potentially polluting surface and ground water sources.
- **Endangered Species.** Increased oil and gas development, overgrazing, prolonged drought, and coal-fired power plant pollution have created a continual deterioration of the air and water quality with resultant impact on soil and vegetation in the Four Corners region. Mercury is in the local food chain as evidenced by the number of fish consumption advisories in the area. La Plata County, Colorado is home to five federally endangered or threatened species including the Mexican Spotted Owl, Southwestern Willow Flycatcher, and lynx (wildlife.state.co.us). Many more are listed as State endangered and threatened. Changes in vegetation, pollutants, and climate change in general, impact wildlife habitat and food supplies further threatening the populations of species struggling to survive.
- **Public Health.** The health effects of pollutants from the FCPP have been highly publicized. Forty-four premature deaths, 800 asthma attacks, 2 asthma-related emergency-room visits with an estimated cost of more than \$34.1 million are attributed to its air pollution (www.catf.us/coal/problems/power_plants/existing/map.php?state=New_Mexico). Health impacts to miners at the Navajo Mine create an additional cost by reduced life expectancy, congestive heart failure, black lung disease, and asthma attacks. While the Navajo Mine is a surface mine, we were recently reminded of

<https://mail.google.com/mail/attach/3494/0/?ui=2&ik=6ac25e16c3&view=pt&search=info&th=1466393471dcb033siml=1466393471dcb033>

23

Response 237.002

Thank you for your comment. OSMRE is considering all of the alternatives that were analyzed in the Draft EIS and will inform the public of its decision via the Record of Decision, anticipated in the spring of 2015. With regard to consideration of environmental impacts, Master Response #4, Mercury Deposition and Fish in Nearby Lakes.

Response 237.003

Thank you for your comment. Water resources, including water supply and runoff, are evaluated in Section 4.5 of the Draft EIS.

Response 237.004

Thank you for your comment. Regarding mercury, please see Master Response #4, Mercury in Fish in Nearby Lakes. Threatened and endangered species are addressed in Section 4.8 of the Draft EIS.

Response 237.005

Thank you for your comment. Health and safety, including worker safety, is addressed in Section 4.17 of the Draft EIS. The human health risk assessment conducted for the project is summarized on pages 4.17-22 through 4.17-24.

6/12/2014

DEPARTMENT OF THE INTERIOR Mail - Four Corners Power Plant/Navajo EnergyEIS

COMMENT 237

the dangers miners face, especially in deep mines, as they work to supply coal to coal-fired power plants across the nation and the world.

↑
237.005

- **Environmental Justice.** The Four Corners region, which is impacted by the FCPP and the Navajo Mine, is primarily rural with small towns and has a large Native American population on four tribal lands. Many residents of the Navajo Nation do not have electric power even as they live under or near the transmission lines from the FCPP. We ask that you address your responsibilities under Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, and Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks, to protect the affected population in the region.

237.006

The Navajo Nation is rich in natural resources, including its people, the wind and the sun. Investing in a clean-energy future would create new jobs for those displaced by the reduction in the use of coal. The LWWLPC encourages the OSM to consider all environmental, health, and socioeconomic impacts and to choose environmentally preferable alternatives to the proposed actions for the FCPP and Navajo Mine. Now is the time to move toward a cleaner energy future that benefits the Navajo Nation, the Four Corners region, and the nation. We must begin to get used to the idea of leaving our more problematic sources of energy in the ground where they belong.

237.007

Trish Pegram, Spokesperson
League of Women Voters of La Plata County
[REDACTED]

Manlyn Brown, Secretary
League of Women Voters of La Plata County
[REDACTED]

 [FCPP_Navajo_Mine_Letter_to_OSM_2014.pdf](#)
105K

Response 237.006

Environmental justice is addressed in Section 4.11 of the Draft EIS.

Response 237.007

Thank you for your comment. OSMRE is considering all of the alternatives that were analyzed in the Draft EIS and will inform the public of its decision via the Record of Decision, anticipated in the spring of 2015.

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6/12/2014

DEPARTMENT OF THE INTERIOR Mail - Comment / Draft EIS Four Corners Power Plant

COMMENT # 238



FCPP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>

Comment / Draft EIS Four Corners Power Plant

1 message

randy willis <[REDACTED]> Tue, Jun 3, 2014 at 10:20 AM
To: "fcpnavajoenergyeis@osmre.gov" <fcpnavajoenergyeis@osmre.gov>

Unless Humanity does not care about a life worth having, true limits on carbon pollution is inevitable and should begin NOW. The White House and the EPA have finally acknowledged the science that carbon emissions are a pollutant. Currently, there are NO limits on the amount of carbon pollution that power plants can spew into the atmosphere, driving climate change. So asking states to come up with plans to lower that pollution is a good thing. The simple truth is that the costs of inaction to our health, property and safety are far, far, far greater than any modest cost of this modest rule. The economy will actually benefit from the rules as the real tangible health benefits vastly outweigh the rather modest costs to utilities. Finally steering our way toward controlling carbon based air pollution will drive the economy up as we embrace and promote new technologies for renewable energy sources. Not to mention, if the United States takes charge in this fashion then we will be able to hold our heads up high as the leaders of a new global energy paradigm shift. These rules being proposed by the EPA are so modest in their scope that they are smaller than the emissions reductions that will be achieved by the car and truck fuel efficiency rules already in effect. The numbers behind the reductions sound big – 25% less carbon pollution from electricity generation by 2020 than the base year of 2005. But 2005 was a long time ago, when the economy and pollution levels were bigger. Almost two-thirds of that 25% reduction had already been achieved by 2012, with the EPA doing absolutely nothing on carbon pollution!⁵ The EPA expects to take input and work on the proposal for at least another year, and then, if released, states have two years to propose plans. So if everything goes perfectly – and it will not – that leaves only three years for the rule to have an effect by 2020. Thus, the trick is to bake in all the progress already made from every coal plant already shut down by activism, switched to natural gas, replaced by solar, wind, or reduced demand from energy efficiency. Most of the 25% reduction has nothing to do with what the EPA is proposing. The reduction is still good but, let's not get ahead of ourselves. If we're going to avoid the oncoming global warming apocalypse, we have much more to do.

Thanks for the opportunity to comment!
Randy Willis

<https://mail.google.com/mail/b/049/u/0/?ui=2&ik=6ac25a16cb&view=pt&search=inbox&th=149628719baa157d&siml=149628719baa157d>

1/1

Comment Letter 238..... Willis, R.

Response

Thank you for your comment.

6/12/2014

DEPARTMENT OF THE INTERIOR Mail - Four Corners Power Plant and Navajo Mine Energy Project

COMMENT # 239



FCCP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>

Four Corners Power Plant and Navajo Mine Energy Project

1 message

Susan Elaine Bylina Hutzler [REDACTED] Wed, Jun 4, 2014 at 12:59 PM
To: "FCCPNavajoEnergyEIS@osmre.gov" <fcppnavajoenergyeis@osmre.gov>

Gentlepeople:

I am new to Four Corners area. Purchased a home in Mancos CO in 2009. I am a grandma. I have never experienced such pollution in all my years of life. Please place your energy in Solar.

I am totally against leasing this 1960's type of pollution any longer. I am totally against a renewal permit from Arizona Public Service Co. through 2041. Please develop (5,600 acres) solar panels rather than develop new coal mining area known as the Pinabete Mine Permit area.

Please only renew the Navajo Transitional Energy Co. for the Navajo Coal Mine located on the Navajo Reservation in San Juan County, N.M. with the provision to shut it down and use a safer method.

Sincerely,
Susan Hutzler
[REDACTED]

239.001

Comment Letter 239..... Hutzler, S.

Response 239.001

Please see Master Response #2, Renewable Energy Alternatives.

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1/1

COMMENT 240

To: Mr Marcelo Calle
1999 Broadway, Suite3320
Denver, CO 80202-3050

6, June, 2014

Osborne Gallegos

Dear Mr. Calle and Surface Mining Reclamation and Enforcement and Personnel,

It is with pleasure that I take the opportunity to appeal on the healthful behalf of Four Corners Residents regarding the impact of the Four Corners APS power plant.

Living in Hesperus there is not a day goes by that I can't see the impact of both the APS and the PNM plants in the Kirtland area. As reliable as the energy the plant creates are its waste emissions that disperse daily and contaminate the food and water supply of the four states, even here in the mountains, at the headwaters that we try to keep pristine for the favor of all downstream. It is no longer recommended that the fish be eaten from our streams, rivers, and lakes because of the bioaccumulation of toxic sediment produced by the power plants. Whereas the clear days once prevailed, the days grow more rare that famous Shiprock can be viewed from here.

240.001

The haze created by the plant is particularly evident in the winter, when the demand for electricity is high, and the warm air inversions condense the airborne refuse in the atmospheric strata. It is easy to track the culprit of our children's dry throats and coughs straight to the stacks of the APS Four Corners plant. The region wide, compound health effects of such continued exposure cannot be measured with any sort of economic efficiency, and certainly not treated. Though it is certain that data exists showing disproportionately high levels of respiratory, and other illness down wind of the power plants.

240.002

240.003

The time is past nigh that we realize that coal fire technology is no longer affordable in light of cleaner and more renewable energy sources such as solar, geo thermal, and wind. Not to mention the scars the mining makes on the land, which cannot be fully restored in a human lifetime.

240.004

It is my request that you act with the most stringent environmental and regulatory standards available, and do all you can to incentivize, the transition for clean energy here in the Four Corners, and in the farthest reaches of your jurisdiction to the present and long-term benefit of any and all under the sun.

Thank you for your efforts,

Ryan West Osborne Gallegos

Comment Letter 240..... Osborne, R.

Response 240.001

Thank you for your comment. Water resources, including water supply and runoff, are evaluated in Section 4.5 of the Draft EIS. With regard to fish, please see Master Response #4, Mercury in Fish in Nearby Lakes.

Response 240.002

Thank you for your comment. For clarification, the FCPP operates at the same capacity year-round and provides baseload power. Operation of the facility does not fluctuate with demand. Section 4.1 of the Draft EIS addresses air quality and visibility.

Response 240.003

Section 4.17 of the Draft EIS addresses health and safety; specifically, pages 4.17-22 through 4/17-24 summarize the results of the human health risk assessment conducted for the project.

Response 240.004

Please see Master Response #2, Renewable Energy Alternatives.

6/12/2014

DEPARTMENT OF THE INTERIOR Mail - Fwd: Four Corners DEIS

COMMENT # 241



FCPP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>

Fwd: Four Corners DEIS

1 message

Calle, Marcelo <mcalle@osmre.gov> Tue, Jun 10, 2014 at 1:12 PM

To: OSM FCPP-Navajo-Energy-EIS <FCPPNavajoEnergyEIS@osmre.gov>

Comment on DEIS forwarded from MCALLE

----- Forwarded message -----

From: **Eric Miller** [REDACTED]
Date: Mon, Jun 2, 2014 at 9:16 AM
Subject: Four Corners DEIS
To: mcalle@osmre.gov

Hello,

Regarding the V continued operation of the Four Corners Power Plant, Navajo Mine and proposed Pinabete Permit area, and the potential environmental impacts evaluated in the DEIS.

I support option A

Eric Miller, Ph.D.

Professor of Chemistry

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

-
Marcelo Calle

EIS Coordinator, The Four Corners & Navajo Mine Energy Project

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1/2

Comment Letter 241 Miller, E.

Response

Thank you for your comment.

Jack Fortner
Chairman
Keith Johns
Chairman Pro Tem
Scott Eckstein
Member
Margaret McDaniel
Member
GloJean Todacheene
Member



Mr. Kim J. Carpenter
County Executive Officer



BOARD OF SAN JUAN COUNTY COMMISSIONERS
Resolution 13-14-48

A RESOLUTION SUPPORTING THE RENEWAL OF THE FOUR CORNER'S POWER PLANT'S LEASE WITH THE NAVAJO NATION AND A CONTINUING COAL SUPPLY TO THE POWER PLANT FROM NAVAJO MINE

WHEREAS, the Navajo Nation, Arizona Public Service Company (APS), Navajo Transitional Energy Company (NTEC), and BHP Billiton Mine Management Company are working together to seek approval from multiple federal and tribal agencies to renew the Four Corners Power Plant (FCPP) lease through 2041, to renew associated rights-of-way for the FCPP and transmission facilities, to reconfigure its operations to significantly reduce air emissions, and to expand mining operations to provide a reliable coal supply from Navajo Mine to FCPP (Collectively, these activities are referred to as the Four Corners Power Plant and Navajo Mine Energy Project); and

WHEREAS, the Office of Surface Mining Reclamation and Enforcement (OSM) on its own behalf and on behalf of other federal agencies is preparing an environmental impact statement (EIS) under the National Environmental Policy Act, and also is leading related environmental compliance efforts; and

WHEREAS, once fully implemented, environmental improvement projects to be installed at FCPP will result in the reduction of emissions above and beyond those realized by the recent closure of FCPP Units 1-3, including a 30% reduction in CO₂ emissions and a projected reduction in FCPP water use of almost two billion gallons per year; and

242.01

WHEREAS, The proposed project will have a significant annual direct impact on San Juan County, through the preservation of approximately 758 jobs, income generation from direct labor of approximately \$102 million dollars and Gross State Product for San Juan County in an approximate amount of \$288 million.

242.02

NOW, THEREFORE, BE IT RESOLVED by the Board of San Juan County Commissioners, that the Board affirms its support of the renewal of the Four Corners Power Plant (FCPP) lease, rights-of-way, and associated mining operations; and

242.03

BE IT FURTHER RESOLVED by the Board of San Juan County Commissioners that it finds and concludes that the Four Corners Power Plant and Navajo Mine Energy Project will have a significant economic and environmental benefit to San Juan County.

PASSED, APPROVED AND ADOPTED this 6th day of May, 2014

BOARD OF COUNTY COMMISSIONERS
OF SAN JUAN COUNTY, NEW MEXICO

BY: *Jack L. Fortner*
Jack L. Fortner, Chairman

Attest:

Debbie Holmes
Debbie Holmes, County Clerk

Building a Stronger Community

Comment Letter 242 Board of County Commissioners
of San Juan County, NM

Response 242.001

Thank you for your comment. For clarification, the Federal Implementation Plan is considered as part of the environmental baseline in this NEPA process. A discussion of the changes in historic baseline as a result of the Federal Implementation Plan is provided in each resource area discussion in Chapter 4 of the Draft EIS.

Response 242.002

Thank you for your comment. A complete discussion of socioeconomics is provided in Section 4.10 of the Draft EIS.

Response 242.003

Thank you for your comment. OSMRE is considering all of the alternatives that were analyzed in the Draft EIS and will inform the public of its decision via the Record of Decision, anticipated in the spring of 2015.

COMMENT 243



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

June 26, 2014

Marcelo Calle
Office of Surface Mining
Western Region
1999 Broadway, Suite 3320
Denver, Colorado 80202-5733

Harrilene Yazzi
Bureau of Indian Affairs
Navajo Regional Office
301 West Hill Street
P.O. Box 1060
Gallup, New Mexico 87305

Subject: EPA Comments on the Four Corners Power Plant and Navajo Mine Energy Project Draft Environmental Impact Statement, Navajo Nation, San Juan County, New Mexico (CEQ # 20140097)

Dear Mr. Calle:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced 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. Our detailed comments are enclosed.

The Draft Environmental Impact Statement (DEIS) assesses the impacts from the continued operation of the Four Corners Power Plant (FCPP), a coal-fired power plant with a generating capacity of up to 1,500 megawatts (2 units), should the Bureau of Indian Affairs (BIA) approve Arizona Public Service Company's proposed lease amendment and application for right-of-way renewals for operation through 2041. The project also involves continued and extended surface coal mining at the Navajo Mine, should the Office of Surface Mining (OSM) renew the Navajo Mine's existing Surface Mining Control and Reclamation Act (SMCRA) permit for 5 years and approve an application for a new SMCRA permit for the Pinabete Permit Area. Lastly, the project proposes right-of-way renewals by BIA for portions of four transmission lines.

EPA is a cooperating agency for the proposed project and provided comments on the Preliminary DEIS to the OSM and BIA on February 6, 2014. We found the DEIS to be largely responsive to our comments, and appreciate the changes made to the document to address them. Comments that were not fully addressed are reiterated in the attached Detailed Comments. Based on our review of the DEIS, we have rated the Preferred Alternative A as *Environmental Concerns – Insufficient Information* (EC-2) (see enclosed "Summary of Rating Definitions"). Our concerns regard the existing contamination of groundwater from coal combustion residue (CCR) disposal and the need for enforceable commitments regarding future CCR management, monitoring and remediation. We also have concerns regarding the

243.01

Comment Letter 243 USEPA, Region IX
Martyn-Goforth, K.

Response 243.001

Section 4.5 contains a detailed discussion of the existing environment for groundwater conditions, which accounts for prior placement of CCRs in the Navajo Mine as fill/reclamation materials and CCR disposal at the FCPP. In addition, the following language regarding future management of CCR disposal at the FCPP has been added to Section 4.5.4.1: In accordance with the Final Rule for Disposal of CCR at Electric Utilities, APS will continue groundwater monitoring at the ash disposal area at FCPP, on at least a semi-annual basis and data will be analyzed to detect potential leaching. If sample analysis determines the presence of leaching, APS will take implement appropriate corrective measures, as outlines in the Final Rule. Groundwater monitoring records will be kept in the FCPP operating records and posted on a public website, as specified in the Final Rule.

Section 4.15.1 provides also extensive discussion of the regulatory requirements for the management of CCR. Please see response to comment 243.009 for additional information on cumulative health effects.

COMMENT 243

assessment of cumulative health impacts from continued operation of the project, given the severely compromised existing public health environment.

↑ 243.01

Pollutants from the disposal of CCR have contaminated groundwater at the FCPP. The DEIS includes a number of voluntary measures to be taken by Arizona Public Service (APS) regarding operations, design, groundwater monitoring, corrective action, and closure and post-closure of CCR disposal facilities at the FCPP. Because future regulations by EPA regarding CCR management may not apply on Tribal lands, we strongly recommend that the voluntary measures be incorporated as conditions of approval by the BIA in the event it approves APS's proposed lease amendment and application for right-of-way renewals. Groundwater contamination from past disposal of CCR in Navajo Mine has also occurred and we recommend monitoring of groundwater at the Navajo Mine to confirm the DEIS conclusions that constituents of concern would be attenuated as groundwater travels towards the San Juan River and the Chaco Rivers.

243.02

The DEIS concludes that that cumulative impacts to public health from both the FCPP and the Mine would be minor. Emissions of some pollutants from the power plant will be reduced as a result of EPA's Federal Implementation Plan - Best Available Retrofit Technology, and these reductions are expected to have a positive impact on public health. Nevertheless, as disclosed in the DEIS, health outcomes for Navajo, in term of life expectancy and mortality rates, are worse than for the general population in San Juan County, partly due to healthcare disparities. The cumulative health burden also includes the impacts from in-home burning of coal that is provided by the Navajo Mine to local tribal members free or at low-cost. This coal is often burned in improperly-vented stoves not designed to burn coal. Because many Navajo do not have access, or affordable access, to electricity, the provision of free or cheap coal by the project directly contributes to the cumulative health burden from indoor exposure to coal smoke. We recommend that the Final EIS incorporate the severely compromised existing public health environment into its cumulative health impacts assessment and include commitments to mitigation for the project's contribution to the ongoing environmental justice and cumulative health impacts. Please see the enclosed Detailed Comments for our recommendations regarding mitigation.

243.03

EPA appreciates the opportunity to review this DEIS and looks forward to continued coordination with OSM, BIA, and the other cooperating agencies during the NEPA process. When the Final EIS is released for public review, 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 contact Karen Vitulano, the lead reviewer for this project, at 415-947-4178 or vitulano.karen@epa.gov.

Sincerely,



Kathleen Martyn Goforth, Manager
Environmental Review Section

Enclosure: Summary of EPA Rating Definitions
EPA's Detailed Comments

2

Response 243.002

EPA published its Final Rule for Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electrical Utilities on December 19, 2014. The Final EIS has been updated accordingly to reflect this new rule and its applicability to the FCPP. A comprehensive discussion of the rule, its provisions, and enforceability is provided in Section 4.15, Hazardous Materials and Wastes. In addition, specific provisions of the rule that apply to other resource areas (i.e., Water and Air) are included in Sections 4.1, 4.5, 4.11, 4.17, and 4.18.

Response 243.003

As stated in the comment, the Draft EIS discusses current state of human health specifically for the Navajo Nation (see Section 4.7.2). This existing condition is taken into account when considering potential effects from permitting the continued operations of the project. For mitigating potential indoor air quality effects from Navajo members burning coal available in improper stoves, please see response to comment 243.009.

COMMENT 243

cc: Ben Shelly, President, Navajo Nation
Stephen B. Etsitty, EPA Director, Navajo Nation
Herman Honanie, Chairman, Hopi Tribe
Gayl Honanie, Environmental Director, Hopi Tribe

COMMENT 243

SUMMARY OF EPA RATING DEFINITIONS

This rating system was developed as a means to summarize EPA's level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the EIS.

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

ADEQUACY OF THE IMPACT STATEMENT

Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."

COMMENT 243

EPA DETAILED COMMENTS ON THE FOUR CORNERS POWER PLANT AND NAVAJO MINE ENERGY PROJECT DRAFT ENVIRONMENTAL IMPACT STATEMENT, NAVAJO NATION, NEW MEXICO, JUNE 26, 2014

Coal Combustion Residue (CCR) Management and Contamination

CCR management at the Four Corners Power Plant

EPA expects to finalize the CCR rule by the end of 2014, which will determine whether CCR is managed as hazardous waste under Subtitle C of the Resource Conservation and Recovery Act (RCRA), as solid waste under Subtitle D of RCRA, or in some other manner. The DEIS indicates that CCR at the Four Corners Power Plant will be managed in accordance with this final EPA determination, and notes that, if EPA regulates CCR through Subtitle D, the authority to implement the regulations would be at the state level, which would not apply on tribal lands (p. 4.15-5). OSM proposes mitigation to address this regulatory gap, and we agree this is necessary. However, the DEIS identifies the mitigation measures as voluntary recommendations to Arizona Public Service, while also portraying them as if they were legal requirements. For example, on page 4.15-27, the DEIS states that both new and existing disposal units would be subject to groundwater monitoring requirements and, if certain hazardous constituents are detected at a level exceeding groundwater protection standards, the FCPP would have 90 days to assess corrective measures and select a remedy that would protect human health and the environment. It is not clear what groundwater protection standards are being referenced. The DEIS notes that the Navajo Nation does not have groundwater quality standards (p. 4.15-18). Additionally, the specific timeline and reference to corrective measures imply a rigorous enforcement program. The hazardous and solid waste mitigation measures on pages 4.15-31 through 4.15-32 reference a “permit program” and “inspection requirements” and specify operating, design, groundwater monitoring, corrective action, and closure and post-closure requirements, but these “requirements” are simply recommendations to APS (“OSMRE recommends APS implement the measures below” – p. 4.15-31).

Recommendations: The hazardous and solid waste mitigation measures presented on pages 4.15-31 through 4.15-32 should be enforceable conditions of the project since it is a possibility that coal ash could be regulated under Subtitle D and the standards would not have an enforcement agency on tribal lands. We strongly agree with the need for the identified operating, design, groundwater monitoring, corrective action, and closure and post-closure requirements. Office of Surface Mining, Reclamation and Enforcement does not have a federal action at the FCPP, but the BIA is a cooperating agency and is using this EIS to inform its decision on the FCPP lease renewal. The hazardous and solid waste mitigation measures should be conditions of BIA’s lease approval and enforceable through BIA’s lease conditions and its NEPA Record of Decision. We recommend that they be identified as such in the Final EIS.

Contamination from past CCR mine disposal

Contamination from coal combustion residue (CCR) placed at the Navajo Mine has leached, and will continue to leach, directly into groundwater of the Fruitland Formation coal seams and the Pictured Cliffs Sandstone Formation. The DEIS acknowledges “high levels of chemical constituents of concern exist within the wells in the historic mining area” (p. 4.5-44). The DEIS concludes, however, that “Thus far, negligible impacts have resulted from the CCR placement. It is also unlikely that any significant future effects will ensue from the CCR placement at the Navajo Mine because of the very slow groundwater movement and the likely attenuation of contaminants of concern as they migrate through the subsurface” and that “Therefore, past CCR placement at the Navajo Mine is determined to have no impact in the short- or long-term” (p. 4.5-14). Elsewhere it states that the potential impacts to current and future water uses from CCR placement at the Navajo Mine are minor (p. 4.5-44), despite the identified major impacts for pH, boron, selenium, fluoride and sulfate (p. 4.5-44), with concentrations of

Response 243.004

EPA published its Final Rule for Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electrical Utilities on December 19, 2014. The Final EIS has been updated accordingly to reflect this new rule and its applicability to the FCPP. A comprehensive discussion of the rule, its provisions, and enforceability is provided in Section 4.15, Hazardous Materials and Wastes. In addition, specific provisions of the rule that apply to other resource areas (i.e., Water and Air) are included in Sections 4.1, 4.5, 4.11, 4.17, and 4.18.

Response 243.005

Monitoring wells in Areas I and II of the Navajo Mine Lease area have been added to Figure 4.5-1 and to Table 4.5-3 of the Draft EIS (now Table 4.5-4 in the Final EIS), as well as Table 4.5-6. These wells were displayed on Figure 4.5-3 of the Draft EIS. As stated in the Draft EIS, the groundwater quality within the Navajo Mine lease area (in both areas that are actively mined and those that have not yet been mined) exceed the criteria for livestock watering; however, as shown on Figure 4.5-1, there are no livestock watering wells within Areas I and II.

As described in the EIS, historic and current livestock watering in the vicinity of the permit area has been limited to surface and alluvial systems. Groundwater monitoring data does not indicate that CCR disposal has compromised groundwater quality for livestock use in Area I or II. Rather groundwater monitoring data shows that baseline/background Fruitland and PCS water quality has never met livestock criteria and has never been used for livestock watering. Additionally, the limited data available in the Bitsui alluvium which has been used historically for livestock watering indicates that water quality upgradient of all historic mining and CCR placement was of marginal quality for livestock use. Therefore, the only anticipated future use of groundwater in the area is for oil and gas purposes. The EIS has been revised to provide this explanation as well. In addition, review of baseline monitoring wells in Areas IVN and IVS indicate that water quality in the alluvium and Fruitland Formation is not suitable for livestock watering.

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boron, fluoride, sulfate, and total dissolved solids (TDS) exceeding the criteria for livestock watering, a designated post reclamation land use.

These conclusions, especially that of “no impact”, do not appear to be supported. The modeling assumption that contaminants would be attenuated as they migrate through the subsurface has not been confirmed¹. Additionally, the assumption that pollutants would be diluted by the larger San Juan River groundwater flow, even if they are not attenuated during transport to the Fruitland Formation, is brought into question since the transport modeling and sampling that occurred seems to have not fully recognized the possibility of a significant vertical (fracture) flow in the Fruitland Formation. The DEIS indicates that the general flow direction of groundwater in the Fruitland Formation is downward through the interbedded shale and coal units to the lower strata of the Fruitland Formation, with marginal upward movement from the Pictured Cliffs Sandstone into the Fruitland Formation (p. 4.5-13). One can infer from the vertical flow directions that fracture flow might play a prominent role in the movement of bedrock groundwater in the FCPP area². This parameter was not considered in the groundwater modeling of the FCPP area. If vertical (and lateral) fracture flow is substantial, the assumed attenuation would not occur because fracture flow results in a much smaller residence time of groundwater in the bedrock formations and a limited opportunity for the contaminants to be adsorbed by bedrock clay. This would lead to a potentially larger groundwater impact downgradient of CCR placement than is predicted in the DEIS.

The DEIS is not clear whether any ongoing groundwater or surface water monitoring would occur as a condition of this project. The DEIS seems to indicate that only groundwater and surface water monitoring that are part of the new SMCRA permit groundwater monitoring plan (originally from BHP Navajo Coal Company, but which the Navajo Transitional Energy Company will implement) would occur, which relates to the new mine areas and the Pinabete and Cottonwood arroyos. It does not specify any monitoring of the historic contamination areas nor confirm that contaminated groundwater is not reaching the San Juan or Chaco River surface water or alluvia.

Recommendation: The FEIS should include additional information to support its groundwater and surface water impact assessment conclusions. We recommend that monitoring of groundwater quality at Areas I and II of the Navajo Mine and the San Juan River alluvium occur to confirm the model predictions that constituents of concern would be attenuated as

¹ The DEIS references the “Cumulative Hydrologic Impact Assessment of the BHP Billiton Navajo Coal Company, Navajo Mine” for this assumption, but this assessment is not summarized nor appended to the DEIS.

² Wilson, T.H. et al., (2012). “Fracture and 3D seismic interpretations of the Fruitland Formation and cover strata: Implications for CO₂ retention and tracer movement, San Juan Basin Pilot test”. *International Journal of Coal Geology*, Volume 99, 1 September 2012, Pages 35–53. <http://www.sciencedirect.com/science/article/pii/S0166516212000432>

McCord, J. et al., (1992) “Heat-flow data suggest large ground-water fluxes through Fruitland coals of the northern San Juan basin, Colorado-New Mexico”, *International Journal of Coal Geology*, v. 20 no. 5, 1992, p. 419-422. <http://dx.doi.org/10.1016/j.coal.2012.02.007>

Haerer and McPherson (2008) “Evaluating the impacts and capabilities of long term subsurface storage in the context of carbon sequestration in the San Juan basin, NM and CO”. *Energy Procedia*, Volume 1, Issue 1, February 2009, Pages 2991–2998. Proceedings of the 9th International Conference on Greenhouse Gas Control Technologies (GHGT-9), 16–20 November 2008, Washington DC, USA. <http://www.sciencedirect.com/science/article/pii/S187661020900719X>

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The Final EIS was revised to reflect vertical fracture flow as follows: Further, transport directions for mine spoil water would be laterally down dip in the Fruitland Formation, toward the outcrop areas to the south and west of Area III, and vertically into the Pictured Cliff Sandstone. Lateral flow from the mine spoils through the Fruitland Formation and vertical fracture flow into the Pictured Cliff Sandstone is very low due to the low hydraulic conductivity of these units and due to the relatively flat gradients that can be expected based on pre-mine conditions.

Further the quotes regarding no impact from past CCR placement within the Environmental Setting section have been revised to indicate that impacts are negligible. Those conclusions were based on CHIA criteria, which do not exactly match the NEPA criteria for impact levels defined in the EIS. The EIS analysis for potential impacts is negligible. Further text has been added to the EIS acknowledging that vertical fracture flow has been observed at other locations in the San Juan basin and this could be a potential weakness in the site-specific modeling conducted.

The following text was added to the Final EIS: Available site specific data from within the immediate vicinity of the Project area, used for modeling conducted as part of the CHIA for the Navajo Mine, shows low hydraulic conductivity and does not suggest the presence of significant vertical fracture flow of groundwater between the PCS and Fruitland Formation (OSMRE 2012). However, vertical fracture flow has been observed at other areas in the San Juan Basin (Wilson 2012). The evidence of fracture flow at other locations within the San Juan Basin presents a modeling uncertainty as it presents the possibility that fracture flow may exist within the vicinity of the Project area.

Surface water quality monitoring is conducted by NNEPA along the San Juan River both upstream and downstream of the Navajo Mine Lease area as presented on Figure 4.5-5. OSMRE conducted an evaluation of the potential impacts of past placement of CCR at the Navajo Mine on groundwater and surface water. The evaluation incorporated water quality data collected by the Navajo Nation on the San Juan River as well as groundwater quality data at the mine. The evaluation found that

there is a potential groundwater discharge from the historical mining operation to the San Juan River; however the groundwater discharge rates were minimal as compared to the volume of surface water in the San Juan River and no adverse water quality effects were observed. As such, OSMRE does not see a need for additional monitoring of the San Juan River for that purpose. Navajo Nation conducts its own monitoring of the San Juan River in accordance with their responsibility to ensure the designated uses are met. Whether or not the results of Navajo Nation monitoring are publicly available is at the discretion of Navajo Nation EPA.

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groundwater travels towards the San Juan River and the Chaco River. Because the groundwater of the Fruitland and Pictured Cliffs Sandstone formations that enter into the alluvium also discharges into the San Juan River in the area of the Navajo Mine, monitoring of the San Juan River surface water quality upstream, along the mine reach, and downstream should occur if the groundwater monitoring results identify elevated levels of pollutants in the San Juan River alluvium that exceed Navajo Nation Water Quality Standards.

In addition, the baseline groundwater quality should be clarified. The DEIS summarizes baseline results for Cottonwood, Pinabete, and No Name Arroyo alluvial wells in Table 4.5-5; however the presentation of this information is not useful. EPA previously commented that this summary does not allow an assessment of ground water impacts by source, and we recommended including some monitoring results by well in the DEIS. In addition, the identification/location of these baseline wells is of importance in order to confirm they do, indeed, represent baseline conditions and do not include contamination that is related to past CCR disposal. This information should be included in the FEIS.

Monitoring for CCR contamination from Four Corners Power Plant

The DEIS reports two areas of groundwater seepage at the existing Dry Fly Ash Disposal Areas (DFADAs) known as the "north seep" and "south seepage area", which have contaminated groundwater (p. 4.5-57). According to the DEIS, APS has installed extraction wells and constructed the north intercept trench to collect seepage and prevent contamination of the Chaco River, and is currently constructing a south intercept trench to remediate groundwater to protect the river. The DEIS does not indicate how the groundwater is being remediated. With this action and the monitoring of the existing trenches, the DEIS concludes that continued operation and expansion of the DFADAs would have less potential to contaminate local groundwater and water quality in Chaco Wash (p. 4.5-57).

We believe that such actions to capture and treat contaminated groundwater are necessary to ensure that the continued operation and expansion of the DFADAs does not contribute significantly to the existing pollutant load in the Chaco River. The operation of the intercept trenches, as well as the monitoring of groundwater in existing and, possibly, new monitoring wells, is critical to ensuring that any pollutant sources present in ground water that re-surfaces via seeps can be traced so that appropriate corrective actions can be undertaken.

Recommendation: We recommend that any FCPP lease renewal by the BIA include conditions requiring the continued monitoring and remediation of groundwater at the DFADAs. We also recommend that the FEIS identify the method of groundwater remediation that is occurring or will occur.

Dam Safety

We appreciate the information in the DEIS that states that all recommendations from the 2009 Coal Ash Impoundment – Site Specific Assessment Report for the FCPP were completed in 2009 (p. 4.14-4). On p. 4.15-22, however, the DEIS states that APS indicated that the suggested items would be addressed and completed prior to the end of 2009. The DEIS specifically identifies some of the recommendations, but does not indicate whether the following are occurring: (From section 12.4 of the recommendations):

- Continue monitoring seepage at the downstream toe of the south embankment (Pond #4 toe) for any changes in seepage quantity and flow rate or evidence that the flow is carrying soil/ash particles from the embankment.

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Response 243.006

The Final CCR rule published on December 19 includes groundwater monitoring and reporting requirements as well as remediation for any impacts observed above certain levels. The rule is "self-implementing" and submittal of reports to the appropriate tribal agency and posting online is required. In addition, the rule applies to both existing and new CCR areas. Therefore, no additional mitigation measures or conditions regarding groundwater monitoring or remediation is necessary.

The term "remediate" has been deleted. No active remediation in the sense of treatment occurs. Water is hydraulically controlled through extraction wells and trenches to prevent seepage into groundwater or Chaco River and is pumped into the Lined Decant Water Pond for either reuse in the power plant or evaporation.

Response 243.007

As stated on page 4.15-22, in response to the recommendations from the 2009 coal ash impoundment, "minor maintenance items were identified and APS followed up with a written response and action plan, indicating the suggested items would be addressed and completed prior to the end of 2009 (APS 2009)."

The text has been revised to provide the following updates:

- The recommendation to continue monitoring seepage at the downstream toe of the south embankment (Pond #4 toe) for any changes in seepage quantity and flow rate or evidence that the flow is carrying soil/ash particles from the embankment is being met. A seepage collection toe drain was installed in this area. Flow from the toe drain is negligible.
- The recommendation to expand the monitoring program to include additional monitoring of potential seepage under the dam at the northwest corner of the LAI, where the LAI embankment was not tied-in to the underlying Pond 3-4 embankment to provide continuity of seepage control, and where a potential seepage pathway exists if the HDPE lining fails is being met.

- The recommendation to install additional piezometers to address this potential seepage pathway and expand documentation in APS dam safety inspections to note any evidence of seepage near the downstream toe of the dam in this area has been met. APS installed three piezometers in the recommended area. Levels in these piezometers are recorded quarterly.
- The recommendation to repair or replace the two settlement plates that do not appear to be providing useful information and that may have been damaged during construction or maintenance activities was met.
- Attempts were made to reinitiate the vibrating wire settlement plates but were unsuccessful, so settlement rods were installed as a replacement. Four settlement rods (mechanical) were installed to replace the malfunctioning vibrating wire settlement plates.

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- Expand program to include additional monitoring of potential seepage under the dam at the northwest corner of the LAI, where the LAI embankment was not tied-in to the underlying Pond 3-4 embankment to provide continuity of seepage control, and where a potential seepage pathway exists if the HDPE lining fails. Install additional piezometers to address this potential seepage pathway and expand documentation in APS dam safety inspections to note any evidence of seepage near the downstream toe of the dam in this area.
- Repair or replace the two settlement plates that do not appear to be providing useful information and that may have been damaged during construction or maintenance activities.

Recommendation: For clarity in the FEIS, indicate whether the above recommended actions and monitoring from the 2009 Coal Ash Impoundment – Site Specific Assessment Report for the FCPP are occurring. If the requested monitoring has occurred, include results of seepage monitoring efforts.

Dust Control from CCR Management

The DEIS provides information regarding the FCPP Dust Control Plan. The DEIS states that, “During placement of CCR, compaction control, added moisture, and slope control are used, as well as dust suppressant and periodic fabric covering of slopes”. The DEIS states that DFADA 1 and 2 will continue to be used until they reach capacity in 2016. DFADA 1 is tallest on the west berm, approximately 110 feet above natural grade (p. 4.15-12). The DEIS also states that APS would construct five additional DFADAs to accommodate future disposal of all fly ash, bottom ash, and flue gas desulfurization waste generated through the duration of the lease term. Each site is anticipated to be approximately 60 acres and approximately 120 feet high (p. xiii and p. 3-15). On page 4.15-27, the DEIS states that the new DFADA’s would be approximately 80 feet high, so it is not clear which height represents the height above natural grade.

If the height of the DFADAs will be 120 feet above natural grade, to the extent there is any settlement in the down-wind directions, fugitive dust control on such a high active face would be difficult to maintain. EPA has received complaints from nearby residents regarding fugitive dust, therefore renewed efforts at dust control, and monitoring of dust control effectiveness, is essential.

Recommendation: Clarify in the FEIS whether the height of the DFADAs will be 80 feet or 120 feet above natural grade. For either height, we recommend that the DFADAs be continuously sprayed with water to ensure dust is controlled. Slope control and the other dust control measures in the Dust Control Plan should be monitored regularly to ensure they are effective. When wind speeds are elevated, more frequent dust control should be implemented.

We recommend that a dust complaint procedure and hotline be developed to allow local residents to report ineffective dust control conditions. APS should conduct outreach to the local population, in Navajo as well as English, to ensure awareness of this complaint procedure.

Cumulative Health Impacts

The EIS should acknowledge the cumulative health impacts that the residents in the vicinity of the project experience. The DEIS largely relies on the air quality analysis conclusions for its public health impact assessment. The DEIS states that the combined impacts to air quality from the Navajo Mine and the Four Corners Power Plant (FCPP) are minor (p. 4.1-85) because modeled criteria pollutant emissions meet the National Ambient Air Quality Standards (NAAQS). EPA sets the NAAQS at a level requisite to protect public health with an adequate margin of safety, taking into consideration effects on

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Response 243.008

The Final EIS text was changed to clarify the DFADAs are expected to be 120 feet above natural grade.

Regarding the comment that dust control mitigation measures should be included in the Draft EIS, the “Approach to Environmental Analysis” section (Chapter 4) identifies that mitigations are recommended for unavoidable impacts that are major, as defined for each resource area. Because the air quality analysis identifies that PM levels are below the established NAAQS, impacts are not considered major.

With regard to the specific recommendations:

- Continuous watering of DFADAs for dust control is not practical or desirable. The DFADAs are designed for dry disposal of ash. Continuously watering the DFADAs would create waste water that would have to be managed. As stated in Section 3.2.6.1 of the Draft EIS, water is introduced to the ash as it is loaded into the transport trucks for dust control and proper compaction in the DFADA. Inactive surfaces of the DFADAs are covered with fabric or sprayed with dust suppressants. Active work areas and roads are periodically sprayed with water for dust control. Watering of active work areas and roads is increased during high wind events.
- Further, as required in the FCPP Dust Control Plan, Plant personnel verifies and documents control measures monthly. Plant and contract personnel monitor dust control on a more frequent informal basis. Corrective actions are implemented as needed. Also, watering of active work areas and roads is increased during high wind events. EPA published its Final Rule for Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electrical Utilities on December 19, 2014. The Final EIS has been updated accordingly to reflect this new rule and its applicability to the FCPP. A comprehensive discussion of the rule, its provisions, and enforceability is provided in Section 4.15, Hazardous Materials and Wastes. In addition, specific provisions of the rule that apply to other resource areas (i.e., Water and Air) are included in Sections 4.1, 4.5, 4.11, 4.17, and 4.18.

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susceptible populations, based on the scientific literature; however, as we previously commented, EPA's Particulate Matter and Ozone Integrated Science Assessments (U.S. EPA, 2009 and U.S. EPA, 2013) determined that there is no evidence of a population-level threshold in PM- and ozone-related health effects in the epidemiological literature. This means that there is not a level below which there is no impact. Instead, health impacts that occur below the standards are assumed to be more uncertain than those occurring above the standards.

The DEIS acknowledges that the cumulative public health effects depend on the respiratory health status of residents in the area (p. 4.18-54), yet it does not appear that respiratory health was considered in the conclusions that project impacts to public health from the FCPP are negligible for criteria pollutants (p. xli, p. 4.17-22) and minor for hazardous air pollutants (p. p. 4.17-24), and that cumulative impacts to public health from both the FCPP and the Mine are minor (p. 4.18-54). The DEIS does disclose San Juan County's most recent Community Health Profile, which found that San Juan County has a higher incidence of chronic lower respiratory disease, comprised of chronic bronchitis, asthma, and emphysema, compared to New Mexico or the rest of the United States. It also cites a study by the New Mexico Department of Health that found that San Juan County residents are 34 percent more likely to have asthma-related medical visits after 20 parts per billion increases in local ozone levels (p. 4.17-4). A study by Bunnell, et al, also cited in the DEIS, documents disproportionately high rates of respiratory disease in the Indian Health Service's Shiprock Service area (p. 4.11-14). None of this information appears to have been factored into the DEIS' conclusions regarding cumulative public health impacts.

The DEIS also discusses the unique situation of in-home coal burning from coal provided free of charge to Navajos who reside within a certain radius of the mine, which was part of the original mining lease agreement. The DEIS states that, from October through March, coal for personal use by project employees and local Chapter residents is placed in the Community Coal Stockpile, located adjacent to the Navajo Mine Area III office (p. 2-12). Because many Navajo are able to obtain cheap or free coal, and they do not have access, or affordable access, to electricity – an existing environmental justice vulnerability -- many use coal to heat their homes. It is not unusual for the coal to be burned in stoves that were not designed to burn coal, nor is it unusual that the stoves are poorly maintained or improperly vented. The Bunnell study revealed that air quality from coal combustion inside dwellings used for cooking and heating had an average 24-hour wintertime PM_{2.5} level exceeding EPA's ambient air standard for PM_{2.5} (note that EPA does not regulate indoor air pollution levels). This cumulative impact, which directly relates to the mine operations for which this EIS is being prepared, should be considered in the cumulative public health impact conclusions, as well as referenced in the environmental justice impact conclusions.

Recommendation: We recommend that the cumulative public health impact assessment conclusions factor in the respiratory health status of residents in the area, as the DEIS states should occur on page 4.18-54. The FEIS should document how the lack of access to electric power and the provision of free or low-cost coal by the project have contributed to indoor air quality cumulative impacts, as well as outdoor air pollution during stagnant winter weather conditions. Because the DEIS does not define what would constitute a moderate or major impact to cumulative public health and does not define a level of significance, we recommend identifying mitigation measures for this impact, since the existing public health environment is severely compromised (health outcomes for Navajo are worse than for the general population in San Juan County; life expectancy is lower, mortality rates far exceed the national rates; investment in healthcare services on Navajo land is about half of that for the general population; and healthcare disparities between Navajo and the general population are pronounced due to lack

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Response 243.009

The Draft EIS includes quantitative analysis of the cumulative health impacts to residents in the vicinity of the Project. With respect to the use of NAAQS as significance criteria, the Draft EIS included a specific human health risk assessment that considered the specific composition of coal dust at the Navajo Mine, and evaluated whether the NAAQS were protective of susceptible populations. As such, under the site specific conditions, the NAAQS are protective of public health.

Section 4.17 considers project-specific impacts, and the findings (negligible to minor) reflect the specific analyses and modeling (air quality, human health, ecological analyses). The comment notes that the Draft EIS appropriately considered cumulative impacts by citing additional studies (New Mexico Department of Health, Bunnell et al.) that address past and current public health issues. The cumulative impact analysis has been modified as follows to include these studies, which were only mentioned in Section 4.17:

"The cumulative public health effects also depend on the ambient air quality in the San Juan Air Basin and the respiratory health status of residents in the area. San Juan County's most recent Community Health Profile includes a comprehensive overview of health indicators including respiratory health (San Juan County 2010). This study found that San Juan County has a higher incidence of chronic lower respiratory disease (CLRD) comprised of chronic bronchitis, asthma, and emphysema compared to New Mexico or the rest of the United States. Another study found that elevated levels of ozone in San Juan County were linked to incidence of asthma-related medical visits. This study found that San Juan County residents are 34 percent more likely to have asthma-related medical visits after 20 parts per billion increases in local ozone levels (NMDH 2007). Another study also conducted in the Project Area, was undertaken to better understand the relationship between the perceived risk to respiratory health from ambient air quality and the risk presented by coal combustion inside of dwellings for cooking and heating. The study considered special exposures for vulnerable populations, and examined the relationship between coal combustion in homes in the

Shiprock area (Shiprock residents have easy access to the low or no-cost coal, which is made available to Navajo tribal members near Navajo Mine and impacts on respiratory health. The conclusion of the report states that the presence of two large coal-fired power plants near Shiprock may contribute to that risk, but results from this study suggest that the risk could be reduced by making relatively simple and inexpensive changes to methods of home heating” (Bunnell et al. 2010). In their comments to the Draft EIS, EPA recommended consideration of funding for replacement of old stoves with more efficient stoves appropriate for the fuel types being used; funding for replacement of old coal and wood stoves with propane gas heaters; assistance to the affected community for residential solar, wind or other electrical generation projects; assistance to Navajo Tribal Utility Authority for local electricity connections and subsidies to any affected residents; and education on how to properly operate, vent, and maintain existing stoves, perhaps locating this information in Navajo at the Community Coal Stockpile or producing an instructional video to play in Indian Health Service clinic waiting rooms. As noted below, several of these measures are in place.

The reports summarized in Section 4.17 of the EIS and cited in the EPA comment letter do not document an existing major impact, and as such the cumulative impacts due to the existing condition plus continued emissions from FCPP would not be major. We would also indicate that, while public health impacts of the Proposed Action alone are negligible for criteria pollutants and minor for HAPs, the cumulative impacts on an already compromised population would be greater than minor because they add to an existing impaired community’s health burden, thus the cumulative impact determination has been changed from minor to “minor to moderate.” EPA’s discussion of mitigation focuses on the effect of the Navajo Mine Community Coal Stockpile. The implication is that this stockpile is the primary, or only, source of coal used for indoor coal burning. However, it is a relatively minor source; there are other local areas of community harvesting of coal for home use, and coal collection occurs from these areas. Coal is also sold for the purpose of indoor burning. We are not sure that EPA is aware of the pervasive presence of coal and its use for home burning in

this area. Even removing the Navajo Mine Community Coal Stockpile altogether would not have an effect on indoor burning of coal, except to make it more difficult to obtain for mine workers. Further inquiry with MMCo and NTEC indicates that, for the community coal stockpile at Navajo Mine, there is a permit system that limits the use and transport of coal. In addition, representatives from local chapter houses receive training on the safe use and transport of coal, and these representatives are expected to inform the community. For the past 3 years, Navajo Mine has provided safety and health awareness training to Chapters that participate in the coal distribution program. Chapter coordinators are required to give the training to all Chapter members who request a coal permit. Additionally, Indian Health Services provides radio public service announcements on coal dump rules, preparedness, and safety guidelines throughout the winter season. NTEC plans to continue this educational program in coordination with Indian Health Services and is committed to improving the training to specifically require that coal permittees certify that they have attended the safety and health training on an annual basis before obtaining their annual coal permit. Indian Health Services also has training videos that inform the local population on the safe home use of coal.

The cumulative impacts chapter will be augmented to identify specific activities related to public health protection related to in-home coal burning that are already being conducted by the project Applicants, the Navajo Nation, and Indian Health Services.

Need for Mitigation

The impact is moderate, and does not require mitigation beyond what is already being conducted by the project Applicants, the Navajo Nation, and Indian Health Services. Furthermore, CEQ's January 14, 2011 guidance for mitigation states: "CEQ also acknowledges that NEPA does not create a general substantive duty on federal agencies to mitigate adverse environmental effects". This is particularly the case in the preparation of an EIS. The CEQs "40 Most Asked Questions" states:

"All relevant, reasonable mitigation measures that could improve the project are to be identified, even if they are outside the jurisdiction of

the lead agency or the cooperating agencies, and thus would not be committed as part of the RODs of these agencies. Sections 1502.16(h), 1505.2(c). This will serve to [46 FR 18032] alert agencies or officials who can implement these extra measures, and will encourage them to do so. Because the EIS is the most comprehensive environmental document, it is an ideal vehicle in which to lay out not only the full range of environmental impacts but also the full spectrum of appropriate mitigation. However, to ensure that environmental effects of a proposed action are fairly assessed, the probability of the mitigation measures being implemented must also be discussed. Thus the EIS and the Record of Decision should indicate the likelihood that such measures will be adopted or enforced by the responsible agencies. Sections 1502.16(h), 1505.2. If there is a history of nonenforcement or opposition to such measures, the EIS and Record of Decision should acknowledge such opposition or nonenforcement. If the necessary mitigation measures will not be ready for a long period of time, this fact, of course, should also be recognized.”

The following text has been added to the conclusion of 4.18.

While the public health impacts of the Proposed Action alone are negligible for criteria pollutants and minor for HAPs, the cumulative impacts on an already compromised population are minor to moderate. The primary impairment to public health is the indoor burning of coal. Although the Navajo Mine Community Coal Stockpile does provide coal to mine employees, it is a relatively minor source; other local sources of community collecting of coal for home use are readily available. Coal from non-project sources is also sold for the purpose of indoor burning.

The use of the community coal stockpile at Navajo Mine requires a permit administered by the companies that limits the use and transport of coal. In addition, representatives from local chapter houses receive training on the safe transport of coal, and these representatives are expected to inform the community. Indian Health Services also has training videos that inform the local population on the safe home use of coal. Because the cumulative public health impact is minor to moderate, and the contribution of the Proposed Action to that condition is negligible to minor, no further mitigation is required beyond the

ongoing permit/training program, and IHS' public education program on safe indoor burning of coal.

There is a permit system that limits the use and transport of coal from the community coal stockpile at Navajo Mine. In addition, representatives from local chapter houses receive training on the safe use and transport of coal, and these representatives are expected to inform the community. This training is conducted with participation of Northern Navajo Medical Center, Indian Health Services, and includes a video produced by Four Directions, Office of Environmental Health that informs the participants on the safe home use of coal.

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of access and funding - p. 4.10-15). The DEIS notes that the results from the Bunnell study suggest that the added risk from in-home coal burning could be reduced by making relatively simple and inexpensive changes to methods of home heating (p. 4.17-4). Such changes should be further discussed and identified as possible mitigation for this cumulative public health and environmental justice impact.

EPA previously recommended mitigation for cumulative impacts from in-home coal combustion supplied by the continued operation of the mine. At a minimum, the following potential mitigation measures should be identified and considered: funding for replacement of old stoves with more efficient stoves appropriate for the fuel types being used; funding for replacement of old coal and wood stoves with propane gas heaters; assistance to the affected community for residential solar, wind or other electrical generation projects; assistance to Navajo Tribal Utility Authority for local electricity connections and subsidies to any affected residents; and education on how to properly operate, vent, and maintain existing stoves, perhaps locating this information in Navajo at the Community Coal Stockpile or producing an instructional video to play in Indian Health Service clinic waiting rooms. Selection of any of the above measures should be done in consultation with the affected residents.

Excluding Fugitive Dust from the Human Health Risk Assessment (HHRA)

EPA previously commented that fugitive dust should have been included in the Human Health Risk Assessment and that uncertainty regarding the assumption of equal toxicity of PM species does not warrant the exclusion of fugitive dust from the impacts analysis (on the basis of having a lower proportion of metals and other toxic substances). OSM has chosen, instead, to include a discussion of potential impacts from PM_{2.5}, including baseline and projected future emissions.

Recommendation: We recommend that the FEIS clearly state that fugitive dust was not included in the HHRA.

Potential for Mine Methane Capture

The DEIS quantifies the fugitive methane emissions that would be liberated from coal seams during mining (p. 4.2-22). Methane has a global warming potential more than 20 times higher than CO₂ for a 100-year period³. Methane can be captured at surface mines through pre-mine drainage, either from the surface or through horizontal boreholes. EPA is aware that there are surface mines in operation in the Powder River Basin in Wyoming and elsewhere around the world that are recovering methane through pre-mine drainage and, thus, mitigating the impact from this powerful greenhouse gas. Also note that surface mine methane capture is now eligible for carbon credits - a market tracking system that supports the implementation of California's Cap-and-Trade Program - for greenhouse gas emission reductions associated with the capture and destruction of methane in the U.S. that would otherwise be vented into the atmosphere as a result of mining operations at active underground and surface coal mines. See: <http://www.arb.ca.gov/newsrel/newsrelease.php?id=602>. In addition, the DEIS states that BIA is currently evaluating, under NEPA, Western Oil & Gas's proposal to develop 600 natural gas wells in the Burnham, Upper Fruitland, and Nenahnezad/San Juan Chapters, which would involve the installation of new pipeline (p. 4.18-13).

³ <http://www.epa.gov/climatechange/shgemissions/gases.html>

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Response 243.010

Fugitive dust emissions were quantified and presented in the air quality section and compared to the relevant regulatory standards (PM₁₀ and PM_{2.5}). Based on comments to the Administrative Draft EIS, OSMRE responded to the lack of site-specific fugitive dust analysis in the HHRA by conducting additional analysis in the Draft EIS specifically focused on assessing health effects associated with PM₁₀, PM_{2.5}, diesel particulate matter, and also exposure to coal constituents in coal dusts at PM_{2.5} levels. Fugitive dust emission risk assessment was conducted, and focused on coal dust constituents based on data from the mine. In addition, the mine has an on-going fugitive dust monitoring program, with triggers for further action.

Response 243.011

Project-related GHG emissions were quantified and fugitive methane from mining was determined not to be a significant source of CO_{2e} emissions from the project. When a proposed federal action meets an applicable threshold for quantification and reporting, CEQ proposes that the agency should consider mitigation measures to reduce GHG emissions, subject to reasonable limits based on feasibility and practicality. The Navajo Mine proponents explored the feasibility of methane capture similar to the drilling processes used in commercial coalbed methane extraction. Methane in the Navajo Mine coal seams exists in a very low pressure environment, which would require the seams to be pressurized during the extraction process. Additionally no infrastructure, such as pipeline collection systems, is near enough to the mine to make collection and resale feasible. Therefore, due to low pressure in the coal seams and lack of infrastructure to bring captured methane to market, mine methane capture was determined to be infeasible. The EIS was modified to include a discussion on the infeasibility of mine methane capture.

Regarding the comment on regional GHG cumulative impacts, Section 4.18, Cumulative Effects, addresses oil and gas contributions to regional CO_{2e} emissions along with the other projects identified in the region. The conclusion in this section is that: "Mobile source emissions

from the Navajo Mine SMCRA Permit area and Pinabete SMCRA Permit Area although quantifiable, are relatively small compared to future power plant emissions; therefore, this discussion focuses on the contribution of FCPP to regional climate change impacts. While all projects in Table 4.18-1 would contribute some GHG emissions, the major producers of GHG emissions within this study area are the 17 power plants...” Therefore, the mine methane capture would not address the sources of cumulative impacts.

COMMENT 243

Recommendation: We recommend that the FEIS discuss the feasibility of capturing methane from Navajo Mine. Include the economic benefits that could occur from selling the carbon credits in California's Cap-and-Trade Program, as well as the possible interconnection or use of natural gas infrastructure nearby from Western Oil & Gas's proposed natural gas wells.

Additional information regarding methane recovery at surface mines is available in the following EPA documents:

- "Case Study – Methane Recovery at Surface Mines" - <http://epa.gov/coalbed/docs/CMOP-Methane-Recovery-Surface-Mines-March-2014.pdf>
- "US Surface Coal Mine Methane Recovery Opportunities" - http://epa.gov/coalbed/docs/cmm_recovery_opps_surface.pdf

Petroleum Contamination

The DEIS states that "Secondary containment is not provided for mobile refueling vehicles in areas where NTEC staff are present, and the maximum amount of time before a discharge would be detected is less than 24 hours" (p. 4.15-6). It is unclear why it could take hours before a discharge from mobile refueling is detected. The DEIS states that the bioremediation of petroleum-contaminated soils takes place on-site (p. 4.15-6). The source of this contaminated soil is not identified.

Recommendation: The FEIS should identify the source of the petroleum-contaminated soils and indicate whether they are originating from mobile refueling operations. We recommend that the applicant review and, as needed, update its Spill Prevention, Control, and Countermeasure (SPCC) Plan to identify applicable general containment or drainage control measures, as required by 40 CFR 112.7(c) for mobile refuelers and mobile refueling, to ensure that releases associated with these operations are detected as soon as possible. For the continued operation of the FCPP and Navajo Mine, we recommend that additional measures be explored to prevent and contain releases when mobile refuelers may be unattended and during mobile refueling operations.

Additional comments

- Table 4.1-28 on p. 4.1-67 is confusing. The second column is labeled "Estimated Post-2014 Baseline Emissions", but it is not clear what is meant by post-2014 emissions. The text says that the reductions in the third column represent the reductions from fully implementing BART, but our estimate for mercury reductions under BART implementation is 61%, not the 81% listed. It is possible that the table is intended to represent the additional reductions in mercury that could occur from implementation of the mercury and air toxics standards (MATS). If so, this should be clarified in the FEIS and a definition of "Post-2014 Baseline Emissions" should be provided.
- In Table 4.5-6 on page 4.5-20, the result for mercury is listed as >0.001. Should this have been <0.001?
- In the Hazardous and Solid Waste chapter, the PDEIS states that "specific study of the disposal of CCR in Navajo Mine has not identified adverse effects" (p. 4.15-5). This does not appear to be supported, given the contamination identified in the Water Resources chapter. Groundwater contamination is an adverse effect.

Response 243.012

The material placed in the bioremediation areas includes Area III washbay water and sludge, and when necessary, any small volumes of petroleum contaminated soils, which result from minor accidental spills and leaks. The NTEC SPCC Plan meets the requirements of 40 CFR 112.7c, and any revisions or updates to the SPCC Plan to incorporate additional measures are considered part of the Proposed Action, as provided in Section 3.2.6 of the Draft EIS.

Response 243.013

"Estimated Post-2014 Baseline Emissions" was changed to "Estimated Post-2018 Baseline Emissions" and "Post-2014 versus Pre-2014 Baseline Reduction" was changed to "Post-2018 versus Pre-2014 Baseline Reduction". The sentence preceding Table 4.1-28: "Once BART is fully implemented, the reduction in air emissions from FCPP would decrease substantially." was changed to: "Once BART and mercury and air toxics standards (MATS) are fully implemented after 2018 (i.e., post-2018 emissions from Units 4 and 5), the reduction in air emissions from FCPP would decrease substantially."

Response 243.014

The text in Table 4.5-6 (Table 4.5-7 in the Final EIS) has been revised to indicate the concentration of mercury detected was less than 0.001.

Response 243.015

Page 4.5-44 of the Draft EIS states that impacts to groundwater from historic placement of CCR are negligible. This corresponds with the statement in Section 4.15. No change made to Draft EIS.

COMMENT 244



Office of Surface Mining Reclamation and Enforcement
Four Corners Power Plant and Navajo Mine Energy Project
Environmental Impact Statement (EIS)

Draft EIS Public Meeting Comment Form

Comments must be postmarked by **May 27, 2014**, for consideration in the Final EIS. Comments may be submitted at the open house public meetings (being held April 30 through May 9, 2014), via email to **FCPPNavajoEnergyEIS@osmre.gov** or by postal mail, hand delivery or courier to the address below.

MEETING LOCATION: Shiprock High School DATE: 06 May 2014

Please Print

Based on the agreements made between the Navajo Nation and BHP regarding the mining of Diné coal. I'm in agreement and support to continuation of the remaining plants. This includes the retrofit of cleaner environment of the 4 Corner region. The closure of units 1, 2 & 3 was a positive action as the amount of haze has been visibly been reduced. This will be & is beneficial to all people in the region. As an outdoor man appreciate the fact that our sacred mountain & vegetation will benefit wildlife, trees and water.

Aside from the environmental benefits, see economic benefits is likewise a positive. The positive direct and indirect impact not only benefit Navajo but all Diné community within San Juan County and surrounding counties and states of Colorado, Arizona & Utah. The impact to small business will continue to be realized. All involved must work together forward beauty all around beyond 2014.

244.001

- 1. NAME: Arnold & Yazzie Sr
- 2. ORGANIZATION (if applicable): (Self)
- 3. EMAIL ADDRESS/PHONE NUMBER: [REDACTED]
- 4. MAILING ADDRESS: [REDACTED]

Do you wish to withhold your name or address from public review or from disclosure under the Freedom of Information Act (FOIA)? NO YES

Please give this completed form to one of the project team representatives or mail by **May 27, 2014**, to:

Mr. Marcelo Calle
Office of Surface Mining Reclamation & Enforcement, Western Region Office
1999 Broadway, Suite 3320
Denver, CO 80202-3050

Comments may be emailed to **FCPPNavajoEnergyEIS@osmre.gov**.

Comment Letter 244..... Yazzie, A.

Response 244.001

Thank you for your comment. A complete discussion of Socioeconomics is provided in Section 4.10 of the Draft EIS.

COMMENT 245



Office of Surface Mining Reclamation and Enforcement
Four Corners Power Plant and Navajo Mine Energy Project
Environmental Impact Statement (EIS)

Draft EIS Public Meeting Comment Form

Comments must be postmarked by May 27, 2014, for consideration in the Final EIS. Comments may be submitted at the open house public meetings (being held April 30 through May 9, 2014), via email to FCPPNavajoEnergyEIS@osmre.gov or by postal mail, hand delivery or courier to the address below.

MEETING LOCATION: _____ DATE: 6/2/14

Please Print

I BELIEVE THE EIS SHOULD BE APPROVED
BECAUSE IT PROVIDES STABILITY TO THE FOUR
CORNERS REGION AND THE NAVAJO NATION AS A WHOLE.
PERSONALLY IF THE EIS IS NOT APPROVED I
WOULD NOT ONLY LOSE MY JOB BUT IT WILL HURT
THE FOUR CORNERS REGION AND THE NAVAJO NATION
ECONOMICALLY.

245.001

1. NAME: JERALD ESTES
2. ORGANIZATION (if applicable): ARIZONA PUBLIC SERVICE CO.
3. EMAIL ADDRESS/PHONE NUMBER: [REDACTED]
4. MAILING ADDRESS: _____

Do you wish to withhold your name or address from public review or from disclosure under the Freedom of Information Act (FOIA)? [] NO [] YES

Please give this completed form to one of the project team representatives or mail by May 27, 2014, to:
Mr. Marcelo Calle
Office of Surface Mining Reclamation & Enforcement, Western Region Office
1999 Broadway, Suite 3320
Denver, CO 80202-3050
Comments may be emailed to FCPPNavajoEnergyEIS@osmre.gov.

Comment Letter 245..... Estes, J.

Response 245.001

Thank you for your comment. OSMRE is considering all alternatives analyzed in the Draft EIS and will notify the public of its decision via the Record of Decision, anticipated in spring 2015.

COMMENT 246

5-20-14



**Office of Surface Mining Reclamation and Enforcement
Four Corners Power Plant and Navajo Mine Energy Project
Environmental Impact Statement (EIS)**

Draft EIS Public Meeting Comment Form

Comments must be postmarked by May 27, 2014, for consideration in the Final EIS. Comments may be submitted at the open house public meetings (being held April 30 through May 9, 2014), via email to FCPPNavajoEnergyEIS@osmre.gov or by postal mail, hand delivery or courier to the address below.

MEETING LOCATION: _____ DATE: 5-20-14

Please Print

I choose Alternative "A" - Approve the Four Corners
Power Plant Lease Amendments and 3 for continued operation
to 2041.

- 1. NAME: Lenard Cambridge
- 2. ORGANIZATION (if applicable): SELF - Navaho Nation Tribe
- 3. EMAIL ADDRESS/PHONE NUMBER: [redacted]
- 4. MAILING ADDRESS: [redacted]

Do you wish to withhold your name or address from public review or from disclosure under the Freedom of Information Act (FOIA)? NO [] YES

Please give this completed form to one of the project team representatives or mail by May 27, 2014, to:

Mr. Marcelo Calle
Office of Surface Mining Reclamation & Enforcement, Western Region Office
1999 Broadway, Suite 3320
Denver, CO 80202-3050

Comments may be emailed to FCPPNavajoEnergyEIS@osmrc.gov.

Comment Letter 246.....Cambridge, L.

Response

Thank you for your comment.

COMMENT 247



**Office of Surface Mining Reclamation and Enforcement
Four Corners Power Plant and Navajo Mine Energy Project
Environmental Impact Statement (EIS)**

Draft EIS Public Meeting Comment Form

Comments must be postmarked by May 27, 2014, for consideration in the Final EIS. Comments may be submitted at the open house public meetings (being held April 30 through May 9, 2014), via email to FCPPNavajoEnergyEIS@osmre.gov or by postal mail, hand delivery or courier to the address below.

MEETING LOCATION: _____ DATE: 5-20-14

Please Print

I CHOOSE ALTERNATIVE "A" I HAVE WORKED @ 4 CORNERS POWER PLANT 25 YRS. I HAVE SUPPORTED MY KIDS WITH MY INCOME I MADE - NOT ONLY I SUPPORT MY KIDS, I ALSO SUPPORT BATTERED WOMEN & KIDS OF SHIPCOX N.M. THRU COMMUNITY SERVICE FUND (CSF) AND I SPEND MY MONEY ON THE NAVAJO NATION & ALSO IN SAN JUAN COUNTY AREA. I AM ORIGINALLY FROM ROUGH ROCK AZ. GREW UP IN THE MIDDLE OF NAVAJO NATION. I WENT TO SCHOOL FOR ELECTRIC TRADES, WITH I CAME BACK TO THE NAVAJO NATION TO DO THAT JOB HERE. I WOULD LIKE TO THANK APS FOR GIVING ME THAT OPPORTUNITY TO ~~HERE~~ WORK HERE @ HOME

1. NAME: NORMAN BENALLY
2. ORGANIZATION (if applicable): Self
3. EMAIL ADDRESS/PHONE NUMBER: _____
4. MAILING ADDRESS: _____

Do you wish to withhold your name or address from public review or from disclosure under the Freedom of Information Act (FOIA)? | NO | YES

Please give this completed form to one of the project team representatives or mail by May 27, 2014, to:
Mr. Marcelo Calle
Office of Surface Mining Reclamation & Enforcement, Western Region Office
1999 Broadway, Suite 3320
Denver, CO 80202-3050
Comments may be emailed to FCPPNavajoEnergyEIS@osmre.gov.

Comment Letter 247..... Benally, N.

Response

Thank you for your comment.



COMMENT 248

Office of Surface Mining Reclamation and Enforcement
Four Corners Power Plant and Navajo Mine Energy Project
Environmental Impact Statement (EIS)

Draft EIS Public Meeting Comment Form

Comments must be postmarked by May 27, 2014, for consideration in the Final EIS. Comments may be submitted at the open house public meetings (being held April 30 through May 9, 2014), via email to FCPPNavajoEnergyEIS@osmre.gov or by postal mail, hand delivery or courier to the address below.

MEETING LOCATION: Shiprock, NM DATE: 5/21/14
Please Print

I recommend OSM to process
with Alternative A, which
seems more feasible.

1. NAME: Nancy D. Todea
2. ORGANIZATION (if applicable): NA Member of Navajo Nation
3. EMAIL ADDRESS/PHONE NUMBER: [REDACTED]
4. MAILING ADDRESS: [REDACTED]

Do you wish to withhold your name or address from public review or from disclosure under the Freedom of Information Act (FOIA)? NO YES

Please give this completed form to one of the project team representatives or mail by May 27, 2014, to:
Mr. Marcelo Calle
Office of Surface Mining Reclamation & Enforcement, Western Region Office
1999 Broadway, Suite 3320
Denver, CO 80202-3050
Comments may be emailed to FCPPNavajoEnergyEIS@osmre.gov.

Comment Letter 248..... Todea, N.D.

Response

Thank you for your comment.

COMMENT 249



Office of Surface Mining Reclamation and Enforcement
Four Corners Power Plant and Navajo Mine Energy Project
Environmental Impact Statement (EIS)

Draft EIS Public Meeting Comment Form

Comments must be postmarked by **May 27, 2014**, for consideration in the Final EIS. Comments may be submitted at the open house public meetings (being held April 30 through May 9, 2014), via email to FCPPNavajoEnergyEIS@osmre.gov or by postal mail, hand delivery or courier to the address below.

MEETING LOCATION: _____ DATE: _____

Please Print

I BELIEVE THE 4 CORNERS POWER PLANT IS RUN
IN A MANNER THAT IS SENSITIVE TO THE ENVIRONMENT.

THE OPERATION OF THE PLANT IS ALWAYS DONE
WITH REGARD TO ENVIRONMENTAL IMPACT.

THOSE WORKING AT THE PLANT PLACE THE
ENVIRONMENT AND THE ENVIRONMENTAL IMPACT
OF THE PLANT AS A HIGH PRIORITY, AND
MAKE EVERY EFFORT TO ASSURE THAT WE DO NOT
EXCEED THE EMISSIONS REGULATION.

THE COAL PLANTS ARE A GREAT ASSET TO THIS COUNTRY,
PROVIDING CLEAN, RELIABLE, COST AFFORDABLE POWER, AND
JOBS.

249.001

1. NAME: RAYMOND T. SANCHEZ
2. ORGANIZATION (if applicable): APS
3. EMAIL ADDRESS/PHONE NUMBER: _____
4. MAILING ADDRESS: _____

Do you wish to withhold your name or address from public review or from disclosure under the Freedom of Information Act (FOIA)? NO YES

Please give this completed form to one of the project team representatives or mail by **May 27, 2014**, to:

Mr. Marcelo Calle
Office of Surface Mining Reclamation & Enforcement, Western Region Office
1999 Broadway, Suite 3320
Denver, CO 80202-3050

Comments may be emailed to FCPPNavajoEnergyEIS@osmre.gov.

Comment Letter 249..... Sanchez, R.T.

Response 249.001

Thank you for your comment. A complete discussion of Socioeconomics is provided in Section 4.10 of the Draft EIS.

COMMENT 250



Office of Surface Mining Reclamation and Enforcement
Four Corners Power Plant and Navajo Mine Energy Project
Environmental Impact Statement (EIS)

Draft EIS Public Meeting Comment Form

Comments must be postmarked by May 27, 2014, for consideration in the Final EIS. Comments may be submitted at the open house public meetings (being held April 30 through May 9, 2014), via email to FCPPNavajoEnergyEIS@osmre.gov or by postal mail, hand delivery or courier to the address below.

MEETING LOCATION: _____ DATE: _____

Please Print

I believe that power generation needs to continue with the lowest cost fuels so that the public can continue to have reliable power at the lowest personal cost. As long as the generating stations & coal mines continue to use best available pollution control technology & are making every effort to protect the environment, there is a benefit to everyone to approve the EIS. In addition, the safe & continuous operations of both mines & plant provide a good economic base for the region. The companies contribute a lot to the community in addition to providing jobs.

250.001

- 1. NAME: RENETTA SCACCHITTI *(ie. The Future Energy Center here the SJU College)*
- 2. ORGANIZATION (if applicable): _____
- 3. EMAIL ADDRESS/PHONE NUMBER: _____
- 4. MAILING ADDRESS: _____

Do you wish to withhold your name or address from public review or from disclosure under the Freedom of Information Act (FOIA)? NO YES

Please give this completed form to one of the project team representatives or mail by May 27, 2014, to:

Mr. Marcelo Calle
Office of Surface Mining Reclamation & Enforcement, Western Region Office
1999 Broadway, Suite 3320
Denver, CO 80202-3050

Comments may be emailed to FCPPNavajoEnergyEIS@osmre.gov.

Comment Letter 250..... Scacchitti, R.

Response 250.001

Thank you for your comment. A complete discussion of Socioeconomics is provided in Section 4.10 of the Draft EIS.

COMMENT 251



Office of Surface Mining Reclamation and Enforcement
Four Corners Power Plant and Navajo Mine Energy Project
Environmental Impact Statement (EIS)

Draft EIS Public Meeting Comment Form

Comments must be postmarked by May 27, 2014, for consideration in the Final EIS. Comments may be submitted at the open house public meetings (being held April 30 through May 9, 2014), via email to FCPPNavajoEnergyEIS@osmre.gov or by postal mail, hand delivery or courier to the address below.

MEETING LOCATION: Shiprock New Mex DATE: 05-06-2014

Please Print
I recommend the mine to remain open, because we the people, our children need to have jobs. The whole reservation needs this Power Plant to continue to exist. The government and all we have to work together. I'm a small business owner here in Shiprock and my clients are from APS workers and other oil dollar related. I would approve the transition the Navajo govern. to be and I know we get everybody in working together. I am 62 yet old I have seen the difference through the years. Our children are now educated and they can run whatever they're given. We need the plant for our Quality of life here on the Reservation. We can't give up, we can do anything.

251.001

- 1. NAME: Theresa Yazzie
- 2. ORGANIZATION (if applicable): 4-Corners Salon
- 3. EMAIL ADDRESS/PHONE NUMBER: [REDACTED]
- 4. MAILING ADDRESS: [REDACTED]

Do you wish to withhold your name or address from public review or from disclosure under the Freedom of Information Act (FOIA)? NO YES

Please give this completed form to one of the project team representatives or mail by May 27, 2014, to:

Mr. Marcelo Calle
Office of Surface Mining Reclamation & Enforcement, Western Region Office
1999 Broadway, Suite 3320
Denver, CO 80202-3050

Comments may be emailed to FCPPNavajoEnergyEIS@osmre.gov.

Comment Letter 251 Yazzie, T.

Response 251.001

OSMRE is considering all of the alternatives that were analyzed in the Draft EIS and will inform the public of its decision via the Record of Decision, anticipated in the spring of 2015.

COMMENT 252

Mr. Carl

I am writing to give input during the Public Comment Period of the EIS for the Four Corners Power Plant and Navajo Mine Energy Project, thank you for this opportunity. I live in Durango, CO (redacted) and am impacted daily by the emissions from the Four Corners Power Plant(s). I want to comment on two ways these plants and the emissions they produce impact me.

First, I am a physician, and I can not ignore the negative impact of the pollutants from these older plants. Their emissions affect people with asthma, COPD and other respiratory problems, and frankly I would prefer not to see the air I am breathing. Anyone who has driven over Hesperus Hill can see the sad situation to the south as winds blow the emissions from the plants eastward.

This brings me to my second point-the pollution from these plants mars the scenic beauty of our Colorado landscape-especially important at Mesa Verde, and Chaco Canyon -two federal lands close to the Four Corners. Tourists do not come to the Four Corners(and spend their money) to be assaulted by such obviously dirty air!!

I know that energy may cost more if these plants are retired or if they are required to clean up their emissions-but it is worth it. Do not allow economics to excuse health risks-this has never paid off in the long run. I urge those involved to bring power production in the Four Corners into compliance with clean air standards and make our beautiful part of the world beautiful again for everyone living or visiting this area.

Sincerely,



William Karls MD



Comment Letter 252..... Karls, W.

Response

Thank you for your comment.

COMMENT 253



League of Women Voters of New Mexico
2315 San Pedro NE, (#F-6) , Albuquerque, NM 87110
Tel: 505-884-8441, Web: www.lwvnm.org

June 16, 2014

Marcelo Calle
Office of Surface Mining Reclamation and Enforcement Western Region Office
1999 Broadway, Suite 3320
Denver, CO 80202-3050
Email: FCPPNavajoEnergyEIS@osmre.gov

Dear Mr. Calle:

The League of Women Voters of New Mexico thanks the Department of the Interior’s Office of Surface Mining, Reclamation and Enforcement (OSM) for conducting an Environmental Impact Assessment of the combined effects of the Four Corners Power Plant (FCPP) and the Navajo Mine.

We want to urge you to consider the long term implications of allowing this plant, and the mine, to continue operation for decades.

The Four Corners Power Plant produces levels of carbon dioxide, coal ash, ozone, sulphur dioxide, nitrogen dioxide and other dangerous pollutants that affect the entire Four Corners Area. The Navajo Mine, in addition to producing coal and coal dust, has been a storage facility for coal ash, which has been increasingly recognized as a dangerous pollutant.

In addition, the FCPP (along with San Juan Generating Station, not a subject of this letter) and the Navajo Mine consume huge quantities of water that we can’t spare.

Instead of allowing the expansion of coal mining operations, we encourage you to assist the Navajo nation in developing renewable sources of energy on their land. Such development would provide much-needed jobs in addition to many environmental and health benefits. 253.001

The League of Women Voters of New Mexico has conducted numerous in-depth studies in order to develop positions on which to advocate for the well-being of both man and the environment. We believe regulation and measures to reduce the transboundary air pollutants plaguing the Four Corners is essential to the health of the population and ecology.

The League believes that the adverse impact of polluting activities, such as mining operations and waste disposal facilities, must be mitigated equally for all communities, rich and poor. The Navajo Nation’s population is suffering disproportionately from the health impacts of the fossil fuel pollution, as has been well documented. (www.catf.us/coal/problems/power_plants/existing/map.php?state=New_Mexico). You have additional cause to protect minority populations in the region under Executive Order 12898, Federal

Comment Letter 253Williams, J.
League of Women voters of New Mexico

Response 253.001

Please see Master Response #2, Renewable Energy Alternatives.

COMMENT 253

Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, and Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks.

The League believes we must rapidly develop renewable energy sources and encourages further research on alternatives to the combustion of fossil fuels for energy. The Navajo Nation is rich in natural resources, including its people, the wind and the sun. Investing in a clean-energy future would create new jobs for those displaced by the reduction in the use of coal. The League of Women Voters of New Mexico urges OSM to consider all environmental, health, and socioeconomic impacts and to choose environmentally preferable alternatives to the proposed actions for the FCPP and Navajo Mine. Now is the time to move toward a cleaner future for all Four Corners residents.

On a final note: The League of Women Voters works to promote transparency in government at all levels. We regret that the draft Environmental Impact Statement (DEIS) is not currently available for viewing. Your May 16, 2014, letter extending the comment deadline contains a link to the Document Library, but the link on that page is not live. We hope you will act quickly to rectify this problem. 253.002

Sincerely,



Meredith Machen, President
League of Women Voters of New Mexico
president@lwvnm.org
505 988-4523/505 577-6337 (cell)

Response 253.002

OSMRE has confirmed that the web address provided in the letters is correct and functioning properly.

COMMENT 254

Dear Marcelo Calle at the Office of
Surface Mining,

Please do not renew the permit
for the Four Corners Power Plant near
Fruitland, or permit their right of way
renewals for transmission lines.

Please do not renew the permit
request from the Navajo Transitional
Energy Co. for the Navajo Coal mine, loc-
ated on the Navajo Reservation in San
Juan County, NM.

Also please do not permit the
development of the Pinabete Mine -

Consider the future of our
existence on this planet and help with
the transition into clean energy for the
good of us all.

254.001

Sincerely,

Caroline Lippincott

via Mackenzie



Comment Letter 254.....Lippincott, C.

Response 254.001

Please see Master Response #2, Renewable Energy Alternatives.

COMMENT 255



Office of Surface Mining Reclamation and Enforcement
Four Corners Power Plant and Navajo Mine Energy Project
Environmental Impact Statement (EIS)

Draft EIS Public Meeting Comment Form

Comments posted by postmarked by May 27, 2014, for consideration in the Final EIS. Comments may be submitted at the open house public meetings (being held April 30 through May 9, 2014), via email to FCPPNavajoEnergyEIS@osmre.gov or by postal mail, hand delivery or courier to the address below.

MEETING LOCATION: Nenahnezad Chapter DATE: May 7, 2014

Please Print

My primary concern with the mine and power plant has always been the erosion of air quality by air borne pollutants.

I know that mercury is present in the fall out and that it is a neuro-toxin. Do we allow the continued genetic pollution of the Navajo people by continuing the operation of coal powered power plants. No I think it is time to stop the practice.

Furthermore, did the EIS use NOAA data to profile the impact of wind occurrences and its effect on coal ash deposition?

For all the reasons I have listed, I favor Alternate E. Truly in 2014, sources of cleaner energy is possible.

255.001

255.002

1. NAME: Irene Hamilton
2. ORGANIZATION (if applicable): _____
3. EMAIL ADDRESS/PHONE NUMBER: _____
4. MAILING ADDRESS: _____

Do you wish to withhold your name or address from public review or from disclosure under the Freedom of Information Act (FOIA)? NO YES

Please give this completed form to one of the project team representatives or mail by May 27, 2014, to:

Mr. Marcelo Calle
Office of Surface Mining Reclamation & Enforcement, Western Region Office
1999 Broadway, Suite 3320
Denver, CO 80202-3050

Comments may be emailed to FCPPNavajoEnergyEIS@osmre.gov.

14-06-17-19

Comment Letter 255..... Hamilton, I.

Response 255.001

Thank you for your comment. OSMRE is considering all of the alternatives that were analyzed in the Draft EIS and will inform the public of its decision via the Record of Decision, anticipated in the spring of 2015. Section 4.1 of the Draft EIS addresses air quality. With regard to health and safety, Section 4.17 of the Draft EIS addresses potential impacts with regard to Health and Safety, including worker safety. Pages 4.17-22 through 4.17-24 summarize the human health risk assessment conducted for the project.

Response 255.002

To facilitate modeling, wind events were evaluated by reviewing on-site wind speed data correlated to threshold friction velocity guidance and emission estimation techniques published by the EPA.

COMMENT #256

PNM
2401 Aztec NE, Z100
Albuquerque, NM 87107
P. 505.241.2019
Claudette.Horn@pnmresources.com



EMAIL TRANSMITTAL

June 19, 2014

Mr. Marcelo Calle
Office of Surface Mining Reclamation and Enforcement
Western Region
U.S. Department of the Interior
1999 Broadway, Suite 3320
Denver, CO 80202-5733
mcalle@osmre.gov
fcppnavajoenergyeis@osmre.gov

RE: Comments of Public Service Company of New Mexico on the Four Corners Power Plant and Navajo Mine Energy Project Draft Environmental Impact Statement

Dear Mr. Calle,

Public Service Company of New Mexico (PNM) is submitting comments on the Four Corners Power Plant (FCPP) and Navajo Mine Draft Environmental Impact Statement (EIS) in accordance with the Notice of Availability published in the Federal Register (Vol. 79, No. 60) on March 28, 20014, and the subsequent Notice to Extend the Public Comment Period published in the Federal Register (Vol. 79, No. 95) on May 16, 2014.

PNM is the owner and operator of two electric transmission lines which are part of the connected-action for this EIS and appreciates this opportunity to comment on the draft EIS. The draft EIS thoroughly analyzes the impacts of the continued operation of the transmission lines and other connected actions and alternatives. The selection of the Proposed Action as the Preferred Alternative best meets the purpose and need of the project.

PNM does suggest incorporating the following refinements to the EIS to provide a more comprehensive description of the importance of the transmission lines and associated switchyards to electric reliability.

1. The draft EIS should consistently recognize that the transmission lines and FCPP switchyard are not dependent upon the FCPP for their utility. The FCPP switchyard and associated transmission lines serve as a generation and transmission hub that enables efficient use and reliable transmission of existing generation resources. These resources include, in addition to FCPP-generated power, power generated from hydroelectric, renewable resources, nuclear, and other fossil fuels. The operation of

256.001

**Comment Letter 256 Horn, C.
PNM**

Response 256.001

The description of the No Action alternative has been revised in Chapter 3 (Section 3.2.5.3) to indicate that: “The transmission lines and FCPP switchyard are not dependent upon the FCPP for their utility, as they also serve as a transmission hub for other existing generation sources.”

COMMENT #256

the transmission lines also facilitates electric grid reliability in the western U.S. and region-wide reserve sharing agreements necessary to respond to system emergencies. Many references in the draft EIS recognize this utility for the switchyard and lines (see p.v, #3); however, some references state that these facilities are dependent upon the output of FCPP for continued operation. We recommend that the DEIS consistently treat the switchyard and transmission lines as having independent utility from the continued operation of the FCPP.

- 2. Alternative E for the transmission lines, No Action, should reflect consistent recognition of the utility of the transmission lines to electric grid reliability. We recommend carrying the language from page 4.9-25 through other applicable sections in the document.

"It is unlikely that they would be decommissioned and demolished however, because they still support interconnection of the Western US energy grid and potential future energy supplies could use the excess capacity."

If the lines were decommissioned, it is likely additional transmission facilities would have to be built to offset the lost capacity.

In addition to the refinements above, PNM is also providing Attachment 1, PNM Technical Clarifications, for incorporation into the final EIS.

PNM appreciates consideration of our comments. If there are questions on this submittal, please contact Claudette Horn, Environmental Manager, at (505)241-2019 or Claudette.Horn@pnmresources.com.

Sincerely,



Aubrey Johnson
Vice President
New Mexico Operations

Response 256.002

The suggested text has been added where applicable in the EIS: "It is unlikely that they would be decommissioned and demolished; however, because they still support interconnection of the Western U.S. energy grid and potential future energy supplies could use the excess capacity."

256.002

COMMENT #256

Attachment 1
PNM Technical Clarifications
Four Corners Power Plant and Navajo Mine Draft EIS Comments

Comment #	Section	Page	Paragraph	Comments	
1	Global			<ul style="list-style-type: none"> The following land ownership/jurisdictions are not consistently referenced or recognized for PNM's FW line (Four Corners to West Mesa). <ul style="list-style-type: none"> Navajo Nation Trust and Allotted lands (We recommend correcting the multiple references that refer to only Trust lands.) BLM Zia Pueblo New Mexico State Land Office Bernalillo County The NM State Land Office lands are not consistently identified for the FC line (Four Corners to San Juan Switchyard). 	256.003
2	ES	iv	2	Change "Six transmission lines..." to "Eight..." There are several different references to the number of transmission lines throughout the document. We suggest using one number which reflects that the APS line to Cholla has two parallel lines. See p. 2-21 paragraph 1.	256.004
3	ES	iv	4	Change "Two modifications to these transmission lines..." to "Two previous actions on these..." Existing wording implies a physical modification to the lines.	256.005
4	ES	vi	7	Under NPS, remove "review ROW renewal for PNM FCPP to West Mesa transmission line." This is a perpetual easement.	256.006
5	Table ES-2	vi		Zia Pueblo is not listed as a consulting party for Sec 106.	256.007
6	ES	vii	1	Add text in bold: "BIA would approve the lease agreement for the FCPP and transmission lines, and BLM..."	256.008
7	ES	xii	5	Change "other generators" to "enable efficient use and reliable transmission of other generation resources".	256.009
8	ES	xiv	3, #1, Ln 3	Suggest including that the BLM ROW expires in May 2016. A portion of the line conveyed by BLM to Zia Pueblo expires in May 2016 and requires BIA approval.	256.010
9	ES	xiv	Last	Change "The Navajo Lease for the 4.5-mile portion..." to "The Navajo Lease for the 6.03	256.011

Page 3 of 8

Response 256.003

Section 1.2 has been amended to include the following clarification:
The West Mesa transmission line traverses Navajo Nation tribal trust lands up until the Reservation boundary and then passes through private and allotted trust lands held in trust by the U.S. Federal Government for individual Navajo tribal members.

Sections 4.9.2.1 and 4.12.2.2 have been amended similarly to clarify that the PNM 345kV West Mesa transmission line also crosses allotted lands that are held in trust by the U.S. Federal Government on behalf of individual Navajo members. Figure 4.9-2 (land use/ownership jurisdictions) has also been updated to show allotted lands.

References referring to PNM's "Four Corners to West Mesa" and "Four Corners to San Juan Switchyard" have been corrected throughout the Draft EIS. OSMRE contends that all other references to the other land assignments are consistently and appropriately used.

Response 256.004

The number of transmission lines has been changed to "eight" in the Executive Summary and Section 1.1.3. Section 2.2 correctly referred to "eight" in the Draft EIS.

Response 256.005, 256.006

Changes made per comments received.

Response 256.007

Zia Pueblo has been provided with all the information that consulting parties received, and OSMRE has consulted with the Zia Pueblo THPO throughout the Section 106 process. They is a signatory to the Programmatic Agreement. Please see Section 5.1.3.2 of the Draft EIS for greater detail.

Response 256.008

Change made.

Response 256.009

Change made.

Response 256.010

No change made.

Response 256.011

Changes made.

COMMENT #256

Comment #	Section	Page	Paragraph	Comments
10	Table ES-11	xxi	Row 4	<p>mile..."</p> <ul style="list-style-type: none"> • Add text in bold: "...between FCPP and the PNM San Juan Generating Station Switchyard." <p>Add text in bold to reference the cultural resources programmatic agreement (PA) for FCPP and transmission lines. "Specific protection measures listed in the PA for FCPP and transmission lines. Internal evaluation to ensure cultural property protection. Avoidance or monitoring for ground-disturbing activities in the vicinity of eligible or unevaluated sites. If the internal evaluation process indicates that NRHP-eligible will not be avoided, the BIA, in consultation with the appropriate agency, will develop a Treatment Plan to resolve adverse effects in accordance with the final PA."</p>
11	Table ES-11	xxii	Row 1	Delete strikethrough and add text in bold. "...PNM will implement an Avian Protection Program" to "...PNM has an Avian Protection Program."
12	ES	xxii	1	Wildlife and Habitats row. These are construction specifications from Desert Rock and are not appropriate for maintenance activities.
13	ES	Xxii	2, last line	Acid text in bold. "...milkvetch and Mesa Verde cactus."
14	ES	Xviii	1	Terms are well-defined in Section 4.4 but the distinction between historic archaeological resources (i.e. sites) and historic resources (i.e. buildings, structures, objects, and districts) would benefit from clarification. Consider substituting "historic buildings and structures" for historic resources throughout the document to make this more understandable. As there are only 3 of these resources along the transmission lines, it might be useful to say what they are. Same comment applies to Section 4.4, pg.4.4-1, para 1.
15	Table ES-12	xxiv	Row 4	Loss of revenue from transmission line ROW easement payments should be included under Alternative E.
16	Table 1-1	1-10	All	Comments 4 and 5 carry over to this table.
17	Table 1-1	1-10	Table last row	Change "...review ROW renewal for PNM FCPP to PNM FCPP to West Mesa Transmission line" to "...PNM ROW across NPS lands are perpetual."
18	1.4.2.6	1-12	6	Add text in bold: "...NHPA and special status species under Section 7 of the ESA."
19	2.3.1	2-31	3	Suggest deleting references to PNM as this section is dedicated to APS and there is another ROW section for PNM on page 2-32.
20	2.3.1	2-31	3	Add text in bold: "...neither APS nor PNM hold easements or access rights outside the transmission line ROW but the right of ingress and egress is generally granted as a part of applicable ROW documents."
21	2.3.1	2-31	3	Delete the last sentence in the paragraph which states that "if access roads do not exist..."

Page 4 of 8

Response 256.012

Change made

Response 256.013

Changed to "will continue to implement..."

Response 256.014

The Final EIS has been revised to be consistent with the BA.

Response 256.015

Change made

Response 256.016

Replaced the term "historic resources" with "historic buildings and structures".

Response 256.017

Table ES-12 for Alternative E under the socioeconomic impacts has been revised to include "payments" in addition to tax revenues.

Response 256.018

Changes made per 256.006 & .007 above.

Response 256.019

Change made per 256.006 above

Response 256.020

Change made

Response 256.021

Change made. Relevant text from the reference paragraph was added to page 2-32 of the Draft EIS.

Response 256.022

Change made

Response 256.023

The change was not made, as text no longer references PNM.

COMMENT #256

Comment #	Section	Page	Paragraph	Comments
22	2.3.2	2-33	3, in 5	PNM generally relies upon existing roads and two-tracks to access transmission structures. Maintenance cannot be accomplished by crews on foot and PNM does not generally use helicopters for this purpose.
23	2.3.2	2-32	3	Add text in bold. "...are consulted, as necessary." Add text in bold. "Power can flow in either direction on the Four Corners-San Juan transmission line depending on the demand and the generation availability. Power flows on the Four Corners-West Mesa transmission line from north to south." 256.024 256.025
24	3.2.1.3	3-19	#1	Suggest incorporating comment 8.
25	3.2.1.3	3-19	#4	See comment 10 for line length.
26	3.2.5.3	3-33	3	Change "... not renew the 323 federal grants of ROW for PNM's Four Corners to Cholla..." to "not renew the 323 federal grants of ROW for PNM's Four Corners to San Juan..." 256.026 256.027
27	3.2.6.1	3-35	1	Add text in bold. "Vehicle access will be restricted to existing roads and patrol trails within the APS and PNM ROWs to the extent possible." 256.028
28	3.2.6.1	3-35	2	Add text in bold. "When access is not available through existing roads or patrol trails, vehicles traveling offroad." 256.029 256.030
29	3.2.6.4	3-36	7	Add text in bold to Transmission Line section in 3.2.6.4: "Specific measures have been proposed and are included in the PA. Proponents rely upon review of end to end cultural surveys to determine if any cultural properties are located in the vicinity of proposed maintenance activities. Internal evaluation is conducted to ensure that cultural properties present along the line are not damaged by maintenance activities. If the internal evaluation process indicates that NRHP-eligible will not be avoided, the BIA, in consultation with the appropriate agency, will develop a Treatment Plan to resolve adverse effects." 256.031
30	3.2.6.5	3-38	7	Add text in bold. "...staging areas...will be located in previously disturbed areas, where possible, but outside..." 256.032
31	3.2.6.5	3-38	8	Add text in bold. "...implemented as part of the construction process as required by applicable regulations." 256.033
32	3.2.6.5	3-39	top	Add text in bold. "When required, to protect the water quality..." 256.034
33	3.2.6.6	3-40	3	Add text in bold. "...harbor seeds prior to entering tribal and federal lands." 256.035
34	3.2.6.7	3-40-41		As pointed out in BA comments, these are taken directly from Desert Rock and are applicable to construction but not maintenance. These need to be re-worked as requested in the BA. 256.036
35	3.2.6.8	3-44	5	Add text in bold. "...milkvetch and Mesa Verde cactus" 256.037
36	3.4	3-62	1	GSMIRE should be consulting with BLM and other applicable agencies as well as Navajo THPO and 256.038

Page 5 of 8

Response 256.024

Change not made

Response 256.025

Change made

Response 256.026

See response to Comment 256.010

Response 256.027

Change made per comment #256.011.

Response 256.028

Change made

Response 256.029

Change made

Response 256.030

Change made

Response 256.031

Change made

Response 256.032

Change made

Response 256.033

Change made

Response 256.034

Change made

Response 256.035

Change made

Response 256.036

Made consistent with the BA.

Response 256.037

Change made

Response 256.038

Changed sentence to read: "OSMRE is consulting with appropriate tribes and agencies for determination of Project effects."

COMMENT #256

Comment #	Section	Page	Paragraph	Comments
37	4.1	4.1-2	1	SIPO for determinations of project effect. This comment is common to all alternatives. "...the EPA has proposed developing new secondary standards for SO ₂ and NO _x aimed at reducing the impacts of atmospheric deposition on surface waters"
38	4.3.4.1	4.3-23	1	Delete: "All vehicle access to the transmission lines is via paved roadways." Please refer to comments 21, 27, and 28 and the project description submitted by PNM.
39	4.4	4.4-1	1	Suggest incorporating comment 14.
40	4.4.1.1	4.4-1	6	Add Tribal Historic Preservation Officers
41	4.4.1.1	4.4-2	2	Remove Tribal Historic Preservation Officer from line 2
42	4.4.1.1	4.4-3	4	ARPA permits are not issued for conducting surveys. ARPA permits are issued for mitigating adverse effects to archaeological resources through data recovery.
43	4.4.2.1	4.4-13	2	Navajos constructed pueblos during the Gobernador, not the Dinétah phase. Associated with the Pueblo Revolt and Reconquest.
44	4.4.2.3	4.4-16	1	Sentence 3 may not be correct. No NRHP determinations are required for in-use areas according to Navajo Nation Guidelines for the Treatment of Historic, Modern & Contemporary Abandoned Sites.
45	4.4.4.1	4.4-21-24		This table appears to consist exclusively of properties associated with the mine expansion and includes two of four sites along the FC line. It does not include properties associated with the power plant, the APS lines, or PNM's FW line. The table should be revised to incorporate the additional information.
46	4.4.4.1	4.4-25	2	Add text in bold "...resources that are determined eligible for the NRHP (Table 4.4-25). The FCPP and transmission line PA is based on existing proponent conservation measures and includes provision for internal screening, site protection and treatment in cases where avoidance of adverse effect is not possible."
47	4.4.4.1	4.4-25	2	Table 4.4-5 does not contain the data to support the presence of 297 historic properties currently unevaluated and two archaeological resources that have been determined eligible within the APE. I would suggest expanding the data for completeness or deleting the table with reference to the appropriate appendices.
48	4.5.4.1	4.5-60	3	Add text in bold to beginning of sentence. "As appropriate..." All maintenance activities that involve site disturbance do not warrant stormwater-related BMPs.
49	4.5.4.1	4.5-60	3, line 5	Change "... required by the appropriate authorities." to "... appropriate permits."
50	4.5.4.5	4.5-64	1	Add text in bold. "...and obtain necessary permits, which may include a Stormwater General

Page 6 of 8

Response 256.039

Change made

Response 256.040

Changed text as follows: Most vehicle access to the transmission lines is via paved roadways; however, some occurs on unpaved roadways. Implementation of applicant proposed measures would minimize any potential for impact; therefore, maintenance activities would not result in any erosion or soil disturbance.

Response 256.041

See Response to comment 256.016

Response 256.042

The Draft EIS text already says "federally recognized tribes".

Response 256.043

Change made

Response 256.044

Revised second sentence to read: "ARPA requires Federal landowning agencies to issue ARPA permits to qualified individuals, institutions, or firms that conduct archaeological excavations within Federal and tribal lands."

Response 256.045

The phase name was replaced with "Gobernador."

Response 256.046

Comment noted. Per NN Guidelines for the Treatment of Historic, Modern & Contemporary Abandoned Sites, in-use sites require only summary documentation, sufficient to determine if potential historic properties are present and if they would be affected by the proposed undertaking. This section has been updated following completion of consultation with the NNTHPO.

Response 256.047

Comment noted. Table includes only those resources that are historic properties and have been updated per the completion of Section 106 consultation.

Response 256.048

Comment noted. No change made as the other sections do not contain this language. The Programmatic Agreements are discussed previously on page 4.4-18 and later on page 4.4-35.

Response 256.049

Comment noted. Table includes only those resources that are historic properties. All data are available in Appendix B. Tables have been updated based on completion of Section 106 Consultation.

Response 256.050, 256.051

No change

Response 256.052

Change made

COMMENT #256

Comment #	Section	Page	Paragraph	Comments
51	4.6.4.1	4.6-19	3	Permit..." As written, the sentence implies that such permit would be required; but, applicability will be a case by case assessment. This is the No Action Alternative for this section and should be edited in accordance with PNM's global comment regarding Alternative E. Delete text in strikethrough and add text in bold. "Repair to transmission lines infrastructure is completed regularly as needed. "
52	4.6.4.1	4.6-19	3	Add text in bold. "...ground disturbing activities would be subject to agency consultation and permitting prior to construction if sensitive resources which cannot be avoided are identified. " Given that the ROW corridors have been previously disturbed and were recently surveyed for biological resources, it is not necessary or practical to require consultation for unqualified ground disturbing activities.
53	4.7.2.2	4.7-26	7, line 4	Also Bernalillo County as described in <i>PNM Transmission Line FW Maintenance Biological Evaluation, Sandoval and Bernalillo Counties, New Mexico</i> prepared by Marron and Associates in 2013. This BE covered the section of line from Rio Puerco to West Mesa. Overall comment. This section should be updated with edits made previously to the draft BA.
54	4.8	4.8-1		Seven counties. Check and correct everywhere six counties are mentioned
55	4.8.2.1	4.8-4	3	Yellow-billed cuckoo is Proposed Threatened
56	Table 4.8-1	4.8-7	1	
57	4.9.2.1	4.9-11	4	<ul style="list-style-type: none"> Change "This transmission line is approximately 135 miles..." to "...156 miles..." Replace "Rio Rancho" with "Albuquerque."
58	4.9.2.2	4.9-15	2	Delete text with strikethrough and add text in bold. "...access to the transmission line ROW is achieved exclusively through the use of public roads and patrol trails, neither APS nor PNM hold easements or access rights outside the transmission line ROW." Grant of easement documents allow ingress and egress to the ROW.
59	4.9.2.2	4.9-15	2	Remove "If access roads do not exist due to terrain constraints, maintenance crews use foot access or helicopters to access the transmission lines." This is not true for PNM crews.
60	4.10.2.2	4.10-12	1	The PNM and APS transmission and maintenance employees work out of Albuquerque and Phoenix, respectively, not the FCPP.
61	4.12.4.1	4.12-10	2	Delete strikethrough and add text in bold. "To protect the water quality of area surface waters during construction and maintenance activities, any and all of the BMPs required by appropriate authorities permit conditions will be implemented and maintained." The qualifier is unnecessary and can inadvertently impose BMPs that are not suited for a particular activity.
62	4.17.2.3	4.17-5	1	Change "electromagnetic frequency (EMF)" to "electromagnetic fields (EMF)"

Page 7 of 8

Response 256.053

Change made

Response 256.054

Change made

Response 256.055

Only portions of the PNM Rio Puerco to West Mesa line (previously authorized in a separate NEPA evaluation) occur in this county on private, state, and National Park Service lands in Bernalillo County. References to Bernalillo county have been added to the text where necessary. All federal (USFWS) and state species for Bernalillo County have been included in the revised section of 4.8 in the Draft EIS. BLM, Navajo, and Hopi species have been eliminated from consideration on this portion of the PNM transmission line.

Response 256.056

The Final EIS has been made consistent with BA

Response 256.057

The Final EIS has been made consistent with BA

Response 256.058

Table and text have been updated to reflect the proposed listing of Yellow-billed Cuckoo as threatened throughout the document.

Response 256.059

See also page 1-4, 2-32 – have made consistent throughout document.

Response 256.060

Change made

Response 256.061

Have clarified that PNM does not do this.

Response 256.062

The intent of the following sentence is to take into account the large percentage of Navajo members that work at/around the FCPP, including transmission lines, as part of the project and likely have large amounts of support facilities and equipment stationed at FCPP: "All operations and maintenance employees for the APS and PNM transmission lines work out of the FCPP."

Response 256.063

No change

Response 256.064

Change made

COMMENT #256

Comment #	Section	Page	Paragraph	Comments
63	4.18.2	4.18-3	Table 4.18-1	Use the following text in column 2: "SIGS is operated by PNM and consists of four coal-fired, pressurized units that generate about 1,800 gross megawatts of electricity. The four units went online between 1973 and 1982, and is PNM's primary generation source, providing 32 percent of the power capacity to meet the needs of PNM customers. SIGS is subject to the regional haze provisions of the Clean Air Act including a requirement to control visibility reducing pollutants using BART. In June 2011, the state of New Mexico submitted a Regional Haze SIP that included a SIGS BART determination. EPA partially approved and disapproved the SIP and issued a Federal Implementation Plan (FIP) requiring SIGS to install additional NOx control technology (SCR). The state of New Mexico and PNM challenged the FIP in court and began negotiations with EPA and NMED that resulted in a tentative agreement that lead to a Revised SIP. On April 30, 2014, EPA released a pre-publication version of a proposed approval of the Revised SIP that calls for installing selective non-catalytic reduction (SNCR) to reduce NOx on two units by 2016 and shutting down two units by the end of 2017. Change. "ADS PNM operates the FC-Pillar."
64	4.18.2	4.18-12	Row 2	Change title to Archeological Sites Identified in ROW for PNM FC Line on Navajo lands within APE.
65	Table B-9	B-41	Title	Change title to Archeological Sites Identified in ROW for PNM FC Line on Navajo lands within APE.

256.065

256.066

256.067

- Response 256.065**
Change made
- Response 256.066**
Change made
- Response 256.067**
Change made

COMMENT 257

6/23/2014 DEPARTMENT OF THE INTERIOR Mail - FOUR CORNERS POWER PLANT, NAVAJO MINE AND PROPOSED PINABETE PERMIT AREA



FCCP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>

FOUR CORNERS POWER PLANT, NAVAJO MINE AND PROPOSED PINABETE PERMIT AREA

1 message

janet wilson [REDACTED] Thu, Jun 19, 2014 at 6:59 AM
To: FCCPNavajoEnergyEIS@osmre.gov

Office of Surface Mining Reclamation and Enforcement, Western Regional Office

Marcelo Calle,

Conversion of coal power plants to natural gas (while temporary) is mandated.
Don't sanction another coal mine permit!!
Natural gas is abundant in this area...has poxed the entire area and has stayed at record low prices for years.
Use what has already been developed (at enormous negative impact).
The air, land and water resources of this area have been taxed beyond recovery! Use what is here. The wells exist, the gas exists. New development cannot be sustained.
Develop the solar and wind potential of this area as a long term (2041) goal and in the meantime convert to existing sources of natural gas!
STOP the destruction NOW! THIS MUST BE BIGGER THAN coal mining interests and power plant issues.
Jobs are available in conversion projects, cleaning and reclamation projects and new (wind and solar) resource development.

257.001

While air quality is the driving force in these conversions.... (EXCEL/DENVER) **WATER**
depletion is the underlying crisis.
You may clean the air but you can't replace the water.

<https://mail.google.com/mail/tv/349/u/0/?ui=2&ik=6a:25a16cb&view=pt&search=inbox&th=146b4360d8e9496&siml=146b4360d8e9496>

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Comment Letter 257..... Wilson, J.

Response 257.001

Please see Master Response #2, Renewable Energy Alternatives

6/23/2014

COMMENT 258
DEPARTMENT OF THE INTERIOR Mail - (no subject)



FCCP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>

(no subject)

1 message

Joe Ward [REDACTED] Sat, Jun 21, 2014 at 4:48 AM
Reply-To: Joe Ward [REDACTED]
To: "FCCPNavajoEnergyEIS@osmre.gov" <FCCPNavajoEnergyEIS@osmre.gov>

Please close the filthy coal fired power plants in San Juan County, New Mexico. Those of us who have to live downwind of those abominations are tired of breathing their pollution. It isn't fair to people with asthma and other respiratory disorders to have their condition worsened by the filth spewed into the sky by these nasty polluting monstrosities. It isn't fair for us to have to see the pall of pollution like an ugly bruise on the sky every day. Close them and install wind turbines rather. Thank you.

258.001

Joe Ward
[REDACTED]

"Little garden planet,
Oasis in space.
Some hearts hurt,
They can hardly stand
The waste."
- from "Ethiopia" by Joni Mitchell -

<https://mail.google.com/mail/b/349/u/0/?ui=2&ik=6a:25e16cb&view=pt&search=inbox&th=148be0b12f4a2467&siml=146be0b12f4a2467>

1/1

Comment Letter 258.....Ward, J.

Response 258.001

Please see Master Response #2, Renewable Energy Alternatives



COMMENT 259
TIIS TSOH SIKAAD CHAPTER
Post Office Box 7359
Newcomb, New Mexico 87455
505-696-5470 (Telephone)
505-696-5473 (Fax)
tiistsohsikaad@navajochapters.org



June 17, 2014

Marclo Calle
Office of Surface Mining Reclamation and Enforcement, Western Region Office
1999 Broadway, Suite 3320
Denver, CO 80202-3050

Dear Mr. Calle:

**Four Corners Power Plant & Navajo Mine Energy Project Environmental Impact Statement (EIS)
NEPA Process**

The Tiis Tsoh Sikaad Chapter, a duly certified Chapter under the Navajo Nation Government is delegated and authorized to review all matters affecting its service area and community members. On behalf of the Tiis Tsoh Sikaad Community, please accept the attached Chapter Resolution supporting and requesting a favorable decision that will allow for the continuation of the Four Corner's Power Plant and Navajo Mine Operations.

If you have questions, please contact Arthur Yazzie at the Tiis Tsoh Sikaad Chapter.

Sincerely,

Xo: Chapter file
Nancy Degay, TTS Secretary/Treasurer

**Comment Letter 259 Yazzie, A.
Tiis Tsoh Sikaad Chapter**

Response

Thank you for your comment.



COMMENT 259
TİİS TSOH SİKAAD CHAPTER

Post Office Box 7359
Newcomb, New Mexico 87455
505-696-5470 (Telephone)
505-696-5473 (Fax)
tftsoshsikaad@navajochapters.org



TİİS TSOH SİKAAD

Resolution of TİİS TSOH SİKAAD Chapter
TTS-RES14-06-065

**SUPPORTING A DECISION FROM THE OFFICE OF SURFACE MINING THAT WILL ALLOW
FOR THE CONTINUATION OF THE FOUR CORNER'S POWER PLANT AND NAVAJO MINE
OPERATIONS.**

WHEREAS:

1. TİİS TSOH SİKAAD is a certified Chapter of the Navajo Nation pursuant to Navajo Tribal Council CAP-34-98 and is delegated authority with respect to local matters consistent with Navajo Nation Law, including custom, tradition, and fiscal matter; AND
2. The Navajo Nation, Arizona Public Service Company (APS), Navajo Transitional Energy Company (NTEC), and BHP Billiton Mine Management Company are working together to seek approval from multiple federal and tribal agencies to renew the Four Corners Power Plant (FCPP) lease through 2041 to renew associated rights-of-way for the FCPP and transmission facilities, to reconfigure its operations to significantly reduce air emissions, and to expand mining operations to provide a reliable coal supply from Navajo Mine to FCPP (Collectively, these activities are referred to as the Four Corners Power Plant and Navajo Mine Energy Project); AND
3. The Office of Surface Mining Reclamation and Enforcement (OSM) on its own behalf and on behalf of other federal agencies is preparing an environmental impact statement (EIS) under the National Environmental Policy Act, and also is leading related environmental compliance efforts; AND
4. Once fully implemented, environmental improvement projects to be installed at FCPP will result in the reduction of emissions above and beyond those realized by the recent closure of FCPP Units 1-3, including a 30% reduction in carbon dioxide and a projected reduction in FCPP water use of almost two billion gallons per year; AND
5. The proposed project will have a significant annual direct impact on TİİS TSOH SİKAAD, through the preservation of jobs and income generation from direct and indirect labor; AND
6. The project uses Navajo-Owned natural resources, while contributing 30 percent of the Navajo Nation general fund.

NOW, THEREFORE BE IT RESOLVED THAT:

TİİS TSOH SİKAAD and its community members affirm its support of the renewal of the Four Corners Power Plant (FCPP) lease, rights-of-way, and associated mining operations; AND

BE IT FURTHER RESOLVED by the TİİS TSOH SİKAAD that it finds and concludes that the Four Corners Power Plant and Navajo Mine Energy Project will have significant economic and environmental benefits to the Navajo Nation, as well as the Navajo Communities.

Nancy Begay
President

Day's Henry
Secretary/Treasurer

Gazing Member

Arthur J. Yazzie
Vice President

Lorenzo Bates
Council Delegate

COMMENT 259

CERTIFICATION

We hereby certify that the forgoing resolution was duly considered by the T'is Tsoh Sikaad Chapter of the Navajo Nation, (New Mexico), at a duly called meeting at which a quorum was present and that same was passed by a vote of 22 in favor, 02 opposed, and 02 abstained on this 8th day of June, 2014.

Motion: Marty Chee

Seconded: Pauline Tsosie



Arthur J. Yazici, Vice President



Nancy Begay, Secretary/Treasurer

Lorenzo Bates, Council Delegate

6/23/2014

COMMENT 260

DEPARTMENT OF THE INTERIOR Mail - Coal fired Power Plants



FCPP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>

Coal fired Power Plants

1 message

Mary Ann Findley [redacted] Sun, Jun 22, 2014 at 7:48 PM
To: "FCPPNavajoEnergyEIS@osmre.gov" <FCPPNavajoEnergyEIS@osmre.gov>

Thank you for the opportunity to comment. I am very much in favor of retaining our coal fired power plants. President Obama has declared a war on coal and it is another way for him to weaken the United States. Billions have been wasted on solar energy plants and other alternative energy schemes. We all know that the day will come in our society when we will have other sources of power and that coal powered plants will be antiquated. However, we cannot just shut them down and do away with them like so many would like to. We all want clean air and water. With more modern technology on cleaning up our power plants, we can continue to have our plants, the electricity that they produce and a clean environment. I don't believe my comments will mean anything in the long run. Only comments condemning them will be considered. Meanwhile, electric rates will soar, the poor will get poorer and our nation will get weaker. Let's get rid of Obama instead!

Mary Ann Findley
[redacted]

Sent from my iPad

Comment Letter 260..... Findley, M.

Response

Thank you for your comment.

COMMENT 261



County Commissioners: **Board of County Commissioners** 109 West Main, Room 302
Steve D. Chappell Cortez, CO 81321
Keenan G. Ertel (970) 565-8317
Larry Don Suckla (970) 565-3420 Fax
County Administrator:
Melissa A. Brunner June 16, 2014

Mr. Marcelo Calle
Office of Surface Mining
Reclamation and Enforcement
Western Regional Office
1999 Broadway, Suite 3320
Denver, CO. 80202-3050

RE; Local Government Coordination Comments on the Four Corners Power Plant and Navajo Mine Energy Project.

The Montezuma County Board of County Commissioners appreciates this opportunity to comment on the Four Corners Power Plant and Energy Project Draft Environmental Impact Statement (DEIS). The Council on Environmental Quality's (CEQ) NEPA regulation requires Federal agencies to coordinate with State and local agencies to fullest extent possible.

Dependable energy is critical to health of our nation and our region. We fully support the right of the Navajo Nation to develop its natural resources and continue the operation of the Four Corners Power Plant until 2041. We feel that the proposed plans reflect an appropriate balance between the need to accommodate electricity demands, preserve jobs, and the need to protect the environment.

Our primary concern as a neighboring community is degradation of air quality. Clean air, and the associated panoramic views the southwest is famous for are all affected by the brown haze that creeps northward from the power plants in New Mexico and Arizona. Tourism is a very important industry to both Southwest Colorado as well as the Navajo Nation. Air quality is very important to the tourism industry and reversing negative impacts on tourism will benefit the southwest as a whole.

In southwest Colorado, air quality is primarily influenced by factors beyond our State's border. Our border states of Arizona and New Mexico both have large power generating facilities in the region that impact ozone levels in the Four Corners region much more significantly than energy

Comment Letter 261 Dietrich, J.

COMMENT 261

development and other anthropogenic factors within Colorado. Our community is constantly faced with the possibility of being classified as a non-attainment region under the Clean Air Act.

Colorado has recently implemented the most stringent air quality control regulations in the nation. These new regulations will help to promote clean air within the state and help us to stay in attainment and in compliance with the Clean Air Act. However the State of Colorado can only do so much. We therefore must count on neighboring states to do their part as well. We believe the proposed actions should be approved contingent upon implementing the best available retrofit technology.

261.001

Thank you for this opportunity to comment.

Sincerely,

The Montezuma County Board of County Commissioners.



Keenan G. Ertel, Chairman.

Response 261.001

The Federal Implementation Plan for FCPP requiring Best available retrofit technology is a decision made by the EPA that is considered as part of the baseline environmental conditions and is not a part of the proposed project. Please see Master Response #14, No Action Alternative and Environmental Baseline. Air quality is addressed in Sections 4.1 and 4.18.3.1 of the EIS.

6/23/2014

COMMENT 262
DEPARTMENT OF THE INTERIOR Mail - Continued Operation of the FCPP and the Navajo Mine



FCPP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>

Continued Operation of the FCPP and the Navajo Mine

1 message

Kyle Rhodes <kylek@pescoinc.biz> Mon, Jun 23, 2014 at 1:39 PM
To: "FCPPNavajoEnergyEIS@osmre.gov" <FCPPNavajoEnergyEIS@osmre.gov>

To Whom It May Concern,

I fully support Alternative A – Proposed Action that is being considered by the DEIS. My support is due to the tremendous reduction of pollutants and a result of the shutting down of Units 1, 2 and 3, plus installation of pollution control upgrades on Units 4 and 5.

There is also a huge economic impact to the Navajo Nation and the surrounding area that must be considered and preserved. 262.001

Respectfully,

Kyle K. Rhodes

President

Process Equipment & Service Company, Inc. (PESCO)

kylek@pescoinc.biz

505-327-2222 (office)

505-327-7550 (fax)



<https://mail.google.com/mail/b/349/u/0/?ui=2&ik=6ac25a16cb&view=pt&search=inbox&th=146ca3e1b2261188&siml=146ca3e1b2261188>

1/1

**Comment Letter 262Rhodes, K.
PESCO**

Response 262.001

Thank you for your comment. A complete discussion of Socioeconomics is provided in Section 4.10 of the Draft EIS.

6/29/2014 **COMMENT 263**
DEPARTMENT OF THE INTERIOR Mail - Continued operation of the FCPP and the Navajo Mine
 FCPP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>

Continued operation of the FCPP and the Navajo Mine

1 message
Brik Moorhead [REDACTED] Tue, Jun 24, 2014 at 9:03 AM
To: "FCPPNavajoEnergyEIS@osmre.gov" <FCPPNavajoEnergyEIS@osmre.gov>

To whom it may concern,

As a resident of San Juan county I would like to express my support for Alternative A of the proposed action plan presented before the DEIS.

Lowering the pollution and keeping jobs in the area will help keep the four corners residents healthy and self-reliant, ensuring a prosperous future. 263.001

Sincerely,
Brik Moorhead

Comment Letter 263.....Moorhead, B.

Response 263.001

Thank you for your comment. OSMRE is considering all of the alternatives that were analyzed in the Draft EIS and will inform the public of its decision via the Record of Decision, anticipated in the spring of 2015.

COMMENT 264

Comment on EIS for Four Corners Power Plant/Navajo Mine from SouthWest Organizing Project

The SouthWest Organizing Project (SWOP) is submitting this comment on the environmental impact statement that is being done on the Four Corners Power Plant and Navajo Mine. SWOP is a 34 year old social justice organization that has worked for many years on environmental issues impacting communities of color. The Four Corners Power Plant and the Navajo Mine have been an environmental burden on the Navajo community for decades now, and we want to take this comment opportunity to provide our input on the EIS and it's implications for the Navajo community moving forward.

It is also worth mentioning that starting in September of 2012, SWOP began working with two families that lived around the edge of Navajo Mine via our Breathe in New Mexico campaign. Community members who live around the mine have longed complained about poor air quality that impacts their health, as well as the health of their livestock and the surrounding plant life. Through the Breathe in NM Campaign, community members collected 12 months worth of air quality samples to better understand what was in the air they were breathing as a result of the activities at the Navajo Mine, as well as the nearby coal-fired power plants. We will be submitting our samples results and final analysis as part of our comments for this EIS process.

264.001

Environmental Justice

There have been environmental justice issues that impact Navajo people as long as the mine and power plants have been located in the Four Corners region of New Mexico. Not only does the mine and power plants pollute the air, land, and water, but it also threatens the water supply in the area since the mining and plant processes demand so much water use. Yet residents in the area are forced to haul water from miles away and the majority of them live without electricity, despite living in the vicinity of some of the large water users and electricity producers in the SouthWest.

These local, mostly Navajo, populations are disproportionately impacted by the pollution coming from the Navajo Mine and Four Corners Power Plant. The area of the two power plants has now been noted as the largest source of green house gases in the United States, yet a certain population of low-income, indigenous people is dealing with the hardest impacts from this pollution.

The taking away from the earth in order to produce economical gains goes against the Navajo Fundamental Laws. The expansion of the mine and the continued pollution from Four Corners Power Plant will continue the devastating impacts on local plants and herbs that the Navajo people use for their ceremonies. Thus, the expansion and continuation of the Navajo Mine and Four Corners Power Plant will have cultural and religious impacts on the Navajo people, which is something that needs to be taken into consideration with the EIS.

Whenever industrial practices have disproportionate impacts on low-income, communities of color; environmental justice issues must always be taken into consideration. The Navajo people have a long history of being treated unjustly, and thus why environmental and other justice issues should be weighed even more heavily during this EIS process for the Navajo Mine and Four Corners Power Plant.

264.002

Comment Letter 264 Reynosa, J.
SWOP

Response 264.001

The data submitted were reviewed for possible inclusion in the Final EIS. Based on the data collection and reporting methodology provided, it was determined that the study is not appropriate for inclusion in the EIS for the following reasons:

- Data quality assurance and data validation were not sufficiently conducted. For example, data were not accompanied by monitoring flow rates. Measurement of PM10 is flow rate dependent.
- Appropriate reference methods do not appear to have been used.
- No third party audit of the data was conducted.
- Sampling date and schedule determinations are not provided, which makes it possible that the data are completely event-specific data (e.g., only collected on windy days) not a combination of "event" and "non-event" data.

Response 264.002

Environmental justice is addressed in Section 4.11 of the Draft EIS.

COMMENT 264

At this point, this EIS does not take justice issues into account enough for this EIS to be deemed as covering all its bases and to be able to be approved.

↑ 264.002

Air Quality

The fact that the area that encompasses the Navajo Mine and Four Corners Power Plant is now being proven to be the largest point source of pollution in our country should be a large area of focus in the EIS, yet the EIS does not take this into account, nor does it take into account cumulative impacts.

When determining whether the Four Corners Power Plant should continue operations into the future, there needs to be a good analysis of how this will continue to contribute to this area being the largest point of pollution in the country, especially when it is impacting the Navajo people disproportionately.

Cumulative impacts analysis is an analysis that looks at the impacts of multiple nearby sources of pollution, instead of looking at them source by source. It is obvious that having two large, coal-fired power plants 10 miles away from one another will have huge cumulative impacts on not only human health, but the surrounding wildlife and plant life. There is also a lot of oil and natural gas development in this area, and the pollution impacts from nearby oil and gas development needs to be taken into account within this EIS as well.

If cumulative impacts were taken into effect, it will show that this area is even more impacted by air pollution than what the Los Alamos study showed when it did its space analysis to show the area is the largest point source of pollution in our country. Cumulative impacts needs to taken into account within the air quality analysis of this EIS, or it should be deemed as an incomplete analysis if cumulative impacts are not taking into account.

264.003

Finally, as noted above, SWOP did a year long citizen science campaign that shows that inhabitants living in the area of the Navajo Mine are breathing in unhealthy amounts of particulate matter and silicates. We worked with Global Community Monitor to train citizens on how to use a particulate monitor, take air quality logs, fill out chain of custody forms, and ship the samples in a timely manner. Between the 2 sites, 50 air samples were taken over a year's time.

The data of our report strongly suggests chronic exposure to crystalline silica levels near the Navajo Coal mine that are a public health concern. The conclusion of Dr. Mark Chernaik, who did the sample analysis for us, is as follows: "Emissions of PM₁₀ and crystalline silica by the Navajo Coal Mine are likely creating long-term, unhealthy air quality at residential locations between 900 and 1400 meters from the mine. Investigation into measures to reduce emissions of PM₁₀ and crystalline silica by the Navajo Coal Mine are warranted."

Along with this written comment, SWOP will also be submitting our sample results and Dr. Chernaik's final analysis of our year long citizen science campaign. Through this analysis you will see that there is a real need for air quality analysis to be done at the site of the Navajo Mine and at both the San Juan Generating Station and Four Corners Power Plant instead of relying on monitors miles away and using a dispersion model to get air quality data. That is not real air quality data, instead that is data that can be easily skewed to show cleaner air that what actually is. Especially if one of our local labs is now showing the power plants and accompanying mine are now the largest point source of pollution in the United

↓

Response 264.003

As provided in Section 4.1, the Draft EIS contains extensive discussion on air quality effects, which serve as the basis for measuring incremental effects to the cumulative environment (Section 4.18.1). The cumulative effects ROI for air quality is the greater Four Corners region, composed of northeastern Arizona, southwestern Colorado, Navajo Nation, and northwestern New Mexico. There are 17 other energy generation facilities occurring with the study area (see Table 4.18-1 and Figure 4.18-1) that represent the other major emission sources in the Four Corners region and are thus the focus of this cumulative analysis.

See comment 264.001 for more information regarding the SWOP year-long citizen science campaign.

COMMENT 264

States, then an EIS would not be complete without actual air quality data at the source of the pollution that also takes into account nearby sources of pollution. ↑ 264.003

Climate change and Drought

Being one of the largest sources of pollution, but also putting out very high amounts of greenhouse gases, which contribute to climate change, the EIS for Navajo Mine and Four Corners Power Plant definitely needs to take this issue into account. This is especially important in regards to extreme drought and water shortages, which is already having a huge impact in the SouthWest as a result of climate change.

Even if someone doesn't agree with the very real reality of climate change, the data being put out from LANL on greenhouse gas emissions from power plants in the NorthWest region of New Mexico should prompt a further and more in-depth look at these emissions and its impacts on the environment and connected implications like water shortage. 264.004

New Mexico and all the surrounding states in the SouthWest are experiencing severe droughts. New Mexico is currently its most severe drought on record and each year the drought data only gets worse. The San Juan-Chama Project coming from the NorthWest part of New Mexico is already starting to not be able to fulfill its part of the water to supply New Mexico's piece of the Rio Grande Compact agreement. As noted before, the coal fired power plants in the area use an extreme amount of water and this should not continue to occur as the SouthWest is forced to deal with the reality of existing with less water each year as drought continues to impact communities.

Thus the ongoing drought in our area and it's impacts need to be taken into account into this EIS. The question of how will water be supplied to the power plants when there is less and less water to be used is one that needs to be addressed. What water use will be prioritized in the area? Will the Navajo people once again be disproportionately impacted in regards to water access in order for this coal plant to continue operations in the future? Nothing in the EIS addresses this issue and this needs to be taken into account especially with water supplies dwindling in the SouthWest.

Alternative Sources of Energy Production

The SouthWest region has many viable options for energy production besides relying on oil, gas, coal, and nuclear. In the SouthEast part of New Mexico wind and solar production are picking up. Texas has just declared they will be producing coal free energy by 2016. Why should New Mexico not continue to move in this direction of cleaner energy that uses less water.

This Environmental Impact Statement needs to consider renewable energy options further and more explicitly instead of solely relying on prolonging the life of the Four Corners Power Plant. The Four Corners region of New Mexico is ready and fully capable of harnessing solar and wind energy, which then can be transmitted via transmission lines to large usage hubs like Albuquerque. 264.005

There needs to be a good analysis in this EIS to show how renewable energy and energy efficiency options line up versus continuing on with coal use. What needs to be looked upon is not only the

Response 264.004

Climate change is addressed in Section 4.2 of the Draft EIS. Section 4.18 further considers the cumulative impacts of climate change in a multi-media sense. See responses to comment 55.002 and Master Comment response #5.

Response 264.005

Please see Master Response #2, Renewable Energy Alternatives

COMMENT 264

difference in environmental impacts per pollution outputs, but also the difference in water usage amongst the two options. Also, the economic benefits in terms of job potential for renewable energy outweighs the job potential for coal produced energy and that should be taken into account.

↑
264.005

Conclusion

The SouthWest Organizing Project hopes that our comments submitted along with data from our air quality campaign Breathe in New Mexico will provide you all with to make the right decision for the communities living in this area.

There are better environmental and economic options for people living in the Four Corners region instead of continuing to rely on outdated facilities that are making this region the largest point source of pollution in our country.

Thank you for this opportunity to comment on this environmental impact statement.

Juan Reynosa

SWOP

6/30/2014

COMMENT 265
DEPARTMENT OF THE INTERIOR Mail - Operations of the 4 Corners Power Plant & Navajo Mine



FCCP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>

Operations of the 4 Corners Power Plant & Navajo Mine

1 message

Charley Tyler [REDACTED] Tue, Jun 24, 2014 at 4:07 PM
Reply-To: Charley Tyler [REDACTED]
To: "FCCPNavajoEnergyEIS@osmre.gov" <FCCPNavajoEnergyEIS@osmre.gov>

As a concerned citizen & business owner in San Juan County I wish to express my support of APS as they strive to maintain their business & reduce emissions at the 4 Corners Power Plant. I have been briefed on their Alternative A - Proposed Action & I fully support this plan.

APS & their employees are great community stewards giving to many varied causes in San Juan County.

BHP has been tremendous to our area as well providing good jobs to many people & their contract with the Navajo Nation will continue the legacy that their business has established.

Thank you for allowing me to express my support!

Charley Tyler
Material Manager / Owner of PESCO

<https://mail.google.com/mail/tv/349/u/0/?ui=2&ik=6a:25e16cb&view=pt&search=inbox&th=146cfebae185eed7&siml=146cfebae185eed7>

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Comment Letter 265.....Tyler, C.

Response

Thank you for your comment.

6/30/2014

COMMENT 266

DEPARTMENT OF THE INTERIOR Mail - NavajoMine comments



FCCP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>

NavajoMine comments

1 message

Harry Martin

Tue, Jun 24, 2014 at 7:18 PM

To: "fcpnavajoenergyeis@osmre.gov" <fcpnavajoenergyeis@osmre.gov>

I have worked for the mine for 20 +years , raised a family of 5 children , put them through school , and I also help my elderly parents with finances , my family would be devastated with out my help , Thank you
Sent from my iPhone

266.001

Comment Letter 266..... Martin, H.

Response 266.001

Thank you for your comment. A complete discussion of Socioeconomics is provided in Section 4.10 of the Draft EIS.

6/29/2014

COMMENT 267

DEPARTMENT OF THE INTERIOR Mail - Continued Operation of FCPP and Navajo Mine



FCPP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>

Continued Operation of FCPP and Navajo Mine

1 message

Jamie Mead [REDACTED] Tue, Jun 24, 2014 at 9:34 AM
To: "FCPPNavajoEnergyEIS@osmre.gov" <FCPPNavajoEnergyEIS@osmre.gov>

To Whom It May Concern,

I am sending this email as support for the Alternative A – Proposed Action plan that is being considered by the DEIS. I fully support this effort as it has many benefits to our area; pollution control, jobs, general contribution to the economy, etc. The loss of FCPP and the Navajo Mine would be of great devastation to the Navajo Nation as well as the surrounding Four Corners area.

267.001

Thank you very kindly.

Jamie Mead
Executive Assistant

[REDACTED]
[REDACTED]
[REDACTED]



<https://mail.google.com/mail/b/349/u/0/?ui=2&ik=6a:25a16cb&view=pt&search=inbox&th=146ce83db71107ba&siml=146ce83db71107ba>

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Comment Letter 267.....Mead, J.

Response 267.001

Thank you for your comment. A complete discussion of Socioeconomics is provided in Section 4.10 of the Draft EIS.

6/30/2014

COMMENT 268
DEPARTMENT OF THE INTERIOR Mail - Draft EIS: 20140097



FCPP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>

Draft EIS: 20140097

1 message

Mark Martinez [REDACTED] Tue, Jun 24, 2014 at 6:43 PM
To: "FCPPNavajoEnergyEIS@osmre.gov" <FCPPNavajoEnergyEIS@osmre.gov>

To Whom It May Concern:

I am writing to ensure my comments are considered as part of the review for Four Corners Power Plant and Navajo Mine Energy Project draft EIS. I am an employee of BHP Billiton, the operator of Navajo Mine, but I do not speak on half of the company, my comments are as a concerned citizen.

I have lived in Farmington for most of my life, and now I have a family that was started in the area. The quality of life that I currently have I owe in a large part to the mine. I have seen the volume of personnel employed by the mine and power plant and the families that are impacted by their operation. I have also seen first hand the values that govern how the mine operates and the focus on Safety, Environment and Community. This is one of the primary reasons that I chose to work for this company. Part of that focus is to actually leave the environment in better shape than it was to begin with. The process to rehabilitate the land to support both flora and fauna is carefully supervised and monitored by the company to ensure success. The other major focus is on Community. The company has a group devoted to interacting with the community with emphasis on educating on the positive impacts to the overall community. This also includes the funding and volunteer work supplied by the mine to various community programs, including San Juan United Way, vocation programs and several youth programs in the area. It is hard to attend any city/county function or recreational area without seeing a sign for either the power plant or the mine operator.

268.001

The continued operation of both operations will have long lasting, positive effects to the employees and families, the overall community and of course the land that the operations currently use.

Mark Martinez

Comment Letter 268..... Martinez, M.

Response 268.001

Thank you for your comment. A complete discussion of Socioeconomics is provided in Section 4.10 of the Draft EIS.

COMMENT 269

To Whom It May Concern,

My name is Mark Walser, and I am an eighth grade science teacher at Mountain Middle School in Durango, Colorado. My students are currently studying a coal-powered plant in the Four Corners region, and I ardently request that your staff take some time to read several of their opinions surrounding the proposed twenty-five year extension of an already outdated plant. Their young voices eloquently represent the urgency with which we must face an issue that will dramatically affect their (and many future) generation(s).

"The Four Corners Power Plant has operated for 50 years. In Power Plant Years, it is an old man, wheezing and coughing up smoke, but still providing electricity to the surrounding area. In its final breaths, the power plant asks for a 25 year license renewal.

Not only is this dangerous for the environment, it is also dangerous to the places that the plant provides power to, an area that is home to over 150,000 people and countless plants and animals living within numerous diverse ecosystems. This power plant deserves no more than a five year license renewal (time for other energy development) and should be taken down and replaced by safer and more sustainable energy-producing technologies." 269.001

~Quinn Luthy

"The original lease for the Four Corners Coal-Powered Plant was granted in 1960, a decade after the lease signed for the original 33,600 acre mine that provides it with coal. Fifty-four years later, it is due to expire in 2016.

Unfortunately the Navajo Transitional Energy Company, as well as the Arizona Public Service Company and, to a lesser extent, the New Mexico Public Service Company proposes a twenty-five year permit renewal for the Four Corners Power Plant, a permit renewal of a Navajo-owned coal mine, full permission to operate connected transmission lines, and permission to develop a new mine of about 5,600 acres.

Federal workers, the Office of Surface Mining and Reclamation and Enforcement, private sector individuals with Cardno, and an Australian environmental service company created five propositions in the drafted Environmental Impact Statement including one called the No Action Alternative. This action, or rather lack thereof, allows the mine and power plant to operate until 2016, the predetermined date, then shut down and yield to renewable energy alternatives.

At this time the cleanup from fifty-six years of filthy coal mining can commence. This will clean the air, water, and soil while forcing development of renewable energy sources that may be used for as long as there is wind or water to power them."

~Lilah Slaughter

Comment Letter 269..... Walser, M.

Response 269.001

Please see Master Response #3, Alternatives with Shorter Lease Term, and Master Response #2 Renewable Energy Alternatives.

COMMENT 269

"Now I understand how some people think that we need to keep coal mines and plants in production. However, if we continue to use these plants and fail to better regulate CO₂ output we will go even further over a previously designated CO₂ threshold, which is 400 ppm. We surpassed that historic level on May 10th, 2013.

Dr. Michael Gunson--the Global Change & Energy Program Manager; Project Scientist, Orbiting Carbon Observatory-2 satellite mission - NASA Jet Propulsion Laboratory--states that "passing the 400 mark reminds me that we are on an inexorable march to 450 ppm and much higher levels. These were the targets for 'stabilization' suggested not too long ago. The world is quickening the rate of accumulation of CO₂ and has shown no signs of slowing down. It should be a psychological tripwire for everyone."

This clearly states that CO₂ emissions are growing at an exponential rate. So I ask you to go to represent us by articulating the fact that if we continue emitting CO₂ at this rate we will further destabilize the planet's climate and risk the extinction of many existing species."

~Curtis Salinger

"Recent research conducted shows that the normal [and safe] lifespan for most coal-powered plants in the twenty-first century is forty years. May I point out to you that the Four Corners Power Plant is already fifty years in use and still up and running. By extending the permit another twenty-five years we risk seventy-five years of power plant use; almost double the average lifespan suggested.

This is a proposition that is unreasonable considering the constant negative externalities suffered by our environment, including air pollution, water consumption and pollution, and the exacerbation of global climate change. Its continued operation will continue to prove harmful to regional wildlife, vegetation, and cultural resources while perpetrating adverse effects that threaten the public health of marginalized and vulnerable populations. Simply put, it is illogical."

~Autumn Stevens

"The Four Corners coal power plant generates 2,040 megawatts through the use of steam powered turbines. This plant employs numerous men and women in the Navajo Nation where the economy can be called stagnant at best. Power generated by this plant provides energy to houses and businesses around the Four Corners.

It is my opinion that although coal power is not a solution for the future, it would hurt the economic growth of the Navajo Nation to shut it down immediately. I propose that we do not yet close the power plant or mine down. That noted, we should not give out any future contracts for a coal mine that would feed the Navajo Coal Plant for years to come. My proposal dictates that

269.002

Response 269.002

Thank you for your comment. OSMRE is considering all alternatives analyzed in the Draft EIS and will notify the public of its decision via the Record of Decision, anticipated in spring 2015.

COMMENT 269

we should not renew any permit proposals that include operation of the mine or plants after the year 2020. This would give the region ample time to develop other areas of energy production such as natural gas, solar, wind, and nuclear.

These types of energy production will not strain the environment or chalk up our sky to the extent coal pollution is currently doing. By the year 2020 the coal deposits left in the current mine will be reduced to scraps and the mine owners - specifically the Navajo Council - will be forced to look to alternatives such as those listed above."

~Paxton Scott

"As I see it, this situation can be compared to cutting paper with scissors. The old adage measure twice, cut once applies because if you make the cut, you can't go back. We need to think through the long term impact of our actions before we go ahead and issue a twenty-five year extension.

There is one main difference between the two situations. With scissors, if you mess up and cut too much, you can start over on another piece of paper. With greenhouse gasses, we can't start over. There is no going back. I think that the No Action Alternative would be the best in the long run, not just for the current population, but for generations to come.

So, in order to maintain the Earth's cleanliness for many generations and scientific breakthroughs to come, we must take action today. This action must include a responsible long term plan for our planet, not just the people of today.

In 25 years, we may have discovered new technologies to fuel our hungry planet. If we carry out this extension, we could end up stuck with this coal plant for far longer than that which is necessary. We need to help our Earth and secure a better future for many generations to come.

Get your opinion out there. Email your representatives to advocate the need to examine the long term effects of our actions. As William Shakespeare so eloquently stated, "It is not in the stars to hold our destiny, but in ourselves."

~Ruby Epstein

These young researchers make a far more eloquent case than I could surrounding the urgency with which we must address the issue of coal pollution and climate change. These are our children, and to discard their wise commentaries would be truly tragic.

With Urgency,
The 8th Grade at Mountain Middle School



SUSANA MARTINEZ
Governor
JOHN A. SANCHEZ
Lieutenant Governor

COMMENT 270
State of New Mexico
ENVIRONMENT DEPARTMENT
Office of the Secretary

Harold Runnels Building
1190 Saint Francis Drive, PO Box 5469
Santa Fe, NM 87502-5469
Telephone (505) 827-2855 Fax (505) 827-2836
www.nmenv.state.nm.us



RYAN FLYNN
Cabinet Secretary
BUTCH TONGATE
Deputy Secretary

June 24, 2014

Mr. Marcelo Calle
Office of Surface Mining Reclamation & Enforcement
Western Region Office
1999 Broadway, Suite 3320
Denver, CO 80202-3050
FCPPNavajoEnergyEIS@osmre.gov

RESPONSE BY EMAIL

RE: Four Corners Power Plant and Navajo Mine Energy Project

To Whom It May Concern:

Your letter regarding the above named project was received by the New Mexico Environment Department (NMED) and was sent to various for review and comment. Comments were provided by the Air Quality, Ground Water Quality, and Surface Water Quality Bureaus and are as follows.

Air Quality Bureau

The Air Quality Bureau has evaluated the information submitted with respect to the Four Corners Power Plant and Navajo Mine Energy Project. San Juan County is currently considered to be in attainment with all New Mexico and National Ambient Air Quality Standards. The project is on Navajo Nation sovereign lands. Air quality regulation is under the jurisdiction of the Navajo Nation Environmental Protection Agency and overseen by EPA Region IX.

Arizona Public Service is now operating under a Federal Implementation Plan (FIP) for Best Available Retrofit Technology (BART) at the Four Corners Power Plant. The Air Quality Bureau submitted comments on the original BART proposal. In addition to the power plant this project addresses many other sources of air pollution including a myriad of emissions from maintenance and development of the mine. Best operating practices should be used and emissions mitigated from these activities.

The current ozone design value for San Juan County is 0.071 ppm. EPA is currently reviewing the existing national ambient air quality standard (NAAQS) for ozone, which is 0.075 ppm.

270.001

**Comment Letter 270Nelson, M.R.
New Mexico Environmental Department (NMED)**

Response 270.001

Thank you for the comment confirming the Draft EIS analysis that San Juan County is currently considered to be in attainment with all New Mexico and National Ambient Air Quality Standards. The Draft EIS incorporated air quality issues and options to reduce air pollution developed by the Four Corners Air Quality Task Force, as mentioned in the comment. A complete discussion of Air Quality is provided in Section 4.1 of the Draft EIS.

COMMENT 270

The states of Colorado and New Mexico convened the Four Corners Air Quality Task Force (Task Force) in November 2005 to address air quality issues in the Four Corners region and consider options to mitigate air pollution. Increased natural resource and industrial development and population growth in the area are contributing to air quality concerns including relatively high levels of ozone and regional haze. Many residents are concerned with potential health impacts from air pollutants, and input from area residents is important in developing and implementing an effective management plan.

In addition to Colorado and New Mexico, other participating agencies in the Task Force included the Navajo Nation Environmental Protection Agency; the Southern Ute Indian Tribe Air Quality Program; the U.S. Environmental Protection Agency (EPA); the U.S. Department of Interior - Bureau of Land Management (BLM) and National Park Service; the U.S. Department of Agriculture - Forest Service (USFS); the U.S. Department of Energy; and the State of Utah. Some of the air pollutants addressed by the Task Force were: ozone, volatile organic compounds, nitrogen oxides, particulate matter, sulfur dioxide, and mercury.

The Task Force met face-to-face on a quarterly basis from November 2005 through November 2007. These meetings took place in Farmington, New Mexico and Durango and Cortez, Colorado. The Task Force developed a 550 page report of over 200 mitigation options for improving air quality in the region, available at <http://www.nmenv.state.nm.us/aqb/4C/TaskForceReport.html>. Many of the options are focused on reducing emissions from power plants.

Due to continued interest in air quality issues, the members and interested parties continue to follow air quality progress in the region as the Four Corners Air Quality Group (Group or 4CAQG). There are over 500 participants in the Group. The Group continues to provide a forum for learning and the exchange of ideas and information on air quality issues. The Group also keeps the Four Corners Air Quality website, <http://www.nmenv.state.nm.us/aqb/4C/FAQ.html>, operational to provide a tool for information sharing which may be useful to the contractors and operators in this project.

Ground Water Quality Bureau

New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB) staff reviewed the above-referenced letter as requested, focusing specifically on the potential effect to ground water resources in the area of the proposed project.

The Office of Surface Mining Reclamation & Enforcement (OSMRE) has proposed a Draft Environmental Impact Statement (DEIS) for the Four Corners Power Plant & Navajo Mine Energy Project in San Juan County, NM. The DEIS proposes the following actions: 1) amending the Four Corners Power Plant (FCPP) operational lease, 2) renewing right-of-way agreements for the continued operation of transmission lines, 3) permit renewal for the continued operation of the Navajo Mine, and 4) the development of a new coal mine area.

The FCPP and Navajo Mine are entirely on Navajo Tribal Trust Lands and therefore, outside the GWQB's jurisdiction. However, implementation of construction activities and mining operations will likely involve the use of heavy equipment, thereby leading to a possibility of contaminant releases (e.g., fuel, hydraulic fluid, etc.) associated with equipment malfunctions. The GWQB advises all parties involved in the project to take appropriate corrective actions in

270.001

270.002

Response 270.002

Thank you for your comment. As described in Section 3.2.6 of the Draft EIS, the Navajo Mine maintains and implements a SPCC Plan and a SPCC Plan will be implemented at the FCPP. The SPCC Plan identifies areas of risk, specifies appropriate control measures, and provides a list of response actions that will be taken in the event of a release.

Best management practices to reduce the occurrence of leaks and spills, and contingency measures, are discussed in Sections 2, 3, and 4.5 of the Draft EIS.

COMMENT 270

the event an accidental discharge occurs. Appropriate corrective actions will ensure the protection of ground water quality in the vicinity of the project area.

↑ 270.002

Surface Water Quality Bureau

The activities described in the Draft Environmental Impact Statement are not regulated by the New Mexico Environment Surface Water Quality Bureau has no comments.

270.003

Thank you for this opportunity to comment.

I hope you find this information helpful.

Sincerely,

Morgan R. Nelson
Environmental Impact Review Coordinator
NMED File Number: EIR 5117

Response 270.003

Thank you for your comment.

6/29/2014

COMMENT 271
DEPARTMENT OF THE INTERIOR Mail - FCPP and Navajo Mine



FCPP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>

FCPP and Navajo Mine

1 message

Rod Troxell [REDACTED] Tue, Jun 24, 2014 at 1:22 PM
To: "FCPPNavajoEnergyEIS@osmre.gov" <FCPPNavajoEnergyEIS@osmre.gov>

To Whom It May Concern,

Proposed Action "A" has may full support that is being considered by DEIS.

I am a Farmington resident and believe the finical impact to our community and the Navajo Nation would suffer if the local power plants had to shut down completely. 271.001

ROD TROXELL
Health, Safety & Environmental
PESCO
[REDACTED]
[REDACTED]
[REDACTED]

Comment Letter 271..... Troxell, R.

Response 271.001

Thank you for your comment. OSMRE is considering all alternatives analyzed in the Draft EIS and will notify the public of its decision via the Record of Decision, anticipated in spring 2015.

6/29/2014

DEPARTMENT OF THE INTERIOR Mail - Continued Operation of the FCPP and the Navajo Mine

COMMENT 272



FCPP-Navajo-Energy-EIS, OSMI <osm-fcpp-navajo-energy-eis@osmre.gov>

Continued Operation of the FCPP and the Navajo Mine

1 message

Shane Galloway [REDACTED] Tue, Jun 24, 2014 at 1:34 PM
To: "FCPPNavajoEnergyEIS@osmre.gov" <FCPPNavajoEnergyEIS@osmre.gov>

To Whom It May Concern,

This e-mail is in strong support of Alternative A- proposed action that has been introduced for consideration by the DEIS. The re-fitting of Units 4 & 5 with pollution reduction equipment plus the de-commissioning of Units 1, 2 & 3 is a satisfactory and reasonable plan to keep hundreds of jobs and millions of dollars in our area, especially the Navajo Nation.

272.001

Respectfully

Shane Galloway
QC Manager

Process Equipment &
Service Company, Inc.

[REDACTED]

[REDACTED]
[REDACTED]

Comment Letter 272.....Galloway, S.

Response 272.001

Thank you for your comment. For clarification, the Federal Implementation Plan for the FCPP is a separate action conducted by the EPA and is considered as a baseline condition in the EIS. OSMRE is considering all of the alternatives that were analyzed in the Draft EIS and will inform the public of its decision via the Record of Decision, anticipated in the spring of 2015.

6/30/2014

DEPARTMENT OF THE INTERIOR Mail - Comments on Four Corners Power Plant

COMMENT 273

FCCP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>



Comments on Four Corners Power Plant

1 message

Alicia Corbell [REDACTED]
To: FCCPNavajoEnergyEIS@osmre.gov

Wed, Jun 25, 2014 at 1:53 PM

I am writing in support of Alternative A affecting the Four Corners Power Plan and the Navajo Mine Energy Project.

The economic impact to the Four Corners area is vital. With their commitment to installing advanced environment controls I am confident that the facility will then be one of the cleanest in the nation. | 273.001

I would appreciate your favorable consideration of Alternative A.

Alicia Corbell

Director of Retention & Expansion
Four Corners Economic Development



Comment Letter 273 Corbell, A.

Response 273.001

Thank you for your comment. A complete discussion of Socioeconomics is provided in Section 4.10 of the Draft EIS. A discussion of the air emissions as a result of the Federal Implementation Plan for the FCCP is provided in Section 4.1.3 of the Draft EIS.

COMMENT 274



Office of Surface Mining Reclamation and Enforcement
Four Corners Power Plant and Navajo Mine Energy Project
Environmental Impact Statement (EIS)

Draft EIS Public Meeting Comment Form

Comments must be postmarked by May 27, 2014, for consideration in the Final EIS. Comments may be submitted at the open house public meetings (being held April 30 through May 9, 2014), via email to FCPPNavajoEnergyEIS@osmre.gov or by postal mail, hand delivery or courier to the address below.

MEETING LOCATION: _____ DATE: _____

Please Print

As Senior Vice President/Division Manager of Bank of the Southwest and 2nd Vice Chair of Four Corners Economic Development I am expressing my support of the proposed plan proposed by Four Corners Power Plant & Navajo Mine Energy Project.

The economic impact these two companies provide the four corners area is substantial. Without them our economy would experience significant economic hardship,. Considering that we have we have great economic challenges already.

274.001

I believe the plan adequately addresses the environmental issues as well as our economy

- 1. NAME: Georgia Gramlich
- 2. ORGANIZATION (if applicable): Bank of the Southwest & 4CED
- 3. EMAIL ADDRESS/PHONE NUMBER: _____
- 4. MAILING ADDRESS: _____

Do you wish to withhold your name or address from public review or from disclosure under the Freedom of Information Act (FOIA)? NO YES *[Signature]*

Please give this completed form to one of the project team representatives or mail by May 27, 2014, to:
Mr. Marcelo Calle
Office of Surface Mining Reclamation & Enforcement, Western Region Office
1999 Broadway, Suite 3320
Denver, CO 80202-3050
Comments may be emailed to FCPPNavajoEnergyEIS@osmre.gov.

Comment Letter 274 **Gramlich, G.
Bank of the Southwest & 4CED**

Response 274.001

Thank you for your comment. A complete discussion of socioeconomics is provided in Section 4.10 of the Draft EIS.

6/30/2014

DEPARTMENT OF THE INTERIOR Mail - Comments
COMMENT 275



FCPP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>

Comments

1 message

Vincent Yazzie [REDACTED] Wed, Jun 25, 2014 at 9:43 AM
Reply-To: Vincent Yazzie [REDACTED]
To: OSM FCPP-Navajo-Energy-EIS <fcpnavajoenergyeis@osmre.gov>

Vincent H. Yazzie
[REDACTED]
[REDACTED]

Dear Sir,
Four Corners Power Plant (FCPP) exceeds capacity.
SCR only designed for 1.540 GW. FCPP will not be
able to handle the extra ammonia from the SCR. Unit
4 can exceed 0.80 GW.

There were exceptions to BART settlement which was
the ability of FCPP to handle the ammonia.

FCPP needs to install and engineer an ammonia
system for a power plant capacity of 1.62 GW if FCPP
unit 5 can later reach 0.81 GW

Lines 92 to 181 is Four Corners power plant unit 4.
Total Power (GW) is the addition of the power of units
4 and 5.

Unit 4 can exceed 40% efficiency which might be

<https://mail.google.com/mail/tv/349/u/0/?ui=2&ik=6ac25e16cb&view=pt&search=inbox&th=146d3b2b4ae12ba&siml=146d3b2b4ae12ba>

1/2

Comment Letter 275..... Yazzie, V.

Response 275.001

The capacity of Units 4 and 5 is discussed in Section 2 and 3 of the EIS, and is based on historical performance. The SCR is designed to accommodate this maximum performance. In addition, EIS provides analysis of risks and hazards associated with the ammonia source for the SCR devices. The devices will be engineered to meet the requirements of BART. Operational output for Units 4 and 5 with SCR equipment installed are analyzed in the EIS.

275.001

6/30/2014

DEPARTMENT OF THE INTERIOR Mail - Comments

COMMENT 275

impossible. Unit 5 efficiency looks about right.

Have not calculated carbon content of the coal.

Sincerely,

Vincent H. Yazzie

↑
275.001

 DLY_2014nmQ1.xlsx
379K

<https://mail.google.com/mail/tv/349/u/0/?ui=2&ik=6ac25e16cb&view=pt&search=inbox&th=146d3b2b4ae1f2ba&siml=146d3b2b4ae1f2ba>

2/2

COMMENT #276



ANN BECKER
Vice President,
Environmental & Chief
Sustainability Officer

400 N. 5th Street
Phoenix, AZ 85004
Mail Station 9910
Tel 602 250 3722

June 26, 2014

Mr. Marcelo Calle
Office of Surface Mining Reclamation and Enforcement
U.S. Department of the Interior
1999 Broadway, Suite 3320
Denver, CO 80202-3050

**RE: Comments of Arizona Public Service Company on the Four Corners Power Plant
and Navajo Mine Energy Project Draft Environmental Impact Statement**

Dear Mr. Calle:

Arizona Public Service Company appreciates the opportunity to submit comments on the Four Corners Power Plant and Navajo Mine Energy Project Draft Environmental Impact Statement, released for public comment on March 28, 2014. The attached comments, including Attachments A, B, C, D, E, F, G, H, and I, are being submitted for the agencies' consideration and for inclusion in the administrative record.

Sincerely,

A handwritten signature in cursive script that reads "Ann C. Becker".

Ann Becker
Vice President,
Environmental & Chief Sustainability Officer
Arizona Public Service Company

Comment Letter 276 VanBellehgem, S.
Arizona Public Service Company (APS)

COMMENT #276

**Comments of Arizona Public Service Company on the Four Corners Power Plant
and Navajo Mine Energy Project Draft Environmental Impact Statement**

I. INTRODUCTION

Arizona Public Service Company (APS) appreciates the Office of Surface Mining Reclamation and Enforcement (OSMRE), the Bureau of Indian Affairs (BIA) and the cooperating agencies'¹ efforts on the Four Corners Power Plant and Navajo Mine Energy Project Draft Environmental Impact Statement (DEIS).² The federal permits and approvals for the Four Corners Power Plant and Navajo Mine Energy Project ("the Project" or "Proposed Action") will allow continued operation of these facilities for 25 years, supporting important economic, environmental, and energy goals:

- The Project supports tribal economic development, as indicated in the DEIS and the administrative record. The 2013 Arizona State University economic impact study cited in the DEIS found that the Navajo Nation will benefit from 42,574 job-years of employment, \$1.88 billion in income, and gross Navajo National Product of \$2.45 billion over the life of the Project (2016 through 2041).³ In addition to its economic contributions to the Navajo Nation, the Project also contributes to the economic wellbeing of San Juan County and the State of New Mexico, as indicated in the DEIS. Furthermore, continued operation of the Project will support tribal self-determination because it supports Navajo Nation ownership and production of its own natural resources.
- The Project incorporates a number of environmental improvements, including the reduction of both criteria and hazardous air pollutant emissions, the reduction of greenhouse gas emissions, reduction of coal combustion residuals, and reduction in water use.
- The Project will provide responsibly produced, reliable energy from Navajo-owned coal, generating baseload power⁴ sufficient to meet the electricity demand

¹ The cooperating agencies include Bureau of Indian Affairs, U.S. Army Corps of Engineers, Bureau of Land Management, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, National Park Service, Navajo Nation, and Hopi Tribe.

² APS's comments include by reference and in their entirety, Attachments A, B, C, D, E, F, G, H and I, which are being submitted for the record.

³ Dr. Anthony Evans, Dr. Tim James and Eva Madly, "Four Corners Power Plant And Navajo Mine: An Economic Impact Analysis" 6 (Arizona State University 2013) (in 2011 dollars) (cited in the DEIS at 4.10-2, 4.10-10—4.10-14, 4.10-24—4.10-26, 4.10-31).

⁴ A baseload plant is devoted to the production of electricity on a relatively continuous basis. Baseload plants are typically operated for the majority of the hours during a given year and are taken off-line relatively infrequently. Baseload plants usually have a low variable production cost relative to other production facilities available to the system.

COMMENT #276

Comments of Arizona Public Service Company

of over 500,000 homes. It will contribute to a diverse and cost-effective energy portfolio for the region.

The DEIS provides a robust and extensive analysis of the potential environmental impacts associated with the Proposed Action and alternatives. The DEIS is the result of significant efforts and coordination by OSMRE, BIA, and the cooperating agencies, and far exceeds the requirements of the National Environmental Policy Act (NEPA).

- The DEIS is the product of over a year-and-a-half of analysis and consideration by multiple agencies, in consultation with tribes and other stakeholders. The DEIS relies upon sophisticated air quality modeling, ground water and surface water data, ecological risk assessments, a human health risk assessment, and other scientific research and analysis.
- The agencies have facilitated extensive public participation regarding the DEIS, well beyond what is typically provided. OSMRE extended its 60-day public comment period, and the public was given a total of 91 days to submit comments on the DEIS. OSMRE held nine public meetings at various locations in Arizona and New Mexico, and offered Hopi and Navajo interpreters and the ability to provide either oral or written comments.
- The agencies considered a reasonable range of alternatives and took the requisite “hard look” at the potential environmental impacts of the Proposed Action and alternatives, including direct, indirect, and cumulative impacts. Accordingly, the DEIS fulfills the requirements of NEPA and provides both the agency decision-makers and the public with information and analysis needed to evaluate the potential impacts and benefits of the Proposed Action and alternatives.

The DEIS’s evaluation and conclusions regarding potential alternatives are well-supported in the administrative record. APS recommends that OSMRE and the cooperating agencies select Alternative D, which includes an alternative ash disposal configuration, but is otherwise identical to the Proposed Action. Additionally, as discussed in further detail in section V below, the administrative record amply supports the conclusions, documented in the DEIS, that the alternatives considered, but not carried through for further analysis, were not economically or technically feasible and/or did not meet the purpose and need of the Proposed Action.

276.001

APS commends OSMRE, BIA and the cooperating agencies on their thorough and timely work on the DEIS. However, APS urges expeditious action on and approval of the final EIS and the Record of Decision (ROD). The final EIS and all other environmental authorizations and approvals must be completed by the end of the first quarter of 2015 to ensure the continuous, uninterrupted operation of FCPP after 2016.

APS also requests that the agencies consider and incorporate into the final EIS and ROD the following:

Response 276.001

Thank you for your comment. OSMRE is considering all of the alternatives that were analyzed in the Draft EIS and will inform the public of its decision via the Record of Decision, anticipated in the spring of 2015.

COMMENT #276

Comments of Arizona Public Service Company

- APS recommends that OSMRE and the cooperating agencies select Alternative D, which includes an alternative ash disposal configuration, but is identical to the Proposed Action in all other respects. Alternative D proposes an alternative ash disposal configuration that would disturb fewer acres and would not require impoundment walls and roads through the ash disposal area at FCPP.⁵ APS agrees that the alternative ash disposal configuration meets the purpose and need for the action and is both technically and economically feasible. *See* DEIS at 3-28. The DEIS notes (at 3-27) that this alternative was considered for its potential to reduce environmental effects of the proposed ash disposal configuration. APS supports selection of the ash disposal configuration in Alternative D. *See* section VIII below.
- As the DEIS indicates (at 2-35), APS will install Selective Catalytic Reduction (SCR) on Units 4 and 5 to reduce nitrogen oxides (NO_x) emissions in compliance with FCPP's source-specific Federal Implementation Plan promulgated by the U.S. Environmental Protection Agency (EPA). Operation of SCR requires an ammonia reagent, and the DEIS analyzes impacts of various potential sources of ammonia. *See, e.g.*, DEIS sections 4.9, 4.11, 4.15 and 4.17. OSMRE recommends urea as the ammonia supply option, citing significantly greater transportation safety. After consideration of the DEIS and other factors, APS has selected urea as its ammonia source. APS requests that the final EIS reflect this selection. *See* section VII below. 276.002
- As discussed in section VIII below and in Attachment C, APS's coal combustion residual (CCR) disposal procedures will meet regulatory requirements adopted by EPA. The DEIS incorrectly states that APS may be exempt from these requirements, depending upon EPA's final regulations governing CCR. For the reasons described below and in Attachment C, there will be no regulatory gap, and APS requests that the final EIS reflect this fact. 276.003

In sum, APS respectfully requests that OSMRE, BIA and the cooperating agencies timely issue approvals needed for the Project by March 2015, consistent with Alternative D, along with proposed mitigation measures for the FCPP, transmission lines, and ancillary facilities.

⁵ APS proposes a slight clarification to the DEIS's description of Alternative D (alternative ash disposal configuration), as explained in section VIII below. APS's support of Alternative D, is contingent on the final EIS incorporating this clarification.

Response 276.002

Comment Noted and the Final EIS will reflect this selection.

Response 276.003

EPA published its Final Rule for Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electrical Utilities on December 19, 2014. The Final EIS has been updated accordingly to reflect this new rule and its applicability to the FCPP. A comprehensive discussion of the rule, its provisions, and enforceability is provided in Section 4.15, Hazardous Materials and Wastes. In addition, specific provisions of the rule that apply to other resource areas (i.e., Water and Air) are included in Sections 4.1, 4.5, 4.11, 4.17, and 4.18.

COMMENT #276

Comments of Arizona Public Service Company

II. THE PROJECT CONFIGURATION WILL RESULT IN SUBSTANTIAL ENVIRONMENTAL BENEFITS

As noted in the DEIS, FCPP's post-2016 operations will achieve substantial emission reductions over historic operations. On August 6, 2012, EPA issued a source-specific Federal Implementation Plan requiring FCPP to achieve air emissions reductions under the Clean Air Act's Best Available Retrofit Technology (BART) provisions. APS's compliance with the implementation plan will be achieved by shutting down Units 1, 2 and 3, which were retired on December 30, 2013, and installing SCR on Units 4 and 5, which will commence in 2017 and 2018, respectively.

Specifically, post-2016 operations would substantially reduce coal consumption and air emissions in comparison with historic operations. The closure of Units 1, 2 and 3 will result in more than a 30 percent reduction in the amount of coal burned. By shutting down Units 1, 2 and 3 and adding SCR equipment to Units 4 and 5, the following reductions in emissions of air pollutants are projected to occur, compared to existing conditions at the time that APS submitted the lease amendment and rights-of-way applications:

- Nitrogen oxides - 87 percent reduction
- Mercury - 67 percent reduction⁶
- Particulates - 58 percent reduction
- Carbon dioxide - 26 percent reduction
- Sulfur dioxide - 18 percent reduction

Shutting down Units 1, 2 and 3 will also reduce water consumption by nearly two billion gallons per year.

APS also plans to close its existing lined ash impoundment. The scrubbers on Units 1, 2 and 3 contributed the majority of waste to the existing lined ash impoundment, but this waste stream was eliminated with the closure of these units. Therefore, storage of ash and scrubber sludge in ash impoundments will be discontinued at FCPP. Units 4 and 5 Flue Gas Desulfurization sludge is currently pumped to the lined ash impoundment. However, upon closure of the lined ash impoundment, the Flue Gas Desulfurization slurry will be mixed with fly ash and placed into the Dry Fly Ash Disposal Area.

Importantly, the size of the leased acreage or right-of-way footprint of the FCPP, transmission lines, and ancillary facilities would not change. Furthermore, other than maintenance and repair, no significant changes or modifications are anticipated for the 500 kV and 345 kV transmission lines or ancillary facilities that are part of the Proposed Action.

As previously noted, APS will achieve required NO_x reductions through the operation of SCR on Units 4 and 5. The use of SCR tends to oxidize some sulfur dioxide (SO₂) to sulfur trioxide (SO₃), which results in increased sulfuric acid (H₂SO₄) mist above the Prevention of

⁶ Section IX below provides a clarification regarding mercury emission reductions.

Response 276.004

Thank you for your comment. That is the description of the baseline conditions during the interim period of 2014 to 2018, during which time the FIP for BART will be implemented.

Response 276.005

This has been clarified in Section 3, which already described that upon closure, the FGD slurry would be mixed with fly ash and placed in the DFADAs. In addition, EPA published its Final Rule for Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electrical Utilities on December 19, 2014. The Final EIS has been updated accordingly to reflect this new rule and its applicability to the FCPP. A comprehensive discussion of the rule, its provisions, and enforceability is provided in Section 4.15, Hazardous Materials and Wastes. In addition, specific provisions of the rule that apply to other resource areas (i.e., Water and Air) are included in Sections 4.1, 4.5, 4.11, 4.17, and 4.18.

Response 276.006

Description incorporated into Section 2.4.2.2 as well as Chapter 4, Sections 4.9, 4.11, 4.15, 4.18. The updated information does not change the results of those resource evaluations.

COMMENT #276

Comments of Arizona Public Service Company

Significant Deterioration (PSD) significant emission threshold. Therefore, APS has applied for a PSD permit from EPA. In order to minimize H₂SO₄ emission increases, APS proposes to install a dry sorbent injection system, using hydrated lime as the sorbent. A pneumatic dry sorbent truck unloading system and silo will be installed. Hydrated lime will be received by truck and pneumatically conveyed to a storage silo. The lime silo will be approximately 14 feet in diameter and 80 feet tall, including lime transport equipment beneath the silo.

The use of dry sorbent injection will result in emission reduction benefits. The environmental impacts of using dry sorbent injection are minimal and a fraction of the impacts analyzed in the DEIS for ammonia—mainly a small increase in truck traffic for the transport of hydrated lime, which is in a dry powder form. The use of dry sorbent injection is expected to require approximately 900 trucks per year, delivering 10,800 tons per year of hydrated lime. The air emission sources associated with the use of lime will be truck travel on paved roads and a vent on the silo, which will have a baghouse for emissions control.⁷ Importantly, all construction will occur within the existing plant site in industrial areas and areas of previous disturbance. APS requests that OSMRE incorporate this information regarding the use of dry sorbent injection in section 2.4.2.2 of the DEIS, which describes Actions to Comply with BART Ruling. APS also requests that OSMRE incorporate a discussion of the transport of hydrated lime in appropriate places in section 4, where the DEIS analyzes potential ammonia transport impacts. *See, e.g.,* 4.9, 4.11, 4.15, 4.18.

III. THE PROJECT PROVIDES SIGNIFICANT SOCIAL AND ECONOMIC BENEFITS TO THE NAVAJO NATION, AND THE NO ACTION ALTERNATIVE WOULD HAVE MAJOR ADVERSE SOCIOECONOMIC IMPACTS

As explained in the DEIS, the Project provides substantial socioeconomic benefits to the Navajo Nation, and the No Action Alternative—halting operations of the FCPP and Navajo Mine—would have major adverse impacts to the Nation. *See* DEIS at 4.10-30 – 4.10-31. With respect to cumulative effects over the life of the Project (2016 through 2041), the 2013 Arizona State University economic impact study cited in the DEIS found that the Navajo Nation will benefit from 42,574 job-years of employment, \$1.88 billion in labor income, and a gross Navajo National Product of \$2.45 billion.⁸

The loss of these jobs, income, and revenue for the Navajo Nation would be a great hardship. As noted in the DEIS, many of the jobs at the FCPP and Navajo Mine are high-income and high-skill. The Navajo Nation already faces a very high unemployment rate, and 38 percent of households in the Navajo Nation are below the poverty level. DEIS at 4.10-16, 4.10-31. OSMRE correctly concluded that adverse impacts to the overall social and economic well-being of the Navajo Nation would result from selection of the No Action Alternative. *Id.* at 4.10-31.

⁷ APS is currently compiling additional projected emissions information related to the silo. APS will submit this information to OSMRE for evaluation and inclusion in the final EIS, but the emissions are expected to be minimal.

⁸ *ASU Economic Impact Analysis, supra* note 3 at 6 (figures are in 2011 dollars).

COMMENT #276

Comments of Arizona Public Service Company

APS believes that the adverse impacts of the No Action Alternative may be even greater than projected in the DEIS:

- The DEIS states that, due to lost royalties and tax revenue, the Navajo Nation would be expected to lose between approximately \$40 and \$60 million per year from a closure of the FCPP and Navajo Mine, which would result in major adverse impacts for the Navajo Nation. *Id.* at 4.10-27, 4.10-31. However, the significance of the Project's financial contributions that would be lost by the Navajo Nation is even more substantial when compared to the overall Navajo Nation budget. The DEIS notes that tribal taxes and royalties paid by the FCPP and Navajo Mine make up approximately one-third of the Navajo Nation's General Fund revenues.⁹ *See id.* at 4.10-30 – 4.10-31. The taxes and royalty revenues the Navajo Nation receives from the FCPP and Navajo Mine are a crucial source of funding for many Navajo Nation public services, which are already struggling to provide emergency medicine, police, fire, and other services because of resource constraints. *See id.* at 4.10-19, 4.10-22.
- The DEIS notes that the baseline fiscal contribution of the Navajo Mine to the Navajo Nation Transitional Energy Company (NTEC), a wholly owned limited liability company of the Navajo Nation, is expected to be higher than the estimated \$28.1 million under the previous ownership because NTEC would be exempt from some local, state, and federal taxes that the previous owner paid. *Id.* at 4.10-27. The ASU Study quantifies the benefits to the Navajo Nation from tax exemptions as totaling \$17.9 million per year.¹⁰ The DEIS understates the adverse impacts of the No Action Alternative by not expressly including these benefits to the Navajo Nation that are expected from tax exemptions resulting from NTEC's ownership of the Navajo Mine.
- Additionally, the DEIS references the development of renewable energy production as potential mitigation of the major adverse socioeconomic impacts of the No Action Alternative. *See* DEIS at 4.10-30. However, it is unlikely that renewable energy development would materially reduce economic harm to compensate for the FCPP and Navajo Mine closure in the short-term. As the

276.007

276.008

276.009

276.010

⁹ APS notes that the percentage of the Navajo Nation's General Fund made up of taxes and royalties paid by the FCPP and Navajo Mine fluctuates each year relative to the overall size of the Navajo Nation General Fund. For example, the DEIS states that in 2011 the FCPP and Navajo Mine paid a total of \$59.9 million to the Navajo Nation in the form of royalties, taxes, and fees. DEIS at 4.10-26. Since the Navajo Nation General Fund had a total gross revenue of approximately \$197 million and total net revenue of approximately \$149 million for the fiscal year ending on September 30, 2011, the \$59.9 million in FCPP and Navajo Mine taxes and royalties comprised approximately 30.4 percent of the General Fund total gross revenue and 40 percent of the General Fund net revenue that year. *See* Navajo Nation, "Revised General Fund Revenue FY 2014 Budget" (June 17, 2013).

¹⁰ ASU *Economic Impact Analysis*, *supra* note 3 at 39.

Response 276.007

The socioeconomic analysis of the impacts of No Action to the Navajo Nation were based on the ASU study, the most comprehensive evaluation of these effects. The model that was used, IMPLAN, does not have data to support an analysis of the additional socioeconomic benefits brought by the project (referred to as the "multiplier effect"); such analysis was performed for San Juan County and the State of New Mexico. The Draft EIS included a qualitative description of how the multiplier effect would operate in the Navajo Nation. Although the quantified effects of No Action would likely be higher, the Draft EIS relied on the qualitative addition to the ASU study to bound the potential effects.

Response 276.008

Thank you for your comment. OSMRE agrees, and a complete discussion of Socioeconomics is provided in Section 4.10 of the Draft EIS.

Response 276.009

The tax exemption information has been added to Section 4.10.

Response 276.010

Thank you for your comment. OSMRE is considering all of the alternatives that were analyzed in the Draft EIS and will inform the public of its decision via the Record of Decision, anticipated in the spring of 2015. With regard to renewable energy, please see Master Response #2, Renewable Energy Alternatives.

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DEIS notes (at 4.10-27), the Navajo Nation resolution that authorized the formation of NTEC directs NTEC to invest 10 percent of NTEC’s profits from Navajo Mine operations in research and development of renewable and alternative sources of energy, storage, and transmission technologies.¹¹ While these long-term research and development efforts will lead to job creation in renewable and alternative energy development, it will take substantial financial resources (including the revenue the Navajo Nation receives from the Navajo Mine) and time to build this new sector of the Navajo Nation economy. As such, renewable energy development and production will not—and cannot—mitigate the immediate adverse socioeconomic impacts from halting FCPP and Navajo Mine operations in 2016 under the No Action Alternative.



APS requests a clarification in the socioeconomic analysis in the final EIS. The DEIS indicates that the use and transportation of ammonia for FCPP operations under the Proposed Action could impact Navajo Nation public services if an accidental release occurred. DEIS at 4.10-29. APS notes that its selection of urea as the FCPP’s ammonia source greatly reduces the risk of such an accidental release because urea is transported as a solid. *Id.* at 4.15-19. APS requests that its selection of urea be reflected in the socioeconomic evaluation of the Proposed Action in the final EIS.

276.011

In sum, the Project provides crucial social and economic benefits to the Navajo Nation, including high-skilled, high-paying jobs and taxes and royalties to the Navajo Nation. Selection of the No Action Alternative, halting operations of the FCPP and Navajo Mine, would result in substantial harm to the Navajo Nation, due to the loss of these benefits.

276.012

IV. THE DEIS EVALUATES A REASONABLE RANGE OF ALTERNATIVES

Both the Council on Environmental Quality and the Department of the Interior’s NEPA implementing regulations make clear that the purpose and need of the proposed action establishes the reasonable range of alternatives that an agency should consider in a DEIS. 40 C.F.R. § 1502.13; 43 C.F.R. § 46.415(b). OSMRE has met this requirement. The DEIS appropriately describes the purpose and need in relation to the agencies’ need to either approve, approve with modification, or disapprove various permits and approvals needed for the Project. DEIS at v-vi. OSMRE also properly considered the applicants’ goals and the agencies’ mission and directives in formulating the purpose and need. Thus, in addition to identifying the agencies’ need to evaluate and act on each permit or approval (Table ES-2), the DEIS also laid out the goals of the Project, including:

- Promoting tribal self-determination and tribal economic development for both the Navajo Nation and Hopi Tribe;
- Maintaining long-term, reliable, and uninterrupted baseload power generation and transport;

¹¹ Navajo Nation Council Resolution No. CAP-20-13, Section A.8 (Apr. 2013) (included as Attachment D).

Response 276.011

There will be a global clarification to address APS’ selection of the urea option for ammonia transport.

Response 276.012

Thank you for your comment. A complete discussion of Socioeconomics is provided in Section 4.10 of the Draft EIS. This section, as well as Environmental Justice, is being augmented with additional socioeconomic effects to the Navajo Nation as a result of the No Action alternative.

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- Continuing to supply coal to the FCPP from Navajo Mine; and
- Ensuring continued operation and maintenance of transmission lines and ancillary facilities that are part of the Proposed Action.

DEIS at v. OSMRE relied upon the purpose and need of the proposed action and these factors to craft a range of alternatives to evaluate in the DEIS. *Id.* at vii.

OSMRE's selection of the Proposed Action as the Preferred Alternative is well-supported and the factors underscoring the Proposed Action as Preferred Alternative also support Alternative D. The "preferred alternative" is one that the agency "believes would fulfill its statutory mission and responsibilities, giving consideration to economic, environmental, technical and other factors." *See* Council on Environmental Quality, "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations," 46 Fed. Reg. 18026, 18027 (Mar. 23, 1981). Here, the Proposed Action, with the replacement of the ash disposal configuration from Alternative D, best meets those factors for a number of reasons. *First*, it meets OSMRE's mission—to carry out the Surface Mining, Reclamation and Control Act and to ensure that coal mining operations are protective of citizens and the environment during mining. The mining operations proposed here include applicant proposed measures and best management practices that provide environmental and public health protection. Moreover the Proposed Action also meets the BIA's mission—to promote economic opportunity and protect and improve the trust assets of American Indians. The Proposed Action would do just that—it would facilitate tribal economic development—particularly now that that Navajo Mine is owned by the Navajo Transitional Energy Company. *Second*, the Proposed Action best promotes a strong economy. It provides economic benefits to the Navajo Nation and surrounding communities, *see* section III above, and the continued operation of the FCPP as a source of uninterrupted baseload power is important to the economy and regional grid reliability, *see* section V.A below. *Third*, the ongoing operations at the FCPP represent substantial environmental benefits over historic operations, and, as compared to the ash disposal configuration evaluated in the Preferred Alternative, Alternative D would reduce impacts even further because it would disturb fewer acres of land. *See* section II above and section VIII below.

276.013

APS supports OSMRE's formulation of the Proposed Action and Alternative D, with the clarifications identified herein and in Attachment A. OSMRE reasonably interpreted the baseline for the analysis to include potential impacts of two prior federal actions: the transfer of Navajo Mine to the Navajo Transitional Energy Company and EPA's BART Federal Implementation Plan for the FCPP. DEIS at Executive Summary i. It was reasonable for OSMRE to consider these potential impacts in the baseline because the federal agency has already issued a final action in each case. Additionally, the Mine Transfer Permit Approval was already subject to NEPA review—OSMRE prepared an Environmental Assessment to evaluate that action and made a Finding of No Significant Impact.¹² The Federal Implementation Plan for

¹² OSMRE, "Environmental Assessment: Navajo Mine SMCRA Permit NM-0003F Transfer" (Nov. 2013) *available at* http://www.wrcc.osmre.gov/initiatives/navajoMine/permitTransfer/PT_FinalEA.pdf.

Response 276.013

Thank you for your comment. OSMRE is considering all of the alternatives that were analyzed in the Draft EIS and will inform the public of its decision via the Record of Decision, anticipated in the spring of 2015.

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the FCPP was an action taken pursuant to the Clean Air Act, so it is not subject to NEPA, as the DEIS acknowledges (at iii and iv). *See* 15 U.S.C. § 793(c)(1).

APS requests that the following aspects of the Proposed Action/Preferred Alternative be clarified in the final EIS:

- The DEIS states that negotiations are ongoing with the Hopi Tribe regarding the right-of-way renewal on Hopi land for APS's 500 kV line. DEIS at Executive Summary xii. However, APS and Hopi have reached agreement on that right-of-way renewal and the renewal was submitted to the BIA Western Region office for review and agency action. This agreement should be reflected in the final EIS. 276.014
- The DEIS properly explains that BIA actions include both the approval of both right-of-way renewals and the lease extension for the FCPP plant area. *See, e.g., id.* at Executive Summary i, xii, xix, 1-1. APS requests that all discussions of BIA's action for the FCPP plant site consistently acknowledge both rights-of-way renewal and the lease extension approval throughout the final EIS. *See, e.g., id.* at Table ES-2, Executive Summary iii, v, vii. 276.015
- The DEIS correctly notes that BIA's rights-of-way approvals include Moenkopi Substation and ancillary facilities (at 1-11) in addition to APS's transmission lines that are part of the Proposed Action. APS requests that this description consistently be carried throughout the final EIS. *See, e.g., id.* at Table ES-2. 276.016
- The DEIS correctly notes that the BIA must approve rights-of-way renewals for APS's 500 kV and 345 kV transmission lines. *See id.* at 1-11. The DEIS incorrectly states that Proposed Action also requires a BLM approval for APS's 500 kV line. There is no BLM land within the boundaries of the Navajo Nation or the Hopi Tribe. APS requests that the final EIS reflect that the Proposed Action only includes BIA approvals for APS's 500 kV transmission line. *See, e.g., id.* at Table ES-2, vi, Table 1-1, 1-10 and 11. 276.017
- APS requests that OSMRE remove the following item from the table of proposed actions (Table ES-2 and Table 1-1) listed for EPA: "Ensure that emissions from the FCPP comply with the Clean Air Act during modification of Title V Operating Permit and Title IV Acid Rain Permits." As noted above, EPA's actions under the Clean Air Act are not subject to NEPA review, 15 U.S.C. § 793(c)(1), so these permitting items do not belong in the table of authority and actions. 276.018
- APS requests that OSMRE remove the following statement from Section 5.1.4.1 (Water Resources): "Any activity requiring a Federal permit, license, or approval that results in a discharged [sic] into a water of the U.S. must receive Clean Water Act Section 401 Certification. *In this case, the certification would be issued by the NNEPA Water Quality Program verifying that the Navajo Nation Surface Water Quality Standards will be met when the discharge occurs.*" (emphasis added.) In EPA's Decision Document for the Approval of the Navajo Nation Application for Treatment in the Same Manner as a State for Sections 303(c) and 401 of the Clean 276.019

Response 276.014

The text has been updated in the Final EIS.

Response 276.015

Approval of Lease Amendment No. 3 includes the ROW approvals for Moenkopi Substation and ancillary facilities. No change made.

Response 276.016

Approval of Lease Amendment No. 3 includes the ROW approvals for Moenkopi Substation and ancillary facilities. No change made.

Response 276.017

The text has been updated in the Final EIS.

Response 276.018

The text above the table states that some of the actions require NEPA review. It doesn't state that all actions in the table require NEPA review. No change made.

Response 276.019

Please see Master Response #11, Covenant 17.

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Water Act dated January 20, 2006, EPA explains that in its application for treatment as a state, the Navajo Nation expressly excluded Morgan Lake from the scope of the application. As a result, EPA concluded that the application "effectively does not include land the Tribe leases for the Four Corners Power Plant and Navajo Generating Station," including Morgan Lake. Moreover, Section 17 of the lease between the Navajo Nation and FCPP participants prohibits the applicability of Navajo Nation Surface Water Quality Standards to FCPP. Accordingly, the italicized language above should not be included in the final EIS.

V. OSMRE PROPERLY ELIMINATED FROM FURTHER EVALUATION ALTERNATIVES THAT WOULD NOT MEET PURPOSE AND NEED AND WOULD NOT BE ECONOMICALLY AND/OR TECHNICALLY FEASIBLE

Under both the Council on Environmental Quality's and the Department of the Interior's regulations that implement NEPA, agencies must inform decision-makers and the public of reasonable alternatives that meet the purpose and need of the proposed action and that would avoid or minimize impacts. 40 C.F.R. § 1502.1; 43 C.F.R. § 46.415(b). For alternatives that agencies eliminate from detailed study in the EIS, the EIS must "briefly discuss the reasons for their having been eliminated." 40 C.F.R. § 1502.14(a). The DEIS fulfilled that requirement in its thorough discussion of each potential alternative eliminated from detailed study. OSMRE made well-supported conclusions to screen the potential alternatives.

A. Conversion of FCPP to Non-Coal-Fired Energy Options is Not Viable

APS makes decisions regarding energy generation on a portfolio-wide basis. APS's 2014 Integrated Resource Plan evaluates how APS will meet projected demand within its service territory.¹³ The plan is based on an assessment of resources, costs and environmental variables across the generation portfolio, and each asset serves a role in APS's balanced and diverse portfolio. APS is committed to expanding renewable generation and is doing so in locations that make sense from a cost and reliability perspective. However, as described below, APS has determined that there are economic and reliability reasons that preclude converting the FCPP to gas or renewable power generation. APS agrees with OSMRE's elimination of alternatives considering conversion of FCPP to non-coal-fired options for the following reasons.

276.020

Response 276.020

Thank you for your comment. Please see Master Response #2, Renewable Energy Alternatives.

¹³ See Arizona Public Service, 2014 Integrated Resource Plan, Exec. Summary VII (Apr. 2014), available at http://www.aps.com/library/resource%20alt/2014_IntegratedResourcePlan.pdf (included as Attachment E).

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OSMRE correctly concluded that conversion of the FCPP to a natural gas-fired, biomass-fired, or solar, wind or geothermal power plant would not meet the purpose and need for the proposed action. DEIS at 3-2, 3-48. APS agrees that such conversion would discontinue use of Navajo coal, eliminating the resulting coal royalties to the Navajo Nation. It would also reduce or eliminate hundreds of mining jobs at the Navajo Mine. Conversion of FCPP to non-coal-fired energy would result in adverse economic impacts to the Navajo Nation and surrounding communities, compared to the Proposed Action. And the FCPP lease requires coal as the primary fuel. In addition, several other considerations preclude the conversion of the FCPP to an alternative energy source.

276.021

1. Gas

While conversion of coal-fired power plants to natural gas is technically feasible, at FCPP it would require a much greater volume of gas supply. The infrastructure currently in place at FCPP only provides sufficient volume of natural gas to ignite boilers at startup and for other minor uses. Therefore, APS would need to construct a large diameter distribution pipeline from a nearby transmission pipeline to the FCPP. APS would also have to undergo the operational and engineering adjustments described in the DEIS. See DEIS at 3-49.

276.022

Importantly, it would not be economically feasible for APS to undergo the expense of converting the FCPP to natural gas. Converting the FCPP boilers to combust natural gas would be much less efficient than building new natural gas combined cycle units closer to APS's load centers in Arizona. Building new combined cycle units would improve the fuel to electricity efficiency from about 37 percent to 49 percent, in comparison to converting the existing coal-fired units to natural gas. However, building a new combined cycle unit closer to APS's load center would not meet the purpose and need because it would not benefit the Navajo Nation through jobs, taxes, and royalties, and it would not support Navajo Nation production of its own coal resources.

276.023

Converting to natural gas would also be economically infeasible because of changes to dispatch of Units 4 and 5. Units 4 and 5 currently operate as baseload units. They provide low cost energy and are generally operated 24 hours per day, seven days per week. In a utility's dispatch order, a coal-fired unit would typically be called upon to operate after nuclear, hydro and must-take contracts, and before natural gas units. If FCPP Units 4 and 5 were to be repowered to run on natural gas, their dispatch cost would increase so that they would be called upon after coal units and also after high efficiency combined cycle units. Combined cycles are more efficient, with heat rates around 7,000 Btu/kWh, while the FCPP heat rate would be in the 9,700 Btu/kWh range after conversion to natural gas. For individual owners, this would likely put the FCPP into the "peaking range" of operation, creating two major issues:

276.024

1. Coal units—especially the FCPP, which is a supercritical plant—were designed for baseload operation, and the operating characteristics are not conducive to cycling or peaking operation. Peaking units typically run a few to several hours per day during the utility's peak months, and can easily be started and stopped to meet the utility's load requirements and system contingencies. Supercritical boilers such as the FCPP can take 24 hours to start, and must stay on line for at least 24 hours as well. Even if the boilers were converted to natural gas, they would still be very slow to start up, given the large

Response 276.021

Page 3-51 of the Draft EIS states that the lease for FCPP requires coal to be the primary fuel for the plant. This has also been added to page 3-50.

The Draft EIS notes that a new lease would need to be reviewed and approved for its tribal trust responsibilities.

Response 276.022

The following sentence is already in the Draft EIS: *APS would also need to secure a larger supply of gas from a nearby transmission pipeline and install a large-diameter distribution pipeline to the existing power plant site.* No change made.

Response 276.023

The following text has been added to the Final EIS: Further, it would be more economically efficient to build a new natural gas combined cycle units near major load centers than it would be to convert the existing units at FCPP.

Response 276.024

The following sentences were added to the paragraph: In addition, Units 4 and 5 are designed to operate as baseload units and are not conducive to cycling or peaking operation. If FCPP were converted to natural gas, the dispatch cost of operating Units 4 and 5 would increase substantially and the units would no longer provide baseload power.

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quantity of metal to heat up in equilibrium. With these inflexible operating characteristics, the plant would either be started too early and be shut down too late, or not be called upon at all when it would otherwise be needed. Furthermore, the operating characteristics would not be useful for meeting system contingencies and operating reserves.

2. The FCPP is a joint participation plant with five owners. If any individual owner calls on power from the plant, it must be dispatched and each of the owners must take at least their pro-rata minimum load from the plant. For peaking units, it is likely that one owner would call on a unit while other owners would not. The other owners then would be taking their share of the output uneconomically. For them, the operation of the FCPP would be displacing more efficient, and likely environmentally cleaner, generation.

Finally, developing new gas-fired generation on the lease site concurrently with decommissioning the FCPP coal units, were that scenario considered, would present significant operational challenges.

2. Wind

OSMRE properly concluded (at 3-49) that wind power would not provide uninterrupted power supply to electricity customers. Wind is an intermittent resource and wind energy production primarily occurs in the spring, when APS customer loads are reduced.¹⁴ In contrast, the FCPP is designed to run twenty-four hours a day for most days of the year.

Furthermore, wind would not be feasible at the Four Corners lease site because the area is not a candidate for sufficient wind to support this type of generation. A 2009 Western Renewable Energy Zones – Phase 1 Report conducted by the Western Governors’ Association and U.S. Department of Energy, identified a significant amount of potentially developable wind resources in eastern and southeastern New Mexico, but did not identify such wind resources in northwest New Mexico.¹⁵

3. Solar

Like wind generation, solar power is intermittent and similarly not a substitute for baseload generation. As the DEIS acknowledges (at 3-49), complete power replacement with solar power would require over 25 square miles of collector arrays and would need to be augmented by combustion turbines to supplement the low MW-hour availability due to nighttime and cloud cover. These facilities could not be constructed on the existing footprint of the lease and would require an expansion of the lease and associated rights-of-way.

¹⁴ Integrated Resources Plan at 16.

¹⁵ Western Governors’ Association & U. S. Department of Energy, “Western Renewable Energy Zones – Phase 1 Report,” 12 (June 2009), available at www.westgov.org/rtep/219-western-renewable-energy-zones (included as Attachment F).

Response 276.025

Thank you for your comment. Please see Master Response #2, Renewable Energy Alternatives

Response 276.026

The following paragraph has been added: FCPP conversion to wind power is feasible; however, FCPP is designed to operate 24 hours per day 365 days per year and there is not sufficient wind in the region to support this level of operation. A substantial amount of potentially developable wind resources have been identified in eastern and southeastern New Mexico, but not in the northwestern portion of the state.

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As the DEIS notes (at 3-59), if APS were to build solar generating facilities, it would not build them at FCPP. APS would likely build closer to the Phoenix area, where there is greater average annual solar hours and intensity. It also would be more cost-effective to install a solar power plant in this area that is closer to APS's major load center. However, building a solar power plant closer to APS's load center would not meet the purpose and need because it would not benefit the Navajo Nation through jobs, taxes, and royalties, and it would not support Navajo Nation production of its own coal resources.

APS's analysis shows that renewable energy does not currently offer a reasonable alternative to continued coal-fired operations at the FCPP. APS's 2012 Integrated Resources Plan evaluated an Enhanced Renewable scenario and a Coal Retirement scenario and concluded that neither were sufficient replacement for the FCPP. Figure 17 from the APS Integrated Resources Plan illustrates these scenarios.¹⁶

Resource Contribution to System Peak Capacity in Year 2027							
Resource Types (Numbers are in MW)	Base Case	Four Corners Contingency		Enhanced Renewable		Coal Retirement	
	2012 Reference Plan		Change from Base Case		Change from Base Case		Change from Base Case
Nuclear	1,146	1,146	0	1,146	0	1,146	0
Coal	1,932	962	(970)	1,932	0	0	(1,932)
Natural Gas & Demand Response	7,424	8,394	970	7,138	(286)	9,188	1,764
Renewable Energy (RE) & Distributed Energy (DE)	1,141	1,141	0	1,427	286	1,308	167
Energy Efficiency (EE)	1,525	1,525	0	1,525	0	1,525	0
Total Resources	13,168	13,168	0	13,168	0	13,168	0

- (1) The Enhanced Renewable Scenario has only 286 MW (just 2.2% of total resources, 13,168 MW) more renewable than the Base Case.
- (2) The Coal Retirement Scenario has only 167 MW (just 1.3% of total resources, 13,168 MW) more renewable than the Base Case. The retired coal fleet of 1,932 MW is replaced with 1,764 MW (or 91%) of natural gas and only 167 MW (or 9%) of renewable energy.

The MW values quoted for renewable resources above are dependable capacity, not nameplate capacity, which is much higher. Renewable resources, such as solar and wind, are intermittent and variable. As such they are not a reliable substitute for coal generation or other conventional generation technologies, which are a baseload resource designed to operate on demand 24 hours a day, 365 days a year, with occasional outages for maintenance and repairs. Solar and wind also have relatively lower capacity factors: 30 percent or less for solar without storage, 28 percent-35 percent for wind.¹⁷ A coal plant such as the FCPP typically has a capacity factor in the 75 percent-85 percent (or higher) range. Therefore, in order to replace the energy generated from the FCPP with renewable energy, a much larger nameplate capacity of solar or wind has to be installed, on the order of more than twice as large.

¹⁶ Arizona Public Service, "2012 Integrated Resources Plan," 4-4, figure 17 (Mar. 2012) available at <http://www.aps.com/library/resource%20alt/2012ResourcePlan.pdf> (included as Attachment G).

¹⁷ See *id.* at Attachment D.3, page ATT-69.

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In the Coal Retirement Scenario shown above, energy production from more than 1,700 MW of coal to be retired is replaced by 25 percent renewable energy and 75 percent gas generation. The nameplate capacity of a renewable resource required to meet 25 percent of coal generation capacity is more than 1,000 MW.¹⁸ With respect to system reliability, this 1,000 MW of renewable nameplate capacity is worth only 167 MW of dependable capacity as shown above and, accordingly, is not sufficient to satisfy APS's baseload generation needs to ensure affordable and reliable energy service for its customers.

276.027

APS's 2014 Integrated Resource Plan also analyzed a coal retirement ("Coal Reduction Portfolio") and an Enhanced Renewable Portfolio. In this case, the Coal Reduction Portfolio assumed retirement of the Cholla Power Plant rather than the FCPP, but the conclusion is the same: solar energy is not a suitable replacement for baseload coal generation. Similar to the analyses of the 2012 filing, only a small fraction of the retired coal capacity and energy is replaced by solar. The capacity and energy is predominantly replaced by combined cycle natural gas, which would be generated (and built) more efficiently and economically than converting the FCPP to gas.

4. Geothermal

OSMRE properly concluded that geothermal power is not technically feasible at the FCPP because the existence of geothermal resources in New Mexico and Arizona is uncertain and unproven. The Western Renewable Energy Zones – Phase 1 report indicates that there are no discovered geothermal resources in Arizona or New Mexico.¹⁹

5. Biomass

OSMRE properly concluded that biomass is technically infeasible because there is no utility scale source of the torrefied biomass pellets, and transport of hundreds of tons per hour of such pellets would be logistically and economically prohibitive. This is consistent with the Western Renewable Energy Zones – Phase 1 Report, which indicates that there is not enough biomass fuel in the entire states of New Mexico and Arizona combined to power a fraction of the FCPP (NM 223 MW, AZ 327 MW).²⁰

B. Solar Thermal/Coal Hybrid Facility is Not Technically or Economically Feasible for FCPP

OSMRE properly concluded that a solar/coal hybrid only partially meets the purpose and need for the proposed action. Moreover, APS's evaluation of a solar/coal hybrid facility at FCPP in its 2014 Integrated Resource Plan,²¹ by order of the Arizona Corporation Commission,²²

¹⁸ See *id.* at 47.

¹⁹ See Western Renewable Energy Zones – Phase 1 Report at 23.

²⁰ See *id.*

²¹ See Integrated Resource Plan at 164-67.

Response 276.027

The following sentence was added to the discussion of technical feasibility of solar power: The nameplate capacity of a renewable resource required to meet 25 percent of coal generation capacity is more than 1,000 MW. With respect to system reliability, this 1,000 MW of renewable nameplate capacity is equivalent to only 167 MW of dependable capacity as shown above, and accordingly, is not sufficient to provide baseload generation.

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supports OSMRE's conclusions that solar/coal hybrid is neither technically nor economically feasible for the FCPP.

APS based its evaluation on a study performed for an APS natural gas combined cycle unit²³ and on various studies performed by the Electric Power Research Institute for the electric power industry.²⁴ APS reviewed three concentrated solar power (CSP) systems that could be integrated into a coal plant: (1) parabolic trough—the technology for which industry has the greatest amount of experience; (2) linear Fresnel, which produces a lower energy than the parabolic trough in current designs; and (3) the power tower, which has the least amount of commercial experience and the highest capital costs.²⁵

APS summarized the technical challenges to integrating a solar/coal hybrid at the FCPP in the 2014 Integrated Resources Plan:

One of the strongest considerations is that the Four Corners 4 & 5 units are supercritical boiler technology. No CSP is designed or under consideration today that will be able to be compatible with the high pressure, supercritical steam conditions and only the power tower technology would potentially be able to meet intermediate pressure steam conditions. As was discussed, power tower technology is still untested at utility scale and is the more expensive option. This means that all energy would need to be added at the lower energy points in the system which reduces the efficiency gains in the cycle. The power tower also requires more land for the same energy.²⁶

276.028

Response 276.028

The following sentence was added to Section 3.3.2.4: In particular, Units 4 and 5 operate with supercritical boiler technology. No CSP is designed currently that would be compatible with the high-pressure, supercritical steam conditions of Units 4 and 5.

²² Docket E-01345A-10-0474 Decision No. 73130 (April 24, 2012).

²³ Integrated Resource Plan at 165 (citing “Redhawk Power Station Concentrated Solar Power Augmentation Study.” CH2MHill for APS, September 2011).

²⁴ *Id.* (citing “Solar Augmented Steam Cycles for Coal Plants: Conceptual Design Study.” EPRI, Palo Alto, CA: 2010. 1018648; “Solar Augmented Steam Cycles for Coal Plants: Development Guideline Manual for Mayo Electric Generating Plant.” EPRI, Palo Alto, CA, American Electric Power, Columbus, OH, Progress Energy, Raleigh, NC, Southern Company, Birmingham, AL, and Tri-State Generation & Transmission Association, Westminster, CO: 2009. 1018649; “Solar Augmented Steam Cycles for Coal Plants: Development Guideline Manual for Escalante Generating Station.” EPRI, Palo Alto, CA, American Electric Power, Columbus, OH, Progress Energy, Raleigh, NC, Southern Company, Birmingham, AL, and Tri-State Generation & Transmission Association, Westminster, CO: 2009. 1018650).

²⁵ See Integrated Resources Plan at 165

²⁶ *Id.* at 166.

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The Integrated Resource Plan also highlighted planning and approval considerations. APS concluded that the FCPP leased area would be insufficient to support a CSP augmentation facility sufficient to provide a significant quantity of energy. Thus, a solar/coal hybrid would require additional land, requiring lease negotiation with the Navajo Nation and associated BIA approvals for leases and rights-of-way.²⁷ Moreover, if benefits and costs were to be shared among the co-owners of FCPP, as is current practice, approval from the multiple Public Utility Commissions governing each co-owner would also likely be required.²⁸

APS found that the benefits of a solar/coal hybrid would not justify costs of construction and operation. As an example, the cost of parabolic trough construction ranged from \$3000 /kW to \$4200 /kW in the studies evaluated by APS.²⁹ Operating costs in these studies ranged significantly, from approximately \$700,000 for 29.5 MW-thermal to approximately \$1,720,000 for 69 MW-thermal.³⁰ The studies also highlighted the high volume of water needed for mirror cleaning on CSPs. The solar hybrid study of a natural gas combined cycle power plant estimated that almost 3 million gallons of demineralized water per year would be needed.³¹

C. Carbon Capture and Sequestration (CCS) is Not Feasible at the FCPP

APS agrees with OSMRE's elimination of CCS from detailed study. CCS technology is not commercially available at the scale required for the FCPP. It is neither technically or economically feasible at FCPP, and it does not warrant further evaluation in the DEIS.

While EPA has recently proposed standards of performance for CO₂ reductions for *new* power plants, requiring *partial* CCS,³² EPA has also determined not to consider partial CCS in its proposal for *existing* power plants.³³ EPA recognized that there are different considerations for existing power plants, including space constraints. While EPA noted that there are pilot-scale demonstrations of partial CCS, EPA did not cite any existing utility-scale CCS installation (on either a new or existing power plant) that is in operation anywhere in the world.³⁴ There are a number of challenges to incorporating CCS at existing power plants, including: (1) technical

276.029

Response 276.029

The following sentence was added to 3.3.3.4: Further, while EPA has recently proposed standards of performance for CO₂ reductions for new power plants, requiring partial carbon capture and storage, EPA has also determined not to consider partial carbon capture and storage in its proposal for existing power plants. There are a number of challenges to incorporating carbon capture and storage at existing power plants, including: (1) technical challenges of the CO₂ separation and capture technology; (2) transport and storage of CO₂; and (3) measurement, monitoring and verification.

²⁷ See *id.*

²⁸ See *id.*

²⁹ See *id.* at 165.

³⁰ See *id.* at 166. The costs in the Redhawk study were lower, but since Redhawk Power Station is a gas-fired plant, that study did not account for increased costs to address cost distinctions for a coal-fired plant.

³¹ See *id.*

³² See EPA, "Standards of Performance for Greenhouse Gas Emissions From New Stationary Sources: Electric Utility Generating Units," 79 Fed. Reg. 1430, 1471 (Jan. 8, 2014).

³³ See EPA, "Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units," 79 Fed. Reg. 34830, 34856-57 (June 18, 2014).

³⁴ See *id.* at 243.

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challenges of the CO₂ separation and capture technology; (2) transport and storage of CO₂; and (3) measurement, monitoring and verification. ↑

CCS at the FCPP is also not economically feasible. This conclusion is consistent with EPA's recent determination not to consider partial CCS for existing source standards. EPA acknowledged the substantial economic challenges for existing sources to retrofit with CCS.³⁵ According to the DOE/NETL December 2010 report, currently available CCS technologies are expensive and very energy-intensive due to the large quantity of energy required to separate, capture, transport and inject the CO₂. Capital cost and energy penalty estimates for adding CCS technology to a 550 MW net output power plant are \$700 million and 25 percent for oxy-combustion, and \$900 million and 30 percent for post-combustion separation and capture.³⁶ This is a very high energy penalty and would require the burning of more coal to make up for the loss of power, with accompanying criteria pollutant emissions, water usage, and coal combustion residual generation. And the cost and energy penalty would be even higher because these estimates do not account for the cost of transport and storage of CO₂. Thus, OSMRE correctly concluded that CCS is not economically feasible at the FCPP.

VI. OSMRE PROPERLY DECLINED TO SELECT THE NO ACTION ALTERNATIVE AS THE PREFERRED ALTERNATIVE IN THE DEIS

The record supports OSMRE's decision not to select the No Action Alternative as the agency's preferred alternative. The No Action Alternative would have devastating social and economic impacts on the Navajo Nation, including the loss of taxes, royalty, and other income from the Project as well as increased unemployment, as noted in section III above. The No Action Alternative would also create serious reliability problems. The FCPP is a source of baseload power—it produces electricity on a relatively continuous basis, sufficient to power over 500,000 homes.

Additionally, the No Action Alternative could interfere with transmission of electricity from other power plants in the region. As the DEIS notes (at 3.33), the transmission lines that are being considered as part of the Proposed Action carry power from other power plants. None of the transmission lines are completely dependent on the FCPP operations; rather, the transmission lines exist to transport available power to market. Thus, even if the FCPP were to shut down, each of the transmission lines would still be needed to transmit power from other sources. As the DEIS notes (at 3.33), if the Proposed Action is not approved, the applicants likely would separately apply to BIA to renew and maintain each of those existing transmission facilities, including the switchyards.

APS requests that OSMRE remove from the final EIS any suggestion that APS might seek a new lease for the FCPP with the Navajo Nation under 25 U.S.C. § 415(e) if BIA does not. ↓ 276.030

³⁵ See *id.* at 143-44.

³⁶ DOE/NETL, "Carbon Dioxide Capture and Storage RD&D Roadmap" (Dec. 2010) available at <http://www.netl.doe.gov/File%20Library/Research/Carbon%20Seq/Reference%20Shelf/CCSRoadmap.pdf> (included as Attachment H).

Response 276.030

The reference speaks only to the regulatory possibility of this option. APS is not in any way committed to following this path.

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approve Lease Amendment No. 3 for the FCPP. *See, e.g.*, DEIS at 4.11-36. APS does not intend to seek a section 415(e) lease for two reasons:

- (1) If the BIA denies Lease Amendment No. 3, there is no time to renegotiate a new lease with the Nation under 25 U.S.C. § 415(e). APS and the other Four Corners participants must make a decision on whether to expend hundreds of millions to retrofit Units 4 and 5 with SCR. Lease Amendment No. 3 took approximately three years to negotiate. The BART Federal Implementation Plan for the FCPP requires installation and operation of SCR by July 2018, and investments must be made starting in 2015. Due to the time required to purchase and construct the equipment, the hundreds of millions in expenditures for SCR cannot reasonably be expected to be made absent the timely federal actions required to ensure uninterrupted coal supply to the FCPP and lease and rights-of-way extensions.
- (2) As part of arms-length negotiations between APS and the Navajo Nation, the Nation has granted APS a covenant not to regulate, which means that the Nation has agreed it will not directly or indirectly regulate or attempt to regulate the Company or the construction, maintenance, or operation of the power plant and transmission system by the Company. This covenant not to regulate was approved or otherwise reaffirmed by the Nation consistent with the 1960 Lease, the 1966 Supplemental and Additional Lease, the 1985 Amendment, and again in 2011 with Lease Amendment No. 2 and Lease Amendment No. 3. The Department of the Interior has similarly approved the Lease and amendments containing the covenant not to regulate each time this question was before it. APS does not intend to change its position on this issue in order to seek a new lease for the FCPP with the Navajo Nation under 25 U.S.C. § 415(e).

APS notes that the covenant not to regulate is properly acknowledged in numerous places throughout the DEIS, *see, e.g.*, 4.1, 4.5 and 4.8. APS requests that the covenant be reflected consistently throughout the final EIS, including the discussion of biological resources and sensitive species in sections 1.3 and 1.4.

Finally, while the DEIS states that the No Action Alternative would have “no impacts” on air quality and climate change, *see, e.g.*, Table 3-12, APS notes that there may be some impacts from the No Action Alternative. If the FCPP shuts down, the power generation would be needed from other sources. It is highly unlikely that this power generation would be replaced entirely by zero emission sources.³⁷ Thus, the air emissions and climate impacts would not likely be eliminated. Rather, the impacts would come from other power plants in the region, including, potentially, those with less controlled emissions. APS agrees with OSMRE that it is not possible to predict how FCPP generation would be replaced. Therefore, the air quality and climate change impacts from the No Action Alternative are unknown.

³⁷ See section V.A above for a discussion of the distinction between baseload and intermittent power and see the Western Governors’ Association report, cited at note 15, for an overview of renewable energy resources in the Project area.

Response 276.031

The document has been revised to ensure that the covenant not to regulate is consistently and accurately referenced throughout the document.

Response 276.032

The source of energy that would be needed to replace energy from the FCPP under the No Action Alternative is speculative, and although in the long-term the air quality impact is not known, in the short term there would be no impact.

276.031

276.032

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VII. THE DEIS IDENTIFIED UREA AS THE SAFEST AND LOWEST IMPACT AMMONIA SOURCE AMONG THE OPTIONS EVALUATED, AND APS HAS SELECTED UREA AS ITS AMMONIA SOURCE

The DEIS evaluates the potential impacts of three ammonia options: anhydrous ammonia, aqueous ammonia (29 percent) and dry urea. DEIS at 4.15-18. The DEIS analyzes public health and safety risks associated with the transport, on-site storage and use of ammonia and concludes that dry urea is the ammonia option with the lowest public safety and environmental impact risk for the following reasons:

- The DEIS explains that exposure to anhydrous or aqueous ammonia could result in public health effects, ranging in severity based on the level of exposure, including eyes, nose, throat burning, difficulty breathing, blindness, and death. *Id.* at 4.15-20. Since dry urea is a solid and only a small quantity of ammonia generated from dry urea would be stored at the FCPP, the DEIS concludes that risks during transportation and storage are minimal and impacts would be minor. *Id.* at 4.15-22. In contrast, the DEIS concludes that the transport of anhydrous and aqueous ammonia presents moderate to major risk. *Id.*
- Under worst case assumptions, in the event of a spill, the DEIS predicts that 1,654 public receptors could be affected in Farmington from an anhydrous ammonia transportation release (e.g., a truck turnover or other accident), and that 146 public receptors could be affected in Farmington from an aqueous ammonia transportation release (higher numbers are predicted if an accident were to occur in Denver or Albuquerque). *Id.* at 4.15-21. In contrast, the DEIS states that the dry urea option would have negligible impacts because an accidental release would have no off-site consequences. *Id.* at 4.15-22.
- The DEIS also characterizes the potential of an accidental release of anhydrous and aqueous ammonia as an Environmental Justice issue, including identifying potential adverse impacts to residential populations, tribal land (including surface waters) and trust assets, as well as creating additional burden on already overtaxed Navajo Nation public service agencies, in addition to health and safety impacts described above. *Id.* at 4.11-20, 4.11-21. In contrast, the DEIS reiterates, in the Environmental Justice section, that the impacts of a dry urea release would be negligible. *Id.* at 4.11-22.

APS has selected urea as its source of ammonia for SCR operation. The final EIS should reflect this selection and should explain how the selection of urea minimizes potential impacts analyzed in DEIS, including health and safety, hazardous and solid waste, and environmental justice impacts.

276.033

Response 276.033

The EIS has been updated in multiple places to reflect APS' choice of urea as its source of ammonia for SCR operation. The updates include how the selected option minimizes potential impacts, including health and safety, hazardous and solid waste, and environmental justice. See also response to Comment 276.006.

COMMENT #276

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VIII. APS RECOMMENDS SELECTION OF ALTERNATIVE D INSTEAD OF THE ASH DISPOSAL CONFIGURATION IN THE PROPOSED ACTION AND SUPPORTS OSMRE'S CONCLUSION THAT ASH DISPOSAL AT THE FCPP WILL NOT CAUSE MAJOR ADVERSE IMPACTS TO THE ENVIRONMENT

As noted above, the DEIS evaluates an alternative ash disposal configuration, Alternative D, which would disturb fewer acres and would eliminate the number of impoundment walls and roads through the CCR area. APS recommends that the ash disposal configuration in Alternative D be adopted by OSMRE instead of the ash disposal configuration evaluated as part of the Proposed Action, with a minor clarification of the description, as indicated in Attachment A at 3.

276.034

Under Alternative D, instead of constructing separate, stand-alone Dry Fly Ash Disposal Areas (DFADAs) with separate impoundment walls and roads through the disposal area, APS would construct a single "super cell" DFADA made up of multiple, connected cells. It is likely that as many as five connected cells would be added over the life of the project. This super cell would be approximately 350 acres total and would eliminate the number of impoundment walls and roads through the disposal area. As the DEIS notes (at 3-27), the site would still be constructed in phases. As each subsequent cell nears capacity, the liner and leachate collection system would be extended such that the sites would act as a single facility.

The DEIS notes (at 3-27) that Alternative D was considered for potential reduction in environmental effects of the proposed ash disposal configuration. APS agrees that Alternative D reduces the size of the area impacted by the DFADA, and APS also agrees with OSMRE's conclusion that Alternative D meets the purpose and need for the action and is economically and technically feasible. Thus, APS recommends that OSMRE select the configuration in Alternative D, as clarified, instead of the ash disposal configuration evaluated in Proposed Action.

APS agrees that ash disposal at the FCPP as part of ongoing operations would not cause major adverse impacts to the environment. As the DEIS notes (at 2.26 and 27), fly ash from the FCPP is beneficially used as an ingredient in concrete for the construction of dams, streets, freeways, bridges, buildings, sidewalks, driveways, parking structures, concrete blocks, and roof tiles. EPA has extensively evaluated the safety and environmental impacts of beneficial use of fly ash. EPA concluded that the beneficial use of fly ash in concrete meets the relevant health and environmental benchmarks and provides significant environmental and economic benefits.³⁸ Therefore, EPA supports this use.

³⁸ See EPA, "Coal Combustion Residual Beneficial Use Evaluation: Fly Ash Concrete and FGD Gypsum Wallboard," i (Feb. 2014) *available at* http://www.epa.gov/epawaste/conserve/imr/ccps/pdfs/ccr_bu_eval.pdf (included as Attachment I).

Response 276.034

Thank you for your comment. OSMRE is considering all of the alternatives that were analyzed in the Draft EIS and will inform the public of its decision via the Record of Decision, anticipated in the spring of 2015.

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The vast majority of ash disposal at the FCPP over the life of the project will be dry ash disposal—the DFADA configurations in both the Alternative D and the Proposed Action involve the disposal of dry ash. While dry ash is typically mixed with a small amount of water for dust control and compaction, dry ash disposal facilities are entirely distinguishable from wet ash impoundments that contain ash slurry. Unlike the wet ash impoundment failures that have been highlighted in the news, the DFADA will pose *no* risk of dam failure or flow of ash slurry offsite to Chaco Wash.

276.035

Moreover, APS plans to close its existing lined wet ash impoundment during the life of the Project. The majority of waste to the lined ash impoundment was eliminated with the closure of Units 1, 2 and 3. Units 4 and 5 Flue Gas Desulfurization sludge is currently disposed in the lined ash impoundment. However, upon closure of the lined ash impoundment, the Flue Gas Desulfurization slurry will be mixed with fly ash and disposed in the DFADA. The DEIS extensively evaluates the potential impacts of the existing lined ash impoundment in section 4.15. APS notes that while there would likely be environmental and public health consequences if there were a breach, the probability of a breach is very low, as determined by EPA inspection and assessment of dam safety as acknowledged in the DEIS. *See* DEIS at 4.15-14, 4.15-22, 4.15-27.

APS provides the following additional clarification for inclusion in the final EIS. As described in Section 4.15 in the DEIS, EPA has proposed two regulatory options to govern the disposal of CCR—to regulate CCR under Subtitle C or under Subtitle D of the Resource Conservation and Recovery Act. OSMRE correctly concluded that EPA would enforce Subtitle C CCR regulations at the FCPP if EPA selects this approach. However, OSMRE has incorrectly assumed that there would be a regulatory gap if EPA decides to finalize Subtitle D. As described in the regulatory explanation provided in Attachment C to these comments, there would be no regulatory gap even if EPA finalizes Subtitle D regulations. EPA has made clear that Subtitle D regulations would be self-implementing—owners and operators of CCR landfills and surface impoundments would be required to comply with the rules without interaction with the regulatory agency. APS requests that the final EIS reflect that there would be no regulatory gap, for the reasons described in Attachment C.

276.036

IX. THE DEIS APPROPRIATELY EVALUATES AIR IMPACTS AND USES HIGHLY CONSERVATIVE ASSUMPTIONS

OSMRE’s conclusion that the Proposed Action would not result in major adverse effects to air quality is well supported in the record. *First*, the DEIS relies upon extensive modeling to support OSMRE’s evaluation of air quality impacts, and this modeling represents the state of the science.

- The NAAQS Modeling Study projects whether criteria pollutant emissions from Navajo Mine and the FCPP would exceed National Ambient Air Quality Standards (NAAQS). This study used EPA’s AERMOD dispersion model, version 13350, which was the most recent version available before the draft EIS and incorporates EPA’s most recent (and most stringent) NAAQS.

Response 276.035

The following sentence has been added to Section 3: While dry ash is typically mixed with a small amount of water for dust control and compaction, dry ash disposal facilities are entirely distinguishable from wet ash impoundments that contain ash slurry (described in Section 2). As such, no impoundments would be constructed and berms and contouring would be developed to manage stormwater (100yr storm event) within the DFADAs away from Chaco River.

Response 276.036

See response to comment 276.003.

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- The Ozone Impact Assessment was developed through regional photochemical modeling designed to assess the effects of the FCPP's NO_x emissions, in combination with other regional sources, on area ozone concentrations. The assessment evaluated resulting projected ozone concentrations against both the current 8-hour ozone NAAQS and the former 1-hour ozone NAAQS.
- The plume visibility screening analysis was conducted using EPA's screening-level plume visibility model VISCREEN with site-specific meteorological data.

Each of these modeling studies was conducted by air quality and meteorological experts at AECOM, APS's environmental consultant. Each of the draft modeling studies was critically evaluated and commented on, not only by OSMRE and cooperating agencies, but by air quality experts at EPA and the National Park Service (NPS). See DEIS at 4.1-74. The EPA and NPS experts' recommendations were taken into account in the final modeling studies relied upon in the DEIS. See *id.*

Second, as the DEIS explains, modeling projected that ongoing operation of the FCPP and Navajo Mine would not contribute to an exceedence of the current NAAQS over the life of the project. DEIS at 4.1-85. These standards are set by EPA at a level that is requisite to protect the public health, allowing an adequate margin of safety. 42 U.S.C. § 7409(b)(1). The standards provide public health protection for sensitive populations, such as people suffering from asthma, children, and the elderly. Therefore, maintenance of the NAAQS is a significant measure of potential impacts.

Third, the DEIS demonstrates, based on extensive modeling and an Ecological Risk Assessment, that deposition impacts of the Proposed Action or alternatives within the FCPP Deposition Area would be negligible. The FCPP Deposition Area was delineated through preliminary air dispersion and deposition modeling of eight metals that have been identified through numerous studies as the primary risk drivers for adverse ecological effects associated with coal-fired power plants. The CALPUFF³⁹ model was applied within a 300-km radius of the FCPP to simulate dispersion and deposition of the metals to estimate the contribution of future continuous full load operations of the FCPP stacks⁴⁰ to surface soil concentrations in the region for 25 years. The FCPP Deposition Area was determined by delineating the area where the predicted incremental increase in soil concentration of any of the metals due to 25 years of future full load plant operations is projected to be more than 1 percent of current concentrations. Beyond this area, the very small increase in soil concentration associated with the Proposed Action was sufficiently low to be considered discountable.⁴¹

³⁹ CALPUFF is the EPA-approved model to simulate dispersion and deposition over a large area for long-range transport and complex terrain on scales of tens to hundreds of kilometers.

⁴⁰ For the purposes of evaluating future operations, the modeling considered units 4 and 5 with SCR installed.

⁴¹ Using a percentage of background as a threshold for deposited metals is consistent with the acidic deposition screening approach established by the Federal Land Manager's Air

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The Deposition Area extended less than 50 km from the FCPP, and further detailed air dispersion and deposition modeling needed to support the Ecological Risk Assessment was performed using AERMOD (version 12345)⁴² to quantify future emissions from the FCPP stacks that would be added to the existing concentrations in the soils within the Deposition Area over 25 years. This modeling was done in order to assess the terrestrial exposure to constituents of potential ecological concern (COPECs) from FCPP stack emissions under the Proposed Action. The resulting modeling exposures are also referred to in the Ecological Risk Assessment as “Deposition-Related Contributions.” The AERMOD modeling was extended to a 50-km radius of the FCPP in order to allow a fate and transport model (Industrial Risk Assessment Program-Human Health [IRAP-h] software) to predict the contributions of COPECs to the water bodies within the Deposition Area from upstream watersheds.

AERMOD and IRAP-h were used to estimate soil, sediment, and water concentrations associated with Deposition-Related Contributions. To assess potential risks to identified receptors, hazard quotients (HQs)⁴³ were calculated for each COPEC/receptor combination. The HQ is not a predictor of risk but rather is an index used to indicate whether there is potential risk. When the screening level HQ based on the maximum detected concentration was less than 1 (i.e., the maximum concentration was less than the ecological screening value), exposure to the COPEC was assumed to fall below the range associated with adverse effects. For screening level HQs greater than 1, the COPEC/receptor combination was carried through to the refined evaluation.

The Deposition Area Ecological Risk Assessment estimated risks based on the integration of COPEC exposure and stressor response and characterized the potential for risks within the Deposition Area due to Current Conditions and also due to FCPP future operations (i.e., emissions and deposition associated with the Proposed Action). The Ecological Risk Assessment concluded that all of the HQs above 1 are dominated by contributions from Current Conditions. Emissions from the Proposed Action did not significantly impact these HQs or the findings of the Ecological Risk Assessment.

Fourth, the DEIS relies upon highly conservative assumptions that are designed to overestimate or overstate impacts:

- The DEIS assumes a 9 percent increase in capacity at Units 4 and 5 upon shutdown of Units 1, 2 and 3. However, there is no basis for this assumption and such an increase in capacity is not likely to occur. Therefore, the assumption is highly conservative and overstates the air emissions of the Proposed Action. *See, e.g.,* DEIS at 4.1-82.

Quality Related Values Work Group (U.S. Forest Service, National Park Service, and U.S. Fish and Wildlife Service 2010).

⁴² AERMOD is the EPA-approved steady-state plume model that incorporates air dispersion for simple and complex terrains. It is designed for short-range modeling up to 50 km.

⁴³ An HQ is calculated as an exposure point concentration (or dose) divided by the appropriate ecological screening value.

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- No Class I areas exist within a 50 km radius of FCPP. However, visibility criteria for Class I areas was conservatively applied to Class II areas, and this analysis suggests that view aesthetics in the area surrounding FCPP would improve compared to present-day conditions. See, e.g., DEIS at 4.1-81.

Finally, the Human Health Risk Assessment demonstrates that emissions are within levels protective of human health. The Assessment used multiple conservative assumptions designed to overestimate risk to human health. Both cancer and non-cancer risks from atmospheric dispersion of chemicals of potential concern over 25 years of FCPP operation were below hazard indices.

APS requests that the final EIS incorporate the following clarification regarding hazardous air pollutant (HAP) metals emissions. While the Proposed Action will result in significant HAP metal emission reductions over historic levels, the percent reductions in the table comparing estimated historic and future HAP metals emissions require clarifications, as noted in Attachment A, the Technical Clarification Matrix at 4.

The HAP metals Table 4.1-31 overstates the historic HAP metals emissions estimates and compares those historic overestimates to more precise post-2014 emissions estimates. This overstates the percent reduction of HAP metals emissions. More specifically, AP 42—the measurement used in the DEIS for historic emissions—over-predicts trace metals. However, the Mercury and Air Toxics Standard (MATS)⁴⁴ limit, which was used as the point of comparison in the DEIS, is a more precise measurement of trace metals. In APS's view, these two measurements do not provide a meaningful comparison, and EPRI emissions factors would be a better measurement for the historic HAP metals emissions. Using EPRI emissions factors for historic emissions, the post-2014 emissions will constitute a 37 percent reduction over 2000-2011 levels for all HAP metals, except mercury and selenium. This reduction is largely due to the shutdown of Units 1, 2 and 3 and partially due to MATS compliance on Units 4-5. Using the EPRI factors, post-2014 mercury emission estimates show a 67 percent reduction over 2000-2011 levels, and 2014 selenium emission estimates show a 79 percent reduction over 2000-2011 levels. There are greater percentage reductions in mercury and selenium because these metals are volatile, and Units 1, 2 and 3 removed them at different and lower rates as compared to Units 4 and 5. A chart incorporating the clarifications to the HAP metals table is attached as Attachment B.

276.037

Response 276.037

OSMRE maintains its original analysis but has also added the following text to the section: The Human Health Risk Assessment (AECOM 2013d) used EPRI emissions factors for calculating FCPP HAPS emission levels instead of AP-42 emissions factors. Use of EPRI emissions factors results in lower historic emissions and, therefore, a lower estimate of reductions compared to post-2014 emissions, as follows: a 37 percent reduction for all HAP metals (except mercury and selenium), a 67 percent reduction in mercury emission estimates, and a 79 percent reduction in selenium emission estimates over 2000-2011 levels. This reduction is largely due to the shutdown of Units 1, 2 and 3 and partially due to MATS compliance on Units 4-5. The use of the AP-42 emissions factors is appropriate and is consistent with other EIS analyses.

⁴⁴ EPA, "National Emission Standards for Hazardous Air Pollutants From Coal and Oil-Fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial- Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units," 77 Fed. Reg. 9304 (Feb. 16, 2012) available at <http://www.gpo.gov/fdsys/pkg/FR-2012-02-16/pdf/2012-806.pdf>.

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Importantly, while the HAP metals table in the DEIS overestimates percentage reductions, the emission estimates themselves support the DEIS's findings regarding HAP metal emission impacts of the Proposed Action. In fact, the emission estimates overstate the historic emission rates from Units 4 and 5. The Human Health Risk Assessment found that the FCPP emission levels are within levels protective of human health, and the Ecological Risk Assessments concluded that HQs exceeding 1 were due to current conditions—the future operation of the Project did not result in any HQs exceeding 1.

APS recommends the use of EPRI emission factors for the HAP metals table because of the magnitude of overestimation that results from use of AP 42. However, APS believes that the use of AP 42 is generally a reasonable practice, and APS does not object to the use of AP 42 elsewhere in the DEIS in relation to pollutants that are emitted in smaller amounts. The use of AP 42 elsewhere in the DEIS provides accurate comparisons and adds to the conservatism of the analysis.

In sum, the DEIS took the requisite “hard look” at the potential air impacts from the Proposed Action and alternatives, relying upon extensive data, modeling and reports, and properly concluded that the Proposed Action would not result in major adverse effects to air quality.

X. THE DEIS THOROUGHLY QUANTIFIES GREENHOUSE GAS EMISSIONS FROM THE PROJECT AND APPROPRIATELY EVALUATES CLIMATE IMPACTS

The DEIS's detailed assessment and quantification of greenhouse gas (GHG) emissions and climate change constitutes a “hard look” at the potential climate change impacts of the Proposed Action and alternatives. While there are no binding regulations or guidance describing an agency's responsibility to consider climate change in an EIS, the Council on Environmental Quality published draft guidance on the consideration of the effects of GHG emissions and climate change in February 2010.⁴⁵ The DEIS's climate change analysis is robust and consistent with the recommendations in the draft guidance.

The draft guidance recommends that if the proposed action would be anticipated to cause direct emissions of at least 25,000 metric tons of CO₂-equivalent, a quantitative and qualitative assessment of GHG emissions and climate change would be meaningful to inform the decision-maker and to disclose potential impacts to the public. *Id.* at 1-2. The draft guidance recommends that the EIS provide information regarding the proposed action in the context of global climate change and that the agency set reasonable spatial and temporal boundaries for the assessment. *Id.* at 2. It also recommends that agencies quantify emissions over the life of the project. *Id.* at 3. Importantly, the guidance discourages agencies from trying to link specific impacts to the particular project or its projected emissions, as this would be mere speculation.

⁴⁵ Council on Environmental Quality, “Memorandum for Heads of Federal Departments and Agencies on Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions” (Feb. 2010) *available at* <http://www.whitehouse.gov/sites/default/files/microsites/ceq/20100218-nepa-consideration-effects-ghg-draft-guidance.pdf>.

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Id. at 2-3. Under NEPA, a “rule of reason” should govern the agency’s analysis. *Id.* at 7. Therefore, a qualitative overview of climate change effects is appropriate.

The DEIS’s evaluation of potential GHG emissions and climate change impacts from the Proposed Action and alternatives adheres to recommendations in the draft CEQ guidance. As suggested, the DEIS discusses the overall context of global climate change to set the background for the analysis. DEIS at 4.2-1, 4.2-2. Since the anticipated emissions from the Project are expected to exceed 25,000 metric tons of CO₂-equivalent, the DEIS provides detailed quantification of potential GHG emissions including:

- historic GHG emissions at the project-, regional-, and national-level (*Id.* at 4.2-10 – 4.2-15);
- detailed estimates of future emissions, broken down by project component and distinguishing emissions from stationary and mobile sources (*Id.* at 4.3-19 – 4.3-22); and
- projected annual GHG emissions for each source as well as cumulative GHG emissions over the life of the project (*Id.*).

In addition to this detailed quantification of emissions, the DEIS also provides a qualitative assessment of climate change impacts (*id.* at 4.18-25), consistent with the draft guidance. OSMRE’s conclusion that a qualitative assessment, rather than a quantitative assessment, of the cost of GHG emissions is appropriate for the analysis is consistent with the draft guidance, which does not suggest that cost needs to be quantified. Additionally, quantification of the cost of GHG emissions would be speculative, since neither the FCPP nor Navajo Mine is subject to a carbon cap-and-trade regime. While there are several operational cap-and-trade programs in other regions and in the European Union, the auction price among existing cap-and-trade programs varies significantly and, therefore, is not a reliable means of estimating the cost of GHG emissions.⁴⁶

276.038

Finally, APS requests that the final EIS include a reference to EPA’s recently proposed regulation of CO₂ emissions from existing fossil fuel-fired power plants under Clean Air Act

276.039

⁴⁶ In recent auctions in California, the Regional Greenhouse Gas Initiative, and the European Union Common Action Platform, the average price per GHG allowance was US\$11.50, US\$5.02, and EU6.42 (between US\$8.50 and US\$9) respectively. See California Air Resources Board Quarterly Auction 7 May 2014 Summary Results Report, available at <http://www.arb.ca.gov/cc/capandtrade/auction/may-2014/results.pdf>; RGGI, Market Monitor Report For Auction 24 (June 6, 2014) available at http://www.regi.org/docs/Auctions/24/Auction_24_Market_Monitor_Report.pdf; Auctions By the Transitional Common Auction Platform (March 2014) available at http://ec.europa.eu/clima/policies/ets/cap/auctioning/docs/cap_report_201403_en.pdf.

Response 276.038

A quantitative analysis of the social cost of carbon (SCC) has been added to the Final EIS in Section 4.2. The Draft EIS considered the SCC in a qualitative manner, but did not quantify the effects. Subsequent to issuance of the Draft EIS, CEQ published Draft Guidance on climate change analysis (CEQ 2014), in which CEQ indicates that emissions monetization is not required in every project-level NEPA analysis. Nonetheless, OSMRE determined that a quantitative analysis would be included in the Final EIS, following the Interagency Working Group Methods. The results of the SCC analysis do not change the conclusions or the findings of level of significance for the Climate Change issue; however, the analysis has been added to provide additional context to OSMRE’s decision.

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Section 111(d).⁴⁷ After the publication of the DEIS, EPA proposed mandatory CO₂ emission performance targets for each state. EPA estimates that, by 2030, those state targets will result in a 30 percent reduction in CO₂ emissions compared to 2005 levels.⁴⁸ President Obama has directed EPA to finalize that rulemaking by June 1, 2015.⁴⁹ While it is impossible to predict whether EPA will determine that such a plan is necessary or appropriate for existing electric generating units located in Indian country and, if so, what that plan might require, EPA's proposal provides important nationwide context for any climate change evaluation. APS requests that OSMRE reference EPA's recent proposal in the final EIS as Section 111(d) requirements may apply to the FCPP.

XI. THE DEIS THOROUGHLY EVALUATES ENVIRONMENTAL JUSTICE IMPLICATIONS

APS commends OSMRE on the extensive public outreach the agency conducted to involve environmental justice populations in the NEPA process. DEIS at 4.11-2 – 4.11-6. The agency held nine public scoping meetings in August 2012 and nine DEIS meetings in April and May 2014 in the Four Corners region in an open house format, providing a flexible and comfortable setting for public participation. Navajo and Hopi translators assisted members of the public during both scoping and DEIS meetings held on the Navajo and Hopi Reservations. Meeting attendees had the opportunity to view a project overview video at the scoping meetings and a video discussing the Project and DEIS findings at the DEIS meetings. Both the scoping meetings and DEIS meetings had public comment collection stations where translators could assist with written comments and court reporters were available to record oral comments. The agencies designed a culturally-appropriate outreach process that encouraged participation. At the scoping stage, tribal members frequently used the oral comment option, which the agency provided to reflect the strong oral traditions of the Navajo Nation and Hopi Tribe. *Id.* at 4.11-4 – 4.11-5. The locations and format of these public meetings ensured the accessibility of the NEPA process early on for environmental justice populations, including members of the Navajo Nation and Hopi Tribe. OSMRE also provided opportunities for tribal members to participate through the SMCRA informal consultation process, including two informal conferences held in an open house format, as well as the National Historic Preservation Act Section 106 consultation process, during which OSMRE reached out to approximately 40 tribes. *Id.* at 4.11-4 – 4.11-5.

OSMRE's public outreach efforts, facilitating public participation and access to information for environmental justice communities, meet the recommendations outlined in federal agency environmental justice guidance. The Council on Environmental Quality's *Environmental Justice Guidance Under the National Environmental Policy Act* (December 1997)

⁴⁷ EPA, "Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units," 79 Fed. Reg. 34830 (June 18, 2014) *available at* <http://www.regulations.gov/#!documentDetail,D=EPA-HQ-OAR-2013-0602-0001>.

⁴⁸ *Id.* at 34832.

⁴⁹ Memorandum from President Obama to Administrator of the Environmental Protection Agency, Power Sector Carbon Pollution Standards at § 1(b) (June 25, 2013) *available at* <http://www.whitehouse.gov/the-press-office/2013/06/25/presidential-memorandum-power-sector-carbon-pollution-standards>.

Response 276.039

EPA recent proposal was included in the Air Quality section of the Final EIS.

In June 2014, EPA issued the "Clean Power Plan" proposal to cut carbon pollution from existing power plants. The proposal establishes state-by-state goals to reduce greenhouse gases by 2030. The focus is on power plants, but states have discretion to meet goals with a combination of industries. The proposed regulation is subject to comment and finalization. Additionally, tribal lands are not given goals at this time. A proposed timetable is suggested for moving into the process with tribes, with July 2017 being when EPA would have a proposed goal for tribal lands. States are given a year to establish programs, with a provision for a 2-year extension; therefore, 2020 is when states are required to have a program in place. The tribes will likely lag that by a year or two, with the compliance timeframe lagging also. The EIS was changed to acknowledge the proposed plan; however, because of the uncertainties associated with whether the plan will be adopted or modified, and how it would be implemented on the Navajo Nation, there is no change to the conclusions or analysis in the EIS.

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encourages agencies to use innovative and adaptive approaches to overcome linguistic, institutional, cultural, and other barriers for environmental justice populations to meaningfully participate in the NEPA process. *Id.* at 13. OSMRE has effectively employed many of the innovative strategies suggested by this guidance, such as providing translators at public meetings, giving opportunities for limited-English speaking members of the public to provide written and oral comments, and using meeting locations that are local, convenient, and accessible to environmental justice populations.

APS supports the DEIS's conclusion that the Proposed Action will have no major adverse air quality impacts that would disproportionately affect environmental justice populations. DEIS at 4.11-15. Under the Clean Air Act, EPA regulates air pollutants considered harmful to public health and the environment. EPA sets NAAQS for public health protection, including to protect the health of sensitive subpopulations, such as asthmatics, children, and the elderly. The DEIS explains that air quality in the Four Corners Region currently meets the NAAQS and the region is projected to maintain compliance with current NAAQS throughout the life of the project, *id.* at 4.1-74, 4.1-85, 4.11-14; therefore, the existing and projected future levels of air pollutants are within the margin of safety determined by EPA. In addition, the DEIS presents the numerous air emission reductions and clean air benefits from the implementation of SCR at the FCPP and retirement of Units 1, 2 and 3. *Id.* at 4.11-14 – 4.11-15; Table 4.11-1. The DEIS also finds that exposure to mercury and other contaminants (ingested by people through farm products and fish) that may be deposited to the soil from the FCPP would be within thresholds that are protective of human health. *Id.* at 4.11-13. Furthermore, the results of the human health risk assessment show that air pollutants from operation of the Navajo Mine and the FCPP are within levels considered protective of sensitive subpopulations, including children and the elderly. *Id.* at 4.11-14.

APS agrees with the DEIS's conclusion that the Proposed Action would not cause major adverse earth resources impacts that would disproportionately affect environmental justice populations, DEIS at 4.11-16, and provides the following clarification with respect to the impacts of the Dry Fly Ash Disposal Areas (DFADAs). The Proposed Action includes the creation of five new DFADAs to accommodate future disposal of fly ash from the FCPP. The DEIS evaluates an alternative ash disposal configuration that impacts fewer acres, Alternative D, which APS recommends that OSMRE select in addition to the Proposed Action, as explained in section VIII above. Although the DEIS finds that impacts to soil productivity from the DFADAs could potentially adversely affect the ability of Navajo Nation members to use this land for agricultural purposes in the future, *id.* at 4.11-16, this region already faces substantial limitations on agricultural uses due to the arid desert climate. While these lands could potentially be used for grazing, they are unlikely to be used for other agricultural purposes, such as growing crops for food supply, because of the lack of available water for irrigation. Furthermore, the record supports the DEIS's conclusion that the overall Project impacts to soil productivity will be reduced from major to minor. As the DEIS properly notes, comprehensive revegetation plans are in place as part of the reclamation process for both the Navajo Mine Permit Area and Pinabete Permit Area to create a diverse and self-sustaining vegetation community. *Id.* at 4.6-17. These reclamation efforts will increase the vegetation beyond the vegetation present before mining activities, creating a net benefit to the environmental justice communities that may use this land in the future.

276.040

Response 276.040

Thank you for your comment. OSMRE is considering all of the alternatives that were analyzed in the Draft EIS and will inform the public of its decision via the Record of Decision, anticipated in the spring of 2015.

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Several environmental justice evaluations in the DEIS address the risks to environmental justice communities from the potential adverse impacts of ammonia sources other than urea at the FCPP. These risks include adverse impacts to water and Navajo Nation public service resources, in the event of an ammonia spill. DEIS at 4.11-18, 4-11.20. APS again notes that its selection of urea as the FCPP's ammonia source—the option recommended by OSMRE—eliminates the vast majority of these potential impacts. The DEIS explains that because urea is transported as a solid, the potential risks during transportation and storage are greatly reduced compared to the risks for liquid ammonia. Since the on-site storage amount of ammonia generated from urea would be so small, OSMRE concludes that an accidental release of ammonia under the urea option would have only negligible to minimum impacts. *Id.* at 4.15-19. APS requests that APS's selection of urea be reflected in the environmental justice evaluation of the final EIS and that the conclusion regarding impacts to water and Navajo Nation public service resources be updated accordingly.

276.041

XII. THE DEIS TAKES THE REQUISITE "HARD LOOK" AT POTENTIAL IMPACTS ON BIOLOGICAL RESOURCES AND SENSITIVE SPECIES

The DEIS includes a robust and well-supported analysis of potential impacts of the Proposed Action and alternatives on biological resources and sensitive species. APS notes that OSMRE, BIA and the cooperating agencies will soon enter into formal consultation with the U.S. Fish and Wildlife Service, pursuant to Section 7 of the Endangered Species Act. Numerous studies were conducted and extensive data was collected to support this consultation effort. The analysis in the DEIS relies upon the studies and assessments supporting the Section 7 consultation.

Specifically, the evaluation of the potential effects of future emissions from the FCPP was based on two ecological risk assessments (ERAs) conducted to evaluate potential ecological effects associated with future emissions from the combustion of coal at the FCPP.⁵⁰ One ERA was conducted to evaluate ecological risks to both terrestrial and aquatic environments associated with current conditions and future FCPP emissions within the "Deposition Area." The "Deposition Area" was determined through air dispersion modeling to be where the Proposed Action (25 years of Units 4-5 operation with SCR) would have greater than a 1 percent increase on measured soil metal concentrations. The second ERA was conducted to evaluate ecological risks associated with current conditions and future FCPP emissions as well as future regional and global emissions for the aquatic environment of the San Juan River within the deposition area and downstream of the deposition area into the San Juan River arm of Lake Powell. EPRI developed a regional air quality model and coupled the output with a watershed biogeochemical cycling and aquatic biota bioaccumulation model. This EPRI model supported the second ERA by assessing the contributions of arsenic and selenium from regional power plants (FCPP, San Juan Generating Station, Navajo Generating Station) and the local, regional, and global contributions of mercury to water, watershed compartments, and biota in the San Juan River basin extending down to the San Juan arm of Lake Powell.

⁵⁰ The scope of the ERAs is limited to evaluating the FCPP stack emissions because the proposed operations at Navajo Mine would not emit the COPECs in sufficient magnitude to be considered in the ERA.

Response 276.041

The Final EIS reflect APS' selection of the urea option. Any impact assessment (in environmental justice for example) that considers other options besides urea has been modified to reflect APS' selection.

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The ERA process is used to inform environmental decision-making by evaluating the potential for adverse ecological effects that may occur as a result of exposure to one or more environmental stressors. Importantly, the approach used in the ERAs for evaluating the potential impacts of the Proposed Action is consistent with the USEPA's Guidelines for Ecological Risk Assessment (USEPA 1998a), Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments (USEPA 1997), and the Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities (SLERAP; USEPA 1999). Therefore, the DEIS relies upon extensive scientific analysis, consistent with well-accepted evaluation approaches.

APS notes that, since the Section 7 consultation had not formally commenced at the time the DEIS was published, some of the analysis regarding potential impacts to threatened and endangered species has likely evolved since that time. APS requests that all of the additions and adjustments to the species analysis that are incorporated into the final Biological Assessment submitted to FWS be incorporated into the final EIS.

276.042

Moreover, APS agrees that the applicant-proposed measures and best management practices highlighted in the DEIS are protective of biological resources and sensitive species. They include measures to ensure that species are protected throughout both construction activities and operation and maintenance. APS notes that, in addition to the measures listed in the DEIS, conservation measures were proposed in the Biological Assessment OSMRE prepared for the U.S. Fish and Wildlife Service. APS requests that the description of the conservation measures in the final EIS be revised to correspond to the final conservation measures included in the Biological Assessment.

276.043

XIII. CULTURAL RESOURCES ARE PROPERLY EVALUATED IN THE DEIS AND THE SECTION 106 PROCESS WILL ENSURE THAT POTENTIAL IMPACTS TO THESE RESOURCES ARE AVOIDED OR MITIGATED

The DEIS includes a thorough discussion of the potential impacts of the Proposed Action and alternatives on cultural resources. As noted in the DEIS, extensive survey and inventory work was completed in the Area of Potential Effects to document archaeological resources, historic resources, and properties of religious and cultural significance (including Traditional Cultural Properties). The DEIS discloses the number of each category of cultural resources found at the Navajo Mine, the FCPP, and the transmission lines. DEIS at 4.4-14 to 4.4-17. The DEIS then evaluates potential impacts to each category of cultural resources for each alternative, including the Proposed Action. *Id.* at 4.4-17 to 4.4-35.

As explained in the DEIS, Section 106 of the National Historic Preservation Act requires federal agencies to consider the effects of "undertakings" on historic properties. Undertakings are activities an agency carries out, approves, or funds. As part of this process, federal agencies, in consultation with State Historic Preservation Officers (SHPOs), Tribal Historic Preservation Officers (THPOs), tribes, and other interested parties: (1) identify historic resources that may be affected by the undertaking; (2) evaluate and determine whether those properties are eligible for the National Register of Historic Properties (and thus subject to consultation under Section 106); (3) determine whether the undertaking will have an effect on National Register-eligible properties; and (4) resolve adverse effects of the undertaking. *See* 36 C.F.R. part 800. This

Response 276.042

The EIS has been updated to be consistent with the findings of the Section 7 consultation.

Response 276.043

The EIS has been updated to be consistent with the findings of the Section 7 consultation.

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process generally leads to the avoidance or mitigation of adverse impacts on historic resources. For complex projects, the Section 106 implementing regulations allow the agencies, SHPOs, THPOs, and interested parties to enter into a programmatic agreement—a legally binding document that establishes an ongoing process for consultation, identification, eligibility and effects determinations, and resolution of adverse effects. *See* 36 C.F.R. § 800.14(b). Execution of the programmatic agreement fulfills the federal agencies' Section 106 obligations.

As discussed in section 4.4 of the DEIS and as illustrated in the draft Programmatic Agreement for the FCPP, Transmission Lines and Ancillary Facilities in Appendix B to the DEIS, OSMRE and BIA have consulted with the following parties⁵¹ to identify and evaluate historic resources, to determine effects, and to develop a programmatic agreement to govern resolution of adverse effects and ongoing identification, evaluation and effects determinations:

- the Advisory Council on Historic Preservation;
- the Navajo THPO regarding the FCPP, transmission lines and ancillary facilities on Navajo Nation land and Navajo-owned allotments;
- the Hopi Cultural Preservation Office and Arizona SHPO for the transmission line over Hopi Tribal lands;
- the Zia Pueblo for the transmission line over Zia Pueblo lands; and
- the New Mexico SHPO for the transmission line outside of the Navajo Nation or Navajo-owned allotments in New Mexico.

See Appendix B.3 at 2-5. Each of these parties will be signatories or invited signatories to the programmatic agreement. APS requests that the final EIS include a short summary of the role of each of the parties with whom OSMRE and BIA consulted on both the programmatic agreements.

APS agrees with the DEIS's conclusion that the Proposed Action would not result in major adverse effects to cultural resources or historic properties. *Id.* at 4.4-35. The programmatic agreements and avoidance of properties are used to prevent major adverse effects. Once they are executed, the programmatic agreements for both the Navajo Mine and for FCPP, transmission lines and ancillary facilities will be legally binding agreements that will resolve any potential adverse effects on historic properties, establishing appropriate mitigation where avoidance is not possible.

APS requests that the final EIS include the following clarifications:

- The vast majority of the identification work and eligibility and effects determinations will be completed prior to the release of the final EIS. As illustrated by Appendix B to the DEIS, most of the eligibility determinations have already been made and are pending concurrence. *See* Appendix B.3 at

276.044



Response 276.044

Comment noted. Tables and the EIS have been updated based on the outcomes of consultation regarding determinations of eligibility to the extent they were made at the time of Final EIS publication. Future determinations will be made and documented according to the appropriate Programmatic Agreement.

⁵¹ OSMRE and BIA also invited many other Indian tribes to participate in the consultation. *See* Appendix B.3 at 5.

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Attachment C. APS requests that the final EIS be updated to reflect all completed eligibility and effects determinations.

- The DEIS references an expansion of the transmission line ROW on the Hopi Reservation. *See* 4.4-17. This reference should be clarified, as there was not a ROW expansion; rather, the Hopi requested that the Area of Potential Effects be expanded 100 meters on either side of the ROW on the Hopi Reservation. APS recommends that the final EIS describe this expansion of the Area of Potential Effects on the Hopi Reservation in section 4.4.2.
- As OSMRE has recognized and documented, PNM's Four Corners to West Mesa line crosses Navajo individual-owned allotments. *See* Appendix B.3, p.4. The programmatic agreement includes procedures governing consultation on these allotments. *Id.* APS recommends that the final EIS include these allotments in Figures 1-1, 4.1-1, 4.4-3, 4.9-2, 4.10-1, 4.11-1, 4.16-1, 4.18-1.

276.045

276.046

XIV. APS AGREES THAT WATER RESOURCES/HYDROLOGY IMPACTS FROM CONTINUED OPERATION OF THE FCPP WOULD BE NEGLIGIBLE

The record supports OSMRE's conclusion that water resources/hydrology impacts from continued operation of the FCPP would be negligible. In addition to the information provided in section 4.5 of the DEIS, APS offers the following additional context related to background concentrations of constituents of potential concern. This is an excerpt from the Four Corners Power Plant and Navajo Mine Energy Project Ecological Risk Assessment, October 2013, cited as AECOM 2013c in the DEIS, at 6-39:

Many of the inorganic COPECs with HQs above 1 in the ERA are also found in non-impacted background locations. Background refers to constituents or locations that are not influenced by the releases from a site (e.g., the FCPP), and is usually described as naturally occurring or anthropogenic (USEPA 2002b). Shacklette and Boerngen (1984) summarized background concentrations of metals present in surficial soil samples collected at a depth of 20 cm across the United States between 1961 and 1975. These samples were collected to estimate ranges of these constituents in unaltered/minimally altered surficial materials.

Table XIV-1 presents a comparison of the Current Conditions data for COPECs with HQs above 1 in the ERA against the range of concentrations identified by Shacklette and Boerngen (1984) for the western United States and the average of the New Mexico samples from that sampling effort (as summarized by USEPA [2007e]). These samples were collected many decades ago and are expected to represent naturally occurring levels of these metals in the soils. As indicated in the table, all of the Current Conditions concentrations fall within the range of observed concentrations for the western United States. All of the average concentrations from the Current Conditions data set are below the average of the New Mexico samples reported by Shacklette and Boerngen (1984),

276.047

Response 276.045

Clarified last sentence in section 4.4.2.4 to read "Additional survey work for properties of religious and cultural significance (including TCPs) was conducted in the expanded APE, which covered 100 meters on either side of the ROW within the boundaries of the Hopi Reservation."

Response 276.046

Section 1.2 has been amended to include the following clarification: The West Mesa transmission line traverses Navajo Nation tribal trust lands up until the Reservation boundary and then passes through private and allotted trust lands held in trust by the U.S. Federal Government for individual Navajo tribal members.

Sections 4.9.2.1 and 4.12.2.2 have been amended similarly to clarify that the PNM 345kV West Mesa transmission line also crosses allotted lands that are held in trust by the U.S. Federal Government and administered by the Navajo Nation on behalf of individual Navajo members. Figure 4.9-2 (land use/ownership jurisdictions) has also been updated to show allotted lands.

References referring to PNM's "Four Corners to West Mesa" and "Four Corners to San Juan Switchyard" have been corrected throughout the Draft EIS. OSMRE contends that all other references to the other land assignments are consistently and appropriately used.

Response 276.047

The discussion of these results in the Draft EIS makes it clear that the project-related effects are distinct from background level-effects.

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with the exception of selenium. However, the seven samples collected from within San Juan County had higher levels of selenium (average of 0.57 mg/kg) than the state average indicating that the region around the FCPP may have more elevated levels of naturally occurring selenium. The comparison in **Table XIV-1** indicates that the risks due to Current Conditions in soil are similar to or below risks in background locations outside the influence of the FCPP and the Proposed Action.



Table XIV-1. Current Conditions Soil Data Compared to Regional Background Levels

COPEC	Western United States Background Soils (a)	New Mexico Background Soils (b)	Deposition Area Current Conditions Data	
	Observed Range (mg/kg)	Arithmetic Average (mg/kg)	Observed Range (mg/kg)	Arithmetic Average (mg/kg)
Arsenic	<0.10 - 97.0	5.9	1.2 - 8.4	4.1
Boron	<20 - 300	22.4	1.1 - 18.7	7.5
Barium	70 - 5000	727	23.2 - 737	129
Chromium	3 - 2000	55.5	2.0 - 17.2	9.0
Copper	2 - 300	21.0	2.0 - 34.0	9.4
Iron	1000 - > 100000	20898	4070 - 22703	11403
Mercury	<0.01 - 4.6	0.060	0.0032 - 0.049	0.016
Manganese	30 - 5000	367	56.0 - 489	202
Molybdenum	<3 - 7.0	1.7	0.35 - 3.0	1.5
Nickel	<5 - 700	27.9	2.0 - 19.0	8.5
Lead	<10 - 700	18.1	3.0 - 54.7	10.5
Selenium	<0.1 - 4.3	0.29	0.060 - 1.7	0.42
Vanadium	7 - 500	71.4	7.2 - 41.6	21.1
Zinc	10 - 2100	44.3	8.0 - 83.3	37.9

Notes:
(a) Range of surface soils reported by Shacklette and Boermgen (1984).
(b) Average of New Mexico soils from Shacklette and Boermgen (1984) as reported by USEPA (2007e).

XV. APS SUPPORTS THE PROPOSED MITIGATION FOR THE FCPP AND TRANSMISSION LINES

APS supports the mitigation OSMRE has proposed in the DEIS. *First*, APS agrees that the Programmatic Agreement being prepared for the FCPP, transmission lines and ancillary facilities (“Programmatic Agreement”), pursuant to Section 106 will mitigate or avoid impacts on historic properties. The Programmatic Agreement will include a process for the applicants, agencies and consulting parties to determine and implement resource-specific measures to mitigate adverse effects on historic properties when it is not possible to avoid the resources. The Programmatic Agreement was listed in the DEIS as mitigation for the FCPP and transmission lines in the executive summary and at page 4.19-2. APS requests that the Programmatic Agreement be referenced as mitigation throughout the final EIS, where appropriate.

276.048

Response 276.048

The Programmatic Agreement has been referenced as appropriate in the Final EIS.

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Second, OSMRE has proposed mitigation measures for ash disposal. While the DEIS's text is somewhat unclear, the DEIS suggests that the mitigation is meant to impose measures that EPA has proposed for regulating CCR under Subtitle D of the Resource Conservation and Recovery Act. DEIS at 4.19-31 (“[d]epending on the outcome of the EPA’s Final Rule, some or all of these measures may be requirements of EPA’s Final Rule on CCR”). EPA’s rule has not yet been finalized and OSMRE has incorrectly assumed that there would be a regulatory gap in CCR regulation at the FCPP if EPA finalizes a CCR Regulation under Subtitle D. *See* section VIII above and Attachment C. Therefore, APS understands the mitigation to mean that, in the absence of EPA regulation, OSMRE intends to impose the requirements of EPA’s proposed regulation as mitigation measures to ensure that they apply to the FCPP. As noted in Attachment C, a slight clarification in the text of OSMRE’s proposed mitigation measures is needed to ensure consistency with EPA’s proposal, as APS believes OSMRE intends. Provided APS’s understanding of OSMRE’s intention is correct, APS supports these mitigation measures for ash disposal, as clarified.

276.049

Finally, APS notes that OSMRE, BIA and the cooperating agencies will soon enter into formal consultation with the U.S. Fish and Wildlife Service, pursuant to Section 7 of the Endangered Species Act. This process will result in a Biological Opinion that may include additional measures, if warranted, to avoid or minimize potential impacts on threatened and endangered species.

XVI. THE DEIS APPROPRIATELY CONSIDERS CUMULATIVE IMPACTS

In the DEIS, OSMRE properly considers the cumulative impacts of the Proposed Action and alternatives “when added to other past, present, and reasonably foreseeable future actions.” 40 C.F.R. § 1508.7. The DEIS uses reasonable temporal and spatial criteria to select the actions for inclusion in the cumulative effects analysis, screening them against the criteria to be included in that analysis. *See* DEIS at Table 4.18-1. An action meets the spatial criteria if it could have an environmental effect in the same region of influence as the Proposed Action for each resource category. *Id.* at 4.18-2. An action meets the temporal criteria for inclusion in the DEIS’s cumulative impacts analysis if it has already occurred, is ongoing, or is reasonably foreseeable within the Proposed Action’s timeframe, extending until 2041 plus the reclamation period for the Pinabete permit. *Id.* The DEIS explains the rationale for excluding approximately a dozen projects from the cumulative effects analysis because they do not meet the parameters of a “cumulative impact” under NEPA. *See id.* at Table 4.18-1. The DEIS reasonably concludes that certain projects are not reasonably foreseeable because an evaluation of those projects would be entirely speculative, and, therefore, would not constitute cumulative impacts, as defined for NEPA purposes. *See, e.g., id.* at 4.18-5, 4.18-7. “[C]umulative impacts that are too speculative or hypothetical to meaningfully contribute to NEPA’s goals of public disclosure and informed decisionmaking need not be considered.” *See Wyoming v. U.S. Dep’t of Agriculture*, 661 F.3d 1209, 1253 (10th Cir. 2011). For instance, OSMRE determined that several proposed projects and suspended projects are not reasonably foreseeable because project details are not yet sufficiently defined. *See, e.g.,* DEIS at 4.18-5, 4.18-30. Therefore, the potential impacts are too speculative to meaningfully contribute to NEPA’s goals of public disclosure and informed decision-making, and need not be considered, consistent with Tenth Circuit precedent. *See Wyoming v. U.S. Dep’t of Agriculture*, 661 F.3d at 1253.

Response 276.049

See response to comment 276.003.

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APS requests that OSMRE clarify that in addition to evaluating cumulative global emissions from China, the two ecological risk assessments (ERAs) cited in the DEIS also evaluated potential impacts from future emissions from regional emissions sources. Specifically, the ERAs took into account modeled future emissions from the existing Navajo Generating Station (assumed to continue operations through 2044, DEIS at 4.18-4) and the existing San Juan Generating Station (assumed in operation until 2074). The ERAs showed that for all metals and all ecological receptors evaluated in the ERAs, hazard quotients (HQs) exceeding 1 were entirely due to current conditions and that FCPP emissions associated with the 25-year Proposed Action did not result in any HQs greater than 1.⁵² Contributions to ecological risk from future FCPP operations under the Proposed Action would be negligible compared to current conditions. DEIS at 4.18-46. Thus, the DEIS incorporates extensive scientific analysis to conclude that the contribution of the FCPP to the potential cumulatively major effect of emissions deposition on aquatic resources would be significantly less than historic conditions and represents a decline over baseline emissions. *Id.* at 4.18-49.

276.050

APS also agrees with the other conclusions in the DEIS regarding cumulative impacts. As demonstrated in the DEIS, OSMRE took the requisite “hard look” at the cumulative impacts of the Proposed Action and alternatives when added to other past, present, and reasonably foreseeable future actions, as required by NEPA.

XVII. APS URGES TIMELY REVIEW AND DECISION

APS requests that OSMRE finalize the EIS and issue the Records of Decision in the first quarter of 2015. This timing is needed for SCR to be installed and operational on both Units 4 and 5 by July 31, 2018, as required for the FCPP to comply with the reductions mandated by EPA in the BART Federal Implementation Plan. *See* 77 Fed. Reg. 51620, 51621-22 (Aug. 24, 2012). Installation of SCR will require a multi-year planning, engineering, equipment procurement and construction process. In a recent Clean Air Act rulemaking, EPA assumed that 21 months would be needed to install SCR on a *single* unit, 76 Fed. Reg. 48208, 48282 (Aug. 8, 2011) (Cross-State Air Pollution Rule), and many argued that this underestimated the time needed to install SCR. However, APS will be constructing SCR on *two* units and will need to phase the construction on each unit, so that there are staggered outages. This will require careful planning to ensure that FCPP is able to provide needed baseload generation during the construction—it will also require more time than installing SCR on a single unit. APS and the FCPP co-owners cannot make the significant investment in this engineering, procurement and construction process until the Records of Decision are issued. Therefore, APS urges timely issuance decision documents.

276.051

XVIII. ADDITIONAL TECHNICAL CLARIFICATIONS SHOULD BE INCORPORATED INTO THE FINAL EIS

In addition to the foregoing comments, APS has identified several technical clarifications that should be incorporated into the final EIS to ensure an accurate and complete administrative record. Those clarifications are identified in Attachment A—Technical Clarifications.

⁵² An HQ less than 1 indicates that adverse effects to ecological receptors are unlikely to occur. DEIS at 4.18-45 n.1.

Response 276.050

Clarification has been added to Section 4.18.3

Section 4.8 estimates ecological risks associated with the future operations of FCPP special status species, focusing those COPECs with HQs greater than one. For all COPECs and ecological receptors evaluated, HQs exceeding 1 were entirely due to current conditions; FCPP emissions associated with the proposed future 25-year project did not result in any HQs greater than 1, nor contribute appreciably to those risks already present under current conditions. These existing conditions are the result of geological conditions, anthropogenic sources other than the project facilities, as well as the historic operation of the FCPP. These findings do not mean that the FCPP will not contribute to ecological risk during the life of the proposed project, but they do indicate that such contributions would be negligible as compared to current conditions.

Response 276.051

OSMRE appreciates APS' request and is working with the cooperating agencies to complete the NEPA process in a timely manner. Many factors will determine the timing of these steps.

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XIX. CONCLUSION

For the foregoing reasons, APS respectfully requests that these comments, including the technical clarifications in Attachment A, the revised table of hazardous air pollutant emissions in Attachment B, and the clarification regarding regulation of CCR in Attachment C, be addressed in the final EIS. APS also requests that OSMRE, BIA, and the cooperating agencies timely issue approvals needed for the Project by March 2015, consistent with Alternative D, along with proposed mitigation measures for FCPP, transmission lines, and ancillary facilities, as clarified in Attachment C.

APS appreciates the opportunity to comment on the Four Corners Power Plant and Navajo Mine Energy Project Draft Environmental Impact Statement.

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COMMENT #276

**Attachment A
Technical Clarification Matrix**

No.	Section #s	Page #s	¶	Comments	
1.	Global			As the DEIS correctly describes at 3-15 and 16, two DFADAs are already constructed and the Proposed Action and Alternative D contemplate the addition of up to 5 DFADAs (or connected cells). This should be stated consistently throughout the final EIS.	276.052
2.	Global (4.9, 4.10, 4.11, 4.15, 4.17, 4.18)			Update to reflect that APS selected urea as its ammonia source. See APS Narrative Comment Letter at 3 and 7.	276.053
3.	Global (2.4.2.2, 4.9, 4.11, 4.15, 4.18)			Update to reflect that APS will be using dry sorbent injection on Units 4 and 5 to reduce H ₂ SO ₄ emissions. See APS Narrative Comment Letter at 5.	276.054
4.	Global (and 4.11)	Global: 4.11-36		See APS Narrative Comment Letter at 17-18 regarding the covenant not to regulate.	276.055
5.	Global			Update to consistently reference that BIA actions include both the approval of both right-of-way renewals and the lease extension for the FCPP plant area. See APS Narrative Comment Letter at 9.	276.056
6.	Global			Update to consistently reference that BIA's rights-of-way approvals include Moenkopi Substation and ancillary facilities. See APS Narrative Comment Letter at 9.	276.057
7.	ES, 1	Table ES-2 and Table 1-1		Remove the following item from the table of proposed actions (Table ES-2 and Table 1-1) listed for EPA: "Ensure that emissions from the FCPP comply with the Clean Air Act during modification of Title V Operating Permit and Title IV Acid Rain Permits." See APS Narrative Comment Letter at 9.	276.058
8.	ES	xii	3	APS and Hopi have reached agreement on the right-of-way renewal for the 500 kV transmission line and the renewal was submitted to the BIA Western Region office for review and agency action. See APS Narrative Comment Letter at 9.	276.059
9.	ES	xix	3	The FCPP switchyard and the transmission lines are also of a critical nature and should be described similarly to the Moenkopi switchyard in relation to importance to the grid.	276.060
10.	1.0	1-1	4	Butler 3 should be clarified to indicate that Lease Amendment #3 is for 25 years, rather than 40 years, as indicated in the DEIS.	276.061
11.	1.1.2	1-3	1	Clarify that APS has agreed to assume El Paso Electric's obligation to purchase seven percent of the coal supply for the FCPP rather than stating "APS will also be purchasing El Paso Electric's 7 percent ownership share."	276.062

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Response 276.052

Comment noted.

Response 276.053 and 276.054

The Final EIS has been modified to reflect urea choice.

Response 276.055

The Final EIS has been reviewed for consistency throughout document on "covenant not to regulate" and determined that language is consistent. No change to text made.

Response 276.056

Has been reviewed for consistency throughout document. Lease amendment #3 includes the ROW renewals.

Response 276.057

Has been reviewed for consistency throughout document. Lease amendment #3 includes the ROW renewals.

Response 276.058

No change made

Response 276.059

The Final EIS has been updated as noted.

Response 276.060

The following sentence has been added to the discussion: "...Failure to renew the ROW for the Moenkopi and FCPP switchyards would potentially affect other existing transmission facilities that use the switchyards."

Response 276.061 and 276.062

Change made.

COMMENT #276

Comments of Arizona Public Service Company

No.	Section #s	Page #s	¶	Comments
12.	1.2, 2.3	1-5 1-7 2-28	Figure 1-1 and Figure 1-2	As the DEIS notes (at 4.8-29), the FCPP to Cholla Substation transmission line ROW runs parallel in a 315' ROW corridor for 85.1 miles, then separates into two, 195' corridors for just over 40 miles and then converges into a single 315' corridor for 10.7 miles before leaving the Navajo Nation. The text in section 1 and section 2.3, as well as the figures, should be updated to indicate and show the split in the 345kV transmission lines. 276.063
13.	1.3	1-10 and 1-11	Table 1-1; ¶ 4	APS FCPP to Moenkopi transmission line approval or disapproval is by BIA not BLM. BLM does not have jurisdiction to approve the FCPP to Moenkopi line as the ROW is entirely on Navajo Nation or Hopi Tribe land. 276.064
14.	1.4	1-10 - 1-12	Table 1-1	EPA actions listed in Table 1-1 for the FCPP are not subject to NEPA because they are Clean Air Act actions. They should either be deleted, or the table should be updated to reflect that EPA is also issuing a PSD permit for FCPP (also exempt from NEPA). The reference to the Navajo Nation Clean Water Act 401 certification should also be removed, for the reasons described in Section IV of APS's comment letter. 276.065
15.	2.2.7			In 2012, APS installed an auxiliary boiler needed to provide steam for Units 4-5 start-up. Previously, Units 1-2-3 provided start-up steam for Units 4-5. (The auxiliary boiler is included in the latest version of the NAAQS modeling report.) 276.066
16.	2.3.1	2-32		The level of description should be consistent with that of PNM's transmission lines on page 2-33. Therefore, replace section On Going Maintenance Activities with: "APS conducts yearly inspections of each structure on each transmission line and conducts maintenance as needed. Visual and physical inspections may include vehicle (passenger and all-terrain vehicle), pedestrian, and aerial surveys. APS performs climbing inspections every 7 years, which involve a close visual inspection of each transmission line. During ground surveys, inspectors utilize existing access roads. These access roads are maintained by the local landowner for the APS ROWs and APS does not conduct regular road maintenance activities. Access roads are primarily unpaved two-track dirt roads. Access roads are repaired when they become impassable for maintenance activities. Access roads may also be managed to control erosion and reduce conditions that cause excessive rutting. Maintenance for the transmission line structures may include re-leveling pads in areas of uneven terrain to permit safe equipment setup, repair, replacement, or addition of structures or any of the associated equipment and wires, and treating the structures to prevent rot and extend their life span. APS has an environmental screening program that requires screening transmission maintenance work for compliance-related environmental issues. The environmental review relies on biological and cultural surveys of the ROW corridors. Ground-disturbing work in the vicinity of a known cultural or biological resource requires specific monitoring or avoidance stipulations and procedures, and land management agencies are consulted to determine the best course of" 276.067

Response 276.063

This is not stated on page 4.8-29 of the Draft EIS. It has been determined that the adjacent ROW would not be visible at the scale drawn. The FCPP to Cholla Substation transmission line consists of two parallel transmission lines that occupy the same ROW for approximately 85 miles before separating into two ROWs for another 40 miles and converging into a single right-of-way for 10 miles before leaving the Navajo Nation".

Response 276.064

Change made.

Response 276.065

The text above the table states that some of the actions in the table require NEPA review, not that all do. Clean Air Actions have been left in place. Navajo Nation CWA 401 Certification for FCPP removed.

Response 276.066

The following sentence has been added to Section 2.2.3: In 2012, APS installed an auxiliary boiler to provide steam for Units 4 and 5 in anticipation of the shut-down of Units 1, 2, and 3.

Response 276.067

It does not appear that there is anything factually incorrect as currently written in the Draft EIS; therefore, change not made.

COMMENT #276

Comments of Arizona Public Service Company

No.	Section #s	Page #s	¶	Comments
17.	3.2.4.2	3-27	4	<p>action to protect the integrity of the resource while conducting the necessary maintenance. Emergency conditions (e.g., weather, system outages, and structure damage) are addressed immediately. Vegetation management at APS involves the cyclical treatment of vegetation approximately every 5 to 10 years utilizing mechanical, manual, and herbicide treatments. Vegetation may be cleared within the entire permitted ROW width, including clearing around poles, guy wires, anchors and towers. On rare occasions vegetation maintenance outside the routine cycle is required to address emergencies or imminent threats to the transmission line's performance. Vegetation maintenance activities are conducted with attention to resource (cultural) and plant and animal species concerns. APS conducts aerial helicopter patrols of the transmission lines 1 to 3 times per year to identify potential problem areas, to plan maintenance schedules, and to monitor effectiveness of treatment. Ground patrols may be required to follow up on any identified problem areas."</p> <p>Recommend editing this section as follows:</p> <p>"Under this alternative, BIA would approve the amended lease for the FCPP, and the plant would continue to operate as described under the Proposed Action. However, instead of constructing seven <u>separate, stand-alone</u> DFADAs, APS would construct a single "super cell" DFADA, <u>made up of multiple, connected cells</u> that would be approximately 350 acres total (Figure 3-5). Construction of a single large DFADA would eliminate the number of impoundment walls and roads through the CCR area. The site would still be constructed in phases. As each subsequent site is constructed cell <u>nears capacity</u>, the liner and leachate collection system would be extended such that the sites would act as a single facility. <u>Dry ash, with enough water added for dust control and compaction, will be trucked to the DFADA. Since the DFADA will not be an impoundment, there will be no risk of dam failure or flow of ash slurry offsite to Chaco Wash.</u> The DFADA would be setback at least 300 feet from the FCPP Lease Area boundary. The proposed borrow areas would remain as described in the Proposed Action and would be located in the area of future expansion of the super cell; therefore, the potential reduction in ground disturbance resulting from the DFADA would not be realized during excavation of the borrow pits."</p> <p>276.068</p>
18.	3.2.6.1	3-35		<p>Ash is sprayed with water and/or chemical stabilizers for dust control.</p> <p>276.069</p>
19.	3.2.6.7	3-40 and 41		<p>Measures labeled "Common to All Project Components" should be deleted. They were not proposed by applicants.</p> <p>276.070</p>
20.	3.2.6.8	3-44	1-5	<p>Request that the conservation measures included in the final EIS be consistent with the final Biological Assessment and replace the measures listed here. It is not possible for APS to avoid all potential work in this area for 6 months. APS will avoid/minimize potential impacts but the area cannot be "off limits" for emergency work, which is necessary to ensure safety and reliability.</p> <p>276.071</p>

Response 276.068

Does not change the description functionally. No change has been made.

Response 276.069

See response to comment 276.069

Response 276.070

The applicant proposed measures have been revised to be consistent with the BA.

Response 276.071

The applicant proposed measures have been made consistent with the BA.

COMMENT #276

Comments of Arizona Public Service Company

No.	Section #s	Page #s	¶	Comments	
21.	3.3.1.4 and Exec. Summary	Tables ES-3 and 3-1		Tables ES-3 and 3-1 should be updated for consistency with the text in section 3.3.	276.072
22.	3.3.4.2, 3.3.4.3	3-53	3, 4	Revise to state that the FCPP lease and transmission line ROWs would be renewed under this alternative.	276.073
23.	4.1	4.1-1	1	The EIS should clarify the reasons a 300-km radius was used for the Proposed Action area, including that this is consistent with EPA's area evaluated for the BART rule and for the technical reasons explained in the Deposition Area Ecological Risk Assessment.	276.074
24.	4.1.1.1	4.1-2	3	Revise the phrase "The greatest" source to "An important" source. In some situations, high NOx and VOC emissions are not the result of fossil fuel combustion alone.	276.075
25.	4.1			The DEIS correctly states that the FCPP emits ozone precursors, VOCs and NOx. The FCPP does not emit ozone. In several places the DEIS references ozone emissions from the FCPP. Clarify references to ozone emissions in the Air Quality section to refer to emissions of ozone precursors.	276.076
26.	4.1.1.6	4.1-15	2	The Part 71 permit expired on August 1, 2013. The application for renewal was timely filed in January 2013.	276.077
27.	4.1.2.2	4.1-17		The list of sources affecting regional air quality should include general wind-blown dust, especially in the spring, as a major factor in the entire region. Also, the most severe cases of visibility impairment (other than the episodic dust storm events) occur as a result of forest fire (either wildfire events or as a result of planned burns) and smoke from fires as far away as Arizona or California can impact visibility and air quality in the Four Corners region.	276.078
28.	4.1.2.2	4.1-21	Figure 4.1-2	Revise the legend label for Monitoring Stations in Figure 4.1-2 to say "Monitoring Stations, Four Corners Region". There are many more monitoring stations within the 300 km region.	276.079
29.	4.1.2.3	4.1-26	2	The Unit 4-5 FGD absorber system went into service in 1985. In 2004-2005 APS undertook a voluntary trial to increase sulfur dioxide removal. Other references to FGD should be updated accordingly.	276.080
30.	4.1.3.2	4.1-69	Table 4.1-31	See APS comment letter at section IX for clarification regarding Table 4.1-31. An updated table is provided as Attachment B. Text relying upon the table should be updated accordingly.	276.081
31.	4.1.3.3	4.1-71	2	The ozone concentrations that appear on these tables represent the contribution from the VOC and NOx emissions from all sources in the region including those from the FCPP, but not only the FCPP as implied in the current paragraph. Change "An assessment of ozone emissions from the FCPP was conducted ..." to "A regional assessment of ozone concentrations was conducted...". Additionally for Table 4.1-33 change "Historic Ozone" to "2005 Ozone" and "Baseline Ozone" to 2018 Proposed Action Ozone.	276.082
32.	4.1.4	4.1-74		The references in the last two paragraphs on this page should be AECOM 2013a and AECOM 2013b.	276.083

Response 276.072

Tables reviewed for consistency.

Response 276.073

The text in Section 3.3.4.2 has been revised as follows:

Under this alternative, the amended lease for the FCPP would be renewed, and the current lease would expire in 2016 in conjunction with the expiration of the Navajo Mine SMCRA permit. However, under this alternative the Navajo Mine may not be able to meet contractual obligations through 2041. After coal reserves are exhausted and/or the SMCRA permit expires, APS would shut down Units 4 and 5.

3.3.4.3 Transmission Lines

Under this alternative, the ROWs for the four subject transmission lines would not be approved, as described for Alternative A. As the subject lines primarily transmit power from the FCPP, under this alternative the power source for the transmission lines would be removed. The lines would either be decommissioned and dismantled or left in place, as described for the No Action Alternative.

Response 276.074

Clarification added.

Response 276.075

The change was made as suggested.

Response 276.076

The following clarification was added: Ozone is not directly emitted, rather, its precursors NO_x and VOC are the pollutants which react with sunlight to form ground-level photochemical ozone and contribute to regional haze, along with SO₂ and particulate matter. Criteria emissions – also referred to as regulated pollutants – caused by the Action include reactive or volatile organic compounds (ROCs or VOCs), nitrogen oxides

(NO_x as NO and NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), respirable particulate matter (PM₁₀), and fine particulate matter (PM_{2.5}).

Response 276.077

Text was revised as follows: The current Part 71 permit for FCPP (NN-ROP-05-07) expired August 1, 2013; however, FCPP submitted a permit renewal application on January 25, 2013. FCPP may operate according to their present permit terms and conditions until NNEPA either issues a new permit or denies their renewal application.

Response 276.078

"wind-blown dust and forest fires" has been added to the sentence.

Response 276.079 and 276.080

Change made.

Response 276.081

The Attachment B Estimated Historic and Future HAP Metals Emissions were not used to update Table 4.1-31. The more conservative percent reduction conclusions based on use of the alternative EPRI emissions factors from the HHRA were added to the text where Table 4.1-31 is introduced. The AP-42 analysis is appropriate and is consistent with other analyses in the EIS (see also, response to comment 307.073). The updated text does not affect the conclusions in the Final EIS.

Response 276.082 and 276.083

Change made.

COMMENT #276
Comments of Arizona Public Service Company

No.	Section #s	Page #s	¶	Comments	
33.	4.1.4	4.1-76	5	Edit to last sentence "Thus, the results are somewhat uncertain, but provide an upper bound to the impacts (i.e., impacts are more likely to be over-estimated than under-estimated)."	276.084
34.	4.1.4	4.1-79 to 4.1-80		Remove the sentence "Over time, it dries into a cement-like solid." The ash produced by the FCPP does not harden as such.	276.085
35.	4.1.4	4.1-85	Table 4.1-41	The modeling results in this Table 4.1-41 should be updated to reflect the revised AECOM NAAQS modeling report provided in Feb. 2014 with the higher 1-hour NO ₂ emission rates and inclusion of the auxiliary boiler in the modeling.	276.086
36.	4.1.4	4.1-81 & 4.1-99		In the discussions about plume visibility, it should be clarified that the plume visibility analysis was conducted by AECOM for areas within 50 km, within which there are no PSD Class I areas. The last sentence on page 4.1-81 should be edited as follows: "No criteria exist for evaluating visible plumes from sources beyond the boundaries of Federal Class I areas; therefore, this criteria was used to determine if emissions from the Proposed Action would affect visibility within Class I Class II areas."	276.087
37.	4.1.4	4.1-75	3	The EIS should note the results of the plume visibility analysis, which indicate that since continued operations, with the shutdown of Units 1-3 and installation of SCR on Units 4 and 5, will result in a large reduction in PM and NO _x , this will result in a net improvement in plume visibility. The plume visibility due to FCPP emissions will noticeably improve for most of the analyzed vistas, while others will have imperceptible changes in visibility.	276.088
38.	4.1.4.5	4.1-103	8	Update to reflect that the modeling was rerun with the new version of AERMOD and the results were submitted to OSMRE; the conclusions of the modeling remain the same.	276.089
39.	4.3.4	4.3-14	3	Change "Ozone emissions" to "VOC and NO _x emissions".	276.090
40.	4.3.4.1	4.3-20	1	"At the FCPP, these activities would include the excavation of soils for the construction of berms around the DFADAS". The construction of the stormwater berms will have minimal impact on paleontological resources, but the excavation and construction of the ash disposal cells will result in ground disturbance.	276.091
41.	4.3.4.1	4.3-23	1	Clarify that no impoundments will be constructed, since the FCPP will be disposing of CCR through dry ash disposal methods. Clarify that berms may be constructed to minimize runoff and to divert surface water runoff from entering the disposal facilities (run-on).	276.092
42.	4.3.4.1	4.3-23	2	While the roads used to access the transmission line ROWs may be paved (unlikely in all cases, however) not all roads along transmission lines that are used to inspect and maintain the lines and ROW are paved. There should be some mention of potential erosion, acknowledged to be minimal, due to travel on unpaved roads and maintenance operations. While no new towers are proposed, it may be a good idea to mention that emergency tower replacements can occur and that proper consideration for offsite erosion and sedimentation and adverse impacts to paleontological resources, while possible, would be unlikely due to APS' and PNM's management practices.	276.093

Response 276.084

Change not made. The statement is clear as written.

Response 276.085

Change made. Checked for reference to this throughout document.

Response 276.086

Values in Table 4.1-41 were updated with values from the revised NAAQS Modelling Report (Table 5-1), received on August 26, 2014. The report included revisions that:

- Incorporate urea and Dry Sorbent Injection (DSI) handling to be consistent with the associated PSD permit application.
- Include coal, overburden, and topsoil stockpile locations within the proposed Pinabete mine area.

The minor refinements produced very little change in modeled values and did not change the conclusion that the project would not cause exceedance of the NAAQS.

Response 276.087

The sentence was changed to reflect the criterion was applied within a 50 km radius, even though no Class I areas exist within the radius.

The plume visibility analysis was conducted from 16 areas within the 50 km radius. The results of the analyses are shown in the "Plume Visibility Assessment Summary" sub-sections of each Alternative section. These sub-sections address the second part of this comment by giving specific results. Tables 4.1-49 and 4.1-50 summarize the screening-level results in terms of the vistas with greatest change, the least change as a percent of significance threshold for each parameter, and the number of vistas for which the visibility parameters would be improved or be degraded.

Response 276.088

At the time the Draft EIS was developed, the Applicants' air quality

modeling was on hold, pending the EPA approval of needed changes to the AERMET/AERMOD model. The EPA issued an approved model, which was used to update the analysis. The updated analysis is presented in the Final EIS. Minor changes were made to the model results, which do not change the conclusions presented in the Draft EIS.

Response 276.089

The comment is correct, in that ozone is not directly emitted, rather, its precursors NO_x and VOC emitted, and these “ozone precursors” react with sunlight to form ground-level photochemical ozone and contribute to regional haze, along with SO₂ and particulate matter. This occurrence and 4 other occurrences of “ozone emissions” in the Draft EIS were changed to “ozone precursor emissions” in the Final EIS.

Response 276.090

Sentence changed as follows: At the FCPP, these activities would include the excavation and construction of DFADA cells as well as excavation of soils for the construction of berms around the DFADAs.

Response 276.091

Text changed as follows: The soil needed to create the berms for stormwater control as well as evapotranspiration covers for closed DFADA cells would be borrowed from areas inside the existing FCPP Lease Area.

Response 276.092

Sentence changed as follows: Most vehicle access to the transmission lines is via paved roadways; however, some occurs on unpaved roadways. Minor erosion and soil disturbance would result from vehicle traffic on unpaved roadways. Implementation of applicant proposed measures would minimize any potential for erosion or soil disturbance.

Response 276.093

Clarification not necessary here, no change made.

COMMENT #276

Comments of Arizona Public Service Company

No.	Section #s	Page #s	¶	Comments	
43.	4.3.4.4	4.3-27	2	Impacts to topography, soils, and geology would be less under Alternative D than under the Proposed Action due to the smaller acreage of disturbance.	276.094
44.	4.3.4.5	4.3-28	2	Under the No Action Alternative, there would be surface disturbance due to reclamation of the power plant facilities and ash disposal area, so there would be impacts to soils, but not likely any to topography, geology, or minerals.	276.095
45.	4.4			See APS Narrative Comment Letter at 30-32 for suggested additions.	276.096
46.	4.4.1.1	4.4-2	1	The NHPA places particular emphasis on federal agency consultation with THPOs and tribes. The last sentence of this paragraph should include tribes in the list of groups with which the lead federal agency has an obligation to work.	276.097
47.	4.4.1.2	4.4-4	2	It should be pointed out that NM regulations do not apply on tribal lands. Per a NM DCA report: "Tribal statutes and regulations cover all activities that are carried out within the sovereign boundaries of individual reservations. On non-federal and non-tribal lands, OAS [Office of Archaeological Studies] activities are covered by the provisions of the Cultural Properties Act and the Unmarked Burial Statute."	276.098
48.	4.4.2.2	4.4-15	3	The Unruh and Vierra 2012 report identified 20 sites, 13 previously recorded (6 of which were not relocated), and one newly recorded. 9 sites were recommended as NRHP eligible. This information related to eligibility recommendations could be incorporated into the discussion even though the final determinations by the THPO and OSMRE have not been made, as a way to present a clearer picture of potential impacts.	276.099
49.	4.4.2.2	4.4-15	6	This paragraph only includes the sites along the APS ROW to the Moenkopi Substation, but not the 6 sites along the ROW between Moenkopi and the Navajo Nation border. These sites should be referenced in the final EIS and either the applicant's eligibility recommendations for these sites or the eligibility determinations (if completed) should be included in the final EIS.	276.100
50.	4.4.2.2	4.4-15	7	There are 2 345-kV lines but the APE only extends to the border of the Navajo Nation, not all the way to Cholla. The total number of recorded sites (79) is correct for the ROW to the Navajo Nation border. 66 of these recorded sites were identified as NRHP-eligible.	276.101
51.	4.4.2.2	4.4-16	3	The Olson 1971 project was an aerial reconnaissance survey only in Arizona, not a salvage project. 62 sites were identified in this part of the 345-kV ROW, but none were NRHP-eligible.	276.102
52.	4.4.2.3	4.4-16	7	The NM portion of the ROW was surveyed using helicopter and ground reconnaissance and reported in Siscenti 1962. In preparation for construction of the transmission line structures, 3 sites in this part of the ROW were excavated because they were NRHP-eligible. There are no designated timeframes or treatments for removal of historic structures from service. APS must consult with the Navajo Nation before determining if the structures (including Morgan Lake Dam) will be demolished, left intact, or modified before they revert back to Navajo ownership.	276.103

Response 276.094

This is clear as written, no change made.

Response 276.095

Text has been revised as follows: Soil disturbance would occur during reclamation of the decommissioned facilities and ash disposal area. This would be a short-term minor impact. Reclamation activities would not impact topography, geology, or mineral resources within the area of the FCPP.

Response 276.096

Please see responses to Comments 276.044-046.

Response 276.097

Comment noted. No change made. This is a general discussion on regulatory compliance.

Response 276.098

The Final EIS has been revised such that the 2nd and 3rd sentence of 2nd paragraph under 4.4.1.2 are revised to read "This act authorizes the committee to issue permits for archaeological survey and excavation and excavation of unmarked human burials on state and private lands to qualified institutions with the concurrence of the state archaeologist and SHPO. It also established civil and criminal penalties for looting of archaeological sites and disturbance of unmarked burials on state and private lands."

Response 276.099

Comment noted. Consultation regarding determinations of eligibility and project effects is ongoing. The EIS has been updated accordingly. Report recommendations made by the applicant will not be added to the EIS.

Response 276.100

Appendix B lists all the sites located within the APE. Consultation regarding determinations of eligibility and project effects is ongoing. The EIS has been updated accordingly. Report recommendations made by the applicant will not be added to the EIS.

Response 276.101

Changed text to read "to the Navajo Nation border on the Cholla line".

Response 276.102

Comment noted. The Olson 1971 report cited in the EIS consists of salvage work completed at 29 sites. The text has been revised to read "In addition to these recent surveys, an archaeological salvage project was conducted for the APS 345-kV power line within Arizona in the 1960s (Olson 1971). The salvage project identified 29 archaeological sites."

Response 276.103

Comment noted. OSMRE is currently consulting with the NNTHPO regarding determinations of eligibility and project effects. The treatment of historic structures is outlined in the Programmatic Agreement.

COMMENT #276

Comments of Arizona Public Service Company

No.	Section #s	Page #s	¶	Comments	
53.	4.4.2.4	4.4-17	6	The last sentence in this paragraph mentions an expansion of the ROW within the Hopi Reservation. While the APE was expanded, the APS ROW was not expanded.	276.104
54.	4.4.4	4.4-18	2	Effects from project alternatives would only be considered if there is an impact to NRHP-eligible historic properties. Recommend changing sentence to read "The criteria listed below were considered when evaluating the types of short-term and long-term effects the Project alternatives could have on the NRHP-eligible historic properties within the APE." The importance of impacts to eligible properties should also be clarified in the last paragraph on this page.	276.105
55.	4.4.4	4.4-19	Table 4.4-3	This table only includes the recorded sites for the ash disposal area. The information from the rest of the FCPP lease area should be included or the title should make it clear that the full lease area is not included.	276.106
56.	4.4.4	4.4-20	Table 4.4-4	The numbers presented in this table should be updated to correspond with the numbers of recorded sites along the APS and PNM transmission lines already presented in the previous sections.	276.107
57.	4.4.4.1	4.4-20 – 25	2 & Table 4.4-5 and Table 4.4-6	The text should be revised to state that "Table 4.4-5 lists the archaeological historic properties present within the APE for the Pinabele Permit Area under Alternative A." A corresponding change should be made to the table's title, and to the title of Table 4.4-6.	276.108
58.	4.5.1.1	4.4-2	1	Delete "combined waste treatment pond" from the sentence that says "no discharge was released from the chemical metal cleaning water or combined waste treatment pond." There was discharge from the combined waste treatment pond.	276.109
59.	4.5.2.1	4.5-17		The DEIS erroneously states that all monitoring wells at FCPP "exceeded the New Mexico and EPA drinking water standard for boron (0.75 mg/L)." Neither EPA nor New Mexico has established a drinking water standard for boron. The correct information is provided in Table 4.5-6 on page 4.5-20. The table provides a summary of groundwater quality monitoring results from FCPP and compares the results to drinking water standards adopted by EPA and NNEPA. In this table, boron is listed under the category of Constituents with No Applicable Drinking Water Standards. A footnote to the table explains that the NNEPA standards are surface water quality standards, not groundwater standards.	276.110
60.	4.5.2.2	4.5-33	3	In the first sentence replace "that would be constructed to capture" with "that captures." The Lined Ash Impoundment is currently in use.	276.111

Response 276.104 and 276.105

Clarified

Response 276.106, 276.107, 276.108, and 276.109

Change made

Response 276.110

Changed text to state that "All monitoring wells at the FCPP, including those that would represent "background" or pre-power plant levels have relatively high boron concentrations (greater than the State of New Mexico surface water standard of 0.75 mg/L) at various times during the period of record (1987-2012) (APS 2013)."

Response 276.111

Change made

COMMENT #276

Comments of Arizona Public Service Company

No.	Section #s	Page #s	¶	Comments
61.	4.5.2.2	4.5-34	3	Replace this paragraph with: "Water is pumped from the San Juan River to Morgan Lake. Water from Morgan Lake is pumped into the FCPP for the main uses of heat transfer in the primary cooling systems, steam production in the turbine systems, use in SO2 scrubbers, and as cooling water for the condenser cooling system. Oil-free power plant wastewater is drained to the circulating water discharge canal and released back into Morgan Lake. Condenser cooling water is discharged into Morgan Lake at around 40.5°C (105° F). Water from Morgan Lake is released via No Name Wash into Chaco Wash, which flows back into the San Juan River." 276.112
62.	4.5.2.2	4.5-33; 4.5-36	5 to 6 (4.5-33); and Figure 4.5-8	Navajo Nation Water Quality Standards do not apply to Morgan Lake. 276.113
63.	4.5.4	4.5-41	First bullet	The criteria for "Major" adverse impacts should clarify that major adverse impacts are "outside the random fluctuations of natural processes." 276.114
64.	4.5.4.1	4.5-46	Surface Water Quality, 2nd paragrap h	Reference should be to Table 4.5-12. 276.115
65.	4.5.4.1	4.5-57	3	In the first sentence, change "beneath" to "in." 276.116
66.	4.5.4.1	4.5-57	3	In the second to last sentence, change "is in the process of installing" to "has installed." 276.117
67.	4.5.4.1	4.5-58	3	Replace paragraph starting "Similar to the existing..." with: "In the ash disposal area, BMPs such as silt fences, berms, and settling basins are and will be utilized for stormwater. Therefore, no adverse impacts to water quality would result from stormwater runoff associated with the proposed new DFADA sites." 276.118
68.	4.5.4.1	4.5-59	1	Suggest a cross-reference to the Air Quality section, which addresses future emissions from the Proposed Action and the alternatives, including the No Action alternative, in Section 4.1.4. 276.119
69.	4.5.4.5	4.5-63	6	Clarify that with the shutdown of the FCPP, air emissions from the FCPP would cease, but the deposition of mercury, selenium, and other pollutants from other sources would still continue. 276.120
70.	4.5.4.5	4.5-63	6	In the last sentence under the FCPP section replace the word "current" with "historic" and delete "other facilities." 276.121
71.	4.5.4.1	4.5-58	7	"With regard to groundwater, since the historic ash ponds would remain in place and the DFADAs are lined, impacts would be similar as described for the Proposed Action." 276.122

Response 276.112

There are no inaccuracies as written, and suggested language does not provide necessary clarification. No change made.

Response 276.113

Added the following sentence to the front of the paragraph: "No tribal, state, or federal water quality standards apply to discharges from FCPP or water quality in Morgan Lake; comparison to NNEPA standards is for context only."

Response 276.114

Clarification made

Response 276.115, 276.116, and 276.117

Change made

Response 276.118

Clarification added

Response 276.119

The last sentence of page 4.5-58 of the draft EIS refers the reader to Section 4.1, Air Quality. No change made.

Response 276.120

The sentence reads "from FCPP" already. No change made.

Response 276.121

Clarification made

Response 276.122

Have deleted "by EPRI"

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No.	Section #s	Page #s	¶	Comments	
72.	4.6.4	4.6-14	2	Add footnote after "combustion of coal at the FCPP" - "The scope of the ERAs is limited to evaluating the FCPP stack emissions because the proposed operations at the mine site would not emit the COPECs in sufficient magnitude to be considered in the ERA."	276.123
73.	4.6.4	4.6-14	2	Edit beginning of 2 nd sentence "One ERA was conducted to evaluate ecological risks to both..."	276.124
74.	4.6.4	4.6-14	2	Provide a figure showing the boundary of the Deposition Area, as shown in Figure 2-1 of the ERA for the Deposition Area (AECOM 2013 c).	276.125
75.	4.6.4	4.6-14	2	Edit sentence beginning with "The other ERA..." to "The second ERA was conducted to evaluate ecological risks associated with current conditions and future FCPP emissions as well as future regional and global emissions for..."	276.126
76.	4.6.4	4.6-14	3	Add the following text to the end of the 3 rd paragraph: "The ERA process is used to inform environmental decision making by evaluating the potential for adverse ecological effects that may occur as a result of exposure to one or more environmental stressors. The approach used in the ERAs for evaluating the potential impacts of the Proposed Action is consistent with the USEPA's Guidelines for Ecological Risk Assessment (USEPA, 1998a), Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments (USEPA, 1997), and the Screening Level Ecological Risk Assessment Protocol for Hazardous Waste Combustion Facilities (SLERAP, USEPA 1999). The tiered approach for risk assessment recommended by the USEPA (1997, 1998a) has been adopted in these ERAs. Consistent with the SLERAP (USEPA 1999), a conservative screening level evaluation was conducted first using maximum media concentrations and conservative assumptions. A more refined evaluation was conducted for receptors and scenarios that indicated potential risks in the screening level evaluation."	276.127
77.	4.6.4	4.6-14	4	Delete water from list of site-specific media sampled. Change text to "collection of project specific soil and sediment samples..."	276.128
78.	4.6.4	4.6-14	4	Add text noting number of soil sampling locations "Project specific samples were collected from 35 locations representing different soil..."	276.129
79.	4.6.4	4.6-15	1	The San Juan River ERA does not describe the AERMOD modeling conducted by AECOM. Change the second sentence to read "The air dispersion and deposition modeling conducted by AECOM is described in the Deposition Area ERA (AECOM 2013a)."	276.130
80.	4.6.4	4.6-15	5	Add after the first sentence: "It is generally assumed that as the number of affected individuals increases, the likelihood of population-level effects also increases. However, effects on individual organisms may occur with little or no population or community-level effects."	276.131
81.	4.6.4	4.6-15	5	Add to the end of the sentence that begins "Thus, potential ..." and therefore the analysis presented here is considered conservative vis-à-vis population risk."	276.132

Response 276.123

The following footnote has been added to the Final EIS: "The scope of the ERA was limited to the FCPP stack emissions because the proposed operations at the mine site would not result in atmospheric emissions of COPECs of sufficient magnitude to cause adverse environmental effects. The potential effects of runoff from the mine are considered outside of the ERA"

Response 276.124

Suggested edits were made

Response 276.125

The Deposition Area has been added to Figure 4.1-4.

Response 276.126, 276.127, 276.128, 276.129, 276.130, 276.131

Suggested edits were made

Response 276.132

The following text was added in Section 4.6.2: Thus, potential risks to individuals are likely not representative of risks to populations; in general, for the same exposures, population risk tends to be lower than individual risk and therefore the analysis presented here is considered conservative with regard to its' assessment of risks to populations.

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No.	Section #s	Page #s	¶	Comments
82.	4.6.4.1	4.6-19	3-5	Suggest adding impact analysis of current vegetation management practices within the APS transmission line ROWs. Section 4.17.2 (page 4.17-17) provides a summary of what could be placed here. 276.133
83.	4.7.2.2	4.7-7	Table 4.7-1	Note, it would also be appropriate to present this information in Section 2.3.1 to be consistent with the Vegetation Management activities presented for PNM lines (Section 2.3.2). Add Swainson's hawk. Source: Mikesic, D.G. 2008. Species Account for <i>Non-Endangered Raptors & Migratory Birds</i> . Website: http://nrbp.ndfw.org . Revised: 17 MAR 2008. 276.134
84.	4.7.2.2	4.7-8	6	Last sentence indicates that the table identifies species "documented to occur within the ROI" but the table title indicates they are species "expected to occur." Recommend that this difference be clarified or made consistent. 276.135
85.	4.7.2.2	4.7-9; 4.7-14; 4.7-19	Table 4.7-2; Table 4.7-3; Table 4.7-5	Many of the special status species analyzed for the project are not included in tables in Section 4.7.2. For example, the southwestern willow flycatcher, yellow-billed cuckoo, and mountain plover are missing from Table 4.7-2; the black-footed ferret from Table 4.7-3; the Mexican gray wolf from Section 4.7-5. Recommend a close cross-check between these tables and the species selected for analysis in Section 4.8 Special Status Species, as it seems that the species addressed in Section 4.8 should be a sub-set of what is presented in Section 4.7. If OSMRE prefers not to include the special status species in the tables in Section 4.7, then Section 4.7 should state that, "further discussion for special status species potentially occurring within the project is found in Section 4.8 Special Status Species." 276.136
86.	4.7.2.2	4.7-17	4	Remove reference to AECOM 2013r. The AECOM Habitat Model Report (AECOM 2013r) does not document the presence of hares and rabbits. 276.137
87.	4.7.2.2	4.7-19	2	AECOM also documented suitable habitat for Mexican gray wolf (AECOM 2013r). 276.138

Response 276.133

The following text was added to the Transmission Line Discussion in 4.6.4.1: "APS and PNM manage vegetation within the transmission line ROWs to prevent this vegetation from interfering with the transmission lines and to maintain access to the lines for conducting maintenance. These activities are conducted in accordance with each company's vegetation management program, and are subject to their environmental screening programs and additional measures to protect avian species and special status plants within the ROW (see Section 3.2.6). Vegetation management in any given area occurs every 2 to 5 years, depending on growth rates and would keep the vegetative communities within the ROWs in a similar condition to the environmental baseline."

Response 276.134

Swainson's hawk was added to Table 4.7-1.

Response 276.135

Clarified to state: "Nonraptor avian species expected to occur within the ROI".

Response 276.136

Missing species were added to Tables 4.7-2 (Baird's sparrow, Mountain plover, southwestern willow flycatcher, and yellow-billed cuckoo) and 4.7-5 (black-footed ferret and Mexican gray wolf).

Response 276.137

Reference removed

Response 276.138

Gray Wolf was added to Table 4.7-5.

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No.	Section #s	Page #s	¶	Comments
88.	4.8.2.1	4.8-7, 4.8-15, 4.8-33	Table 4.8-1, Table 4.8-2 and 4.8- 5	Suitable California condor nesting habitat was modeled and field verified along the APS transmission lines (AECOM 2012f). Suitable Mexican spotted owl habitat was modeled within the deposition area around the FCPP and immediately adjacent to the APS transmission lines (i.e., within 0.5 miles of the t-lines) (AECOM 2012f). Northern Mexican garter snake, Canada lynx New Mexico population, and Yellow-billed cuckoo, are Proposed Threatened, no longer candidate. Update throughout. New Mexico jumping mouse, Three Forks Springsnail, and Fickeisen plains cactus are Endangered, no longer candidate or Proposed Endangered. Update throughout. Zuni bluehead sucker status is Proposed Endangered, no longer candidate. Update throughout. Navajo sedge, Zuni fleabane, Navajo bladderpod, Nokomis fritillary, Gooding's onion, and Alcove bog orchard habitat were modeled and field verified during 2012 surveys of the APS transmission lines (AECOM 2012f). Black footed ferret could be eliminated from further analysis because it has been extirpated in New Mexico since 1934. The California condor was considered in the BA and the rationale for exclusion seems similar to other birds that are retained in these tables (e.g., yellow-billed cuckoo and southwestern willow flycatcher). Potential habitat for the American dipper, Mexican spotted owl, Nokomis fritillary, and Gooding's onion were identified for the Deposition Area ERA, recommend not eliminating from further analysis, consistent with the BA and/or BE. If table is specific to ROW, add that to the title and use that terminology (not "area" or "ROW area") in the Eliminated From Further Analysis column. Confirm that conclusion for black footed ferret should be different from Table 4.8-1. Note that text indicates yellow-billed cuckoo is "known to occur within the deposition area" but the species is not listed in Table 4.7-2. Add to Table 4.7-2.
89.	4.8.2.1	4.8-6	Table 4.8-1	276.139
90.	4.8.2.4	4.8-7, 4.8-15	Table 4.8-1, 4.8-2	276.140
91.	4.8.2.1	4.8-15	Table 4.8-2	276.141
92.	4.8.2.1	4.8-22	Table 4.8-3	276.142
93.	4.8.2.3	4.8-32	2	276.143 276.144

Response 276.139

Text Modified where appropriate for California condor. California condor carried forward for analysis in Section 4.8.

Text Modified where appropriate for Mexican spotted owl. Mexican spotted owl carried forward for analysis in Section 4.8.

Northern Mexican garter snake was listed Threatened 7/8/14 USFWS (<http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=C04Q>). Tables and text have been updated to reflect the appropriate listing status of northern Mexican garter-snake in Section 4.8.

Tables and text have been updated to reflect the appropriate listing status of Canada Lynx and yellow-billed cuckoo in Section 4.8.

Tables and text have been updated to reflect the appropriate listing status of New Mexico jumping mouse, Three Forks spring snail, and Fickeisen plains cactus in Section 4.8.

Tables and text have been updated to reflect the appropriate listing status of Zuni bluehead sucker in Section 4.8.

Navajo bladderpod habitat was modeled but concluded as not present as a result of AECOM habitat analysis.

Navajo sedge, Zuni fleabane, Nokomis fritillary, Goodings onion and Alcove bog orchid were all carried forward for analysis in the Draft EIS.

Response 276.140

Black footed ferret has been eliminated from consideration in the Draft EIS.

Response 276.141

Discussion of potential impacts to California condor has been added to EIS.

Response 276.142

The EIS text has been revised to be consistent with the BA.

Response 276.143

Table is technically not specific to the PNM ROW. If other portions of the project extended onto such lands they would also be included in this table. In actuality the table becomes specific to the PNM ROW because that is the only portion of the project ROI that cross BLM, State, or private lands, as described in the text on Page 4.8-5. No change made to document.

Response 276.144

Discussion of potential impacts to yellow-billed cuckoo has been included in the EIS.

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No.	Section #s	Page #s	¶	Comments
94.	4.8.2.3	4.8-33 4.8-5	¶ Table 4.8-5	FCPP lease boundary area is within the pronghorn known range and contains suitable habitat. (AECOM 2012f). Suitable wolf habitat was modeled and field verified along the APS transmission lines (AECOM 2012f). Suitable Southwestern willow flycatcher habitat was modeled and field verified along the APS transmission lines west of US 491, along the Little Colorado River crossing, and east of US 491 south of Shiprock (AECOM 2012f). Suitable northern leopard from habitat was field verified along the APS transmission lines at the Little Colorado River crossing (AECOM 2012f). Same edits as in Section 4.6.4. Add footnote after "combustion of coal at the FCPP" - "The scope of the ERAs is limited to evaluating the FCPP stack emissions because the proposed operations at the mine site would not emit the COPECs in sufficient magnitude to be considered in the ERA." Same edits as in Section 4.6.4. Edit beginning of 3rd sentence "One ERA was conducted to evaluate ecological risks to both." Same edits as in Section 4.6.4. Edit to be consistent with Section 4.1.4 description - "...within the area identified by air dispersion modeling as having a 1 percent future increase in soil metals concentrations above present-day concentrations per data provided by the USGS (AECOM 2013c)." Same edits as in Section 4.6.4. Provide a figure showing the boundary of the Deposition Area. Same edits as in Section 4.6.4. Edit sentence beginning with "The other ERA." to "The second ERA was conducted to evaluate ecological risks associated with current conditions and future FCPP emissions as well as future regional and global emissions for..." Edit text to indicate COPECs were based on studies that considered "associated human health and ecological risks". Define HQ as a hazard quotient if this is the first use of the term and add a footnote indicating "An HQ is calculated as an exposure point concentration (or dose) divided by the appropriate ecological screening value." Ecological risk is discussed in earlier sections. Could introduce HQs and overview of ERA approach in Section 4.9.4 Vegetation.4.7.4 Wildlife and Habitats, or Section 4.1.4 Air Quality Edit text to clarify FCPP contributions "While the ERAs identified a number of COPECs with elevated HQs related to Current Conditions, future FCPP emissions associated with the Proposed Action did not contribute significantly to this risk."
95.	4.8.4	4.8-69	9	276.145
96.	4.8.4	4.8-69	9	276.146
97.	4.8.4	4.8-69	9	276.147
98.	4.8.4	4.8-69	9	276.148
99.	4.8.4	4.8-69	9	276.149
100.	4.8.4	4.8-69	10	276.150
101.	4.8.4	4.8-69	10	276.151
102.	4.8.4	4.8-70	1	276.152 276.153

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Response 276.145

The Pronghorn has been carried forward for analysis in the EIS. Both text and tables now reflect this species potential occurrence within the lease area.

The wolf will continue to be excluded from consideration as the Mexican gray wolf and any limited potential habitat is too isolated to support this species within the ROI. The wolf could occur as a rare migrant through the ROI.

Southwestern willow flycatcher was carried forward for analysis in the Draft EIS. Both text and tables now reflect this species potential occurrence within the ROI.

Northern leopard frog was carried forward for analysis in the Final EIS. Both text and tables now reflect this species potential occurrence within the ROI.

Response 276.146

Clarification added

Response 276.147, 276.148

Applicable changes were made to Section 4.6.4 of the Final EIS

Response 276.149

Applicable changes were made to Section 4.6.4 of the Final EIS. The Deposition Area has been added to Figure 4.1-4.

Response 276.150

Applicable changes were made to Section 4.6.4 of the Final EIS.

Response 276.151, 276.152, 276.153

Clarification made

COMMENT #276
Comments of Arizona Public Service Company

No.	Section #s	Page #s	¶	Comments
103.	4.9.2.1	4.9-8	8	The transmission line does not end at Moenkopi Substation, but continues another 14 miles before exiting the Navajo Nation. 276.154
104.	4.10.4.1	4.10-29	1	APS has selected urea to provide ammonia for SCR operation. Urea creates minimal risk during transportation. Therefore this discussion of the impacts of accidental release should be removed. 276.155
105.	4.11.3.1	4.11-18	1	Replace first paragraph with: "The potential to contaminate local groundwater will be minimized by installing composite liners for all future DFADAs. The operation of existing trenches will reduce the likelihood of existing groundwater entering Chaco Wash (see Section 4.5, Water Resources/Hydrology). Operations regarding uptake and discharge of water for Morgan Lake would not adversely affect surface water quality of water bodies in the plant's vicinity." 276.156
106.	4.11.3.1	4.11-22	7	APS has selected urea to supply ammonia to the SCR. The first 7 lines of this paragraph no longer apply. 276.157
107.	4.11.3.1	4.11-23	2	Replace "APS is currently in the process of installing..." with "APS has installed." 276.158
108.	4.11.3.5	4.11-36	2	Replace OSMRE with OSMRE/BIA. 276.159
109.	4.11.3.5	4.11-36	3	Replace OSMRE with OSMRE/BIA. 276.160
110.	4.12.4.1	4.12-8		The purpose of the berms described in this section is for storm water management, not to contain ash. 276.161
111.	4.12.4.1	4.12-10		Change to read: "Such required environmental protection measures are expected to limit any adverse effects to surface water ITAs to minor impacts. No additional mitigation measures would be required." 276.162
112.	4.15			See APS Narrative Comment Letter at 21 and Attachment C for recommended revisions. 276.163
113.	4.15.1.2	4.15-3	7	The statement that air quality controls, such as FGD and SCR concentrate metals and contaminants in the CCR is incorrect. While there may be traces of ammonia in the ash from the fabric filter and the FGD water due to the use of this reagent in the SCR system, there is no reason to believe that the SCR would concentrate the metals in the ash. The SCR and FGD are not expected to have any major effect on the ash or the FGD sludge. 276.164
114.	4.15.2.2	4.15-10	Table 4.15-3	APS no longer burns used oil on-site. 276.165
115.	4.15.2.2	4.15-11	3	Edit as follows: "As of October 2011, the evaporation ponds are no longer in use, and have been reclaimed." 276.166
116.	4.15.2.2	4.15-18	5	Revise the statement that "no demolition or disposal activities are anticipated until the end of life of the facility." Portions of unused structures like Units 1 – 3 could potentially be demolished or disposed before completion of the project. 276.167
117.	4.15.2.2	4.15-27	2	The total area of the DFADAs under the Proposed Action is 385 acres, not 350 acres as stated here. 276.168
118.	4.15.4.1	4.15-18	5	Units 1-2-3 will be demolished as described in Sec. 2.4.2.2, heading titled "Shutdown of Units 1-3. Carry through all alternatives." 276.169

Response 276.154

Clarified

Response 276.155

The entire document has been reviewed to indicate that APS has selected the urea option.

Response 276.156

Referenced discussion does not require this change.

Response 276.157, 276.158, 276.159, 276.160

Change made

Response 276.161

As stated in the paragraph "berms would be constructed around the areas to restrict any soils containing CCR that could impact surrounding soils" Text changed to: The new DFADA cells would be lined with synthetic liners to minimize infiltration. The cells would be surrounded by a berm whose size is designed to capture a 100 year, 24 hour storm event without runoff. The stormwater that lands on the DFADA flows to an adjacent lined depression (stormwater pond), which is used for dust control or pumped to the Lined Decant Water Pond. In this way, stormwater that falls on the DFADA cells, and associated runoff, is retained. Stormwater that falls on surrounding areas, outside the DFADA cells, would be channeled around the cells to the Chaco Wash by a system of berms so that the unaffected runoff does not come in contact with the DFADA area.

Response 276.162

Change made

Response 276.163

See response to comment 276.003.

Response 276.164

Thank you for your comment. The text has been revised to indicate that decreases in metal emissions are completely attributable to the shut-down of Units 1, 2, and 3 and not related to the FGD or SCR system. The following sentence has been removed from the section: Air quality controls such as FGD and SCR are designed to reduce the volume of these compounds emitted into air, which then concentrates them in the CCR.

Response 276.165

Table has been revised to indicate revised disposal method and location.

Response 276.166

Change made

Response 276.167

Revised.

Response 276.168

Corrected

Response 276.169

Revised

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No.	Section #s	Page #s	¶	Comments	
119.	4.15.4.1	4.15-20	Table 4.15-8	The use of urea will result in the manufacture of ammonia, which will require reporting under TSCA and TRI.	276.170
120.	4.15.4.1	4.15-27	2	Replace the beginning of the first paragraph under the heading CCR Management with: "FGD waste generated from Units 4 and 5 would continue to be placed in the lined ash impoundment until it is full or closed. Ash and bottom ash would continue to be placed in DFADA Sites 1 and 2 until these sites reach capacity..."	276.171
121.	4.15.4.5	4.15-30	5	EPA's BART rule went into effect at the beginning of 2014, not in 2016 when the lease expires. All 3 switchyards probably would not be decommissioned and demolished under No Action alternative because they are used to transmit power from other sources.	276.172
				Any decisions regarding the future uses of the FCPP must be with the concurrence of the Navajo Nation, not the other power owners.	
122.	4.15.4.5	4.15-31	1	OSMRE does not have the authority to approve the closure plan for the FCPP. The transmission lines would not be removed because they wheel power for other sources besides the FCPP. They would likely not be decommissioned and dismantled, but decommissioning and dismantling would have to involve the Navajo Nation, Hopi Tribe, the BLM, and private landowners and Zia Pueblo in the case of the PNM West Mesa line.	276.173
123.	4.16.4.1	4.16-11		There will be no new ash pond, only new DFADAs and a lined surge pond. Please delete all references to future ash ponds.	276.174
124.	4.17.4.1	4.17-24		The third paragraph states that the HHRA indicates that operation of FCPP for 25 years "would not have a major impact on health" but then at the end of the paragraph, states that the effects are "minor". Please consider a revision of the third sentence in the third paragraph on this page to read: "Therefore, the HHRA demonstrates that operation of FCPP units 4 and 5 with SCR (and with units 1, 2 and 3 shut down) over the next 25 years would not have an appreciable adverse impact on human health."	276.175
125.	4.17.4.5	4.17-26	7	Coordination with BLM would not be required.	276.176
126.	4.18.3.1	4.18.38-39		Please clarify whether projected future emissions reduction requirements for other power plants are taken into account in tables 14.8-2 and 14.8-3.	276.177
127.	4.18.3.5	4.18-43	2	Per Figure 4.18-1, not all of the power plants referenced in this paragraph are within the San Juan River Basin, which is defined as the study area, and not all of them are coal-fired power plants. Per the EPRI report (cited as EPRI 2013 in DEIS), there are 3 coal-fired power plants in the San Juan River Basin (see Figure 2-1). The San Juan River ERA demonstrates that it is overly conservative to state, as the DEIS does, that there would be "potentially major, long-term cumulative impacts" to surface water from these sources.	276.178

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Response 276.170
Modified as suggested

Response 276.171
Changes made

Response 276.172
Text has been revised accordingly.

Response 276.173
No change made

Response 276.174
Clarified globally

Response 276.175
No change made. This is a general discussion on regulatory compliance.

Response 276.176
Changed sentence as follows: As with the FCPP, decommissioning and dismantling activities would need to be coordinated with the Navajo Nation and/or the BLM (depending on the land crossed by each subject line, e.g. the FCPP to Cholla line only crosses Navajo Nation jurisdiction and would not require coordination with BLM), such that the area meets the specific needs of the planned reuse.

Response 276.177
The Draft EIS did not include San Juan Generating Station projected changes; however, the Final EIS contains the information about San Juan Generating Station and other regional changes (see Comment 298.006).

Response 276.178
Comment noted.

COMMENT #276

Comments of Arizona Public Service Company

No.	Section #s	Page #s	¶	Comments	
128.	4.18.3.8	4.18-44	5	Replace reference to EPRI 2013 with AECOM 2013c in the 2 nd sentence Add reference to AECOM 2013h at the end of the 4 th sentence Clarify what "These contaminants" refers to - Suggested edit - "Emissions related contaminants associated with the Proposed Action and local and regional sources have the potential..."	276,179
129.	4.18.3.8	4.18-45	1	The cumulative effect study area includes more than just the Deposition Area. Replace 1 st full sentence with: "Therefore, the cumulative effects study area for threatened and endangered wildlife species includes the Deposition Area, as well as the San Juan River from the eastern boundary of the Deposition Area downstream into the San Juan arm of Lake Powell."	276,180
130.	4.18.3.8	4.18-45	2	Edit to be consistent with Section 4.1.4 description - "... within the area identified by air dispersion modeling as having a 1 percent future increase in soil metals concentrations above present-day concentrations per data provided by the USGS (AECOM 2013c)."	276,181
131.	4.18.3.8	4.18-45	4	Rephrase 1 st sentence. Section 4.8 considers special status species. Refer to Section 4.6 and 4.7 for the evaluation of representative plants and wildlife, respectively.	276,182
132.	4.18.3.8	4.18-45	4	Include the "Total HQ" footnote in the sentence referring to the "Current Conditions + FCPP Contributions" scenario.	276,183
133.	4.18.3.8	4.18-45 to 4.18-46	multiple	In the summary of HQs it is unclear whether the HQs are based on screening level or refined evaluations. Introductory text is recommended to clarify which is appropriate for this section. It is recognized that screening level HQs may be relevant to some immobile listed species, but the refined HQs are expected to be relevant to most non-listed or mobile species. It is recommended that the fish tissue HQ discussions also consider the alternate fish toxicity values (0.2 mg/kg for Hg and 1 mg/kg for Se) discussed in the ERA. The Current Conditions dataset did not target early life stage fish and the estimates of fish tissue from the FCPP used uptake factors for generic fish. Comparing the Current Conditions and FCPP datasets against toxicity values based on early life stage fish will over-estimate risks to juvenile and adult fish. The alternate fish toxicity values are more appropriate for these comparisons.	276,184

Response 276.179

Changes made

Response 276.180

Changes made to show that the study areas are the same as those for cumulative impacts to plants and wildlife.

Response 276.181

Reviewed for consistency

Response 276.182

Change made

Response 276.183

The Draft EIS is correct. No change made.

Response 276.184

Section 4.18.3 has been reviewed and revised as appropriate with regard to these comments and revised as appropriate and consistent with the discussion of this issue in the BA.

COMMENT #276

No.	Section #s	Page #s	¶	Comments
134.	4.18.3.8	4.18-45	4 and 5	<p>It appears these HQs are the result of the screening level ERA conducted with the maximum detected and predicted concentrations. If this is intentional, this should be made clear in the text. This assumption is likely to over-estimate actual risks. It is suggested that the refined HQ results are more applicable to most receptors. See below for suggested edits to paragraph 4 and beginning of paragraph 5 (assuming the screening level HQs are retained):</p> <p>"In total, for the "Current Conditions + FCPP Contributions" scenario, the two ERAs reported 67 instances in which the screening level total HQs' based on maximum concentrations exceeded a value of 1 indicating a potential risk to ecological receptors. For terrestrial receptors within the Deposition Area, screening level total HQs greater than 1 ranged from 1.5 to 37, with boron, chromium, and vanadium presenting the highest total HQs, most frequently for terrestrial plants. These elevated screening level total HQs were observed for representative terrestrial invertebrates, plants, birds, and wildlife as well as the federally listed Mancos milk-vech and Mesa Verde cactus (AECOM 2013c). It is unlikely that ecological receptors would be continually exposed to maximum concentrations, so risks are expected to be over-estimated. Within the Deposition Area aquatic and riparian habitats of Morgan Lake, screening level total HQs greater than 1 based on maximum concentrations ranged from 2.3 to 190, largely due to potential barium, lead, nickel, and selenium exposures to generic aquatic receptors and fish. The highest total HQ of 190 was due to maximum selenium exposure to generic adult life stage Morgan Lake fish."</p>
135.	4.18.3.8	4.18-45	1	<p>Willow flycatcher is also the surrogate for the federal candidate species yellow-billed cuckoo. Add the cuckoo to this sentence. It is noted that these HQs are from the refined Morgan Lake evaluation, as is appropriate for these mobile receptors. Suggest indicating that these are "total HQs from the refined evaluation" and adding a footnote that states: "For the assessment of mobile species (e.g. birds, mammals, adult fish), refined HQs based on 95% upper confidence limit [UCL] media concentrations (an estimate of the average concentration with 95 percent confidence that the true mean concentration is less than this value), rather than maximum concentrations are applicable because exposure for mobile species is largely related to foraging behavior. The use of maximum media concentrations for mobile species would be unrealistic and would likely overestimate HQs."</p>

276.185

276.186

Response 276.185

Section 4.18.3 has been reviewed and revised as appropriate with regard to these comments and revised as appropriate and consistent with the discussion of this issue in the BA.

Response 276.186

Section 4.18.3 has been reviewed and revised as appropriate with regard to these comments and revised as appropriate and consistent with the discussion of this issue in the BA.

COMMENT #276

Comments of Arizona Public Service Company

No.	Section #s	Page #s	¶	Comments
136.	4.18.3.8	4.18-46	2	<p>It appears that these HQs represent screening level HQs from the San Juan River evaluation in the Deposition Area ERA. Suggest revising as follows:</p> <p style="text-align: right;">276.187</p> <p>"The aquatic and riparian habitat of the San Juan River within the Deposition Area exhibited screening level total HQs greater than 1 ranging from 1.5 to 220 based on maximum concentrations largely due to potential aluminum, barium, copper, lead, methylmercury, nickel, selenium, vanadium, and zinc exposures to generic aquatic receptors and fish. The highest screening level total HQs of 180 and 220 were due to maximum nickel and selenium exposures to generic San Juan River fish. As stated previously, it is unlikely that ecological receptors would be continually exposed to maximum concentrations, so risks are expected to be over-estimated. Because the available fish tissue data set from within the San Juan River and the estimated fish tissue associated with the Proposed Action did not include early life stage fish, the HQs based on early life stage toxicity values are likely to over-estimate risks to juvenile and adult fish.</p>
137.	4.18.3.8	4.18-46	3	<p>Similar to Morgan Lake, the willow flycatcher, which represents the federally listed southwestern willow flycatcher and candidate yellow-billed cuckoo exhibited elevated total HQs under the refined evaluation ranging from 1.1 to 6.6 with the highest total HQs of 2.4 and 6.6 due to selenium and methylmercury, respectively (AECOM 2013c)."</p> <p style="text-align: right;">276.188</p>
138.	4.18.3.8	4.18-46	3	<p>These HQs appear to be from the "Current Conditions + FCPP-only Contributions" refined evaluation, as is appropriate for these mobile fish. Suggest clarifying the text to refer to "refined total HQs" within this paragraph.</p> <p>Suggested edit to clarify fish HQs because early life stage fish were not specifically modeled and were not targeted in the sampling on which Current Conditions were based:</p> <p>"Specifically, elevated refined total HQs related to mercury exposure ranged from 3.0 to 3.8 for forage fish and the federally listed razorback sucker and from 1.8 to 12 for the federally listed Colorado pikeminnow. Elevated refined total HQs related to selenium exposure ranged from 1.5 to 71 for generic fish (AECOM 2013h). Because the available fish tissue data set from within the San Juan River and the estimated fish tissue associated with the Proposed Action did not include early life stage fish, the HQs based on early life stage toxicity values are likely to over-estimate risks to juvenile and adult fish."</p> <p style="text-align: right;">276.189</p>
139.	4.18.3.8	4.18-46	6	<p>Edit last sentence of paragraph to indicate: "This suggests that sensitive plants and invertebrates could be at risk of adverse effects in areas of higher naturally occurring barium concentrations or that some species may be tolerant of higher barium levels than the species used to derive the Eco-SSLs."</p> <p style="text-align: right;">276.190</p>

Response 276.187

Section 4.18.3 has been reviewed and revised as appropriate with regard to these comments and revised as appropriate and consistent with the discussion of this issue in the BA.

Response 276.188

Section 4.18.3 has been reviewed and revised as appropriate with regard to these comments and revised as appropriate and consistent with the discussion of this issue in the BA.

Response 276.189

Section 4.18.3 has been reviewed and revised as appropriate with regard to these comments and revised as appropriate and consistent with the discussion of this issue in the BA.

Response 276.190

Section 4.18.3 has been reviewed and revised as appropriate with regard to these comments and revised as appropriate and consistent with the discussion of this issue in the BA.

COMMENT #276

Comments of Arizona Public Service Company

No.	Section #s	Page #s	¶	Comments
140.	4.18.3	4.18-48	1	Because this is the first mention of Scenario 8, suggest adding a footnote: "Scenario 8 represents the highest emissions-related contributions to the watershed modeled in the San Juan River ERA and assumes a high increase in mercury emissions from China (AECOM 2013h)." Suggest adding a footnote indicating that: "Because the available fish tissue data set from within the San Juan River and the estimated fish tissue associated with the Proposed Action and Scenario 8 did not include early life stage fish, these HQs which are based on early life stage toxicity values, are likely to over-estimate risks to juvenile and adult fish." It is recommended that the fish tissue HQ discussions also consider the alternate fish toxicity values (0.2 mg/kg for Hg and 1 mg/kg for Se) discussed in the ERA. Suggest editing first sentence to state: "metals concentrations under Current Conditions alone may pose a potential risk to some sensitive ecological receptors within the Deposition Area as well as in the San Juan River downstream of the Deposition Area." Recommend deleting the HQs listed in the 1 st full sentence [the HQ of 190 is for Morgan Lake, the HQ of 12 is based on adult pikeminnow compared to an early life stage toxicity value, the HQ of 71 is based on adult fish].
141.	4.18.3	4.18-48	Table 4-18-7	276.191 276.192
142.	4.18.3	4.18-48	Last paragraph	276.193
143.	4.18.3	4.18-49	1	HQs based on maximum concentrations or based on highly conservative comparisons (e.g., juvenile/adult tissues compared to early life stage toxicity values) will over-estimate risks and should not be used to identify population level risks. Suggested edit: "Even at the lower range of HQs that assume status quo Current Conditions in combination with future FCPP emissions, elevated HQs indicate the potential for adverse effects to some individual receptors." The suggestion of "major" impacts from the 1 st sentence overstates impacts. Without more site-specific data (e.g., species specific toxicity studies), it is impossible to quantify or estimate a magnitude of potential impacts as major. Based on the results discussed within this section and in the ERAs, which indicate that the FCPP contributes very little to overall risks, it seems an overstatement of impacts to conclude that the contribution to cumulative impacts to threatened and endangered species is moderate. The ERAs indicate that risks to these species are essentially unchanged by the FCPP contributions. A conclusion that the FCPP's future contributions to cumulative impacts are "negligible" would be more appropriate.
144.	4.18.3	4.18-49	2	276.194 276.195
145.	4.18.3	4.18-49	2	276.196

Response 276.191

The discussion of ecological risk was revised throughout the document to address this and other comments and to be made consistent with the discussion of this issue in the BA.

Response 276.192

Section 4.18.3 has been reviewed and revised as appropriate with regard to these comments and revised as appropriate and consistent with the discussion of this issue in the BA.

Response 276.193

Change made

Response 276.194

Section 4.18.3 has been reviewed and revised as appropriate with regard to these comments and revised as appropriate and consistent with the discussion of this issue in the BA.

Response 276.195

Section 4.18.3 has been reviewed and revised as appropriate with regard to these comments and revised as appropriate and consistent with the discussion of this issue in the BA.

Response 276.196

Section 4.18.3 has been reviewed and revised as appropriate with regard to these comments and revised as appropriate and consistent with the discussion of this issue in the BA.

COMMENT #276

Comments of Arizona Public Service Company

No.	Section #s	Page #s	¶	Comments	
146.	5.1.1.2	5-2	8	BLM does not have regulatory approval for the portion of the FCPP to Cholla transmission lines that are part of the Proposed Action.	276.197
147.	5.1.4.1	5-6		A jurisdictional wetlands and waters of the U.S. investigation was prepared for APS and is cited in the DEIS as AECCOM 2012b. The findings from this report are referenced in Section 4.5.2.2 beginning on page 4.5-33. Please add a cross reference to this information and a description of the consultation on page 5-6.	276.198
148.	5.1.4.1	5-6		Remove sentence: "In this case, the certification would be issued by the NNEPA Water Quality Program verifying that the Navajo Nation Surface Water Quality Standards will be met when the discharge occurs." See APS Narrative Comment Letter at 9-10.	276.199

Response 276.197

Removed FCPP to Cholla transmission line from this sentence.

Response 276.198

Cross-reference added.

Response 276.199

See Master Response #11, Covenant 17.

6/30/2014

DEPARTMENT OF THE INTERIOR Mail - Continued Operation of the FCPP and the Navajo Mine
COMMENT #277



FCPP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>

Continued Operation of the FCPP and the Navajo Mine

1 message

Bruce Voiles [REDACTED] Thu, Jun 26, 2014 at 8:29 AM
To: "FCPPNavajoEnergyEIS@osmre.gov" <FCPPNavajoEnergyEIS@osmre.gov>

To Whom it may Concern,

I fully support Alternative A- Purposed Action that is being considered by the DEIS. My support is due to the reduction of pollutants as a result on the shutting down of Units 1,2 and 3, plus installation of pollution control upgrades on Units 4 and 5. **277.001**

Thanks

<https://mail.google.com/mail/b/349/u/0?ui=2&ik=6ac25a16cb&view=pt&search=inbox&th=146d885145fc290&siml=146d885145fc290>

1/1

Comment Letter 277.....Voiles, B.

Response 277.001

Thank you for your comment. For clarification, the Federal Implementation Plan for the FCPP is a separate action conducted by the EPA and is considered as a baseline condition in the EIS. OSMRE is considering all of the alternatives that were analyzed in the Draft EIS and will inform the public of its decision via the Record of Decision, anticipated in the spring of 2015.

6/30/2014

DEPARTMENT OF THE INTERIOR Mail - Navajo Mine

COMMENT #278



FCPP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>

Navajo Mine

1 message

Clifton Horace [REDACTED]
To: FCPPNavajoEnergyEIS@osmre.gov

Thu, Jun 26, 2014 at 5:00 PM

Dear sir or madam,

Please please please consider the huge unemployment we have on the reservation and how important these jobs are to us. The plan to clean up the plants is as good as it gets. **278.001**

Please vote yes and approve "Alternative A"

Sincerely

Clifton Horace
[REDACTED]

Comment Letter 278..... Horace, C.

Response 278.001

Thank you for your comment. A complete discussion of Socioeconomics is provided in Section 4.10 of the Draft EIS.

<https://mail.google.com/mail/tb/349/u/0/?ui=2&ik=6ac25e16cb&view=pt&search=inbox&th=146da6b0b383101f&siml=146da6b0b383101f>

1/1

COMMENT #279
FRYE LAW FIRM, P.C.

Attorneys at Law

William Gregory Kelly
Licensed in New Mexico, Arizona,
Oregon and the Navajo Nation

TEL: 505/296-9400
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June 26, 2014

Marcelo Calle, Project Coordinator
Four Corners Power Plant and Navajo Mine Energy Project
Department of the Interior
Office of Surface Mining Reclamation and Enforcement
1999 Broadway, Suite 3320
Denver, Colorado 80202-5733

And via electronic mail to: mcalle@osmre.gov

Re: Comments of the Navajo Transitional Energy Company, LLC on the Four Corners Power Plant and Navajo Mine Energy Project Draft Environmental Impact Statement

Dear Mr. Calle:

On March 28, 2014, the Office of Surface Mining Reclamation and Enforcement ("OSM") published a Notice of Availability of the Draft Environmental Impact Statement ("DEIS") for the Four Corners Power Plant ("FCPP") and Navajo Mine Energy Project ("Project"). Comments were originally due to OSM by May 27, 2014, but that date was extended for an additional thirty (30) days to June 27, 2014 at the request of special interest environmental groups.

The Navajo Transitional Energy Company, LLC ("NTEC"), a wholly owned entity of the Navajo Nation government and the new owner of the Navajo Mine, hereby provides its comments on the DEIS. As further detailed below, NTEC appreciates the thorough work OSM has done so far in its analysis in the DEIS. The DEIS has adequately analyzed a range of reasonable alternatives in accordance with the requirements of the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4321-4347, and its preferred alternative (or as modified by Alternative D, as discussed *infra*) meets the appropriately defined purpose and need of the Project, including the critical objective of the Project that the Navajo Nation be able to determine its own economic destiny and energy security.

NTEC believes, however, that while OSM's analysis complies fully with NEPA, OSM appears to have *underestimated* the harm to the Navajo Nation if the no action alternative were selected, in part because economic data and studies available to OSM, principally the 2013

279.001

Comment Letter 279.....Kelly, W. NTEC

Response 279.001

The economic impacts provided in the Draft EIS are based on a study developed by Arizona State University. This study used San Juan County and the State of New Mexico as the two primary study areas; therefore, there are no specific calculations or data to discuss specific multiplier effects to the Navajo Nation under the No Action alternative. Rather, these effects are assumed to be captured in both the study areas provided in the Draft EIS.

COMMENT #279

Arizona State University (“ASU”) study, may not fully address the multiplier effect of the loss of \$40 million annually to the Navajo Nation that would otherwise pay for governmental services and government jobs. Moreover, profits to NTEC are the *only* practical means for the Navajo Nation and its wholly owned enterprise to pay for the transition to a new energy economy relying on clean energy alternatives, including emerging clean coal technologies. The Final EIS could more fully discuss that without approval of the Project, NTEC’s tremendous promise to the Navajo Nation and the region will be lost.

Additionally, and although OSM correctly recognizes the federal trust responsibility and federal Indian policies promoting tribal self-determination, *see, e.g.*, DEIS at 1-9, the Final EIS could further clarify that the principal environmental justice community of concern for the Project is the Navajo Nation, which has a government-to-government relationship with OSM and the other federal cooperating agencies. That OSM extensively reached out to local Navajo communities, through the scoping process and for comments on the DEIS, including in the Navajo language, is laudable, and was very important as part of the public outreach required by NEPA. Nonetheless, of particular import in the context of environmental, social and economic justice for the Navajo Nation is that the Nation’s democratically elected leaders—the Navajo Nation Council and President—have repeatedly, with supermajority votes in the Council, and on behalf of the whole Navajo people, supported this Project moving forward. That unflinching support from the leaders of the Navajo Nation for the Project, which is almost wholly located on the Navajo Nation’s tribal trust lands, cannot be emphasized enough and could be further expounded on in the Final EIS. The Navajo Nation’s vast coal resources are reserved to the Navajo Nation under the Treaty of 1868 and the various Executive Orders and Acts that established the Navajo Reservation¹ and are its principal tribal trust assets. The Navajo Nation has a fundamental treaty right to develop these resources for its own economic prosperity and energy security, and it has chosen to do so by creating NTEC and supporting the Project.

279.002

NTEC is not submitting its own technical comments, and hereby adopts the comments submitted by BHP Billiton Mine Management Company (“MMCo”), its agent and Mine Manager.

I. HISTORY OF NTEC

In an historic act of tribal sovereignty and self-determination, the Navajo Nation Council created NTEC on April 29, 2013, as a wholly owned Navajo Nation tribal entity, in order to purchase back the Navajo Mine, and, using profits from the Navajo Mine, to eventually

¹ The Navajo Mine and the FCPP leases are principally located in the 1880 Executive Order Reservation, an area of the Navajo Reservation which has been implicitly ratified by Congress. *See, e.g., United States v. Midwest Oil Company*, 236 U.S. 459, 469-473 (1915); *Arizona v. California*, 373 U.S. 546, 598 (1963), *overruled on other grounds by California v. United States*, 438 U.S. 645 (1978)); *see also* 25 U.S.C. § 398d (changes to Executive Order reservations require Act of Congress).

Response 279.002

Thank you for your comment. Section 5 of the Draft EIS contains lengthy discussion on the outreach, coordination, and consultation that OSMRE has performed in preparing the Draft EIS.

COMMENT #279

transition the Navajo Nation's energy economy into renewables (solar, wind, geothermal) and clean coal technologies. On December 30, 2013, NTEC purchased the subsidiary that formerly owned the Navajo Mine, New Mexico Coal Company, LLC ("NMCC"), from BHP Billiton New Mexico Coal Company, Inc. ("BBNMC"), and NMCC was merged into NTEC in early January, 2014. To assist with the transition, BBNMC created MMCo to operate the Navajo Mine on NTEC's behalf through 2016.² By this transaction, NTEC thus reacquired the surface and mineral estate leaseholds at the Navajo Mine, on behalf of its owner, the Navajo Nation, that had been held by non-Navajo companies since 1957.

The four officers of NTEC's initial governing board³ are *Diné*—Navajo tribal members—and professionals in the fields of engineering, environmental science, finance, alternative energy development, and the law. The three non-tribal members on the Committee are all former or current professors and scientists in engineering fields, with particular knowledge of alternative and emerging clean coal energy technologies. These seven agreed to assist the Navajo Nation in taking ownership and control of its energy resources through the creation of NTEC, and to help the Navajo Nation realize its economic promise and future energy security. NTEC received initial capitalization from the Navajo Nation Council in October of 2013 and currently has an interim executive staff, all of whom are *Diné* professionals. NTEC's headquarters is in Shiprock, Navajo Nation (New Mexico), on tribal trust lands approximately 20 miles from the Navajo Mine. The executive staff is the interface between NTEC's governing board and MMCo.

The Navajo Nation's opportunity to purchase the Mine arose in large part because of a rulemaking by the U.S. Environmental Protection Agency ("EPA") for Best Available Retrofit Technology ("BART") under the Clean Air Act that caused APS to close three of the five Units at FCPP resulting in a decrease of the annual average coal burn at FCPP from approximately 8 or 9 million tons to roughly 6 million tons of coal under the current coal supply agreement (with the attendant reduction in air emissions and greenhouse gas (GHG) emissions).⁴ This decreased

279.003

² If the Project is approved, a new mine manager will be brought in by NTEC in 2016 to continue operations. NTEC may take over day-to-day mine operations by as early as 2021.

³ NTEC is a single member limited liability company or "LLC," governed by a Management Committee selected by the Navajo Nation's leaders.

⁴ Arizona Public Service Company ("APS") owned 100% of Units 1, 2, and 3 of FCPP, which it shut down at the end of 2013 as a result of the BART ruling. APS also recently purchased Southern California Edison's share of Units 4 and 5, giving it a 63% share in the remaining operations. The other owners of FCPP are Public Service Company of New Mexico ("PNM") with 13%, Salt River Project with 10%, and Tucson Electric Power and El Paso Electric each with 7%. DEIS at 1-2. Units 4 and 5 will be brought into compliance with the BART ruling by retrofitting selective catalytic reduction technology, which will further significantly reduce air and GHG emissions from the historic baseline. *See, e.g.*, DEIS at 2-38.

Response 279.003

A discussion on the natural law section has been added to Section 1.4.2.6

COMMENT #279

volume made the mining operation unattractive to BHP Billiton for the continued investment in and operation of the Navajo Mine. The Navajo Nation was thus offered a singular opportunity to purchase the Navajo Mine, and, for the first time to not merely lease its coal resources to others, but to control and develop them by and on its own behalf, thus having the ability to steward the human and natural environments within the Navajo Nation's territorial jurisdiction in accordance with Navajo Fundamental Law, including the doctrine of *k'é*.⁵

The Navajo Mine and FCPP, the Navajo Mine's only coal customer, are both wholly located within the Navajo Nation's territorial jurisdiction on Navajo Nation tribal trust lands.⁶ DEIS at 1-4. NTEC leases the mineral and surface estates from its owner, the Navajo Nation, and most of the other associated surface leases and rights-of-way ("ROW") for the Project (for FCPP) are located on the Navajo Nation. *Id.*

If the Project goes forward, the Navajo Nation will continue to receive royalties and taxes of approximately \$40 million per year, over 800 well-paying jobs at FCPP and the Navajo Mine will continue to be filled predominantly by Navajo Nation tribal members, and NTEC will begin growing as an asset of the Navajo Nation and the Navajo people, with its profits available to help fund the transition to clean energy technologies for the benefit of the Navajo Nation and the natural environment. Indeed, pursuant to its enabling legislation, NTEC is required to "invest and re-invest no less-than ten-percent (10%) of its available Net Income in a given year into the research and development of renewable and alternative sources of energy, storage, and transmission technologies and facilities." Navajo Nation Council Resolution No. CAP-20-13 (April 29, 2013); *see also* DEIS at 4.10-27. As discussed further, *infra*, this forward-looking energy policy of the Navajo Nation will allow NTEC to transition the Navajo Nation from a source of conventional coal-fired electrical generation to a provider of electrical energy by emerging technologies, meeting regulatory and societal requirements of the future.

⁵ The Navajo people believe that the natural world is an intricately connected and interdependent web of relationships, a great kinship which includes the earth, the sky, the plants and animals, and human beings, human culture, and ceremony. The continued use of the *hooghan* at the Navajo Mine for traditional Navajo ceremonies by the employees and their families, *see* DEIS at 4.11-17, including those ceremonies for the purpose of healing such relationships under *k'é*, is critical to mitigating adverse impacts to the natural world from resource extraction, and is an important component of NTEC's policy to incorporate Navajo values and culture into NTEC's business model.

⁶ Any references to state jurisdiction are mistaken and should be corrected throughout for the Final EIS.

COMMENT #279

II. THE PREFERRED ALTERNATIVE (OR ALTERNATIVE D) MEETS THE OBJECTIVES OF THE PROJECT, PROMOTING THE NATION'S RIGHT TO SELF-DETERMINATION, ECONOMIC INDEPENDENCE AND ENERGY SECURITY.

A. Additional Analysis of Socioeconomic Impacts Would Further Underscore the Positive Impacts to the Navajo Nation from the Project and the Catastrophic Harm that Would Occur to the Navajo Nation and Navajo People If the Preferred Alternative Were Rejected.

The preferred alternative⁷ is critical to the Navajo Nation's current economy and long term economic prosperity and energy security. OSM could therefore more fully account for and analyze the tremendous benefits from the preferred alternative and the potential catastrophic impacts from the no-action alternative. The Navajo Nation is the largest American Indian Nation in the United States in terms of land area and population, with more than 320,000 enrolled members, approximately 174,000 who live on the Navajo Reservation, DEIS, Table 4.10-1, and who, as OSM recognizes, depend on critical governmental services provided by the Navajo Nation government, DEIS at 4.10-19. These governmental services are paid for with royalties and taxes from the Navajo Nation's coal and oil and gas development, and, critically here, from the operations of the Navajo Mine and FCPP, which contribute approximately \$40 million annually to the Navajo Nation's coffers, a third of the Navajo Nation's general fund. DEIS at 4.10-13. It would be a catastrophic blow to the Navajo Nation and the Navajo people if these dollars were to dry up because the preferred alternative was rejected.

In the DEIS, the only Navajo governmental services that OSM fully analyzes are education and public safety. See DEIS at 4.10-19. These are certainly critical services, especially given the limited number of public safety personnel, the 27,000 square miles of Navajo lands that have to be patrolled, and the extremely rural pattern of living on the Navajo Nation (the Navajo people generally do not live in traditional western style communities). In addition to education and public safety, OSM should also consider that these dollars directly benefit chapters and tribal members at the local level, including providing for bathroom and kitchen additions, irrigation projects, weatherization programs, etc. In its analysis, OSM determined that, in terms of housing in the Region of Influence ("ROI") of the Project, the Navajo Nation was the most crowded, had the fewest rooms per capita, the fewest bedrooms, the highest percentage lacking complete plumbing facilities, the highest number without telephone service, and, along with the Hopi Tribe, the highest percentage of housing lacking complete kitchen facilities. DEIS at 4.10-18. Indeed, as OSM recognizes, a shocking 38% of households on the Navajo Nation are below the poverty level. See DEIS, Table 4.10-15. Thus, 19,000 households or approximately 66,000

279.004

Response 279.004

As stated, the Draft EIS characterizes the housing environment on the Navajo Nation tribal trust lands, but it is beyond the purview of the NEPA process to analyze how the Tribe allocates revenues from FCPP and Navajo Mine operations. The Draft EIS identifies the range of benefits (i.e. revenues, tax payments) the Tribe realizes from project operations and notes that these benefits represent approximately 1/3 of the administrative tribal budget. The Draft EIS states that the loss of this amount of operating administrative tribal budget would be major.

⁷ NTEC understands that APS prefers Alternative D in lieu of the preferred alternative described in the DEIS. Essentially, Alternative D changes only the design of the FCPP ash management facilities and leaves the other elements of the preferred alternative in place. NTEC is supportive of APS's position.

COMMENT #279

Navajo tribal members, living on the Reservation, are living in poverty. *Id.* The funding from FCPP and the Navajo Mine has real-world impacts on poverty at the local level on the Navajo Nation.

OSM should also recognize in its analysis that royalties and taxes from FCPP and the Navajo Mine also directly benefit veterans' programs, provide senior services, and build veterans centers, senior centers and other community centers, which generally also include community internet access and public computers. Local internet access is crucial if the Navajo Nation is ever to bridge the "digital divide," and overcome the social and economic inequality resulting from a lack of access to information and technology that other Americans take for granted in the 21st century. Other educational and cultural benefits from coal royalties and taxes include providing government funding for preservation of Navajo language and culture through Navajo immersion programs in elementary schools, the recent dubbing of Star Wars into the Navajo language, Navajo fairs across the Navajo Nation, and funding provided to *Diné* College and its programs for recording and preserving Navajo language, ceremonies and creation stories.

In its socioeconomic analysis, OSM states that it is analyzing "direct effects," "indirect effects," and "induced effects." DEIS at 4.10-8. Although OSM analyzes local and regional multiplier effects for these three categories in San Juan County and the State of New Mexico, *see* DEIS Tables 4.10-22 through 4.10-25, OSM could also consider additional economic multiplier effects on the Navajo Nation. OSM could reasonably extrapolate the ripple effects on the Navajo Nation of the \$40 million going to the Navajo Nation each year, as well as multipliers from the jobs at the Navajo Mine and the FCPP. Moreover, because of Navajo cultural obligations to extended family, each worker at the Navajo Mine and FCPP, earning some of the highest wages on the Navajo Nation, partly or fully supports as many as 18 other family members, all of whom contribute to and participate in the Navajo economy. OSM could also reasonably observe that the Navajo taxes that are collected from vendors that provide goods and services to the Navajo Mine and the FCPP also positively impact the Navajo economy and provide for government services. This additional discussion would help underscore the draft analyses, and further support the selection of the preferred alternative (or Alternative D) and the rejection of the no action alternative.

The unemployment statistic cited in the DEIS by OSM, that based on the most recent census data the Navajo Nation only has a 15.6% unemployment rate, *see* DEIS at 4.10-14, ought to be considered in the context of actual employment opportunity on the Navajo Nation, and in that context is likely underestimated by OSM. As OSM recognizes, the Navajo Nation's own Division of Economic Development places the unemployment rate at 51%. *Id.* Based on the other statistical data OSM provides and relies on in its analysis, the unemployment rate given by the Nation's own economic agency is likely more accurate.⁸ For example, OSM observes that only 7.1% of Navajo tribal members living on the Reservation have Bachelor's or advanced degrees, DEIS, Table 4.10-14, and the percentage of Navajo tribal members living below the

⁸ OSM acknowledges this unemployment rate in the DEIS at 4.10-31 (placing it at 51%).

Response 279.005

Please see the response to comment 279.004.

Response 279.006

Please see response to comment 279.001. Further, the Draft EIS recognizes the benefits project operations (i.e. employment) create for the Navajo Nation, including its members employed at either the Navajo Mine or FCPP. Please see Draft EIS Section 4.10.3.2 and 4.10.4 for additional information on how the project affects the Navajo Nation and its membership employed by FCPP or Navajo Mine.

Response 279.007

Section 4.10.2.3 does include in the 51 percent unemployment figure provided by the Tribe. However, to provide "apples-to-apples" comparisons, the same data sets should be used to describe effects/conditions across varying geographical areas (i.e. comparing Navajo Nation tribal trust lands to the State of New Mexico). The Draft EIS also concludes that the selection of the No Action alternative would result in a "major" effect to the Navajo Nation (see response to comment 279.006 and Section 4.10.4.5).

COMMENT #279

poverty level is 38%, DEIS, Table 4.10-15. OSM places 57% of the Reservation population between 18 and 64 years of age, or approximately 99,000 tribal members who are therefore of working age, DEIS, Table 4.10-4, yet OSM only identifies approximately half of these as in the civilian labor force (53,056), DEIS, Table 4.10-6. 44,757 of those are actually employed, DEIS, Table 4.10-5, yielding the 15.6% unemployment figure cited by OSM ($53,056 - 44,757 / 53,056 = 15.6\%$). However, why only 1 of every 2 tribal members of employment age is counted in the “workforce” could be further elucidated by OSM, where it is likely that tribal members were not counted as being in the workforce if they were not actively seeking employment at the time of the census. Unfortunately, tribal members cannot be actively seeking employment where there simply are *no jobs* available, as is the case for most of the Reservation. Additionally, although there may be a so-called “informal economy” on the Navajo Nation, it does not substitute for real jobs with benefits. *Compare* DEIS at 4.10-14. The supposition that there are full-blown “industries” on the Reservation in tourism, arts and crafts, and domestic services does not appear to be accurate, and the true extent of any such economic activities should be clarified. *Compare id.* Moreover, OSM may wish to clarify that if the preferred alternative is not selected, income level and social support programs on the Reservation *will* be reduced (not merely “may,” *see* DEIS at 4.10-14). There will be less educational attainment, more crime and recidivism, less healthcare access, and more inadequate housing. *See* DEIS at 4.10-14.

In summary, OSM could more completely describe in the Final EIS the tremendous benefits to the Navajo Nation from FCPP, the Navajo Mine and the Project, and the catastrophic impacts to the Navajo Nation and its economy if it were to suddenly lose royalties and taxes from FCPP and Navajo Mine. Indeed, “[e]nergy forms a cornerstone of the Navajo economy by providing jobs for our people, electricity for our homes and business, and revenues for our local and central government. Developing energy resources will expand government revenues, create new industries and promote sustainable jobs for the Diné.” Navajo Nation Energy Policy Act of 2013, Council Resolution No. CO-50-13 (Oct. 24, 2013), Section 1(j), attached hereto as Exhibit 1.

B. Further Discussion of the Positive Impacts from Profits to NTEC, the Only Means to Transition the Navajo Nation to an Energy Portfolio Consisting of Alternative Energy Sources and Clean Coal Technologies, Would Support OSM’s Existing Analysis.

As OSM acknowledges, NTEC is mandated by the Navajo Nation Council to invest part of its profits in transitioning the Navajo Nation’s energy economy and portfolio to clean coal technologies and alternative energies, including wind and solar, *see, e.g.*, DEIS at 4.10-27, 4.11-20. However, the beneficial impacts of NTEC’s investments of its projected profits could be described further in support of OSM’s analysis. OSM notes that under the no action alternative, all activity at FCPP would cease, but leaves open the possibility that “other economic activities, such as production of renewable energy, [may] develop to replace the employment and income opportunities at the FCPP and the Navajo Mine. . . .” DEIS at 4.10-30. That is precisely what NTEC’s mission—to be funded by the profits from the proposed Project—is going forward, as

Response 279.008

As referenced, the Draft EIS contains discussion on the objectives of NTEC’s mission in creating renewable and/or alternative energy generation (see Section 4.10.3.2). OSMRE cannot speculate on the potential effects of this project on future business decisions that would be made by NTEC. The impacts of lost profits are therefore outside the scope of this analysis. However, potential loss of revenues to the Navajo Nation is discussed in Section 4.10.4.5.

279.008

COMMENT #279

noted earlier in these comments. What is important to understand, and what outside environmental interest groups fail to confront, is that such a transition *has to be funded*, and will likely cost in the tens if not hundreds of millions of dollars to research, develop and implement. NTEC is the *only* practical means by which the Navajo Nation can transition from an economy based on traditional fossil fuel extraction and power production to one based on cleaner energy resources and technologies, using the profits of NTEC.

The Navajo Nation has vast resources, including traditional fossil fuels that will be burned cleanly once economical and feasible technologies are in place, and the Navajo Nation also has tremendous resources for wind and solar farms. As discussed below, all of the suggestions for alternatives to the FCPP involving alternative types of energy were properly rejected by OSM at the screening stage, in part because none of the alternatives are currently economical or technologically feasible.

However, if the Project goes through, and NTEC is able to begin making profits from the Navajo Mine, its mission and mandate is to make the transition to new energy sources and technologies a reality. Working with federal, state and Navajo Nation partners, NTEC plans to develop a world class energy institute that will conduct research and development of clean coal and alternative energy technologies, and then implement those technologies on the Navajo Nation and in the region, thereby creating local industry and jobs, and local and regional economic and energy security. That is NTEC's promise, all of which will be lost if the Project is not approved and the Navajo Mine and FCPP are shuttered. If the preferred alternative is not selected, NTEC will wind up the affairs of the Mine, and its business will end. These positive and critical impacts to the Navajo Nation from NTEC's profits bolster the draft EIS and could be incorporated in the Final EIS, as should impacts from the alternative—ending NTEC's tremendous promise by “killing coal” on the Navajo Nation.

In creating NTEC, the Navajo Nation Council laid a path for a transition to cleaner energy technologies. Outside opposition groups say they want clean energy on the Navajo Nation but they do not provide the sourcing of capital or any real vision of what an energy transition on the Navajo Nation would look like, which the Navajo Nation through NTEC has developed. The purchase of the Navajo Mine will give the Navajo Nation control of a large part of its coal resources and the associated natural environment, *and* an existing revenue flow from FCPP that will allow NTEC to explore emerging technologies, create jobs and a sustainable economy, and deliver more environmentally friendly outcomes for future generations of Navajo tribal members. The proposals of the opposition groups, in contrast, are merely empty aspirations absent of any funding solutions, and simply center on closure of existing operations without providing future opportunities for jobs and socio-economic development on the Navajo Nation.

Response 279.009

Thank you for the comment. The Draft EIS describes that the tribal resolution establishing NTEC states that the purpose of purchasing the mine is to gain tribal control over the resources. It is our understanding from the tribal resolution that, if the preferred alternative is not selected, that there is the potential for future use of the mine.

Clarifications received from NTEC on September 9, 2014, confirm that this comment did not imply that the mine does not have independent utility from the FCPP, and that future use of the mine in the event the preferred alternative is not selected would still be pursued.

Response 279.010

See response to comment 279.009.

COMMENT #279

C. OSM Properly Rejected Alternatives that Would Not Meet the Needs of the Navajo Nation and NTEC.

The purpose and need for the Project correctly insures that the Navajo Nation, as a sovereign Indian nation, is able to shape its own economic future and develop its trust resources. In determining the purpose and need of an action, and the appropriate range of alternatives that must be considered in an EIS, the Tenth Circuit has explained that:

Once an agency appropriately defines the objectives of an action, NEPA does not require agencies to analyze the environmental consequences of alternatives it has in good faith rejected as too remote, speculative, or impractical or ineffective. That is, once an agency establishes the objective of the proposed action—which it has considerable discretion to define—the agency need not provide a detailed study of alternatives that do not accomplish that purpose or objective, as those alternatives are not reasonable. However, agencies are not permitted to define the objectives of a proposed action so narrowly as to preclude a reasonable consideration of alternatives. For the alternatives selected for detailed analysis in the EIS, the agency must devote substantial treatment to each alternative including the proposed action so that reviewers may evaluate their comparative merits. Within the detailed alternatives analysis, agencies are also required to include the alternative of no action. For those alternatives which were eliminated from detailed study in the EIS—for example, because such alternatives do not further the defined purpose of the proposed action—the agency must briefly discuss the reasons for their having been eliminated.

279.011

Wyoming v. United States Dept. of Agriculture, 661 F.3d 1209, 1244 (10th Cir. 2011) (internal citations, quotations and punctuation omitted) (emphasis added). OSM has met these NEPA requirements here.

OSM correctly defines the purpose and need of the Project as (1) continuing to provide reliable electrical base-load power for FCPP customers, in part by (2) continuing to provide coal to FCPP, which comes exclusively from the Navajo Mine, (3) continuing to maintain grid and transmission reliability in the region for power originating from a range of sources, including hydro-electric and other renewables, and nuclear, and, *critically*, (4) ensuring tribal self-determination and economic development for affected Indian tribes, principally the Navajo Nation. See DEIS at 1-9. OSM was urged to consider converting FCPP to a natural gas, solar, wind, geothermal, biomass or even a solar/thermal/coal hybrid plant. OSM correctly determined that *none* of these alternatives meets the purpose and need of the Project, including securing the Navajo Nation's rights to self-determination and economic development.⁹ OSM also correctly determined that these alternatives were not economically feasible, and that several were not technically feasible, and that they therefore did not need to be carried forward for further

⁹ Except for natural gas, these all also fail to provide the reliable electrical base load required to meet the objectives of the Project.

Response 279.011

Thank you for your comment. OSMRE is considering all of the alternatives that were analyzed in the Draft EIS and will inform the public of its decision via the Record of Decision anticipated in the spring of 2015.

COMMENT #279

analysis. See DEIS at 3-2 Table 3-1. An off-site coal supply would not use Navajo coal, would put NTEC out of business, and would require renegotiation of FCPP's lease, and OSM was therefore correct to reject this alternative as well.

Moreover, none of the rejected alternatives would be consistent with the Navajo Nation's Energy Policy of 2013, which provides that "[t]he Nation promotes majority ownership by the Nation or its entities of large-scale energy projects that utilize the Nation's resources in order to optimize the Nation's participation in profits," and that "[c]oal and coal-fired plants are a significant component of the Navajo economy and the Nation's revenues. The Nation will encourage a future in coal as a key component of the Nation's energy mix as a coal producer that derives a significant amount of royalties, rent, fees, jobs and tax revenue from coal mining and production of electricity." See Exhibit I, Ex. A, Sections 7, 9. Simply ending the development of the Navajo Nation's coal resources on the Navajo Nation does not meet the need and purpose of the Project, and was appropriately rejected by OSM.

III. APPROVAL OF THE PROJECT IS CRITICAL TO THE NATION'S SELF-DETERMINATION AND THE FEDERAL GOVERNMENT HAS A TRUST RESPONSIBILITY TO ENSURE THAT THE NAVAJO NATION'S RESOURCES ARE DEVELOPED TO ITS ECONOMIC BENEFIT.

The Indian Trust Assets at issue in the DEIS include some surface lands but are principally the Navajo Nation's coal, a critical tribal trust resource of the Navajo Nation specifically reserved to the Nation under the Treaty of 1868 and the various Acts and Executive Orders creating the Navajo Reservation, see, e.g., Treaty between the United States of America and the Navajo Tribe of Indians (June 1, 1868), 15 Stat. 667; see also *United States v. Shoshone Tribe of Indians*, 304 U.S. 111, 116-117 (1938). In the Indian Trust Assets section of the DEIS, Section 4.12, OSM properly acknowledges that "[t]he US has a trust responsibility to protect and maintain rights reserved by or granted to Indian tribes by treaty, statutes, and executive orders." DEIS at 4.12-1 (emphasis added). OSM properly recognizes that the Navajo Nation's coal is a trust asset. DEIS at 4.12-2.

The balance of the Indian Trust Assets analysis should also carry forward the context of the Project, and not treat the Project as generic development of Indian trust assets by non-tribal entities, discussing only whether the tribe is getting its due for royalties from coal sales and not suffering undue environmental costs. The federal government certainly has the responsibility to make that analysis as a fiduciary of the Navajo Nation's land and resources. However, here, the Navajo Nation, as a tribal sovereign with a right to self-determination and economic independence, has made a decision to develop its own trust resources. The Navajo Nation is the resource owner and the seller. The analysis and discussion should thus acknowledge and emphasize further the unique character and context of this Project, and the federal government's trust obligation, in accordance with federal policy, to ensure the Navajo Nation is able to develop and sell the resources that are at stake in this proceeding. See, e.g., the Indian Tribal Energy Development and Self-Determination Act of 2005, 25 U.S.C. § 3501-04 (enacted as

Response 279.012

The following has been added to page 4.12-1 in Section 4.12.1: It is important to note that the Navajo Nation, as a tribal sovereign with a right to self-determination and economic independence, has decided to develop its own trust resources, through the approval of NTEC within Navajo Nation legislation. The Navajo Nation is thus the resource owner and seller. The federal government's trust obligation, in accordance with federal policy, is to assist Indian tribes, like the Navajo Nation, in the development of energy resources and further the goal of Indian self-determination. See Indian Tribal Energy Development and Self-Determination Act of 2005 (25 U.S.C. §3501-04).

COMMENT #279

Title V of the Energy Policy Act of 2005), at § 3502 (the general purpose of the Act is “[t]o assist Indian tribes in the development of energy resources and further the goal of Indian self-determination” in the development of tribal energy resources). The Navajo Nation is not merely getting *royalties* from the extraction and sale of the coal, but it is directly getting *revenues* from the coal sales as well, which could be added to the Indian Trust Assets analysis.

In the fall of 2012, the Navajo Nation began discussions with BHP Billiton on repurchasing the Navajo Mine from its non-Indian owner, and the Navajo Nation Council approved an MOU with the Company to begin negotiations, and to start due diligence. Twice, the Navajo Nation Council passed funding legislation to pay for due diligence costs. On April 29, 2013, after the completion of due diligence, the Navajo Nation Council made an historic decision—by a supermajority vote—and created NTEC as an economic arm and instrumentality of the tribe for the express purpose of buying back Navajo Mine from BHP Billiton and retaking possession of its own tribal trust assets. Subsequent legislation followed: funding NTEC by a supermajority vote, voting to allow the purchase of the Navajo Mine to go forward as an “as-is where-is” deal, and releasing BHP Billiton from past liabilities under Navajo tribal law; and, finally, and again by a supermajority vote, voting to be the financial backer for the SMCRA bond for the Navajo Mine and the performance bond under the coal supply agreements with FCPP.

The Navajo Nation is now the owner *and* leaseholder of the tribal trust assets at issue.¹⁰ 279.013
The Navajo Nation, as the beneficial owner of the coal trust assets at issue, and who is also the owner of the mineral leasehold, has voted numerous times with supermajorities of its tribal Council to develop the trust resources for the Project. As the Navajo Nation Council stated in the legislation enacting the Navajo Nation Energy Policy of 2013, “[t]he Nation will seek to maximize its level of autonomy in managing its energy resources and energy use on the Nation . . . and . . . will take a leadership role in exploring and developing energy resources to exercise its political sovereignty, to build true economic sovereignty, and to promote greater self-determination for future generations of Diné.” See Exhibit I. The Indian Trust Assets discussion could account in greater detail for this historical situation, including the Navajo Nation’s right to sovereignty and self-determination in development of its own resources, and the federal government’s trust responsibility to ensure that the Navajo Nation’s trust assets are developed to its economic benefit.

¹⁰ The Navajo Mine is continuing the coal distribution program under NTEC ownership, see DEIS at 4.11-12, although NTEC will be looking at teaming with Navajo Nation agencies to introduce alternative stoves and heating methods for the Navajo people that are safer for indoor use. This could be clarified in the Final EIS.

Response 279.013

The paragraph has been amended as follows:

OSMRE completed an EA evaluating the proposed action of the transfer of the SMCRA permit from BNCC to NTEC. The EA analyzed the environmental justice effects of this action. The analysis found that some programs formerly offered by BNCC, such as the employee coal distribution program at Navajo Mine, do not formally transfer to NTEC, and it is not clear whether NTEC will continue this program now that the permit has been transferred, or if NTEC will expand the program. Therefore, the potential indirect impacts associated with the assets and liabilities assumed by the Navajo Nation were found to not disproportionately impact the low-income, minority, and Tribal populations within the ROI.

COMMENT #279

IV. OSM SHOULD CONTINUE TO CONFER WITH THE NATION'S DEMOCRATICALLY ELECTED LEADERS IN DETERMINING ENVIRONMENTAL JUSTICE IMPACTS.

As OSM correctly analyzed in the DEIS, the principal environmental justice community of concern for the Project is the Navajo Nation, as a federally recognized Indian tribe, and it is with the Navajo Nation's leaders that OSM is obligated to consult for environmental justice issues affecting the Navajo Nation and its members, on a government-to-government basis. See DEIS at 4.11-12 ("The action of the Tribal Council is an expression by the affected community that investment in Navajo Mine by the Navajo Nation would meet its goals of controlling the mineral resource and providing stable employment for members."); "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," Executive Order 12898, Sec. 6-606 (Feb. 11, 1994) ("[T]he Department of the Interior, in coordination with the Working Group, and, after consultation with tribal leaders, shall coordinate steps to be taken pursuant to this order that address Federally-recognized Indian Tribes.") (emphasis added); Executive Order 13175, Sec. 3 (Nov. 6, 2000) (when "implementing policies that have tribal implications . . . [a]gencies shall respect Indian tribal self-government and sovereignty, honor tribal treaty and other rights, and strive to meet the responsibilities that arise from the unique legal relationship between the Federal Government and Indian tribal governments."); *id.* Sec. 2 ("Fundamental Principles" that "[t]he United States continues to work with Indian tribes on a government-to-government basis to address issues concerning Indian tribal self-government, tribal trust resources, and Indian tribal treaty and other rights [and] . . . recognizes the right of Indian tribes to self-government and supports tribal sovereignty and self-determination.").

279.014

Additionally, based on guidance from EPA's National Environmental Justice Advisory Council, OSM cites specifically to the United Nations Declaration on the Rights of Indigenous Peoples. That Declaration provides that, under international law, indigenous peoples have an "inherent right to self-determination" and that "[a]greements must be reached with the full participation of authorized leaders, representatives or decision-making institutions as decided by the indigenous peoples themselves." DEIS at 4.11-13 (emphasis added).

279.015

As discussed *supra*, the Navajo Nation's leaders have overwhelmingly indicated their support for the Project. Nonetheless, as in the past, OSM will likely receive comments, mainly from outside environmental interest groups, who are diametrically opposed to any kind of coal development, including on the Navajo Nation, purportedly on the basis of protecting the "vulnerable" Native Americans who will be most impacted by the Project. These environmental groups do not represent the Navajo Nation and should not be permitted to bring misguided environmental justice claims on behalf of the principal environmental justice community, the Navajo Nation. On the contrary, if these opposition groups continue to try to kill coal on the Navajo Nation, and are not completely disingenuous in their claim that they seek "environmental justice" for Native Americans, then these groups should pay the Nation not to develop its coal resources. NTEC is unaware of any monetary contributions these opposition groups have ever made to Navajo communities or the Navajo government that would even begin to offset the

Response 279.014

The provided information has been added to the introduction portion of section 4.11.

Response 279.015

Thank you for your comment.

COMMENT #279

tremendous economic harm they appear determined to inflict on the Navajo people. Critically, it is not the legal or moral role of predominately non-Navajo special interest groups to convey the Navajo Nation's vital tribal interests to the federal government. This is especially the case where these organizations are clearly pursuing a singular mandate to "kill" Navajo coal, regardless of the catastrophic impacts their actions may have for the Navajo Nation and Navajo people, including destroying jobs and the Navajo Nations' government and infrastructure, ending the vital governmental services that the Navajo Nation provides from its coal based revenues, and ending the tremendous promise of NTEC.

Nor is any private Navajo group the spokesperson for the Navajo Nation. Navajo tribal members, including members of *Diné* CARE,¹¹ have had ample opportunity, through numerous and transparent votes of their elected leaders,¹¹ to voice their concerns with the Project. The Navajo Nation's leaders considered their concerns, and chose to support the Project and move forward with the creation of NTEC and the purchase of the Navajo Mine. It is critical to its government-to-government relationship with the Navajo Nation that the federal government respect the Navajo Nation's decision made pursuant to Navajo statutory law and traditional Navajo democratic processes. Nonetheless, there is also broad local support for the Project. *See, e.g.,* Exhibit 2 (Resolution of Burnham Chapter supporting a decision by OSM allowing for the continuation of FCPP and the Navajo Mine operations); Exhibit 3 (Resolutions of Upper Fruitland, Nenahnezad, San Juan, and Tse Daa K'ään Chapters supporting the Nation's purchase of the Navajo Mine).

V. **BECAUSE OF THE NAVAJO NATION'S SUPPORT FOR THE PROJECT, THERE ARE NO ADVERSE ENVIRONMENTAL JUSTICE IMPACTS FROM THE PREFERRED ALTERNATIVE; CONVERSELY THERE WOULD BE CATASTROPHIC IMPACTS TO THE ENVIRONMENTAL JUSTICE COMMUNITY OF CONCERN FROM THE NO ACTION ALTERNATIVE.**

As discussed above, in the case of impacts to federally recognized Indian tribes, an environmental justice impacts analysis is made at the level of the tribe. The Navajo Nation, the environmental justice community of concern here, owns and has jurisdiction over the affected tribal trust resources, including the Navajo Mine and other leased areas and ROWs, including any affected surface agricultural or recreational lands. The Navajo Nation is overwhelmingly in support of the Project as expressed through its elected leaders. *See supra*. Accordingly, there are no adverse *environmental justice* impacts to the Navajo Nation's resources, including its grazing lands, stock ponds, cultural resources, visual resources, human resources, recreational

279.016

¹¹ In accordance with traditional Navajo democratic processes and Navajo statutory requirements, all Navajo legislation, including the key legislation creating and funding NTEC and approving the purchase of the Navajo Mine, is required to be posted in advance on the Navajo Nation Council's website for public comment, and generally requires approval by several standing committees of the Navajo Nation Council before reaching the full Council for final discussions and a vote.

Response 279.016

The support of the elected leadership of the Navajo Nation is noted. In accordance with E.O 12898, environmental justice must be evaluated in accordance with NEPA guidelines. The position of the Navajo Nation government is presented on pages 4.11-11 and 4.11-12 of the Draft EIS. The following sentence has been added to page 4.11-12: The Navajo Nation has the authority to discontinue operations of the Navajo Mine and also decided to approve Lease Amendment #3 for the FCPP. The Navajo Nation government representatives are elected by tribal members in a democratic process; thereby, decisions of the Navajo Nation government are considered representative of the tribe (the environmental justice community of concern for this project).

COMMENT #279

resources, etc. from the Project, and OSM could clarify this in the Final EIS. *Compare, e.g.* DEIS at 4.11-16, 4.11-17, 4.11-18, 4.11-19, 4.11-20, 4.11-21, 4.11-24. Thus there cannot be adverse *environmental justice* impacts to a single Navajo tribal member (which would be immaterial in any event). *Compare* DEIS at 4.11-22. There also cannot be any adverse *environmental justice* impacts to Navajo agricultural production and the Navajo food supply. *Compare* DEIS at 4.11-26.¹² This could be clarified by OSM in the Final EIS.

In contrast, as to the no-action alternative, OSM could additionally clarify that the impacts to the environmental justice community would not only be “major,” as OSM correctly determines based on economic factors, *see* DEIS at 4.11-38, but *catastrophic*, in a host of other ways. If the no-action alternative is selected by OSM, the environmental justice community of concern will be prevented, by the federal government, from exercising its sovereignty and self-determination as an indigenous people. If the no-action alternative is selected by OSM, the environmental justice community of concern will be prevented, by the federal government, from developing its tribal trust resources reserved to it under the Treaty of 1868. If the no-action alternative is selected by OSM, the environmental justice community of concern will lose, by decision of the federal government, the tremendous promise of NTEC to transition the Navajo Nation into energy and economic security and prosperity.

279.017

279.018

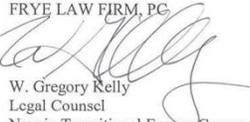
VI. CONCLUSION

OSM has done a thorough job so far in its analysis of the Project in the DEIS and has adequately analyzed a range of reasonable alternatives in accordance with the requirements of NEPA. OSM’s preferred alternative (or alternative D) meets the appropriately defined purpose and need of the Project, including the critical objective of the Project that the Navajo Nation be able to determine its own economic destiny and to have energy security. NTEC believes that the EIS can be made even more thorough with further clarification and analysis as detailed above, particularly in the sections on socioeconomics, environmental justice and Indian Trust Assets.

Thank you for your consideration of NTEC’s comments in finalizing the EIS. If you have any questions, please contact me at (505) 296-9400 or via email at wgk@fryelaw.us.

Sincerely,

FRYE LAW FIRM, PC


W. Gregory Kelly
Legal Counsel
Navajo Transitional Energy Company, LLC

¹² NTEC also understands that there cannot be any breach of coal combustion residue impoundments at FCPP, as no such impoundments exist. *Compare* DEIS at 4.11-23.

Response 279.017

Thank you for your comment. Catastrophic is not a NEPA term. OSMRE is considering all alternatives and will publish its decision in the Record of Decision for the project, anticipated in spring 2015.

Response 279.018

The following language has been added to Section 4.11.8.5: Further, the environmental justice community of concern would be prevented from developing its tribal trust resources reserved to it under the Treaty of 1868.

6/30/2014

DEPARTMENT OF THE INTERIOR Mail - Comments on the draft EIS

COMMENT #280



FCCP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>

Comments on the draft EIS

1 message

Jim Judge [redacted] Thu, Jun 26, 2014 at 2:01 PM

To: FCCPNavajoEnergyEIS@osmre.gov

Please consider the following comments on the draft EIS regarding continued operation of the 4-Corners Power Plant and Navajo Mine operations:

The Four Corners Power Plant lease amendment should not be continued until 2041. Continued operation should be granted but only until 2021.

The Navajo Mine permit should not be renewed, and the Navajo coal mine should not continue to fuel the power plant indefinitely.

The NTEC should not develop a new coal mine area within the existing Navajo mine lease.

<https://mail.google.com/mail/tv/349/u/0/?ui=2&ik=6ac25a16cb&view=pt&search=inbox&th=146d9c5315dad123&siml=146d9c5315dad123>

1/1

Comment Letter 280..... Judge, J.

Response

Thank you for your comment.



COMMENT #281
Office of Surface Mining Reclamation and Enforcement
Four Corners Power Plant and Navajo Mine Energy Project
Environmental Impact Statement (EIS)

Draft EIS Public Meeting Comment Form

Comments must be postmarked by **May 27, 2014**, for consideration in the Final EIS. Comments may be submitted at the open house public meetings (being held April 30 through May 9, 2014), via email to **FCPPNavajoEnergyEIS@osmre.gov** or by postal mail, hand delivery or courier to the address below.

MEETING LOCATION: San Juan College DATE: 7/20/2014

Please Print

IT WOULD APPEAR THAT "ALTERNATIVE A" OF THE DRAFT EIS PROPOSED BY ARIZONA PUBLIC SERVICE IS MOST DESIRABLE. 2000 JOBS AND \$150 MILLION IN PROJECT WILL BE LOST BY FAILURE TO ADOPT THIS ALTERNATIVE AND IS MORE THAN OUR COMMUNITY CAN AFFORD.

281.001

James Henderson

1. NAME: Dr. James Henderson
2. ORGANIZATION (if applicable): Four Corners Economic Development, Inc.
3. EMAIL ADDRESS/PHONE NUMBER: [REDACTED]
4. MAILING ADDRESS: [REDACTED]

Do you wish to withhold your name or address from public review or from disclosure under the Freedom of Information Act (FOIA)? NO YES

Please give this completed form to one of the project team representatives or mail by **May 27, 2014**, to:

Mr. Marcelo Calle
Office of Surface Mining Reclamation & Enforcement, Western Region Office
1999 Broadway, Suite 3320
Denver, CO 80202-3050

Comments may be emailed to **FCPPNavajoEnergyEIS@osmre.gov**.

Comment Letter 281 Henderson, J.
Four Corners Economic Development, Inc.

Response 281.001

Thank you for your comment. A complete discussion of Socioeconomic impacts of the project is provided in Section 4.10 of the Draft EIS.

6/30/2014 DEPARTMENT OF THE INTERIOR Mail - FW: Four Corners Power Plant Draft Environmental Impact Statement Comments Needed by June 27, 2014

COMMENT #282



FCCP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>

**FW: Four Corners Power Plant Draft Environmental Impact Statement
Comments Needed by June 27, 2014**

1 message

JAN TUCKER [redacted] Thu, Jun 26, 2014 at 4:34 PM
To: "FCCPNavajoEnergyEIS@osmre.gov" <fcpnavajoenergyeis@osmre.gov>

I wholeheartedly support Arizona Public Service and its endeavor to be a vital member of our county for 25 more years. They do absolutely more community service than just about any other business. We do NOT want to lose them!

Janet P. Tucker
Vice-president, San Juan Title

[redacted]
[redacted]

You may certainly use my name.

Please feel free to contact me should you need anymore information.

<https://mail.google.com/mail/tv/349/u/0/?ui=2&ik=6ac25a16cb&view=pt&search=inbox&th=146ds50b0acd#4c1&siml=146ds50b0acd#4c1>

1/1

Comment Letter 282..... Tucker, J.

Response

Thank you for your comment.



COMMENT #283
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

June 26, 2014

Marcelo Calle
Office of Surface Mining
Western Region
1999 Broadway, Suite 3320
Denver, Colorado 80202-5733

Harrilene Yazzi
Bureau of Indian Affairs
Navajo Regional Office
301 West Hill Street
P.O. Box 1060
Gallup, New Mexico 87305

Subject: EPA Comments on the Four Corners Power Plant and Navajo Mine Energy Project Draft Environmental Impact Statement, Navajo Nation, San Juan County, New Mexico (CEQ # 20140097)

Dear Mr. Calle:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced 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. Our detailed comments are enclosed.

The Draft Environmental Impact Statement (DEIS) assesses the impacts from the continued operation of the Four Corners Power Plant (FCPP), a coal-fired power plant with a generating capacity of up to 1,500 megawatts (2 units), should the Bureau of Indian Affairs (BIA) approve Arizona Public Service Company's proposed lease amendment and application for right-of-way renewals for operation through 2041. The project also involves continued and extended surface coal mining at the Navajo Mine, should the Office of Surface Mining (OSM) renew the Navajo Mine's existing Surface Mining Control and Reclamation Act (SMCRA) permit for 5 years and approve an application for a new SMCRA permit for the Pinabete Permit Area. Lastly, the project proposes right-of-way renewals by BIA for portions of four transmission lines.

EPA is a cooperating agency for the proposed project and provided comments on the Preliminary DEIS to the OSM and BIA on February 6, 2014. We found the DEIS to be largely responsive to our comments, and appreciate the changes made to the document to address them. Comments that were not fully addressed are reiterated in the attached Detailed Comments. Based on our review of the DEIS, we have rated the Preferred Alternative A as *Environmental Concerns – Insufficient Information* (EC-2) (see enclosed "Summary of Rating Definitions"). Our concerns regard the existing contamination of groundwater from coal combustion residue (CCR) disposal and the need for enforceable commitments regarding future CCR management, monitoring and remediation. We also have concerns regarding the

283.001

**Comment Letter 283..... Vitulano, K.
USEPA**

Response 283.001

The concerns noted by the EPA are addressed in specific, detailed comments that their comment letter 243 provided, see responses 243.001 through 243.015. We also appreciate the opinions regarding the sufficiency of the draft EIS; we believe that responses to these concerns provides the EPA with sufficient information for their NPDES permit actions, to be informed in part by this EIS.

COMMENT #283

assessment of cumulative health impacts from continued operation of the project, given the severely compromised existing public health environment.

Pollutants from the disposal of CCR have contaminated groundwater at the FCPP. The DEIS includes a number of voluntary measures to be taken by Arizona Public Service (APS) regarding operations, design, groundwater monitoring, corrective action, and closure and post-closure of CCR disposal facilities at the FCPP. Because future regulations by EPA regarding CCR management may not apply on Tribal lands, we strongly recommend that the voluntary measures be incorporated as conditions of approval by the BIA in the event it approves APS's proposed lease amendment and application for right-of-way renewals. Groundwater contamination from past disposal of CCR in Navajo Mine has also occurred and we recommend monitoring of groundwater at the Navajo Mine to confirm the DEIS conclusions that constituents of concern would be attenuated as groundwater travels towards the San Juan River and the Chaco Rivers.

The DEIS concludes that that cumulative impacts to public health from both the FCPP and the Mine would be minor. Emissions of some pollutants from the power plant will be reduced as a result of EPA's Federal Implementation Plan - Best Available Retrofit Technology, and these reductions are expected to have a positive impact on public health. Nevertheless, as disclosed in the DEIS, health outcomes for Navajo, in terms of life expectancy and mortality rates, are worse than for the general population in San Juan County, partly due to healthcare disparities. The cumulative health burden also includes the impacts from in-home burning of coal that is provided by the Navajo Mine to local tribal members free or at low-cost. This coal is often burned in improperly-vented stoves not designed to burn coal. Because many Navajo do not have access, or affordable access, to electricity, the provision of free or cheap coal by the project directly contributes to the cumulative health burden from indoor exposure to coal smoke. We recommend that the Final EIS incorporate the severely compromised existing public health environment into its cumulative health impacts assessment and include commitments to mitigation for the project's contribution to the ongoing environmental justice and cumulative health impacts. Please see the enclosed Detailed Comments for our recommendations regarding mitigation.

EPA appreciates the opportunity to review this DEIS and looks forward to continued coordination with OSM, BIA, and the other cooperating agencies during the NEPA process. When the Final EIS is released for public review, 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 contact Karen Vitulano, the lead reviewer for this project, at 415-947-4178 or vitulano.karen@epa.gov.

Sincerely,



Kathleen Martyn Goforth, Manager
Environmental Review Section

Enclosure: Summary of EPA Rating Definitions
EPA's Detailed Comments

COMMENT #284



BASELOAD GENERATION • POB002
P.O. Box 52025
Phoenix, AZ 85072-2025
(602) 236-5385
Fax (602) 236-3809
Jim.Pratt@srpnet.com

JIM PRATT
Senior Director

FOUR CORNERS-NAVAJO MINE DEIS COMMENTS

June 26, 2014

Marcelo Calle
OSMRE Western Region
1999 Broadway, Suite 3320
Denver, CO 80202-3050

Via Email Only: fcppnavajoenergyeis@osmre.gov

Re: Comments on the Four Corners-Navajo Mine Draft Environmental Impact Statement

Dear Mr. Calle:

On March 28, 2014, the Office of Surface Mining Reclamation and Enforcement (OSMRE) issued its draft Environmental Impact Statement (DEIS) on the project known as Four Corners Power Plant (FCPP) and Navajo Mine Energy Project. The OSMRE has solicited comments from the public on the DEIS.

The Salt River Project Agricultural Improvement and Power District (SRP) operates one of the nation's largest public power systems, providing electrical power to about 946,000 customers in the Phoenix area, and in certain rural areas of central Arizona. Most of SRP's power is generated from natural gas, nuclear and coal-fired power plants in Arizona, Colorado and New Mexico, which are either operated by SRP or in which SRP has an ownership interest. SRP holds a 10 percent ownership interest in the FCPP. SRP has reviewed the DEIS and, based on consultation with Arizona Public Service the FCPP operator, recommends that OSMRE and the cooperating agencies select and implement Alternative D – Alternate Ash Disposal Area Configuration. We submit the following specific comments for your consideration.

Comments on Issues of Concern to SRP and Proposed Revisions

Executive Summary, p. ES-ii - At least the first time the Salt River Project is referred to, the full name should be used – Salt River Project Agricultural Improvement and Power District followed by "(Salt River Project)," which is used subsequently in the DEIS.

Project Background, p. 1-2 - In addition to doing so in the Executive Summary, SRP recommends that OSMRE use the full name of Salt River Project Agricultural Improvement and Power District the first time it is referred to, followed by "Salt River Project."

Associated Transmission Lines Operations, p. 2-31 - The first sentence on the page should be revised to reflect that SCE no longer uses any of the capacity on the 500-kV line to Moenkopi (and there is just one line, not multiple lines).

The fenced switchyard is described as occupying 20 acres within the 212 acre ROW. Research by SRP indicates the fenced switchyard is 25 acres.

284.001

Comment Letter 284.....Pratt, J.
SRP

Response 284.001

Thank you for your comments. OSMRE is considering all alternatives and will publish its decision in the Record of Decision for the project, anticipated in spring 2015. With regard to the technical revisions, the Final EIS has been revised accordingly, including revision of the cumulative effects analysis, as appropriate.

COMMENT #284

Marcelo Calle
June 26, 2014
Page 2

Alternatives Carried Forward for Detailed Analysis, p. 3-33 - The second and last paragraphs of this section of the DEIS state:

Under this alternative, BIA would not renew the 323 federal grants of ROW for the 500 kV line from the Four Corners switchyard to the Moenkopi Switchyard and then to the reservation boundary, or the two 345 kV lines from the switchyard at Four Corners to the Navajo Nation reservation boundary. Further, BIA would not renew the 323 ROW grant for the Moenkopi Switchyard, access road, and 12 kV power line. Without renewed ROW for these transmission lines, APS would no longer be authorized to locate and operate the transmission system on tribal lands.

...

Failure to renew the ROW for the Moenkopi Switchyard would potentially affect other existing transmission facilities that use the switchyard. This transmission system is critical to maintaining the reliability of the regional grid, and ceasing to utilize this infrastructure would undermine regional power reliability. Therefore, the operation of this switchyard would be critical regardless of whether FCPP continues to operate. It is possible that if the currently pending lease renewal request for the FCPP is denied, then APS or another company would seek to obtain a lease or ROW grant for the FCPP switchyard, the Moenkopi Switchyard and the transmission lines. Whether such a request would be approved is speculative at this time.

The Navajo Generating Station (NGS) participants¹ and Navajo Nation have agreed to the terms of a proposed amendment to the existing lease that covers the NGS and related facilities, including the Moenkopi Switchyard and the transmission line from there to the Reservation boundary. Also, SRP, on behalf of the NGS participants is applying to the BIA for 323 grants for these facilities to be effective through 12/22/2044. The approvals of the lease and 323 grants for these facilities is part of the NEPA process for NGS-KMC Project currently in scoping. We suggest adding this additional information to the Final EIS for the FCPP.

284.002

Deposition Modeling Results, pp 4.1-90 to 91 - Near the bottom of p. 4.1.90, the National Trends Network section contains the following sentences:

Specifically, with respect to sulfate and nitrate deposition in the region, implementation of BART or approved alternatives would reduce nitrate precursor (NO_x) emissions by approximately 87 percent at FCPP, 62 percent at SJGS, and 84 percent at NGS. Similarly, BART or approved alternatives would reduce sulfate precursor (SO₂) emissions by approximately 18 percent at FCPP and 67 percent at SJGS. However, NGS is currently emitting approximately 90 percent less SO₂ than in the past due to installation and operation of FGD scrubbers and no further reductions are planned. Thus, due to the potential for large decreases in future mass emissions of SO₂ and NO_x from power plants in the region, mass deposition rates of sulfates and nitrates in the region could nominally

¹ The NGS Participants include Arizona Public Service, Los Angeles Department of Water and Power, Nevada Energy, Salt River Project, Tucson Electric Power, and the United States.

Response 284.002

Thank you for your comment. Information regarding the Section 323 grants has been added to Table 4.18-1 as follows:

“The NGS applicants have also agreed to terms with the Navajo Nation to amend the existing NGS lease to include the Moenkopi switchyard (not substation) and a transmission line running from the switchyard to the Reservation boundary. The NGS applicants have filed Section 323 ROW grant requests to BIA for review. If the approvals are not granted, the power plant would shut down in 2019 and the Section 323 grants would not be authorized.”

Marcelo Calle
June 26, 2014
Page 3

COMMENT #284

decrease by several percent with respect to the past (EPA 2012h, 2012i, 2013g; PNM 2013; NGS 2013). (Emphasis added)

Based on <http://www.epa.gov/region9/air/navajo/pdfs/ngs-supp-factsheet-sept25.pdf>, which is EPA's most recent fact sheet for NGS, we suggest the first highlighted phrase above be changed to read "over 84 percent." Also, we suggest changing the second highlighted phrase to "more than 95 percent" based on <http://www.ngspower.com/facts.aspx>. Finally, "NGS 2013" is listed as a reference for the sentences but is not listed in the reference section. We suggest that it be replaced with references to the documents referred to in the web sites listed above.

284.003

Projects Considered in the Cumulative Effects Analysis, p. 4.18-4 - The description of NGS is for full 2,250 MW operation from 2020 through 2044. EPA is expected to issue a final NGS BART determination in the summer of 2014 prior to finalization of the FCPP EIS. These entries should be revised in the FEIS to reflect the range of NGS operations provided for under the EPA's final rule. SRP anticipates EPA will adopt as an alternative for BART the Technical Work Group (TWG) Agreement, which can be found at: <http://www.ngspower.com/twg.aspx>. The EPA's supplemental BART proposal incorporating the TWG Agreement can be found at: http://www.ngspower.com/pdfs/TWGN/S_Supplemental_Proposal_prepublication.pdf

Unless EPA issues a final rule that does not contain the TWG Agreement provisions, we suggest adding the following text to the NGS Project Description:

To comply with EPA's BART determination, the NGS participants would operate under one of two overall alternatives depending on the disposition of ownership in NGS:

284.004

Alternative A

- Cease coal generation on one unit or reduce generation by January 1, 2020.
- Install SCR or an equivalent technology by December 31, 2030 on both remaining units.

Alternative B

- Reduce NOx emissions by an amount equivalent to the shutdown of one unit from 2020 to 2030.
- Submit an annual plan that would describe the measures to be used to achieve greater NOx reductions than EPA's proposed BART rule. The reduced NOx emissions could be achieved by various combinations of measures ranging from curtailment of output from three units to full operation of three units with installation of SCRs prior to 2030.

Also, SRP should be spelled out as Salt River Project since the acronym is not used elsewhere.

Projects Considered in the Cumulative Effects Analysis, p. 4.18-17 - The Project Description for the Kayenta Mining Complex (KMC) should be modified to reflect the information in the preceding comment regarding the TWG Agreement. Coal production will be reduced to about 5.5 million tons per year if NGS generation is reduced to the equivalent of two units.

284.005

Response 284.003

Air Quality data incorporated into the EIS were accumulated and analyzed with data through 2011; therefore, some data identified in the comment are not included. Because the analyses were performed on 12 years of representative performance data, the EIS will not be updated to include more recent data.

Response 284.004

Thank you for your comment. The description of Navajo Generating Station remains as described in the Draft EIS. Alternative operation scenarios for the Navajo Generating Station are outside the scope of the cumulative impact analysis. The abbreviation for SRP has been corrected.

Response 284.005

With regard to Black Mesa Mine and Mohave, the table has been revised to indicate that the station is demolished. The table already indicates that the project is not considered in the cumulative effects analysis. The orange lines extending from the Kayenta Mine Complex have been removed from Figure 4.18-1 and the legend for entry #28 has been changed to "Kayenta Mine Complex"

COMMENT #284

Marcelo Calle
June 26, 2014
Page 4

Projects Considered in the Cumulative Effects Analysis, p. 4.18-20 - The KMC entry regarding the Black Mesa Mine and Mohave Generating Station should be deleted. Alternatively, it could be completely revised to reflect that the Mohave Generating Station has been demolished and the coal slurry pipeline is being abandoned.

Figure 4.18-1 Project Boundaries Map, p. 4.18-33 - There are several orange lines (mining-related per the legend) leading from the Kayenta Mine (#28) on the map. Presumably, these reflect the Black Mesa slurry and proposed C-aquifer water supply lines. If so, they should be removed from the map because the slurry line is being abandoned and the proposed water supply lines are no longer needed. The legend entry for #28 should read "Kayenta Mine Complex."

Hazardous and Solid Wastes, pp. 4.18-52 to 53 - The last sentence concludes that there are moderate to major cumulative impacts from ash disposal. The analysis is not accurate – first, the KMC mine does not involve ash disposal and is not within the same groundwater basin as the FCPP. Also, NGS is not within the same groundwater basin as the FCPP. In addition, given the discussion of groundwater hydrology in the area in Sections 4.5 and 4.18.3.5, there is no reason to believe that possible leaching from the San Juan Generating Station ash disposal would have a cumulative effect with potential leaching from FCPP ash disposal.

SRP appreciates the opportunity to present these comments in response to the DEIS for the FCPP and Navajo Mine Energy Project. If you have any questions or need further information regarding any of the matters discussed in these comments, please call Chuck Paradzick at (602) 236-2724.

Sincerely,



Jim Pratt,

Senior Director Baseload Generation

Response 284.006

The text has been revised as follows: Only one of the three coal-fired power plants in the region, San Juan Generating Station, is of similar capacity as the FCPP and is located within the same groundwater basin. Therefore, it is anticipated that a similar volume of CCR would be generated at this plant and require disposal or impoundment. In contrast, Escalante Generating Station only produces 250 MW and is expected to produce a much smaller volume of CCR; neither Escalante Generating Station nor Navajo Generating Station are located within the San Juan River groundwater basin.

284.006

6/30/2014

DEPARTMENT OF THE INTERIOR Mail - Comments Four Corners Power Plant Navajo Mine Energy Project Draft EIS
COMMENT #285



FCCPP-Navajo-Energy-EIS, OSM <osm-fccpp-navajo-energy-eis@osmre.gov>

Comments Four Corners Power Plant Navajo Mine Energy Project Draft EIS

1 message

Vincent Yazzie [REDACTED] Thu, Jun 26, 2014 at 2:42 PM
Reply-To: Vincent Yazzie [REDACTED]
To: "FCCPPNavajoEnergyEIS@osmre.gov" <FCCPPNavajoEnergyEIS@osmre.gov>

June 26, 2014

Marcelo Calle
Office of Surface Mining Reclamation and Enforcement
Western Region Office
1999 Broadway, Suite 3320
Denver, CO 80202-3050
FCCPPNavajoEnergyEIS@osmre.gov

Vincent H. Yazzie
[REDACTED]
[REDACTED]

Dear Mr. Calle,

Four Corners Power Plant Navajo Mine Energy Project
Draft EIS says solar energy is not feasible, but Lucky
Corridor Transmission Project will deliver renewable
energy via Four Corners to Western Markets.

[http://www.wecc.biz/planning/
transmissionexpansion/transmission/Lists/Project%](http://www.wecc.biz/planning/transmissionexpansion/transmission/Lists/Project%20)

<https://mail.google.com/mail/u/0/?ui=2&ik=6ac25a15cb&view=pt&search=inbox&th=146d9a4a3144c1d8&siml=146d9a4a3144c1d8>

1/7

Comment Letter 285..... Yazzie, V.

Response 285.001

Please see Master Response #2, Renewable Energy Alternatives

285.001

6/30/2014 DEPARTMENT OF THE INTERIOR Mail - Comments Four Corners Power Plant/Navajo Mine Energy Project Draft EIS

COMMENT #285

20Portal/DisplayForm.aspx?ID=55&Source=http://www.wecc.biz/Planning/TransmissionExpansion/Transmission/Pages/default.aspx

Solar is feasible and the study to say solar was not feasible was not correct.

The Lucky Corridor



Need to correct EIS to say solar is feasible as an alternative.

Sincerely,

Vincent H. Yazzie

<https://mail.google.com/mail/u/0/?ui=2&ik=6ac25a15cb&view=pt&search=inbox&th=14699a4a3144c1d8&siml=1458e4a3144c1d>

2/7



COMMENT #286
Office of Surface Mining Reclamation and Enforcement
Four Corners Power Plant and Navajo Mine Energy Project
Environmental Impact Statement (EIS)

Draft EIS Public Meeting Comment Form

Comments must be postmarked by **May 27, 2014**, for consideration in the Final EIS. Comments may be submitted at the open house public meetings (being held April 30 through May 9, 2014), via email to **FCPPNavajoEnergyEIS@osmre.gov** or by postal mail, hand delivery or courier to the address below.

MEETING LOCATION: _____ DATE: **6/26/14**

Please Print

I believe this is a great idea and will be very beneficial to our community!

1. NAME: Ward Salveson
2. ORGANIZATION (if applicable): PESCO
3. EMAIL ADDRESS/PHONE NUMBER: [REDACTED]
4. MAILING ADDRESS: [REDACTED]

Do you wish to withhold your name or address from public review or from disclosure under the Freedom of Information Act (FOIA)? NO YES

Please give this completed form to one of the project team representatives or mail by **May 27, 2014**, to:
Mr. Marcelo Calle
Office of Surface Mining Reclamation & Enforcement, Western Region Office
1999 Broadway, Suite 3320
Denver, CO 80202-3050
Comments may be emailed to **FCPPNavajoEnergyEIS@osmre.gov**.

Comment Letter 286.....Salveson, W.

Response

Thank you for your comment.

COMMENT #287

May 2, 2014
Comment by: Watson Bradley
From: Farmington/Burnham, New Mexico

MR. WATSON BRADLEY: I have to say that economically I think this supports the community by supporting employees and the families. Also the community by way -- I work out at the mines and the way I see it is that they help the community by water, potable water. Our potable water system is taken in from the city, from Farmington, and then it's put -- there are big tanks out there and then local people have access to it. So the way I see that is how it helps the community. Also they help out with the coal, the community areas. In fact, all over the Four Corners area, I see people coming in to get coal for their homes, families and relatives. It supports local families by way of -- in my case, like I sent my kids off to school, college. They're done with school now and they're self-supporting and they moved away. So they did good. And it helped them a lot and helped my family.

And also it seems like the employees also have extended families and they help out too in the area and it's not just their own families, but they also have relatives that they help out too. So I see that also. I think economically the mine, the power plant, also helps out the county-wide and also with the Navajo Nation as a whole and also the San Juan County, the city of Aztec, Farmington, Bloomfield, Shiprock, Durango, and Cortez and those areas too.

We get a lot of, say, small companies come out to the power plants and out to the mines and they help support and run the whole area. So in a way it helps them in their business too. So I see that as economically good for the whole system.

Environmentally, I think Four Corners Power Plant could do a lot better with their ash disposal. Right now, I have big concerns with where they deposit their ash. It's all on the west side of the power plant and it's just big old mounds, and then come spring we have our high winds and you just see a big old gray plumb of ash going down into the valley.

Comment Letter 287..... Watson, B.

Response 287.001

Thank you for your comment. A complete discussion of socioeconomics is provided in Section 4.10, Socioeconomics.

Response 287.002

The majority of ash disposal at the FCPP over the life of the project will be dry ash disposal—the dry fly ash disposal area configurations in both the Alternative D and the Proposed Action involve the disposal of dry ash. The EIS provides information regarding FCPP dust control procedures: “During placement of CCR, compaction control, added moisture, and slope control are used, as well as dust suppressant and periodic fabric covering of slopes...The fly ash has high moisture content when transported and unloaded by the haul trucks. Over time, it dries into a cement-like solid. Surfactant is applied regularly to reduce the amount of fugitive dust that can become airborne during triggering wind events.” No change was made to the EIS based on this comment.

COMMENT #287

I see that there is weather station set up here, but some places they're not set in the right places and not exactly in the downwind of the power plants or the ash. And sometimes I can't even see the smoke stack of the power plant because the ash is blowing so high. I think they could do a better job as far as helping minimize a lot of that ash blowing in the wind. That's one of my big concerns because I didn't say this, but I work there for the mine too. I work at the mine as an electrician in the north shop by Morgan Lake and I'm downwind of a lot of that blowing ash. And when I say you can't see the smoke stacks because of the ash blowing, that is me actually looking at it. My eyes don't lie.

287.003

As far as water, I don't know what they will do with the water situation as far as after disturbance occurs. There is a lot of areas around here that people depend on, say, subsurface waterflows. And when they mine through it, what is going to happen? Right now the mine is coming south from Area III and they're cutting across the wash. What kind of disturbance is going to happen? After reclamation is done, are they going to -- I don't know, what are they going to do with the water, is what I want to say. That's one of the questions I have. That's about all I have really.
(End of comment.)

287.004

Response 287.003

Thank you for your comment. The existing weather stations do not monitor dust that may come from the ash disposal areas, or any source of fugitive emissions. The EIS addresses applicant proposed measures for limiting the amount of dust that escapes from the DFADAs. See comment 287.002 for more detail on proposed measures to decrease fugitive dust from the proposed DFADAs. No change was made to the EIS based on this comment.

Response 287.004

Thank you for your comment. Water resources and potential effects to hydrology are discussed in Section 4.5. As stated on page 4.5-10, well yields in the alluvium within the Pinabete permit area are limited. Similarly, groundwater production and yield in the Fruitland Formation and Pictured Cliffs Sandstone, and exploratory drilling has not produced measurable groundwater.

6/30/2014

DEPARTMENT OF THE INTERIOR Mail - Continued Operation of the FCPP and the Navajo Mine
COMMENT #288



FCPP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>

Continued Operation of the FCPP and the Navajo Mine

1 message

Larry Bryant [REDACTED] Sun, Jun 29, 2014 at 4:10 PM
Reply-To: Larry Bryant [REDACTED]
To: "FCPPNavajoEnergyEIS@osmre.gov" <FCPPNavajoEnergyEIS@osmre.gov>

To Whom It May Concern,

I fully support Alternative A - Proposed Action that is being considered by the DEIS. My support is due to the tremendous reduction of pollutants as a result of the shutting down of Units 1, 2, and 3, plus installation of pollution control upgrades on Units 4 and 5.

There is also a huge economic impact to the Navajo Nation and the surrounding area that must be considered and preserved.

288.001

Respectfully,

Larry Bryant
Just a concerned citizen

<https://mail.google.com/mail/b/C49u02u1-26ik-6ac25a15cb/view-pt#search=inbox&th=1466aac3d251617&siml=1466aac3d251617>

1/1

Comment Letter 288..... Bryant, L.

Response 288.001

Thank you for your comment. A complete discussion of Socioeconomics is provided in Section 4.10 of the Draft EIS.

6/30/2014

DEPARTMENT OF THE INTERIOR Mail - Navajo Mine Comment
COMMENT #289



FCPP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>

Navajo Mine Comment

1 message

Angela Meck [REDACTED]
To: FCPPNavajoEnergyEIS@osmre.gov

Fri, Jun 27, 2014 at 5:15 PM

To whom it may concern,

I completely support the expansion of the Navajo Mine. The mine and it's employees support the local community and make the area a better place to live. The reclamation standards of the Navajo Mine far surpass the national standards. The land looks better after mining than before mining. The people at Navajo truly take pride in their work to mine the resources safely and efficiently and then restore the land. **289.001**

Thanks

<https://mail.google.com/mail/u/0/?ui=2&ik=6ac25a15cb&view=pt&search=inbox&th=146df9dc5bc015b&siml=146df9dc5bc015b>

1/1

Comment Letter 289..... Mack, A.

Response 289.001

Thank you for your comment. A complete discussion of Socioeconomics is provided in Section 4.10 of the Draft EIS.



COMMENT #290
Office of Surface Mining Reclamation and Enforcement
Four Corners Power Plant and Navajo Mine Energy Project
Environmental Impact Statement (EIS)

Draft EIS Public Meeting Comment Form

Comments must be postmarked by **May 27, 2014**, for consideration in the Final EIS. Comments may be submitted at the open house public meetings (being held April 30 through May 9, 2014), via email to **FCPPNavajoEnergyEIS@osmre.gov** or by postal mail, hand delivery or courier to the address below.

MEETING LOCATION: San Juan College, Farmington DATE: June 20, 2014

Please Print

FCI Constructors is a local Commercial General Contractor and its Employees
Are from the local San Juan County and surrounding Four Corners area
We strongly agree with and encourage Alternative A as proposed by APS
and BHP Billiton, by choosing this option it would promote growth to
San Juan county and the surrounding area, as well as save jobs, the
environment, and ultimately save all parties money.

290.001

- 1. NAME: Brian Cornford
- 2. ORGANIZATION (if applicable): FCI Constructors, Inc.
- 3. EMAIL ADDRESS/PHONE NUMBER: [REDACTED]
- 4. MAILING ADDRESS: [REDACTED]

Do you wish to withhold your name or address from public review or from disclosure under the Freedom of Information Act (FOIA)? NO YES

Please give this completed form to one of the project team representatives or mail by **May 27, 2014**, to:
Mr. Marcelo Calle
Office of Surface Mining Reclamation & Enforcement, Western Region Office
1999 Broadway, Suite 3320
Denver, CO 80202-3050
Comments may be emailed to **FCPPNavajoEnergyEIS@osmre.gov**.

**Comment Letter 290..... Comford, B.
FCI Constructors, Inc.**

Response 290.001

Thank you for your comment. OSMRE is considering all of the alternatives that were analyzed in the Draft EIS and will inform the public of its decision via the Record of Decision, anticipated in the spring of 2015.

6/30/2014

DEPARTMENT OF THE INTERIOR Mail - Approve Alternative A
COMMENT #291



FCCP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>

Approve Alternative A

1 message

Cory Darrell [REDACTED]

Fri, Jun 27, 2014 at 10:33 AM

To: FCCPNavajoEnergyEIS@osmre.gov

To whom it may concern:

I am asking for your approval of Alternative A, it is the right thing to do.

Thanks

Cory Darrell

Comment Letter 291Darrell, C.

Response

Thank you for your comment.

<https://mail.google.com/mail/u/0/?ui=2&ik=5ac25a16cb3&view=pt&search=inbox&th=146de2f6bf974dc28&siml=146de2f6bf974dc2>

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6/30/2014

DEPARTMENT OF THE INTERIOR Mail - Comments on FCPP EIS
COMMENT #292



FCPP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>

Comments on FCPP EIS

1 message

Jimbo Buickerood [REDACTED]
To: FCPPNavajoEnergyEIS@osmre.gov

Fri, Jun 27, 2014 at 3:38 PM

Dear NEPA Review Team,

Despite the seemingly enormous energy and finances put into this EIS it is sorely deficient on many points and it is very evident that contrary to law the EIS did not address all the salient issues delineated by the public in the scoping process. The EIS is sufficiently deficient that it should be scrapped and rewritten.

292.001

The EIS has erroneously and illegally narrowed it's scope to power generation and transmission produced only by coal - the EIS should have addressed ALL possible electrical power generation possibilities because that is indeed the issue at hand that is most important to the tribes, other residents of the Four Corners, the entire American populace, and indeed the planetary population considering the mal-effects of coal generated electricity.

The EIS's Biological Assessment is completely unacceptable and represents a document written without key interests/authors at the table. The results of this approach are akin to not writing a BA as part of the EIS.

292.002

The effects of carbon pollution, a position to most species of the planet, is not adequately addressed in the EIS. A realistic and comprehensive analysis of the carbon pollution is necessary and required and the EIS is not valid until this issue is adequately addressed.

Residents of the aware are "tired" of haze, air pollutants, climate damage and other map-affects from coal-fired power plants. We want to be able to eat the fish in our rivers and lakes with a healthy confidence, and we will be able to do some should an adequate EIS be prepared that shows in ENTIRETY the negative effects of the FCPP and associated facilities.

292.003

Sincerely, Jimbo Buickerood

Jimbo Buickerood
[REDACTED]

<https://mail.google.com/mail/u/0/?ui=2&ik=6ac25a15cb&view=pt&search=inbox&th=146df45ea1eb702&siml=146df45ea1eb702>

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Comment Letter 292..... Buickerood, J.

Response 292.001

Please see Master Response #1, Deficient Analysis and Master Response #2, Renewable Energy Alternatives.

Response 292.002

Please see Master Response #1, Deficient Analysis and Master Response #5 Climate Change. With specific regard to the biological assessment, this evaluation was conducted in close coordination with the USFWS as part of the Section 7 consultation process for the project.

Response 292.003

Please see Master Response #1, Deficient Analysis.

6/30/2014

DEPARTMENT OF THE INTERIOR Mail - Navajo Mine Comment

COMMENT #293



FCPP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>

Navajo Mine Comment

1 message

Josiah Meck [REDACTED]
To: FCPPNavajoEnergyEIS@osmre.gov

Fri, Jun 27, 2014 at 6:03 PM

I am in support of the Navajo Mine expansion. I think it will support the community and the Tribe, and help other industries grow.

Comment Letter 293.....Meck, J.

Response

Thank you for your comment.

<https://mail.google.com/mail/u/0/?ui=2&ik=5ac25a16cb3&view=pt&search=inbox&th=146d1c892e29de79&siml=146d1c892e29de79>

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6/30/2014

DEPARTMENT OF THE INTERIOR Mail - Draft EIS Comments
COMMENT #294



FCCP-Navajo-Energy-EIS, OSM <osm-fccp-navajo-energy-eis@osmre.gov>

Draft EIS Comments

1 message

Kasra Manavi [REDACTED]
To: FCCPNavajoEnergyEIS@osmre.gov

Fri, Jun 27, 2014 at 5:18 PM

Hello Office of Surface Mining Reclamation and Enforcement,

I have a few comments on the Four Corners Power Plant and Navajo Mine Energy Project EIS Draft.

1. After reviewing the material, I felt there could be better break downs or highlights made in the EIS. The document itself seems very daunting to read, perhaps a condensed version should be made with the major features and have supplemental materials with the rest of the information/data/graphs/etc. 294.001

2. Short term and long term gains and losses generally focus on the socioeconomic factors of the project. Discussion of the No Action alternative seems a little inflated since the focus is only the mine, making me feel the topic is not thoroughly discussed. 294.002

Perhaps this may not be considered part of the job for OSMRE, but some other organization like Navajo Transitional Energy Company (NTEC). From the reading, I assume the EIS is not intended to focus on other resources for energy production, but never this less there should be some information/discussion about the No Action alternative.

3. As an energy consumer and Navajo tribe member, I feel the Navajo nation has put itself in the position of becoming depended on this mine and have been pushed into a corner due to socioeconomic constraints. If our energy policy was well rounded perhaps we would not be in this situation.

Locking this situation for another quarter century does not appeal to me. During my entire life, talk about the coal mines, pollution and the environment have always been an issue but no one seems to have addressed them. Here we are further extending the lease without an in depth discussion of alternatives. Perhaps more interaction with industries outside of the coal/oil/gas realm would be a start.

In the end, we need to progress as a society and understand that the cost function of life is not just based on dollars and cents, but also includes considerations of human health and happiness as well as nature and the environment.

Thank you for letting me make these comments. I hope to further include myself in the process as much as I can.

Best,

—
Kasra Manavi

<https://mail.google.com/mail/u/0/?ui=2&ik=6ac25a15cb&view=pt&search=inbox&th=146df95d1014b6a&siml=146df95d1014b6a>

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Comment Letter 294..... Manavi, K.

Response 294.001

The Executive Summary is a brief summary of the important components of the Draft EIS, and is meant to be able to read and understood as a stand-alone document. As such, all information in the ES is copied verbatim from sections in the Draft EIS. In addition, a summary video was produced in English, Navajo, and Hopi to convey the information in the EIS to non-English speakers, or to those wishing an alternate to reading the document.

Response 294.002

Per CEQ regulations for implementing NEPA, all alternatives must be analyzed to the same level of detail, as conducted in the draft EIS. The full scope of each alternative, including analyzing the shutdown of FCCP as part of the No Action alternative, was included in the Draft EIS. All alternatives, including the No Action, were analyzed for local and regional economic effects in equal detail. When compared to the other action alternatives, the No Action alternative is unique in the sense that it involves the closure, not continued operations, of the existing facilities (i.e. FCCP and Navajo Mine). As discussed in Section 4.10, the No Action alternative represents the only alternative that could result in a significant adverse economic effect vis a vis the loss of approximately 2,070 direct/indirect jobs and revenues (i.e. taxes, royalties) to the Navajo Nation. These losses would have a ripple effect throughout the local and regional economies, as modeled and discussed in Section 4.10.

6/30/2014

DEPARTMENT OF THE INTERIOR Mail - Public comment
COMMENT #295



FCCP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>

Public comment

1 message

Marjorie Connolly [REDACTED]

Fri, Jun 27, 2014 at 1:09 PM

To: "FCCPNavajoEnergyEIS@osmre.gov" <FCCPNavajoEnergyEIS@osmre.gov>

To whom it may concern,

I am opposed to the proposed project. I live and work in the area. Our skies, water, and people are polluted from coal emissions. I attended the public session in Cortez and talked with the representatives. I do not think this project is a benefit to our community.

Respectfully,

Margie Connolly

<https://mail.google.com/mail/u/0/?ui=2&ik=5ac25a16cb&view=pt&search=inbox&th=146d6bc20aa73d4&siml=146d6bc20aa73d4>

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Comment Letter 295..... Connolly, M.

Response

Thank you for your comment

COMMENT #296



Navajo Transitional Energy Company, LLC

June 27, 2014

Mr. Marcelo Calle
Office of Surface Mining Reclamation and Enforcement
U.S. Department of the Interior
1999 Broadway, Suite 3320
Denver, CO 80202-3050



Re: Comments of BHP Billiton Mine Management Company on the Four Corners Power Plant and Navajo Mine Energy Project Draft Environmental Impact Statement

Dear Mr. Calle:

BHP Billiton Mine Management Company (MMCo) appreciates the opportunity to comment on the Four Corners Power Plant and Navajo Mine Energy Project Draft Environmental Impact Statement (DEIS).¹ The DEIS, as its name demonstrates, is a draft of the Office of Surface Mining Reclamation and Enforcement (OSMRE) and the cooperating agencies' analysis and its purpose is to elicit comments and suggestions, which can then be reflected in the Final EIS (FEIS). The DEIS provides a detailed review of the various components of the Proposed Action's and the potential environmental impacts of the Proposed Action and the alternatives selected for further analysis, including the No Action Alternative. The DEIS allows for meaningful analysis by the agencies involved and provides a springboard for informed public comment and participation. In addition, OSMRE and the cooperating agencies conducted numerous public meetings, both on scoping before the DEIS was prepared and on the contents of the DEIS after it was published. These public meetings provided an opportunity for public engagement and participation. MMCo hopes that these comments will assist OSMRE, the Bureau of Indian Affairs (BIA), and the other cooperating agencies as they prepare the FEIS.

Executive Summary, General Comment:

We are not offering specific comments on the Executive Summary as written because it is a summary of the DEIS. MMCo recommends that OSMRE revise the Executive Summary to reflect changes made to the DEIS, as a result of comments received, as you proceed to the FEIS.

Chapters 1 and 3; General Comment regarding Description of the "Project":

The DEIS defines the "Project" as the four primary federal actions in several sections, and acknowledges that the "Proposed Action" includes other lease renewal and permit approval processes by the cooperating agencies. For the sake of completeness, MMCo recommends

296.001
↓

¹ In addition to this comment letter, MMCo provides and incorporates Attachment A, which is a comment matrix that sets forth additional clarifications or suggested edits, and Attachment B, which identifies certain minor corrections.

Comment Letter 296.....Applegate, K.
MMCo

Response 296.001

The Draft EIS already states "Proposed Action in this EIS also includes the completion of the various lease renewal approval and permit processes by the cooperating agencies with jurisdiction over the project." An R2P2 is a document related to Federal coal leasing, and does not apply in the context of Indian coal leasing. The functional equivalent of the R2P2 for coal leasing on Indian lands is the mine plan. No change has been made to the EIS.

COMMENT #296

including all proposed federal actions in the discussion of the Project, or, in the alternative, providing a list of the other lease renewal and permit issuance processes immediately following the definition of "Proposed Action," as the DEIS has done for the "Project."

For example, in Chapter 1, Section 1, Page 1-1, Paragraph 1, the DEIS defines the four primary actions as the "Project." Chapter 1 includes a subsequent discussion of the other elements of the Project in Table 1-1 and at pages 1-11 to 1-12. For completeness, the initial discussion of the "Project" should be expanded to include all federal actions, including:

- Bureau of Land Management's (BLM) action on the Pinabete Permit Area Resource Recovery and Protection Plan (R2P2) application;
- BLM's action on Public Service Company of New Mexico's (PNM) Four Corners Power Plant (FCPP) West Mesa transmission line application;
- US Army Corps of Engineer's (USACOE) action on MMCo's application for an individual permit under Section 404 of the Clean Water Act;
- U.S. Environmental Protection Agency's (EPA) action on MMCo's NPDES application for the Navajo Mine and Pinabete Permit Area under Section 402 of the Clean Water Act;
- Proposed future realignment of Burnham Road (with formal application anticipated in 2022); and
- BIA's action on Navajo Transitional Energy Company, LLC's (NTEC) application seeking renewal of three ROWs for Navajo Mine Access Roads.

Chapter 3, Page 3-1, lists the Proposed Action's four main components. While the remaining components of the Proposed Action are discussed elsewhere in Chapter 3, for completeness, please provide the list of the other proposed actions in this initial discussion. Similarly, in Chapter 3, each of the alternatives' discussions includes a discussion of the Project's main components, but should also include a discussion of all federal actions associated with that alternative. For example, the alternatives' discussion should include a discussion regarding MMCo's application for a Clean Water Act Section 404 Individual Permit, MMCo's NPDES permit application, the applications pending before the BIA for the three access road renewals, as well as BLM action on NTEC's R2P2, and BLM's action on the transmission line ROW renewal.

Similarly, we suggest clarifying throughout the FEIS that, for certain actions, the action agency has the authority to approve, approve with conditions, or disapprove the action. For example, with respect to NTEC's proposed Pinabete Permit Application, OSMRE may approve, approve with conditions, or disapprove the Pinabete SMCRA Permit Application to allow coal mining activities.

While not technically "proposed actions," OSM could also consider identifying in consistent fashion the various roles of entities involved in formal consultation roles under applicable statutory and regulatory schemes in Table 1-1 of Chapter 1. The DEIS describes those roles in various sections, but it might be helpful to outline those roles at the outset in Table 1-1. The DEIS identifies OSM as the lead agency, and, as the lead agency, OSM is tasked with consultation under Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act, on its own behalf and as lead agency. All of the other action agencies, however, will also participate in the ESA and NHPA consultations. While Table 1-1 describes some of these consultation roles, it does not include all. Thus, we recommend revising Table 1-1 to ensure that following roles are identified:

- The BIA is participating in the ESA Section 7 and NHPA consultations, along with OSM, regarding APS' Proposed Lease Amendment No. 3, NTEC's proposed Burnham Road realignment, as well as the proposed access road right-of-way renewals and transmission

Response 296.002

The regulatory setting governing the alternatives are summarized within each resource category discussion. An R2P2 is a document related to Federal coal leasing, and does not apply in the context of Indian coal leasing. The functional equivalent of the R2P2 for coal leasing on Indian lands is the mine plan.

Response 296.003

Please see Master Response #12, Placement of Conditions on Permit and Lease.

Response 296.004

Thank you for your comment.

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line right-of-way renewals.

- The BLM is participating in the ESA Section 7 and NHPA consultations, along with OSM, regarding the PNM rights-of-way renewal for which it is the action agency.
- The USACOE is participating in the ESA Section 7 and NHPA consultations, along with OSM, regarding MMCo's Clean Water Act Section 404 permit application.
- The EPA is participating in the ESA Section 7 and NHPA consultations, along with OSM, regarding NTEC's NPDES permit application.
- The Navajo Nation is participating in the ESA Section 7 and NHPA consultations, along with OSM.
- The Hopi Tribe is participating in the ESA Section 7 and NHPA consultations, along with OSM.
- The National Park Service is participating in the ESA Section 7 and NHPA consultations, along with OSM.

These same changes should be made in Chapter 1 text. For example, Section 1.4.2.1, which describes the BIA's actions, should include a discussion of BIA's role in the ESA and NHPA consultations. Section 1.4.2.2, which describes the BLM's actions, should include a discussion of the BLM's role in the ESA and NHPA consultations. Section 1.4.2.3, which describes the USACOE's action, should include a discussion of USACOE's role in the ESA and NHPA consultations. Section 1.4.2.4, which describes the EPA's actions should include a discussion of EPA's role in the ESA and NHPA consultations. The Navajo Nation, the Hopi Tribe, and the National Park Service are involved in both the ESA and the NHPA consultations, and sections 1.4.2.6, 1.4.2.7, and 1.4.2.8 should be changed to reflect each entities respective roles. Alternatively, the EIS should be clear that OSM has been acting as the lead agency on behalf of the other federal agencies in fulfilling agency roles in these consultation and compliance efforts.

296.005

Chapter 2, Current Operations; General Comment regarding Section 2.1:

Recognizing that a document such as an EIS cannot always be completely up to date as activities unrelated to the Proposed Action continue, MMCo would observe that as of June 31, 2013, as reported in BHP Navajo Coal Company's (BNCC) Fiscal Year 2013 Navajo Mine Annual Report, approximately 366 acres had been disturbed in the area permitted under OSMRE's March 2012 approval of the SMCRA permit revision for Navajo Mine.

296.006

Also, for completeness, OSM may wish to include reference to the pending *Dine CARE v. OSM* suit that challenges OSM's National Environmental Policy Act compliance effort associated with its March 2012 decision to revise the Navajo Mine SMCRA permit to authorizing mining activities in the northern part of Area IV North, in what is part of the preexisting Navajo Mine SMCRA Permit Area. The record shows that OSM prepared a comprehensive 233 page Environmental Assessment as part of its compliance work prior to approving the March 2012 permit revision.

Chapter 3, Proposed Action and Alternatives; General Comment:

Both the Council on Environmental Quality (CEQ) and the Department of the Interior's NEPA implementing regulations make clear that the purpose and need of the proposed action establishes the reasonable range of alternatives that an agency should consider in a DEIS. OSMRE has met this requirement. The DEIS provides a thorough comparison of alternatives and explanation as to why various alternatives were not carried forward for detailed consideration based on the purposed and need.

NEPA's "rule of reason" requires agencies to rigorously explore and objectively evaluate the No Action Alternative and a range of reasonable alternatives, including the Proposed Action, which

Response 296.005

Thank you for your comment.

Response 296.006

Changed Table 2-1 to indicate 366 acres disturbed.

COMMENT #296

meet the project's purpose and need and are not too remote, speculative, impractical, or ineffective. The range of alternatives OSMRE considered in preparing the DEIS, including those not carried forward for detailed consideration, is reasonable under NEPA's "rule of reason." It is appropriate to consider the Applicants' goals and proposals, and those goals and proposals appear to have been accounted for in developing both the purpose and need statement and the alternatives to be considered. Nevertheless, the statement of purpose and need is generally framed, provides for consideration of a reasonable range of alternatives, and does not compel the selection of only one alternative. Rather, the wide range of alternatives identified in the DEIS reflects the spectrum of options for mining and electric generation. Those alternatives carried forward for detailed consideration in the DEIS appropriately passed a rigorous evaluation of technical and economic feasibility as well as their ability to fulfill the purpose and need, ensuring that the DEIS focused, as intended by CEQ regulations, on comparisons between reasonable alternatives.

As importantly, if not more so, the DEIS and the alternatives carried forward for consideration also give appropriate weight to the Navajo Nation's recent and repeatedly expressed interest in the ongoing development of the coal reserves associated with the Navajo Mine Lease and the operation of Units 4 and 5 of the FCPP. Tribal self-determination and on-Reservation economic development opportunities deserve weight here as OSMRE and the other federal permitting agencies proceed with their consideration of the Project and the related federal approvals. Executive Order 13175 sets forth the "fundamental principles" that guide federal agencies when implementing policies with tribal implications. First, the "United States has a unique legal relationship with Indian tribal governments [and] has recognized Indian tribes as domestic dependent nations under its protection. The Federal Government has enacted numerous statutes and promulgated numerous regulations that establish and define a trust relationship with Indian tribes." Second, the United States "has recognized the right of Indian tribes to self-government. As domestic dependent nations, Indian tribes exercise inherent sovereign powers over their members and territory." The United States and its agencies work with tribes "on a government-to-government basis to address issues concerning Indian tribal self-government, tribal trust resources, and Indian tribal treaty and other rights." Finally, the "United States recognizes the right of Indian tribes to self-government and supports tribal sovereignty and self-determination."

As the DEIS observes, economic conditions on the Navajo Reservation and the recent commitments of the Navajo Nation's central government, including its Executive and Legislative Branches, warrant the strong consideration of the Navajo Nation's current initiatives. From late 2012 and through 2013, following Council Committee hearings and meetings, the Navajo Nation Council voted on four occasions to support the pursuit of the acquisition of BNCC by Navajo Transitional Energy Company, LLC (NTEC), a wholly Navajo Nation-owned company formed by the Nation under Navajo law. On each of these four occasions, in open session, the Council voted in favor—by super-majority votes—of moving forward with the acquisition and its related requirements. These actions followed the earlier decision of the Navajo Nation Council to renew and extend the term of the lease for the Four Corners Power Plant for an additional 25 year term, until 2041. As with the transparent Council decision-making process relating to the formation of NTEC and its acquisition of BNCC, the Council's decision to extend the FCPP lease for an additional 25 years, was also made following committee meetings and other process provided under Navajo Nation law.

The Navajo Mine operations generate direct coal royalty payments and tribal tax revenues to the Navajo Nation. The FCPP lease and operations also generate \$7 million a year in rental payments for the use of the lands on which the Plant is sited. Moreover, both the Power Plant and the Mine provide hundreds of high-paying jobs to Native Americans, most of whom are members of the

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Navajo Nation. Consequently, the siting of these facilities on the Navajo Reservation, and the use of Navajo Nation-owned coal resources, are critical to the economic goals and interests of the Navajo Nation, as defined by the Nation's leadership.

While there is no alternative to coal-fired generation that is carried forward for detailed consideration, this is understandable given the Navajo Nation's sovereign interests, the Applicants' goals, and the existing operations. The range of alternatives not carried forward, and other alternatives that may not have been identified, clearly do not meet the purpose and need of the Project. While in the longer term a transition to other forms of electric generation may make sense to the Navajo Nation and its wholly-owned enterprise, NTEC, in the shorter term, the operations at Navajo Mine, mining Navajo coal, and the smaller environmental footprint of a two-Unit (Units 4 and 5) Four Corners Power Plant are the best alternative for the Nation, its people, and its communities and Chapters – as reflected in the decisions of the Navajo Nation's leadership.

Alternatives that do not generate royalty and tax revenue streams for the Navajo Nation and do not provide long-term and significant employment opportunities for members of the largely Native American communities surrounding the Project area will not provide the economic necessities for the Nation or its people or the surrounding communities in the time horizon considered in the DEIS. Substantial replacement of Navajo Nation-sourced coal generation with natural gas fired generation, solar and wind facilities, and other energy sources are options for the future perhaps, but are not reasonable alternatives at present. Moreover, any off-Reservation-based alternatives would not make sense either – for the project proponents (APS, NTEC and MMCo) who have invested a great deal in the existing operations – or for the Navajo Nation. For example, it is important to understand that renewable energy sources are not currently in a position to deliver reliable baseload power to the southwestern United States.

Neither NTEC nor APS and its FCPP co-owners have rights on the Navajo Reservation to pursue alternative energy development. The Navajo Mine Lease, for example, limits NTEC's activities to mining activities. NTEC does not have the right to install wind turbines or solar panels on the leased lands.

Importantly, and related to earlier statements in this comment, as a practical matter there is wholly insufficient time for the Navajo Nation and NTEC to seriously consider alternatives that exclude continued operations if continuity of revenue streams, continuity of power generation, continuity of employment, and avoidance of socioeconomic shocks to the Navajo Nation and tribal members are considered important. These considerations do not necessarily preclude evaluation of alternative energy options in future Navajo Nation transitional energy plans, which may reflect evolving tribal goals, advances in technologies, and improved market conditions. If Federal approvals are required to implement such plans, NEPA analysis will be performed at the time when such plans ripen into feasible and definite proposals.

With respect to the mining alternatives that were not carried forward for detailed consideration, MMCo agrees with the DEIS's analysis of infeasibility for the reasons stated in the DEIS. With respect to the mining alternatives that were carried forward for detailed consideration, MMCo agrees that, while the other two are technically and economically feasible (although more difficult to implement and more expensive), and would meet the purpose and need, they would result in greater environmental impacts than the Preferred Alternative. As a result, they are appropriately rejected in favor of Alternative A. For example, Alternative B would result in 28 additional acres of impacts to waters of the U.S. and may not meet ACOE's requirements to select the least damaging practicable alternative under the Clean Water Act's Section 404(b)(1) Guidelines. In contrast, the preferred Alternative A has the least impacts because it involves the least amount of ground

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disturbance, while, at the same time, appropriately supports reliable baseload power generation, at the levels sought by APS at this time, by using available and reliable Navajo Nation resources and reduces impacts from mining and generation. As such, it meets the purpose and need, the Navajo Nation's economic goals, is consistent with the Navajo Nation's policies and objectives, and supports tribal economic development and self-determination.

MMCo understands that Alternative D proposes an alternative ash disposal configuration that would disturb fewer acres. MMCo also understands that Arizona Public Service (APS) supports the selection of Alternative D. MMCo also supports OSMRE in the selection of Alternative D.

The DEIS identifies in various places the expected impacts from each of the alternatives. Chapter 3 includes tables that provide a comparison of impacts of the alternatives, for example Tables 3-8 to -10. These tables adequately set forth the comparison of disturbance area, but could also be expanded upon, for example, to include a comparison of the estimated number of cultural or paleontological sites that could be affected. As mentioned above, this information is contained in the DEIS, for example Chapter 4 includes tables summarizing impacts on cultural resources by alternative, and Chapter 5 includes a discussion of impacts by alternative. However, compiling this information in the tables in Chapter 3 may be useful for the reader.

296.007

Under each of the mining alternatives discussed, as the DEIS correctly explains, coal production will decrease at Navajo Mine because FCPP will require less coal due to the shutdown of Units 1, 2, and 3. Historically with Units 1, 2, 3, 4, and 5 operating at FCPP, approximately 8 million (M) tons of coal were produced annually at Navajo Mine. In December 2013 to meet the USEPA BART determination, FCPP Units 1, 2, and 3 were shutdown. The shutdown of these units reduced the total production at Navajo Mine to approximately 6 M tons annually. NTEC would only produce coal sufficient to meet the needs at FCPP. MMCo has estimated a total production of approximately 134 M tons needed to supply FCPP for approximately 25 years, the duration of FCPP lease renewal application, which is accurately depicted by DEIS Table 3-5. The estimated total production of 134 M tons needed would be mined using a combination of both the Navajo Mine SMCRA Permit Area and the proposed Pinabete Permit Area. In certain sections, the DEIS overstates the amount of coal to be produced. For example, in the Indian Trust Asset section, the text on page 4.12-4 should be harmonized with Table 3-5 and all calculations in Section 4.12 should be refined to incorporate the decreased production rate at Navajo Mine. MMCo requests that the estimated decreased production be described consistently throughout the FEIS.

296.008

Chapters 3 and 4; No Action Alternative – General Comment:

Chapter 3 of the DEIS accurately and comprehensively describes the No Action Alternative. The various resource sections, however, are not always consistent with the description of the No Action Alternative provided in Chapter 3. MMCo recommends consistency among all resource sections. The various discussions of the No Action Alternative appear to focus primarily on its on-the-ground implications. While touched on in the draft, OSM should consider whether the final EIS should more comprehensively in one location – perhaps in Chapter 3 – discuss all impacts, both “positive” and “negative.” Additionally, each resource section should include a discussion of all impacts associated with the No Action Alternative. For example, the cessation of mining would result in the end of important royalty and tribal tax payments to the Navajo Nation from Navajo Mine operations. The loss of the royalty and tax payment streams from these operations would have serious negative implications for the Navajo Nation and its ability to provide governmental services to its members and otherwise pursue its self-determination policies.

296.009

While employment at Navajo Mine may not be dramatically impacted initially following “no action” decisions by the federal agencies, revenues and benefits flowing to mine employees would clearly

296.010

Response 296.007

Thank you for your comments. OSMRE has considered the proposed revisions and determined that they would not affect any of the analyses or conclusions presented in the EIS. No change has been made to the Draft EIS.

Response 296.008

Changes made.

Response 296.009

The Draft EIS assesses both the “footprint” effects and the potential social effects of the No Action alternative. The No Action alternative was adhered to consistently throughout all the resource area analyses. For example, Section 4.10.4.5 includes a clear disclosure of the potential economic financial effects of selecting the No Action alternative.

The Draft EIS also assesses both potentially adverse and beneficial effects. See response to comment 307.154. Tables ES-11 and 3-12 also includes a comparison of the effects from each alternative, allowing for a central and comprehensive analysis of the alternatives.

Response 296.010

Thank you for your comment. Please see Section 4.10.4.5 for a discussion of the potential effects to the local economy if the No Action is selected.

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be impacted in the long term: Instead of continuing to mine and contemporaneously reclaim lands for the period from 2016 through 2031, after which final reclamation work would proceed (unless a new coal supply contract is put in place for the period after 2031), the final reclamation effort would start immediately in the 2015-2017 time frame, depending on whether NTEC can continue to mine and deliver coal to the FCPP until its lease expires in 2016. Consequently, under the No Action Alternative, mine employees, their families, and the communities in which they live, work and invest or spend their hard earned income would not enjoy the 15 or more years of prosperity they would otherwise if the Proposed Action was fully implemented.

In the short term, however, under the No Action Alternative, there will be changes in employment patterns and responsibilities if NTEC does not identify another customer. Specifically, those employees that had been involved in coal mining and production efforts would likely be re-tasked to pursue final reclamation work.

For clarification, it may be helpful for readers to understand that the term of the Navajo Mine Lease is essentially based on the ability of the lessee, NTEC, to mine coal in commercial or paying quantities. Unlike the Four Corners Power Plant lease, which is a term of years, as long as NTEC can mine coal economically, the Navajo Mine Lease term continues. Therefore, there is no fixed term of years applicable to the Mine Lease. Rather, barring a lease amendment, the duration of that lease will be dictated by whether mining activity continues and also by the completion of final reclamation activities.

Implementing the No Action Alternative would also mean that NTEC would not be able to realize the full potential of its investment in purchasing BNCC. This would hamper NTEC's plans to thoughtfully investigate and pursue other energy generation alternatives, including the wind and solar generation effort that opponents of this Project favor. As NTEC has stated in its comments and as provided by the Nation in its Council actions, certain revenue generated from NTEC's coal mining operations is intended to provide funding for other energy generation projects as it lives up to its name as Navajo Transitional Energy Company, LLC.

The No Action Alternative discussion also should note that a decision not to approve continued operations of Navajo Mine, FCPP, and the transmission lines and substation, will result in (a) a significant reduction in long-term, reliable, and uninterrupted baseload generation that thousands of consumers throughout the southwest rely upon; and (b) adverse effects on the reliability of the regional power transmission grid in the western United States. Moreover, there is a growing body of research reflecting that the trend of retirement of coal-fired generation facilities will have significant impacts on electricity prices and electricity reliability.

Section 4.3 Earth Resources: Paleontological Resources Management Plan:

In Section 4.3, the DEIS properly describes the previous paleontological surveys conducted within the Navajo Mine Lease Area; however it does not reference the Paleontological Resources Management Plan (PRMP) discussed in Section 4.11 Environmental Justice. As Section 4.11 describes, the PRMP is designed to protect both known and newly discovered paleontological resources within the Navajo Mine Lease Area and proposed Pinabete Permit Area.

Numerous paleontological surveys have been conducted within and adjacent to the Navajo Mine Lease Area. These include the 1916 Max Bauer (U.S.G.S), 1972 Hugh Wagner (Department of Paleontology University of California-Berkeley), and 1974 Larry Marshall and William Breed (Museum of Northern Arizona), and 1997 Donald Wolberg (New Mexico Institute of Mining and

Response 296.011

Section 4.10.4.5 has been amended to include the following language: While it is recognized that a portion of existing FCPP and Navajo Mine employees would be re-tasked for abandonment and reclamation activities, these assignments would likely only last a few years after shutdown and ultimately render the loss of 2,070 jobs.

Response 296.012

The following sentence has been added to page 2-1: There is no fixed lease term applicable to the Navajo Mine lease. The duration of the lease is contingent upon the continuation of mining activity and the completion of final reclamation activities.

Response 296.013

The following sentence has been added to 4.20.4: The No Action Alternative would also result in (a) a substantial reduction in long-term, reliable, and uninterrupted baseload generation that thousands of consumers throughout the southwest rely upon; and (b) adverse effects on the reliability of the regional power transmission grid in the western United States.

Response 296.014

This summary has been included in the Final EIS. The additional information does not change the results, and actually results in fewer impacts.

COMMENT #296

Technology) studies. While the DEIS refers to the 2005 Arnold Clifford report (Ecosphere Environmental Services), it is MMCo's understanding that this report was never finalized, and MMCo questions whether it should be included in the FEIS.

In the summer 2013, MMCo discussed a proposal with OSM and with the Navajo Nation Minerals Department to complete an updated paleontological inventory within unmined portions of Area III and Area IV North of the Navajo Mine SMCRA Permit Area and the proposed Pinabete Permit Area. MMCo completed the inventory in the fall of 2013. From the paleontological resource information gathered during the inventory, MMCo in consultation with the Navajo Nation Minerals Department, developed the PRMP to document and protect known and previously unknown paleontological resources within the Navajo Mine Lease Area.

The PRMP is a management tool which establishes the inventory methodology, the criteria to be used to determine significance, and mitigation strategies for affected paleontological resources. The PRMP also includes procedures and requirements for reporting and curation. MMCo submitted copies of the PRMP to both the Navajo Nation Minerals Department and OSMRE in February 2014.

MMCo recommends that OSM provide a summary of this inventory work and associated evaluations of significance including: the paleontological inventory identified 20 localities as potentially significant. Using the PRMP significant criteria 10 these localities were determined to be significant. Of these 10 localities, only three were located within the area of proposed surface disturbance and thus require further management actions. In consultation with OSM and Navajo Nation Minerals Department, one of these three significant sites was mitigated in the fall of 2013.

Section 4.4 Cultural Resources:

The DEIS describes the cultural resources management and compliance efforts undertaken to date within the Navajo Mine Lease Area. The information contained within the DEIS can be further supplemented with information from the Navajo Mine SMCRA Permit Package (OSM Permit No. NM-0003F), Pinabete SMCRA Permit Application Package (OSM Proposed Permit No. NM-0042-A-P), the 2011 Amended Programmatic Agreement (2011 PA) for Coal Mining and Related Operations in Areas III and IV North and the Burnham Road Realignment, Navajo Mine, and the proposed Second Amended Programmatic Agreement for Navajo Mine Area III, Area IV North, Area IV South and the Burnham Road North and South Realignments (Second Amended PA) (Four Corners Power Plant And Navajo Mine Energy Project Draft Environmental Impact Statement, Appendix B.2).

NTEC (and its predecessors; BNCC, Utah International Inc., and Utah Construction and Mining Company) has completed extensive cultural resource surveys for Areas I, II, III, IV North, IV South, and V of the Navajo Mine Lease Area and its associated rights-of ways. For example, surveys were conducted for cultural resources prior to commencing ground disturbance activities in Areas I and II (Greminger and Sciscenti, 1962) and those areas were subsequently cleared for disturbance. Areas III, IV North, IV South, and V were surveyed from September 1973 to December 1974 as part of the Settlement and Subsistence along the Lower Chaco River: The Coal Gasification (CGP) Survey (Reher, 1977) and subsequently cleared for disturbance. Surveying, testing, and mitigation activities for Area IV North cultural resource sites were completed in 2008

COMMENT #296

(Fetterman, 2011). The Fetterman 2011 report describes the final testing and mitigation efforts for cultural resource sites in Area IV North. Sites within Area IV North have been tested and determined not eligible for listing on the National Register of Historic Places (NRHP), mitigated, or avoided. The Navajo Nation Historic Preservation Department (NNHPD) has reviewed past survey work and issued a Cultural Resources Compliance Form (CRCF) (CRCF Form HPD-09-611- Revised) for cultural resource sites in Area IV South and V (NNHPD, 2009). This CRCF (CRCF HPD-09-611- Revised) provides a listing of cultural resource eligible to be listed on the NRHP in Areas IV South and V and the conditions for compliance. A listing of documents reflecting prior compliance efforts at Navajo Mine is included as Attachment G, of the Second Amended PA (Four Corners Power Plant and Navajo Mine Energy Project Draft Environmental Impact Statement, Appendix B.2).

Additionally, OSMRE is currently coordinating a Section 106 consultation which would amend and supersede the 2011 Amended PA for Coal Mining and Related Operations in Areas III and IV North and the Burnham Road Realignment, Navajo Mine (FCPPNMEP DEIS Appendix 2.B). As part of the NHPA Section 106 process, the proposed Second Amended PA was included as an appendix to the DEIS to allow for public comment. The Second Amended PA will take into account the prior cultural resources compliance work and expand the coverage of 2011 PA to include the proposed mining and reclamation activities within the proposed Pinabete Permit Area.

When viewed against the backdrop of the prior surveys, mitigation and avoidance efforts, and the protections of past, present, and proposed Programmatic Agreements, the DEIS overestimates and provides a conservative assessment of the impacts to cultural resources and traditional cultural properties (TCPs) in Area III, Area IV north, Area IV South, and along the Burnham Road North Realignment. The DEIS states that the Proposed Action (Alternative A) will potentially affect 84 cultural resource sites and 6 TCPs; however, these numbers include the cultural resource sites in Area III, Area IV North, and along the Burnham Road North Realignment which were already mitigated or avoided. Specifically, the DEIS describes that there are 56 cultural resource sites (52 cultural resource sites in Area IV North and 4 sites along the Burnham Road North Realignment) which were determined eligible by Navajo Nation Tribal Historic Preservation Officer (NNTHPO) and OSMRE. MMCo has consulted with OSMRE, BIA, BLM, USACOE, Navajo Nation Historic Preservation Department NNHPD, and the Advisory Council on Historic Preservation (ACHP) on the eligibility and treatment of cultural resource sites and TCPs in Area III, Area IV North, and along the Burnham Road North Realignment area as part of the 2007 PA and 2011 Amended PA for Navajo Mine. Under these two PAs, MMCo has performed testing and mitigation of cultural resource sites and TCPs impacted by mining activities in Area III, Area IV North, and along the Burnham Road North Realignment as directed by the NNHPD and with the concurrence of the signatory parties.

296.015

The draft Second Amended PA (DEIS Appendix B) extends the 2011 PA's coverage into a portion of Area IV South of the Navajo Mine Lease. Within the proposed Area IV South PA coverage area, there are 36 cultural resource sites and one TCP which was not part of the Area of Potential Effect (APE) in either the 2007 or 2011 PAs. The NNTHPO has previously determined that of the 36 Area IV South cultural resource sites, 32 are potentially eligible for listing on the National Register of Historic Properties (NRHP). Additionally, MMCo and NTEC are also seeking a determination of eligibility on one TCP which is outside of the proposed Pinabete Permit Area but within the revised

296.016

Response 296.015

Suggested edits have been made.

Response 296.016

Suggested edits have been made.

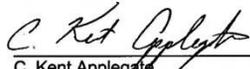
COMMENT #296

APE (a 1-mile buffer of the proposed SMCRA permit area). If the Proposed Action is approved, NTEC and MMCo will comply with the mitigation and avoidance measures contained in the Second Amended PA. ↑

Conclusion:

MMCo appreciates the opportunity to comment on the DEIS. MMCo respectfully requests that its comments, including the comments and clarifications raised in the attached tables, be addressed in the FEIS. MMCo also requests that OSMRE, BIA, and the cooperating agencies timely issue all approvals needed for the Project by March 2015.

Sincerely,



C. Kent Applegate
Superintendent, Environmental Projects
BHP Billiton Mine Management Company

Cc: Sam Woods, Navajo Transitional Energy Company
Marcelo Calle, Office of Surface Mining Reclamation and Enforcement

COMMENT #296

Attachment A: BHP Billiton Mine Management Company (MMCo) Comments on the Office of Surface Mining Reclamation and Enforcement (OSMRE), Four Corner Power Plant and Navajo Mine Energy Project (FCPPNMEP) Draft Environmental Impact Statement, March 2014

No.	Section	Page	Comment
1.	Global		<p>Navajo Mine is used to describe both the Navajo Mine SMCRA area and the Navajo Mine Lease Area. The Navajo Mine SMCRA Area is within the Navajo Mine mining lease area but it also consists of various rights-of-ways and surface use areas. The Navajo Mine SMCRA permit area is defined in the OSMRE permit NM-0003F. Consider defining the following terms in the introduction to the DEIS and then use throughout the DEIS:</p> <ul style="list-style-type: none"> • Navajo Mine refers to the to the past, present, and proposed mining and reclamation operations within Area I, II, III, IV North and IV South • Navajo Mine SMCRA Permit Area refers to the land within the existing OSM SMCRA Permit NM-0003F • Navajo Mine Lease Area, refers to the land within the mine lease approved by the Navajo Nation (Areas I, II, III, IV North, IV South, and V) and associated rights-of-ways (e.g., railroad, Area III Access Road, powerline, etc.) • Pinabete Permit Area refers to land within the proposed OSM SMCRA Permit NM-0042A-P <p>Additionally, the Navajo Mine SMCRA Permit boundary should be included on all Figures within the DEIS.</p> <p>Text in Section 4.4.3, and elsewhere in the DEIS, suggests that the permit transfer from BNCC to NTEC "may lead to changes in the affected environment." There will be no on-the-ground impacts arising from the permit transfer, and OSM determined that in earlier NEPA compliance work. See OSMRE's NEPA compliance document for the permit transfer between BNCC and NTEC.</p>
2.	Global		<p>For clarity, provide consistent use of terminology referencing the Proposed Action, the ROI and other NEPA terminology. Examples include:</p> <ul style="list-style-type: none"> • ROI for Study Area • Reclamation vs. conservation • Proposed Action for Project Area or Proposed Project • No Action Alternative vs. no project • "Interim" and "transition period" • Use of NEPA terminology instead of ESA terminology <ul style="list-style-type: none"> ○ Use ROI for Action Area ○ Impacts for effects and affects <p>Please ensure consistency when identifying various features, i.e. transmission lines, haulroads, precipitation events, drainage features.</p> <ul style="list-style-type: none"> • Chaco River is preferred instead of Chaco Wash, • Cottonwood Arroyo is preferred instead of Cottonwood Wash,
3.	Global		<p>Additional comments regarding consistency and terminology.</p>
4.	Global		<p>Additional comments regarding consistency and terminology.</p>

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Response 296.017

Change made.

Response 296.018

Changed to read (in each section): "Two completed federal actions have been incorporated into the baseline for this analysis..."

Then for each section, we have specifically stated whether either of these actions has any effect on the affected environment.

Response 296.019

Have checked consistency.

Response 296.020

Names listed in the comment have been double-checked for consistency throughout the document.

Attachment A: MMCo Comments on the FCPP Draft Environmental Impact Statement, March 2014
COMMENT #296

No.	Section	Page	Comment
5.	Global		<p>MMCo suggests using the published USGS mapping sources to describe the features.</p> <p>The DEIS uses both "restore/restoration" and "reclaim/reclamation." These terms have different meanings and are not interchangeable. Restore means replacing the exact conditions which existed pre-disturbance, and reclaim means to create a beneficial useable post-disturbance land use. SMCRA imposes reclamation obligations, and not restoration obligations.</p> <p>The DEIS defines three temporal impact categories: short term (during and/or immediately following construction activities), long term (during mining through 2041 including post-reclamation activities), and permanent (after reclamation -post 2041). MMCo agrees with the temporal categories and offers the following information to clarify the duration of the three phases (see detailed schedule information provided in the Navajo Mine and proposed Pinabete SMCRA Permit Application Packages):</p> <ul style="list-style-type: none"> The proposed mining actions do not include a separate construction phase with the exception of the segment of Burnham Road that would be realigned. Mine support facilities (i.e., powerlines, haulroads, sediment ponds, etc.) would be constructed concurrent with mining and reclamation activities and would be managed as part of these activities. The Burnham Road segment would be constructed over an approximate 6-9 month period in approximately 2022. Under Alternatives A, B, C and D, mining would continue through approximately 2041: reclamation (backfilling, regrading and revegetating) would continue through approximately 2051 (Pinabete SMCRA Permit, Section 51, Table 51.1-1). NTEC would monitor revegetation success for a minimum of 10-years through approximately 2061. Reclaimed lands meeting the SMCRA Permit Reclamation Success Criteria will be eligible for Phase III bond release. Under Alternative E, no new mining would be conducted in Area I, II, III, and IV North. Areas I, II, and III would be reclaimed (i.e., backfilled, graded, and revegetated) by approximately 2023 and the disturbed portions of Area IV would be reclaimed by approximately 2024. A 10-year monitoring period would follow the reclamation activities. Reclaimed lands meeting the SMCRA Permit Reclamation Success Criteria will be eligible for Phase III bond release. With the exception of certain earth resources (soils, coal seams), reclaiming the disturbed lands to the approximate original contours and land uses (livestock grazing and wildlife habitat) similar to pre-mine land uses mitigates what would be "permanent" impacts to the environmental resources.
6.	Global		<p>The DEIS overestimates the number of residences impacted by the proposed Pinabete Permit. In several sections, the</p>
7.	Global		<p>The DEIS overestimates the number of residences impacted by the proposed Pinabete Permit. In several sections, the</p>

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Response 296.021

Document has been reviewed for use of these terms. Restore/restoration has been changed to reclaim/reclamation, where appropriate.

Response 296.022

Clarifications have been added to the descriptions of the 5 alternatives in Chapter 3.

Response 296.023

The EIS has been revised, as suggested.

Attachment A: MMCo Comments on the FCPP Draft Environmental Impact Statement, March 2014
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No.	Section	Page	Comment
8.	Global		DEIS states that 5 residences were identified within 0.5 mile of the Pinabete Permit Area. This statement should be revised to state that only 4 residences were located within 0.5 miles of the proposed Pinabete Permit Area. Of these 4 residences, 3 are located within the proposed Pinabete SMCRA Permit boundary. MMCo has completed the relocation of two residences within Area IV North per the respective agreements. These relocations were conducted as part of the approved Area IV North mining activities. Additionally MMCo has an agreement in place to relocate the third residence in advance of mining operations in Area IV South. The fourth residence is outside of the proposed Pinabete Permit Area and is approximately 0.5 from the proposed Pinabete SMCRA permit boundary and would be approximately 0.9 miles away from proposed mining activities.
9.	Global		Please ensure the description of BBNMC 2838 water rights are described consistently between the BA and DEIS. The DEIS text describes various pre- and post-mining land uses of the Navajo Mine Lease Area. As described in the Navajo Mine and proposed Pinabete SMCRA Permit Application Packages the pre-mining land uses of the Navajo Mine Lease Area are livestock grazing. Agricultural, crop production, lands are not present within with the Navajo Mine Lease Area. The Navajo Mine SMCRA Permit (OSM NW-0003F) and the Pinabete SMCRA Permit Application Package specify that lands disturbed by mining and reclamation activities will be reclaimed for a post mining land use of livestock grazing and wildlife habitat. The reclaimed lands are not designed and constructed for residential, industrial or agricultural purposes. Under all alternatives, lands disturbed by mining would be reclaimed to a post-mining land use of livestock grazing and wildlife habitat.
Chapter 1			
10.	1.4.1	1-11	To further clarify the text in Section 1.4.1, please add the bold [?] text to this sentence "OSMRE is the Lead Agency directing EIS preparation for the Project. OSMRE will approve, approve with conditions , or disapprove the Pinabete SMCRA permit application to allow coal mining activities; including development of associated of coal processing facilities."
Chapter 2			
11.	2.1.2	2-7	Table 2-3 lists equipment used for Navajo Mine. Table 3-2 lists equipment use for Pinabete Mine. Please note that the same equipment will be used for both permits areas. MMCo suggests combining the tables into one with a footnote to ensure that the reader understands that there is only one set of equipment for both permits areas.
12.	2.1.2.2	2-10	In MMCo's December 2013 response to OSMRE's technical evaluation comments on the Pinabete Permit application, MMCo revised this to state topdressing will not be salvaged where slopes are greater than 3 horizontal to 1 vertical (3h:1V or >33 percent).
13.	2.1.3	2-12	The second coal supply agreement between NTEC and the Four Corners Power Plant owners, for the period 2016 to 2031, should be referenced in this discussion. This would complete the picture, and will also help clarify that there is no contract for coal sales beyond 2031, notwithstanding the FCPP Lease extension to 2041. See also Section 3.2.4.2, page 3-20.

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Response 296.024

Comment noted.

Response 296.025

Clarifications made (did a global check on pre-mine, post-mine, post-reclamation).

See page 4.11-16 – socio “step 3”

Response 296.026

Please see Master Response #12, Placement of Conditions on Permit and Lease.

Response 296.027

Have added a footnote to Table 3-2 that indicates that these pieces of equipment are not duplicative of the ones listed in Table 2-3.

Response 296.028

Change made.

Response 296.029

This additional detail does not change the presentation of consequences.

Attachment A: MIMCo Comments on the FCPP Draft Environmental Impact Statement, March 2014
COMMENT #296

No.	Section	Page	Comment	
14.	2.4.1	2-35	The last sentence should be revised to read: "Therefore, the permit transfer is not dependent on and is not a connected action to the Proposed Action because it would proceed regardless of the outcomes being evaluated in this EIS."	296.030
15.	2.4.2.1	2-36	MIMCo suggests revising the last sentence to read: "For purposes of analysis, the possibility that NTEC assumes an ownership stake in FCPP was assessed for potential inclusion under the cumulative effects section (Section 4.18)."	296.031
Chapter 3				
16.	3.2.1.1	3-10	Mining will occur until 2039, backfill and regrade work will occur until 2051 (see Pinabete PAP Part 7 Section 51, Table 51.1-1). Support facilities would remain in use throughout the duration of the backfilling and grading operations (2051). Following seeding and irrigation there is a 10-year SMCRA liability period which will end no earlier than 2061.	296.032
17.	3.2.1.1	3-14	Public roads within the mine permit area are built to standards as determined by the "public road authority" designated by OSM (SMCRA CFR 30 Part 761.14(c)). OSM in past actions for the public Burnham Road has designated the BIA as the road authority. On previous relocations of the Burnham Road, BIA required design standards to the American Association of State Highway and Transportation Officials (AASHTO) specifications. A similar topic is discussed on the in Section 4.9.4.1 on page 4.9-18 in regards to the primary road design for mine haulroads. Primary roads are designed to SMCRA performance and MSHA design standards.	296.033
18.	3.2.2.4	3-23	The sentence "This alternative is technically feasible." may be better stated as follows: "Technology exists to implement this alternative, but it would require re-routing the Pinabete Arroyo in addition to activities described in the Proposed Action. This alternative's increased impacts to Waters of the U.S. in comparison to the Proposed Action renders it challenging under the CWA Section 404(b)(1) Guidelines."	296.034
19.	3.2.4	3-27	In this introductory paragraph, for completeness, please consider adding the following additional sentence: "Under this alternative, all other federal permits and approvals would be granted as provided in the Proposed Action."	296.035
20.	3.2.6	3.2-33 to -48	Please ensure that applicant proposed measures, best management practices, and standard operating practices are consistent with the final Biological Assessment (BA).	296.036
21.	3.2.6	3-33	This sentence needs to include applicant proposed protective measures for Four Corners Power Plant, PNM as well as NTEC and would be applicable to their specific project aspects and requirements. As written it appears that all of the proposed measures would be transferred to NTEC.	296.037
22.	3.2.6.17	3-46	Under "Four Corners Power Plant" heading, MIMCo suggests deleting the reference to BNCC 2012a in the last section of the section.	296.038
23.	3.3.4.1	3-53	For clarification MIMCo suggests deleting the following sentence as it is not applicable to the Proposed Action: "Mining with these alternative techniques would occur within the existing approved mine plan to mine coal from remaining reserves in Area II and Area III until 2016, under a renewed SMCRA permit NMO003F." NTEC would likely use highwall continuous miners or augers, as stated in Section 3.3.4.1, in all available highwalls within its lease area and operations. MIMCo agrees with OSMRE's analysis regarding why these mining alternatives are not carried forward.	296.039
24.	3.3.5.1	3-55	On page 3-55 the DEIS states	296.040

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Response 296.030

Change made.

Response 296.031

The potential for NTEC ownership in FCPP is included in the list of cumulative projects in Section 4.18. No change made.

Response 296.032

Have changed "All of these support facilities would remain in use for the duration of the permit period (through 2041)." to "Support facilities would remain in use throughout the duration of the backfilling and grading operations."

Response 296.033

Have clarified in 2nd full paragraph of 3-14, and in 3rd full paragraph on 4.9-18.

Response 296.034

Change made.

Response 296.035

Change made.

Response 296.036

The EIS has been updated to be consistent with the BA.

Response 296.037

Has been clarified (see page 3-34 specifically).

Response 296.038

Reference updated.

Response 296.039

No change to EIS. The sentence is not referring to the Proposed Action, but rather an alternative.

Response 296.040

Have changed this paragraph to read as follows: Coal from the San Juan Mine is similar to that at the Navajo Mine, and is the best-case example for analysis of this alternative due to its proximity to FCPP. San Juan Mine has a production capacity of approximately 8 to 9 million tons annually.

Attachment A: MIMCo Comments on the FCPP Draft Environmental Impact Statement, March 2014
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No.	Section	Page	Comment
			<p><i>"Coal from San Juan Mine is similar to that at the Navajo Mine, whereas other local mines are unlikely to have similar coal quality and, thus, it could not be burned at the FCPP. San Juan Mine has a production capacity of approximately 8 to 9 million tons annually. At this rate, coal reserves at San Juan Mine are sufficient until 2022 to provide coal to the FCPP to meet the shortfalls estimated for the No Action Alternative; up to 4 million tons would be need to be supplied to make up for the shortfall."</i></p> <p>The above paragraph was prepared for a previous action, Navajo Mine Clean Water Act Pre-2016 Individual Permit 404(b)(1) alternatives analysis (USACE IP Permit No. SPA-2011-00122-ABQ, USACE 2011), and is not applicable to Proposed Action. MIMCo suggests deleting this paragraph in its entirety.</p> <p>MIMCo agrees with OSMRE's decision to consider San Juan Mine as an off-site coal supply but not carry it forward for consideration (DEIS Section 3.3.5). Under the "Technical Feasibility" and "Economic Feasibility" in DEIS Section 3.3.5.4, the DEIS accurately describes why it is not feasible to supply coal from San Juan Mine to FCPP for operations through 2041. This discussion is further supported by the USACE Preliminary Draft Permit Individual Permit Evaluation (DEIS Appendix C, Section 4.2.5.1.1). In the USACE preliminary permit evaluation, the USACE recognizes that while it is technically feasible to mine coal at San Juan Mine, the availability of the resource, the cost, and logistics eliminate the off-site coal supply as an alternative.</p>
25.	3.4	3-56	Suggest in second sentence inserting "direct and indirect" between permanent and impacts to clarify that this table summarizes the direct and indirect impacts analysis, rather than the cumulative effects analysis.
26.	3.4	3-56 to -76	Table 3-12 appears to present only "negative" impacts of the alternatives. Positive impacts of the action alternatives particularly socioeconomic considerations should be mentioned as well. Similarly, recreation opportunities on Morgan Lake would continue under the action alternatives, but may not under the No Action Alternative.
Chapter 4			
27.	4	4-1	The quoted paragraph is attributed to the CEO; this attribution should be confirmed. The language appears to be from EPA guidance rather than CEO.
28.	4.1.1.7 4.1.2.3	4.1-16 and 4.1-26	The DEIS provides a detailed regulatory framework for Section 4.1 Air Quality. To further clarify the reader's understanding please provide: <ul style="list-style-type: none"> • a definition of non-road engine, stationary and mobile sources; • an explanation of the regulatory differences between vehicle (tailpipe) emissions and non-vehicle engines; and • a statement which clarifies that intermittent and fugitive emissions can be from stationary sources, e.g., coal handling conveyors, stockpiles, and dirt roads.
29.	4.1.2.3	4.1-27	As a global comment to Sections 4.1 and 4.2, please clarify that: <ul style="list-style-type: none"> • The Navajo Coal preparation plant is a listed source category pursuant to CAA § 302(j).

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Response 296.041

Change made in second paragraph from bottom.

Response 296.042

Impacts are discussed compared with the baseline, not the No Action alternative. There are no positive impacts to socioeconomics or recreation as a result of the proposed action as compared to baseline. No change made.

Response 296.043

Reference has been updated to EPA 1999.

Response 296.044

The comment suggests clarification of mobile versus stationary sources under the regulatory framework sections of Section 4.1, Air Quality. While the suggested clarifications are true, OSMRE does not consider that additional clarification is necessary for the reader to understand the regulatory framework of the EIS analysis. No comments were received indicating that the public was confused about what mobile or stationary sources were or were not included in the air quality analysis. No changes were made to the EIS based on the comment.

Response 296.045

While true statements, OSMRE does not consider it necessary to include the provided statements in the Final EIS. The statements are informational in nature, are already included in the Draft EIS analysis, and do not add significant additional clarity to warrant revision to the EIS.

No changes were made to the EIS based on the comment, with one exception: Section 2.1.2.4 specifies that draglines are electric-powered.

Attachment A: MIMCo Comments on the FCPP Draft Environmental Impact Statement, March 2014
COMMENT #296

No.	Section	Page	Comment
			<ul style="list-style-type: none"> The SMCRA permit area is not and would not be a major source of stationary emissions as currently defined under the Title V and PSD regulatory programs. The only mobile sources on the Navajo Mine Lease Area are tailpipe emissions. Navajo Mine draglines are electric-powered (not diesel powered). The Navajo Mine has two diesel-powered locomotives that can be used in the rare event that the electric train is not operational. Navajo Mine uses ultra-low sulfur diesel fuel for blasting and mobile equipment that is used on the mine site only.
30.	4.2	4.2-2	Section 4.2 summarizes the global, national, and regional climate change effects that scientists currently believe are related to global GHG emissions. This section also summarizes GHG emissions from the Navajo Mine and FCPP, and puts those emissions in the context of regional, state-wide, and national GHG emissions. This section appropriately evaluates the Navajo Mine and FCPP GHG emissions and impacts on climate change in a regional context. However, it is important to recognize that the Navajo Mine and FCPP GHG emissions and impacts on climate change are even less significant when considered in a global context and it is recognized that climate change is a global phenomenon. This comparison is consistent with CEQ guidance and supports the DEIS conclusion that GHG emissions from the Proposed Action are negligible in the context of global emissions. Similarly, the DEIS should acknowledge that current science cannot link particular GHG emissions to particular climate change impacts. (See http://energy.gov/sites/prod/files/CEQ_Draft_Guidance-ClimaticChangeandGHGemissions-2.18.10.pdf . CEQ Guidance)
31.	4.2.1.1	4.2-2	Federal GHG regulations and reporting requirements do not apply to surface coal mining operations. The Navajo Mine is not a "major" source of stationary emissions as defined under the Title V and PSD regulatory programs. Please indicate this in the introductory paragraphs of Section 4.2.
32.	4.2.2.3 & 4.2.2.5	4.2-6 & 4.2-7	As a global comment to Section 4.2, the most recent GHG data cited and analyzed ranges from 2010 to 2012. To the extent possible, use the most recent data and, where possible, distinguish between emissions from generation at FCPP and mining at Navajo Mine (see Sections 4.2.2.3, 4.2.2.7, and 4.2.2.8).
33.	4.2.2.5	4.2-8	Please explain "Interim Standard" and what is the "Standard" that these sources are compared to as "Percent of Standard" in right-hand column of the table. For complete comparison, include coal-fired generation.
34.	4.2.2.6	4.2-9	Please add a sentence that confirms that GHG emissions at the Navajo Mine are small compared to other sources including global emissions in this section, Section 4.2.2.9 and Table 4.2-11.
35.	4.2.2.8	4.2-12 to -14,	For each of these tables, clarify what the "Historic Emissions" and "Historic Baseline" data represent (e.g. averages, totals, per year).
36.	4.2.2.9 & 4.2.3.2	4.2-15, 4.2-16, 4.2-22	DEIS Table 4.1-11 summarize fugitive GHG emissions from Navajo Mine, and cites OSMRE 2012a for BNCC's Area IV North mine plan Revision EA. The fugitive GHG emissions in that EA were based on the prior production rate of approximately 8.5 million tons per year (M tpy) and thus overestimate the GHG emissions that can be expected from the

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Response 296.046

The Draft EIS provides a robust discussion of potential impacts of climate change (see page 4.2-1). The impacts analysis quantifies the CO_{2e} emissions of the FCPP and Navajo Mine in the context of regional, national, and global emissions. With regards to climate change impacts, as stated on page 4.2-23, "while the Proposed action would contribute to the effects of climate change, its contribution relative to other sources would be minor in the short- and long-term." Implementation of the FIP for BART had the additional effect of reducing greenhouse gas emissions by 26% (incorporated as part of the baseline). When compared to other sources of GHG in the region, the reduced contribution from FCPP is considered minor.

Climate Change is inherently a cumulative issue; therefore, the Cumulative Effects Section of the EIS (4.18.3.2) also addresses this comment. The cumulative effects study area for climate change includes northeastern Arizona, southwestern Colorado, Navajo Nation, and northwestern New Mexico. The major producers of GHG emissions within this study area are the 17 power plants, as such, the amount of power produced directly relates to the amount of GHG emitted. Table 4.18-4 shows the relative contribution of future FCPP emissions to regional GHG emissions.

OSMRE does not consider it necessary to acknowledge that no scientific link is established between particular GHG emissions and climate change. The impacts analysis is focused on CO_{2e} equivalent emissions as the prominent measure for comparison of global warming potentials.

No changes were made to the EIS based on the comment.

Response 296.047

The change was made, as suggested.

Response 296.048

The EIS climate change analysis was developed in early 2013; therefore, the GHG data from 2013 and 2014 are not included. Because the EIS analysis was based on 12 years of historic air emissions data, the climate change analysis is a reasonable estimation of future operations.

Table 4.2-11, Estimated GHG Emissions from Navajo Mine and FCPP Mobile and Fugitive Sources, provides the requested distinction between FCPP and Navajo Mine emissions.

No changes were made to the EIS based on the comment.

Response 296.049

As indicated in footnote 2, the Interim Standard is per California PUC Decision No. 07-01-039, January 25, 2007 (SB 1368). The “Percent of Standard” is calculated relative to this Interim Standard; ergo, the value on the “Interim Standard” row of the table is 100 percent. The text introducing Table 4.2-3, Comparison of Electric Power Generation GHG Rates, was modified to make it clear that the California PUC Decision Interim Standard is the value to which the others are compared.

Response 296.050

The change was made, as suggested.

Response 296.051

Text was added to indicate that the tables represent total values per year.

Response 296.052

The language introducing Section 4.2 tables was changed to provide the requested indication that numbers are conservative, being based on a previous mine plan that will be reduced based on reduced coal demand from FCPP.

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			reduced production rate of approximately 6 M tpy. Similarly, Table 4.2-16 overstates GHG emissions for the same reason. It would be helpful to clarify that the impact analysis uses conservative estimates of levels of GHG emissions from mining activities going forward since mining is expected to proceed at lower levels with the closure of FCPP units 1, 2, and 3. The analysis also reflects that fugitive methane is a more potent greenhouse gas (CO ₂ e), and groups the data regarding fugitive mine emissions together with mobile (tailpipe) emissions since mine emissions are considered fugitive sources. The DEIS correctly points out that these mobile and fugitive emissions (together comprising only 0.5% of total Project-wide GHG emissions) comprise a negligible portion of the overall US GHG inventory and a minor portion of regional GHG emissions. The DEIS appropriately points out that the Proposed Action would result in substantial reductions in GHG emissions.
37.	4.2.4.1	4.2-22	Add "annual" to the first sentence and to the title of tables: "... estimated annual GHG emissions ..."
38.	4.3.2.4	4.3-12	The text on page 4.3-12 describing the Museum of Northern Arizona (MNA) paleontological survey conducted in 1974 is correct in saying the work was conducted prior to mining disturbance in Area III, IV North, IV South, and V. However the text could be improved to clarify that neither NTEC nor its predecessors have conducted any mining activity in Area IV South and Area V. The Navajo Mine SMCRA Permit and Pinabete SMCRA Permit application describe historic, current, and proposed mining activities in Area I, II, III, IV North, and IV South of the Navajo Mine Lease Area.
39.	4.3.4.1	4.3-17	The proposed realignment of the Burnham Road (N5082) would be a permanent feature post-reclamation. MM/Co has clarified this in its December 2013 response to OSMRE Technical Evaluation of the Pinabete SMCRA Permit Application (Pinabete SMCRA PAP, Part 5, Section 30, page 30-1). Ancillary two track roads the Navajo Nation does not wish to retain would be reclaimed per the reclamation plan contained within the Pinabete SMCRA permit Application (Pinabete SMCRA PAP, Part 5, Sections 30-39).
40.	4.3.4.1	4.3-18	The DEIS text on page 4.3-18 accurately identifies management practices of primary roads to minimize impact to soil resources. Ancillary roads are used infrequently by small vehicles for access to environmental monitoring and for inspection purposes (See page 3-10 of the DEIS). These roads do not have the same management practices, because of the infrequent use. See Section 23 of the Pinabete Permit Application Package and Chapter 11 of the Navajo Mine SMCRA Permit Application Package.
41.	4.5.1.3	4.5-4	Section 4.5.1.3 states: "The NINEPA has no water quality standard for total dissolved solids (TDS), sulfate, or fluoride." However, Table 4.5-2 Navajo Nation Water Quality Standards for Designated Uses (all in mg/l except pH) includes values for these parameters. The values included in Table 4.5-2 for TDS, sulfate, and fluoride should be credited to livestock watering recommendations provided by Lardy et al. (Lardy, G., C. Stoltenow, and R. Johnson 2008. AS-94 Livestock and Water. Acquired from the Internet 8-18-11 from www.ag.ndsu.edu/pubs/h2oqual/watanim/as954.pdf). MM/Co suggests adding a footnote to Table 4.5-2 to clarify the source of these values.
42.	4.5.2.2	4.5-27	MM/Co's submitted responses to OSMRE Technical Evaluations (TE) on the proposed Pinabete SMCRA Permit. These responses may be downloaded from http://www.wrccc.osmre.gov/initiatives/navajomine/pinabetePermit.shtm . These responses clarified and revised a number of points in the baseline hydrology (Section 18 Water Resources) and the

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Response 296.053

Change made.

Response 296.054

The phrase "prior to excavation of coal mining pits" has been removed from the sentence.

Response 296.055

The text does not indicate that the realignment of Burnham Road would be temporary. It says that NTEC would remove the ancillary roads at the end of the permit term. The text has been clarified in the second full paragraph of the page.

Response 296.056

The text has been changed to read: Approximately 5.2 miles of primary roads would be constructed under the Proposed Action. Topdressing would be salvaged along primary roadways and stockpiled or hauled to regraded areas. Fugitive dust emissions would be controlled by application of water and chemical road stabilizers. To minimize additional surface disturbance, road maintenance would consist of light blading. Ancillary roads will be maintained in a manner to minimize adverse environmental impacts. To minimize additional surface disturbance, the maintenance is limited to occasional light blading particularly after heavy precipitation that may cause damage. The drainage control structures (i.e., culverts, riprap channels, etc.) will be properly maintained. Periodic inspections will be conducted to ensure proper maintenance and safe operating conditions. With the implementation of these measures, impacts to soils (e.g. erosion, productivity and soil loss) during road construction and maintenance would be minimized.

Response 296.057

These lines have been removed from table since the table is intended to show NNEPA water quality standards and not other applicable recommendations.

Response 296.058

The Final EIS has been revised in Section 4.5 for consistency with the responses to OSMRE Technical Evaluations.

Figure 4.5-6 has been modified as follows:

- Dixon Pit label has been moved into Area III
- Gilmore Depression has been added to Area IV North
- The figure pertains to both existing and proposed structures. As such, the sediment ponds have not been removed from the figure.
- Unnamed Arroyo has been changed to No Name Arroyo
- Pinabete Arroyo typo corrected
- The four stock ponds in the Pinabete permit area have been renamed from North to South as Gilmore Depression, Area IV N, Area IV N/S, Stevenson Well Pond.

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			<p>probable hydrologic consequences (Section 4.1 Probable Hydrologic Consequences) in the Pinabete SMCRA Permit. MIMCO suggests the following (TE) responses be addressed in the DEIS:</p> <ul style="list-style-type: none"> On DEIS Figure 4.5-6 and on pages 4.5-26 through 4.5-27, the DEIS identifies three stock impoundments within the Pinabete SMCRA Permit Area. MIMCO has revised its SMCRA permit to state there are four stock ponds within the Pinabete Permit Area. Three stockpounds (Area 4N pond (Pond 1), Area 4N/4S Pond (Pond 2), and Stevenson Well Pond (Pond 3)) were in-channel ponds and determined jurisdictional. The fourth pond, the Gilmore Depression, was not determined to be jurisdictional and seldom has water present. For clarification, MIMCO suggests harmonizing the DEIS text on jurisdictional stockpounds and Figure 4.5-6 with its TE responses to Section 18 Water Resources. MIMCO revised the post-reclamation watershed boundaries in the Pinabete SMCRA Permit. These revisions clarified the watershed acreage and estimated sediment yields based on the updated sediment modeling. For clarification, DEIS Table 4.5-12 should be harmonized with MIMCO's revised Table 4.1.3.5 as submitted to OSMRE. On DEIS page 4.5-50a and in relation to recommended changes to DEIS Table 4.5-12, MIMCO suggests rewording the first bullet to read, "Sediment contributions from reclaimed areas are projected to increase slightly, or be the same as pre-mine conditions in the South Fork of Cottonwood and at the mouth of Cottonwood. These projections are approximately 5 percent, and are within the anticipated error of the SEDCAD model. Sediment contributions from the Pinabete Arroyo and the unnamed tributary of Chaco River are likely to decrease between pre-mine and post-reclamation conditions."
43.	4.5	4.5-32	<p>BBNMC holds all rights under Permit 2838, which is used to supply the FCPP and Navajo Mine with any necessary water supply. NTEC has no rights under the permit. For clarity consider rewording the first paragraph under the heading "Water Use" as follows: "BBNMC holds all rights under New Mexico Office of the State Engineer Permit 2838 which provides a total diversionary right of 51,600 acre-feet annually and a consumptive use right of 39,000 acre-feet annually for surface water from the San Juan River. The water available under Permit 2838 supplies all the water needs of FCPP and Navajo Mine. Water is diverted from the San Juan River into Morgan Lake where it is stored for use at the plant, for all operations (cooling and related purposes), and the mine, for mining, coal processing, and reclamation."</p>
44.	4.6, 4.7 4.8		<p>Several years of wildlife surveys conducted on the mine site, and the Biological Evaluations for Navajo Mine (Ecosphere 2011) and the proposed Pinabete Permit Area (Ecosphere 2014), the extensive Ecological Risk Assessments (AECOM 2013) and (EPRI 2013) and the AECOM Habitat model (AECOM 2013) all provide detailed information to further support the DEIS' wildlife analysis.</p>
45.	4.7.2.1 and 4.7.2.2.	4.7-6	<p>Ponds and impoundments at Navajo Mine and proposed for Pinabete have intermittent water availability. See section 4.7.2.1 and 4.7.2.2.</p>
46.	4.7.2.2	4.7-6	<p>Consider providing separate tables of species expected to occur in the ROI for each of the major project components (FCPP, SMCRA permit renewal and proposed Pinabete Permit Area, and transmission lines). Although a brief description</p>

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Response 296.059

Changed as suggested.

Response 296.060

Thank you for your comment. These resources were used in the development of the Draft EIS.

Response 296.061

Analysis of impacts to wildlife was based upon these references as well as many others in support of a determination and Project effects on species. References have been provided in each of the Sections 4.6, 4.7, and 4.8 where they were appropriate for species level determinations.

In regards to Section 4.6, presently the text states that more detailed vegetation analysis was completed along the FCPP, Mine, and portions of the Transmission lines. Multiple years of mine vegetation analysis is clearly called out in the vegetation sections.

In regards to Section 4.7, the use of these references identified in the comment, and others, are identified and referenced in the appropriate sections of Section 4.7. The references and citations in the sections leading to Section 4.7.4 (Environmental Consequences) are indented to lead the reader to identification of anticipated Project impacts on wildlife detailed in Section 4.7.4. To reinforce the use of these studies, an introductory paragraph summarizing these studies has been included at the beginning of Section 4.7.

In regards to Section 4.8, the use of these references identified in the comment, and others, are identified and referenced in the appropriate sections of Section 4.8. The references and citations in the sections leading to Section 4.8.4 (Environmental Consequences) are intended to lead the reader to identification of anticipated Project impacts on Special Status species detailed in Section 4.8.4. To reinforce the use of these studies, an introductory paragraph summarizing these studies has been included at the beginning of section 4.8.

Response 296.062

OSMRE reviewed the tables and evaluated this request. There is not sufficient information available about the distribution of many of the species identified to accurately separate the tables at the level of detail requested. The area specific descriptions (Navajo Mine, FCPP, transmission lines) provide general lists of species present, as indicated in the various resource reports provided by the applicants, the Navajo Nation, agency databases and other materials reviewed. These sources are not exhaustive, however, and tend to focus on special-status, game or high profile species, while the tables provide a more exhaustive list of species potentially present. We also considered that this action will extend over 25 years and that species distributions may change over this time. Thus, while a species may not be present in a specific area currently, that species may occur in that area at some point in the future, particularly if it is a mobile species or can be found in the vicinity of the specific area in question.

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47.	4.7.4.1	7.7-32	is provided that indicates what the most common species are in the Navajo Mine area, the combined tables infer that the Navajo Mine area has more species and habitat than the multiple years of site-specific studies demonstrate.
48.	4.7, 4.8		For clarification M/MCo conducts annual wildlife surveys to monitor raptors on and within a 1-mile buffer of the SMCRA permit area.
49.	4.8	4.8-1	Please ensure consistency between DEIS Sections 4.6, 4.7, 4.8 with the final Biological Assessment (BA) as applicable for federally-listed species, the Biological Evaluation (BE) for the Pinabete Permit Area (Ecosphere, 2014), the Navajo Mine Biological Evaluation (Ecosphere 2011), and the Biological Clearance Form for the Pinabete Permit Area (Navajo Fish and Wildlife, 2014), including the consistency between the mitigation measures.
50.	4.8	4.8-2	Please rewrite this paragraph as follows for greater clarity: "Federal agencies are required by section 7 of the ESA to ensure that any actions authorized, funded or carried out by the agency do not jeopardize the continued existence of a federally listed threatened or endangered species, or result in the destruction or adverse modification of designated critical habitat. For actions involving major ground-disturbing activities with the potential to affect listed species or designated critical habitat, the lead federal agency (OSMRE) must prepare a Biological Assessment (BA) to determine the effect of the action on listed species and designated habitat. In the event the agency, through the BA, determines that a listed species will be adversely affected or critical habitat adversely modified, the agency must formally consult with the USFWS. As a result of the formal consultation, the USFWS will issue a Biological Opinion (BO) for purposes of determining whether the action would jeopardize the continued existence of any listed species or result in the adverse modification of critical habitat; and for any appropriate measures or alternatives to avoid jeopardy or adverse modification. In compliance with section 7 of the ESA, OSMRE will submit a BA to the USFWS and engage in formal section 7 consultation for the purpose of addressing any adverse effects of the Project on listed species or their critical habitat. Formal consultation will conclude and a final biological opinion issue in advance of a Record of Decision for purposes of NEPA."
51.	4.8.2	4.8-6	On page 4.8-2, M/MCo suggests rewording the third sentence in the second paragraph on the page by adding at the beginning, "If the USFWS determines that jeopardy or adverse modification will result from the project, the BO will include ..."
52.			To complement Table 4.8-1, consider including maps [where available] showing locations of direct observations of special status species, designated critical habitat, and suitable habitat. Appendix D of Habitat Model (AECOM 2013) has habitat maps for several USFWS species.
53.	4.9.4.1	4.9-19	Mountain plover are listed on the Navajo Endangered Species List and BLM Special Status list. Mountain plover have the potential to occur on the Navajo Mine lease and have been documented (including breeding) outside but in close proximity to the 1-mile buffer. Please consider evaluating the impacts, if any, on the mountain plover. The DEIS text on page 4.9-19 describes a temporary traffic management plan required by the BIA to be implemented during the reconstruction of the Burnham Road prior to the permanent reroute of the Burnham Road, which was completed in 2012. Because the permanent reroute has been completed, the traffic management plan as discussed in

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Response 296.063

The following sentence added as requested: These impacts would be minimized by the required performance of annual wildlife surveys within the mine area (and within one-mile of the SMCRA permit area for raptors), which will identify species in areas, or in the vicinity of areas to be disturbed and by removal of vegetation during the non-breeding season for most species, as practical, to eliminate habitat prior to beginning ground disturbing activities.

Response 296.064

Sections 4.6, 4.7, 4.8 and 4.18.3 have been updated for consistency with various other project related documents including the Biological Assessment.

Response 296.065

Because this does not change any of the analysis, no change to the EIS has been made.

Response 296.066

Change made.

Response 296.067

Inclusion of the requested figures would not change the impact analysis or conclusions, therefore, no change to the EIS has been made.

Response 296.068

OSMRE reviewed the potential presence of mountain plover within the ROI and considered the potential impact to this species, as appropriate.

Response 296.069

There is no discussion of a temporary traffic management plan in this section. It is not our understanding that the permanent reroute has been completed given that it is part of the proposed action.

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54.	4.10.3.2	4.10-26	<p>the DEIS text is no longer applicable.</p> <p>The DEIS on page 4.1-2 underestimates the beneficial impact of the transfer of ownership of the mine to the Navajo Nation. The ASU study, "Four Corners Power Plant and Navajo Mine, an Economic Impact Analysis" (ASU 2013) on page 40 states, "If FCPP Units 1-3 are shut down, coupled with an associated reduction in coal production and the change in ownership at Navajo Coal Mine, this could result in a combined estimated gain of 169 jobs, \$7.5 million labor income, and \$9.7 million gross state product from tribal taxes, royalties and tax exemptions alone for the following year in the Navajo Nation, compared to the situation in 2011 when all five units operated at FCPP and Navajo Mine was owned by BHP Navajo Coal Company."</p>
55.	4.11		<p>The third step of the analysis in the Environmental Justice section for each resource evaluated correctly concludes that there will be no disproportionate major adverse effects. The text of the Environmental Justice section supports these conclusions by incorporating the information included in the resource sections in the DEIS, see page 4.11-12, and by summarizing for each resource the potential impacts associated with the Proposed Action, and its alternatives, as well as the changes in the baseline conditions resulting from the closure of Units 1, 2, and 3, the applicant proposed measures, best management practices, and mitigation measures.</p>
56.	4.11.3.1 4.11.3.1	4.11-17 to 4.11-19	<p>The DEIS supports the conclusion for water resources and land and transportation resources and can benefit from the following information: During mining, NTEC would provide alternative sources for livestock watering (e.g., water tanks) to customary land users holding grazing permits, who request assistance, for affected areas within the NTEC lease. After mining operations are completed, NTEC would replace the four livestock impoundments affected by mining with post-reclamation livestock permanent impoundments. Post-reclamation impoundments would be constructed near original pre-mining locations. The replacement livestock impoundments or wells would provide comparable water quantity and quality for use in livestock watering to pre-mine impoundments. (See Section 35, Technical Evaluation Permit Revisions, Pinabete Permit Application Package).</p> <ul style="list-style-type: none"> Permittees are compensated for their grazing in accordance with Navajo law and the terms of the Navajo Mine Lease. BNCC negotiated and executed agreements over time with grazing permit, and CUA holders to compensate for the value of disrupted livestock production and relocation or replacement of improvements to their grazing area due to mining activities. The post-mine land use is designated as livestock grazing and wildlife habitat. In addition, NTEC and MMCo comply with the SMCRA permit, NPDES permit, 404 permit, and 401 certifications regulations and OSMRE conducts a comprehensive analysis of cumulative hydrologic impacts as part of the SMCRA permitting process.

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Response 296.070

The Draft EIS acknowledges the potential economic benefits to the Navajo Nation from NTEC's acquisition of the Navajo Mine in Section 4.10.3.2, as follows: "Now that NTEC owns the Navajo Mine, the baseline fiscal contribution of the Navajo Mine to NTEC is expected to be higher than the estimated \$28.1 million with existing ownership. Because NTEC would be exempt from some local, state, and federal taxes, net revenues after taxes would be higher, so conceivably more revenue would be available to the tribal government." The Draft EIS did not include the exact referenced language from the ASU economic impact study because it runs somewhat counter-intuitive to the reader to state that there will be an economic gain from the shutdown of Units 1-3. Rather the Draft EIS, accounts for this benefit in the sentence above, as well as discusses the potential offset from shutting down Units 1-3 and NTEC acquiring the Navajo Mine in Section 4.10.3.4 where the following language is included: "It]his loss may be offset by the profits and deferred taxes accrued by NTEC's ownership of Navajo Mine, but the difference is not expected to fully offset the payments traditionally realized by the Navajo Nation from BNCC."

Response 296.071

Comment noted.

Response 296.072

This would not change the overall analysis.

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			1.1.4.4, Customary Use Area Interest (Leased Area); Chapter 1, Section 1.1.5.4, Customary Use Area Interest (Lands Contiguous to the Leased Area); and Technical Evaluation Permit Revisions, Pinabete Permit Application Package: Section 35, Hydrologic Reclamation Plan and Chapter 2, Section 2.1, Pre-mining and Existing Land Use.
57.	4.12.2.3	4.12-2	Please state that the Partial Final Decree has been appealed to the New Mexico Court of Appeals. The appeal is in its initial phases at this time. 296.073
58.	4.12.2.6	4.12-3	The DEIS Section 4.12.2.6 states that human remains are considered "cultural items" and not treated as an ITA. Section 4.12.2.4 states that human remains can be considered an ITA if they are associated with land status, a treaty, or other statute. These two sections should be harmonized. 296.074
59.	4.12.4.1	4.12-4	The DEIS overstates the amount of coal to be produced for all Alternatives. Historically with all 5 units (units 1, 2, 3, 4 and 5) operating at Four Corner Power Plant (FCPP), Navajo Mine produced approximately 8-9 million (M) tons per year (tpy). With the shutdown of Units 1, 2, and 3 in December 2013, Navajo Mine will produce approximately 6 M tpy to meet the needs of FCPP. Table 3-5 in the DEIS correctly estimates the amount of coal needed for the Proposed Action. The cost analysis of coal produced, and Table 4.12-1, should be re-evaluated based on an annual production of approximately 6 M tons and 134 M tons for the 25-year lease term. 296.075
60.	4.12.4.1	4.12-5	Section 2.1.2.6 estimates approximately 8 percent of the total coal reserve is lost as wedges and ribs. Section 4.12.4.1 cites a range of 8-10% for coal lost to ribs and wedges. MMCo suggests using the value cited in Section 2.1.2.6 (8%) in Section 4.12.4.1 to calculate the amount of coal reserves lost to coal ribs and wedges. 296.076
61.	4.12.4.1	4.12-6 to 4.12-7	The NPDES permit for Navajo Mine authorizes discharges. In the history of the Navajo Mine NPDES permit, there have been 11 discharges (1977 to present). NTEC also maintains a NNEPA issued Section 401 water quality certification in conjunction with its NPDES permit. An authorized outfall discharge does not automatically constitute a "surface impoundment violation." MMCo is unaware of any "violations" and therefore is unclear which "violations" are referenced in the sentence... "It is worth noting that there have been past surface impoundment violations and there are currently a limited number of impoundments meeting NNEPA surface water quality standards." Please clarify. 296.077
62.	4.14.4		Section 4.14.4 (Noise and Vibration) states that "simple spreadsheet calculations" were used in developing the noise impact analysis. MMCo submits that such calculations may be too simplistic to accurately evaluate noise impacts to various receptors in multiple locations arising from a complex combination of stationary and mobile sources operating over wide areas at various heights, in varying terrain, yielding noise emissions both sequentially and simultaneously. Using the "simple spreadsheet calculations" results in an overly conservative impact analysis and overestimates noise impacts. This Section states that OSM did not use a computer generated model such as CadnaA or SoundPlan because "detailed information was not available." While widely disseminated in the two SWCRA permit application materials, each containing approximately 7,000 pages of detailed information, MMCo believes that the information needed to develop a computer aided noise model is available in the record, but might be difficult to glean from the vast information provided. MMCo will gather the input information from the baseline resources data and provide OSMRE with a computer generated noise model to assist OSMRE in refining the current "simple spreadsheet" model. 296.078

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Response 296.073

The following sentence has been added: The Partial Final Decree has since been appealed to the New Mexico Court of Appeals and no decision has yet been rendered.

Response 296.074

Both statements are correct. Both BIA and NAGRPA consider human remains "cultural items", but if human remains are part of a treaty/land designation/or congressional act, then those items/remains would qualify as ITAs per some land stipulation. No change to text made.

Response 296.075

Thank you for your comment. Table 4.12-1 has been revised to correspond accurately with Table 3-5 and the corresponding text has been revised as follows: In 2011, the average price of coal produced in New Mexico was \$34.22 per ton (US Energy Information Administration 2012). This amount is the price of coal produced and delivered to market, the value of coal in the ground is much lower because of the substantial costs associated with extraction. Assuming a similar BTU rating for average New Mexico coal and the Navajo Mine coal, this analysis estimates a market value of \$34.22 per ton for coal from the Navajo Mine. Table 4.12 shows that coal valued at approximately \$4.6 billion (based on the 2011 New Mexico price) would be extracted during the permit period; however, the future price of coal produced at the Navajo Mine may change as a result of the transfer of ownership of the mine to the NTEC.

A small percentage of the coal resources (between 8 and 10 percent) would be unrecoverable 'wedges' and 'ribs' at the top and bottom of the coal seams. This unrecoverable coal is not included in Table 4.12-1, so an additional 10.7 million (8 percent of 134 million) to 13.4 million (10 percent of 134 million) valued at \$458 million (assuming \$34.22 per ton) would be lost as wedges and ribs.

Response 296.076

Section 4.12.4.1 has been amended to not include the additional 2 percent in referring to coal lost to ribs and wedges, as follows: A small percentage of the coal resources (approximately 8 percent) would be unrecoverable 'wedges' and 'ribs' at the top and bottom of coal seams.

Response 296.077

Sentence has been deleted.

Response 296.078

MMCo submitted a noise report to OSMRE on September 10. The report has been reviewed and text has been revised to incorporate the findings. Results provided in the noise report do not change any of the conclusions provided in the Draft EIS.

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63.	4.16		The DEIS establishes two ROIs: a primary ROI to analyze impact for recreation resources, which includes the Proposed Action footprint, and a regional ROI to analyze regional recreational resources in the Four Corners area. The regional ROI includes a 15 – 20 mile radius around to FCPP and Navajo Mine and a five-mile area around the transmission lines. The DEIS takes a conservative approach by analyzing impacts recreation resources by including resources outside of the 20-mile ROI. 296.079
64.	4.16	4-16.1	The DEIS does a good job identifying regional recreation resources within the Four Corners area. To further support the analyses consider listing the state, county and tribal recreation areas and local activities (i.e., Northern Navajo Shiprock Fair), and referencing land use plans, which discuss recreation areas. 296.080
65.	4.17	4.17-1	The AECOM (2013) HHRA evaluated risk inhalation of contaminations from stack emissions as well as from consumption of food and water within the deposition area. Consider referencing the report and the scope of the HHRA in the opening paragraphs of Section 4.17. 296.081
66.	4.17.1	4.17-1	The DEIS appropriately recognizing MSHA and SMCRA regulation concerning worker and public health and safety. SMCRA also includes other health and safety regulations protective of public health such as 30 CFR 780.13 (blasting plans), 30 CFR 816.61-816.67 (blasting operations) and 30CFR 761.11 (safety around public facilities and structures). 296.082
67.	4.17.2.1	4.17-4	In addition to the other health studies cited in the DEIS (Section 4.17.4.1), OSM conducted two human health risk analyses that evaluate coal dust and diesel particulate matter impacts. These risk analyses show that that metals present in Navajo coal would not pose and unacceptable risk to human health and that particulate emission from mining operations would not pose a major health risk from sensitive receptors. The DEIS acknowledges two regional studies: the San Juan County Community Health Profile (Community Health Improvement Council for San Juan County, May , 2009) and the Navajo Coal Combustion and Respiratory Health Near Shiprock, New Mexico (Bunnell, et.al. 2010). The SIC health study results included in Community Health Profile are considered by EPA in setting NAAQS. As discussed in DEIS Section 4.1, it states the proposed action will be in compliance with NAAQS. 296.083
68.	4.17.4.1	4.17-21	The Bunnell et.al. coal burning in home study identifies an exposure to air pollutants unique to Shiprock communities using coal for domestic heating. Note that this study is not used by EPA or other regulators to determine ambient air quality standards or risks associated with ambient air exposures. To the extent relevant, the Bunnell study supports the conclusions in the DEIS because it states that the respiratory disease burden in the Shiprock area may be reduced by changing indoor home heating behavior and improving stove quality. M/Co agrees with OSMRE's conclusion that the "effects of [diesel] particulate emissions during mining would not pose a major health risk to sensitive receptors (e.g., residents) located downwind of the mine." M/Co also agrees with OSMRE that the screening level health assessment utilized a conservative exposure methodology (maximum mining activity levels and timeframes) and thus overstates potential impacts. Importantly, however, the discussion at pp. 4.17-20 – 4.17-21 overstates the potential health risks even more than OSMRE has concluded. 296.084

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Response 296.079

Comment noted.

Response 296.080

This would not benefit the analysis.

Response 296.081

The following sentences were added to the opening paragraph of Section 4.17: A screening level risk assessment evaluating potential risk to sensitive receptors from diesel exhaust and a human health risk assessment evaluated risk inhalation of contaminations from stack emissions as well as from consumption of food and water within the deposition area.

Response 296.082

Comment noted.

Response 296.083

Comment noted.

Response 296.084

Text has been modified to more clearly state the degree of conservatism in the use of the model.

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No.	Section	Page	Comment
69.	4.17.4.5	4.17-26	<p>OSMRE identified a potential elevated cancer risk from diesel particulate matter (DPM) of between 1 and 2 in a million based on the conservative exposure methodology noted above, and using the cancer unit risk factor developed by the California Office of Environmental Health Hazard Assessment (OEHHA). That cancer unit risk factor was developed using the same methodology used by the U.S. EPA to calculate its draft unit risk factor for DPM. EPA's draft unit risk factor was expressly rejected by the Clean Air Science Advisory Committee (CASAC), the independent peer review panel for EPA's health assessments related to air pollutants. See EPA CASAC, Review of Diesel Health Assessment Document, pp.-2.1 (October 7, 1998) (available at http://vosemite.epa.gov/sab/sabproduct.nsf/D17EBED8B8A7871A8525718F004F8FC0/\$File/casa9901.pdf). CASAC found that "Neither of the two approaches employed by the Agency to use animal data to generate estimates of human risks associated with environmental exposure to diesel exhaust was found to be supported by present knowledge." <i>Id.</i> at 4. The same concern applies to the OEHHA unit risk factor. Ultimately, EPA declined to adopt a unit risk factor for diesel exhaust, a conclusion with which CASAC concurred. See EPA CASAC, Review of EPA's Health Assessment Document for Diesel Emissions, p. 1 (February 4, 2000) (available at http://vosemite.epa.gov/sab/sabproduct.nsf/C2488A0DCA94AD6B8525719B005DF0D5/\$File/casa0004.pdf).</p> <p>Accordingly, MMCo suggests using the chronic Reference Concentration developed by EPA, approved by CASAC and published in EPA's IRIS database (5 ug/m3) instead of the OEHHA unit risk factor to calculate potential cancer risks from DPM, to evaluate non-cancer adverse effects. See EPA, IRIS Database, Diesel engine exhaust (available at http://www.epa.gov/iris/subst/06542.htm). OSMRE should note that the approach to developing the OEHHA unit risk factor was determined to be flawed, and thus that potential risks are likely lower than the DEIS estimates. Finally, MMCo would like to note that DPM is not "considered a hazardous air pollutant" by EPA. (p. 4.17-20.) Rather, DPM has been added to an informal, non-regulatory list of compounds considered to be "mobile source air toxics," or MSATs. See EPA, Mobile Source Air Toxics (available at http://www.epa.gov/otaq/toxics.htm).</p> <p>On page 4.17-6, the DEIS states, "Impacts to Public Health may increase prior to the anticipated mine closure from an increase in mining activity due to the anticipated mine closure." MMCo clarifies that mining will not increase or become less safe if the No Action Alternative is selected. NTEC and MMCo will continue to comply with all applicable regulatory requirements and permit conditions.</p>
70.	4.18	4.18-1	<p>The DEIS' cumulative effects section builds on and is supported by the entire DEIS, including the discussion of the environmental baseline, which includes the past impacts from Navajo Mine, FCPP, and impacts from other past development, and the discussion in the direct and indirect impacts sections, which describe the short and long term impacts associated with the Project, if approved. Many of our comments suggest cross-referencing the other sections, of the DEIS, which provide support for the conclusions reached in the cumulative effects section. The comments we provide in this section are for clarification and, in our opinion, further support the conclusions reached in this section.</p>

296.085
296.086

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Response 296.085

Change made.

Response 296.086

Thank you for your comment. Additional references to sections that describe project-related effects have been included (see responses to comments 296.088). OSMRE has reviewed the list of past, present, and reasonably foreseeable future projects with the Cooperating Agencies and confirmed their status. OSMRE feels that it is clear to the reader which projects are carried forward for cumulative analysis and which ones are not. Justification for this screening-process is included for each project.

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			<p>Table 4.18-1 identifies past, present, and reasonably foreseeable future projects based on scoping comments and input from cooperating agencies. That table identifies those projects carried forward for analysis and those projects which are not, based on whether the project meets the temporal or geographic criteria. The text preceding Table 4.18-1, in conformance with NEPA guidance, describes the temporal criteria as including actions that have occurred in the past or that are or will occur during the timeframe of the analysis, i.e., through 2041 and the time necessary for reclamation of the Pinabete Permit Area, which is through 2061. As OSMRE correctly explains, again consistent with the NEPA guidance OSMRE cites, the geographic scope varies by resource and OSMRE developed a cumulative effect study area for each resource.</p> <p>The DEIS, both in the cumulative effects section and in the separate resource chapters, contains detailed information about the impacts, when relevant, of past, present, and reasonably foreseeable future projects. With respect to impacts from past actions, the DEIS' cumulative effects analysis follows CEQ guidance, including CEQ's 2005 guidance, cited on page 4-18-4, by providing "an analysis and concise description of identifiable present effects of past actions to the extent that they are relevant and useful." CEQ 2005. CEQ guidance confirms that NEPA does not require an agency to "delv[e] into the historical details of individual past actions" but instead that an agency can focus on the "current aggregate effects of past actions." <i>Id.</i></p> <p>MMCo requests that OSMRE review the projects identified in the table and confirm that all relevant projects are included and their impacts discussed in the cumulative effects resource sections as relevant in the final EIS. For example, both the Navajo Mine and FCPP could be added to Table 4-18-1 because, although the DEIS throughout acknowledges that the past impacts from Navajo Mine and FCPP are part of the baseline, it may be helpful to the reader to include them in the table as well. Similarly, the table appropriately identifies past, present, and reasonably foreseeable future oil and gas development. As you move from draft to final, please clarify for the reader that the cumulative effects analysis includes impacts, as relevant from oil and gas development in the region. MMCo also notes that, during the pendency of the DEIS, the status of some of the projects identified in Table 4.18-1 may have changed and the final EIS may need to be updated to reflect their current status.</p> <p>Finally, MMCo suggests breaking down the "Rationale for Consideration or Elimination" column into its relevant component parts to demonstrate why the project was either carried forward or eliminated from review. For example, SIGS is appropriately carried forward because it is a past, present, and reasonably foreseeable future project and it has had or is expected to have effects on resources common to the Proposed Action, found within the resource defined ROI, such as air, climate change, visibility. Similarly, the proposed Ute Mountain Ute Power Generation Facility was properly eliminated because, although, if constructed, it may have effects in the same ROI as the Proposed Action, it is not a reasonably foreseeable future action because it is too speculative at this time.</p>

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No.	Section	Page	Comment
71.	4.18.3.1	4.18-35	<p>296.087</p> <p>Although the DEIS includes the past impacts from Navajo Mine in the baseline, consider adding a discussion here of past/present/future Navajo Mine impacts on air quality, or cross-referencing the other sections of the DEIS that already provide the background information and support for the cumulative effects analysis. For example, Section 4.1 discusses air quality in great detail, including the various studies undertaken to model and quantify past and future impacts from the Navajo Mine and FCPP, as well as studies regarding past impacts from other operations in the San Juan Basin. Table 4.1-1 in Section 4.1 is helpful because it identifies the National Ambient Air Quality Standards. Considering referring back to that table or reproducing it in this discussion. Section 4.1.2.5 includes a discussion of the regional air quality planning tool that can be used to evaluate impacts of future development projects. Consider referring back to this section when discussing future impacts from the Proposed Action and other future projects, because it provides helpful information regarding future impacts.</p> <p>296.088</p> <p>As with other resources, the DEIS includes background information and analysis that informs the cumulative effects analysis for climate change. Consider cross-referencing those sections here. For example, Table 4.1-7 quantifies the emissions from mobile sources at Navajo Mine. Consider expanding the analysis of Navajo Mine's and FCPP's contributions to regional and global GHG emissions using the information already developed in Section 4.2.2.6, which provides context for the discussion of cumulative effects from the Mine and FCPP on climate change. Table 4.2-11 provides useful information regarding estimated GHG emissions from Navajo Mine and FCPP, as do Tables 4.2-16 to 17. Consider cross-referencing. Tables 4.2-4 to -10 provide helpful information regarding past FCPP and other power plant contributions of GHG emissions. Table 4.2-6 provides useful information on past GHG emissions statewide. This table also appears to provide useful information from which to estimate present and future GHG emissions statewide. Consider cross-referencing that table.</p> <p>296.089</p> <p>Consider cross-referencing or summarizing the relevant portions of the previous DEIS chapters, which provide useful background information and analysis. For example, the Cultural Resources section of the DEIS, Chapter 4.4, provides context for the cumulative effects analysis, including describing the studies that have been undertaken and the resources that have been identified. See, e.g., Section 4.4.2.2. Tables 4.4-2 to -6, and the supporting text, provide useful information about the potentially affected historic properties within the Project area by alternative. These tables provide useful context for the cumulative effects analysis.</p> <p>296.090</p> <p>Consider clarifying the statement that much of the proposed Pinabete Permit Area is "designated" a TCP to ensure that the statement accurately describes the designated TCPs, if any, within the Pinabete Permit Area.</p> <p>The introduction to this section correctly states that the impacts from past projects are accounted for as part of the affected environment, but could be clarified for user-friendliness to better explain how those projects are accounted for in the affected environment. For example, the discussion in Section 4.5.2.1 (Affected Environment Pre-2014) provides useful information regarding past groundwater studies, monitoring, and background information on groundwater properties. Consider cross-referencing that section and its included tables and citations. Section 4.5.2.1 also provides</p>
72.	4.18.3.2	4.18-36	
73.	4.18.3.4	4.18-40 to -41	
74.	4.18.3.5	4.18-41	

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Response 296.087

The following reference has been added to Section 4.18.3.1: "Please see Section 4.1.2 and Section 4.1.4 for information on FCPP historic and future emissions; this information served as the basis for measuring FCPP's contribution to the cumulative air quality environment."

Response 296.088

The following reference has been added to Section 4.18.3.2 to guide the reader back to the potential direct effects to climate change: "Please see Section 4.2.2, Section 4.2.3, and Tables 4.2-2 – 4.2-10 for information on FCPP GHG emissions when compared to the other GHG generation sources in the region. This information was directly taken into account for assessing cumulative climate change effects".

Response 296.089

The following reference has been added to Section 4.18.3.4 to guide the reader back to the potential direct effects to cultural resources: Please also see Section 4.4.3, Section 4.4.4, and Tables 4.4-2 – 4.4-6 for information on historic and potential future effects to cultural resources as result of FCPP and Navajo Mine operations. As stated in Section 4.4.4, OSMRE is consulting with the Navajo Nation THPO on determinations of eligibility for 20 resources and Project effects for historical properties within the APE. These potential Project effects served as the basis for assessing cumulative effects in the Four Corners region and on tribal trust lands.

Response 296.090

The following reference has been added to Section 4.18.3.5 to guide the reader back to the potential direct effects to water resources: "Please see section 4.5.4 for a discussion of potential project-related effects that were taken into account for assessing cumulative effects".

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No.	Section	Page	Comment
75.	4.18.3.5	4.18-41	helpful background information on groundwater quality. Consider cross-referencing that discussion as well. The DEIS correctly states on page 4.5-6, "Groundwater availability in the Fruitland Formation is limited by its relatively low hydraulic conductivity (0.002 to 0.00013 feet per day), which means that water cannot move easily through pores or fractures in the formation, as well as low rates of recharge." The Navajo Mine SMCRA Permit Package (NM-0003F, Chapter 6), Pinabete-SMCRA Permit Application Package (Part 2, Section 18), and OSMRE's Cumulative Hydrologic Impact Assessment (CHIA) (OSMRE 2012) support the DEIS analysis that the groundwater production in the Fruitland Formation is expected to be limited.
76.	4.18.3.5	4.18-41	The discussion in Chapter 4.5 provides useful background information and analysis supporting the DEIS' cumulative effects conclusions. Consider cross-referencing or summarizing the relevant portions in this discussion. For example, the discussion at pages 4.5-17 to -19 includes a discussion of Navajo Mine's additions to TDS concentrations. The Water Resources/Hydrology Section includes a discussion of past CCB disposal, including monitoring wells, at Navajo Mine and CCR disposal at FCPP at pp. 4.5-13 to 17. This section also discusses past impacts from past CCB disposal at the Mine as addressed by OSMRE's CHIA, which concluded that negligible impacts had resulted from CCB disposal at the Mine and that it is unlikely that any significant future impacts will occur, because of the very slow groundwater movement and the lack of hydrologic connection. This section also discusses other studies that support the conclusion that CCB disposal at the Mine will have no impacts in the short- or long-term, and thus, by definition, cannot add to cumulative effects. This information is helpful to understanding the cumulative impacts analysis. Please consider cross-referencing this section, as well as other sections where CCB disposal is addressed.
77.	4.18.3.5	4.18-42	Based on the analysis and studies discussed in the DEIS, we believe that the DEIS is overly conservative in concluding that, when considered cumulatively, all projects together could result in adverse cumulative effects. For example, the Water Resources/Hydrology section contains supportive information in the alternatives discussion at pages 4.5-43 to 4.5-45. We agree, however, with the conclusion that the Proposed Action's contribution would be minimal. Consider clarifying this discussion to make clear that the cumulative effects analysis considers the impacts of Navajo Mine on surface waters and the impacts of similar projects, and the impacts of FCPP and impacts from similar projects on surface waters. For example, the Water Resources/Hydrology direct/indirect impacts section states that the ROI for surface waters includes areas within the deposition area of the FCPP, which appropriately acknowledges the impacts on surface water quality. The Surface Water Quality section of the direct and indirect impacts analysis contains useful background information, including historic water quality monitoring results, supporting the cumulative effects discussion. Also, consider cross-referencing the regulatory requirements section of Section 4.5.1, which sets out the regulatory compliance framework, including federal, state, and tribal requirements.

The Water Resources/Hydrology Section provides information on the impacts of Waters of the US from the Proposed Action, for example, at pages 4.5-52-53. Consider cross-referencing.

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Response 296.091

Thank you for your comment and review of the Draft EIS's findings on potential cumulative effects to groundwater conductivity.

Response 296.092

Although the Draft EIS determines that the impacts of ash placement at FCPP and Navajo Mine are minor, it acknowledges a potential that the cumulative effects resulting from the incremental contributions from regional power plants and mines with CCR storage areas within the San Juan Basin may be moderate to major. According to the NEPA guidelines, the cumulative effects analysis is meant to evaluate the additive effects of the Proposed Action with other similar projects within the area of analysis. Although the Proposed Action has a minor effect, when taken together with other water quality stressors within the San Juan Basin the cumulative effect may be moderate to major. Therefore, the cumulative impacts section both 4.18.3.5 and 4.18.3.15, is correct in disclosing the potential for moderate to major adverse groundwater impacts from cumulative CCR storage operations. No change has been made to the Draft EIS.

Response 296.093

Although the Draft EIS determines that the impacts of CCR placement at FCPP and Navajo Mine are minor, it acknowledges a potential that the cumulative effects resulting from the incremental contributions from regional power plants and mines with CCR storage areas within the San Juan Basin may be moderate to major. According to the NEPA guidelines, the cumulative effects analysis is meant to evaluate the additive effects of the Proposed Action with other similar projects within the area of analysis. Although the Proposed Action has a minor effect, when taken together with other water quality stressors within the San Juan Basin the cumulative effect may be moderate to major. Therefore, the cumulative impacts section both 4.18.3.5 and 4.18.3.15, is correct in disclosing the potential for moderate to major adverse groundwater impacts from cumulative CCR storage operations. No change has been made to the Draft EIS.

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78.	4.18.3.6	4.18-43	We agree with the conclusion that impacts on downstream surface water quality will be negligible. The Water Resources/Hydrology section contains supportive information in the alternatives discussion at pages 4.5-46 to 4.5-65. The Vegetation Section, 4.6, discusses past impacts from Navajo Mine and FCPP on vegetation. Consider cross-referencing. The discussion of habitat should be removed from this section, or cross-reference the next section, which specifically discusses habitat.
79.	4.18.3.7	4.18-44	Please ensure consistency between this discussion and the final BA, the BE for the Pinabete Permit Area (Ecosphere, 2014), the Navajo Mine BE (Ecosphere 2011), and the Biological Clearance Form for the Pinabete Permit Area (Navajo Fish and Wildlife, 2014). Section 4.7.2.1 discusses the affected environment pre-2014. Consider cross-referencing this discussion and other relevant information. BNCC undertook, and NTEC/MMCo will continue to undertake, many years of wildlife studies that inform this discussion and that are discussed in Section 4.7. Consider cross-referencing or summarizing those studies here. As with other resources, SMCRA and other federal statutes impose requirements, which minimize impacts on wildlife and their habitat. Consider cross-referencing Section 4.7.1, which discusses the regulatory compliance framework including federal, state, and tribal regulations, as well as regional plans.
80.	4.18.3.8	4.18-44	Chapter 4.7, Section 4.7.4 discusses the environmental consequences of the Proposed Action. Consider cross-referencing or summarizing as relevant and appropriate in the cumulative effects discussion. Consider adding a cross-reference to the Special Status Species section, which provides useful information on the potential of special status species to occur in the Project area based on studies, site visits, and modeling. Please ensure consistency between this discussion and the final BA, the BE for the Pinabete Permit Area (Ecosphere, 2014), the Navajo Mine BE (Ecosphere 2011), and the Biological Clearance Form for the Pinabete Permit Area (Navajo Fish and Wildlife, 2014). The China worst case scenario in the cumulative effects section is a helpful summary of the more expanded discussion in the BA. The discussion in the BA demonstrates that the study included emissions from other generating stations, and not just FCPP. As with the wildlife and habitat section, BNCC has, and NTEC/MMCo will continue to, undertake annual wildlife surveys. The information in those surveys provides additional background information and analysis and should be referenced, included or summarized. Other sections of the DEIS contain information and analysis relevant to the DEIS' cumulative effects analysis. For example, OSM has in the past undertaken consultation with US FWS and the Navajo Nation regarding the SMCRA permit and is the lead agency, along with the other agencies, undertaking consultation on the

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Response 296.094

The following reference has been added to Section 4.18.3.6 to guide the reader back to the potential direct effects to vegetative resources: “Please see Sections 4.6.3 and 4.6.4 for a discussion of potential project-related effects that were taken into account for assessing cumulative effects.”

Response 296.095

Section 4.18.3 has been updated for consistency with the BA and other project specific studies.

Cross references have been added to Section 4.7.2.1 to direct the reader to the studies the applicants routinely conduct, as specified in the Project Description.

Cumulative effects are not discussed in this section to avoid confusing the readers as to those effects related to the project vs. those effects from other sources. A brief mention of the cumulative impacts Section 4.18.3 has been added.

Response 296.096

This section was reviewed and revised, as appropriate, to provide consistency with other environmental documents.

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No.	Section	Page	Comment
81.	4.18.3.10	4.18-50	Proposed Project, which Section 4.8 describes. As with other resources, SMCRA and other federal statutes impose requirements, which minimize impacts on special status species, which the Special Status Species section describes in Section 4.8.1.1. Chapter 4.8, Section 4.8.4 describes the impacts expected from the proposed action. Consider cross-referencing or summarizing those discussions here. This section assumes adverse effect if the Proposed Action only affects employment, etc. The Proposed Action, if approved, will have beneficial impacts on socioeconomics. Consider rephrasing. Section 4.10 describes the current and future socioeconomic conditions in the Four Corners Region, which provides useful information for the cumulative effects analysis. Consider cross-referencing.
82.	4.18.3.13	4.18-51	MIMCo agrees with the conclusion that emissions from FCPP, when added to emissions from all projects in the area, will only have a negligible effect on visual resources. This conclusion is supported by the cumulative effects analysis as well as the Air Quality discussions in the DEIS. For example, Section 4.1 (Air Quality) contains a detailed discussion of visibility and regional haze in Section 4.1.2.5, including a list of visual resources, tables describing historic trends and historic composite visibility from the 10 IMPROVE sites, which are ten national parks or wildernesses in the area, and a discussion of how past projects and operations have affected those resources. The section discusses regional visibility and various studies undertaken to study impacts on visual resources. Section 4.1.2.6 also includes information about deposition at national parks and wilderness areas in the area.
83.	4.18.3.15	4.18-52	The nature of impacts from historic CCB disposal at Navajo Mine is known and documented, and is described in other sections. The nature of the impacts should be included in this section as well. For example, the Hazardous Waste Section, Section 4-15, refers to Section 4.5.2.1 for a summary of the studies of the CCB disposal at Navajo Mine, which studies have not identified adverse effects.
84.	4.18.3.16	4.18-53	MIMCo does not agree with the conclusion that the impacts from CCB disposal at the Navajo Mine and FCPP are considered moderate to major and long term; rather, we think that the available data and analysis in the DEIS support the conclusion that impacts would be negligible to minor. As described in the Hazardous Waste section, the studies conducted at both Navajo Mine and FCPP have found that CCB disposal at the Navajo Mine has not caused adverse impacts, p. 4.15-5, and the Environmental Justice Section at pp. 4.11-23, states that there have only been two areas of seepage at FCPP, and that systems have been designed to prevent contamination of the Chaco wash and that groundwater data shows declines in all constituents.
85.	4.18.3.16	4.18-53	The No Action Alternative would negatively impact recreation on Morgan Lake, if Morgan Lake is no longer supplied with water. A discussion of the recreational value of the leased areas would be helpful in relation to how much hunting, trapping, fishing, and hiking occurs (or occurred in the past) on nearby/land. Consider cross-referencing Section 4.16.2.2, which describes the limited project area recreation resources. Is the "plume area of FCPP emissions" the same as the FCPP deposition area? Please clarify.

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Response 296.097

The cumulative analysis for socioeconomic effects under the No Action alternative does consider a wider set of economic resources than solely employment, as stated: "Therefore, while the closure of FCPP and Navajo Mine would directly affect regional economic conditions, other future projects would positively contribute to the region's economic vitality and not result in a detrimental cumulative effect."

The following reference has been added to Section 4.18.3.10 to guide the reader back to the potential direct effects to socioeconomic resources: "Please see Sections 4.10.3 and 4.10.4 for a discussion of potential project-related effects that were taken into account for assessing cumulative effects".

Response 296.098

Comment noted.

Response 296.099

Please see response to comment 296.094.

Response 296.100

The following reference has been added to Section 4.18.3.16 to guide the reader back to the potential direct effects to recreational resources: "Please see Sections 4.16.3 and 4.16.4.2 for a discussion of potential project-related effects that were taken into account for assessing cumulative effects".

Section 4.16.2.1 includes a discussion of recreational resources in the surrounding area (i.e. on the Navajo Nation), in addition to those offered by Morgan Lake.

Response 296.101

It is assumed in the referenced context of the comment where in the cumulative public health analysis (Section 4.18.3.7), the Draft EIS states that "[t]he past and present cumulative risk was evaluated by

soil sampling conducted within the footprint of the dispersion and deposition plume for FCPP” does mean the same geographic area.”

The following reference has been added to Section 4.18.3.17 to guide the reader back to the potential direct effects to human health: “Please see Sections 4.17.3 and 4.17.4 for a discussion of potential project-related effects that were taken into account for assessing cumulative effects.”

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No.	Section	Page	Comment
86.	4.19	4.19-1	This last portion of this section discusses PM2.5 from the Navajo Mine but the first portion states that the Navajo Mine will not have an impact (and we agree). Consider clarifying. Section 4.17 provides useful information regarding the affected environment pre-2014, including a discussion of past health studies, and recent health risk assessments to evaluate the health effects from emissions from FCPP units 4 & 5. Consider cross-referencing. We agree with OMSRE's approach of not imposing additional mitigation measures where the Proposed Action itself includes applicant proposed measures, best management practices, and standard operating procedures that are expected to avoid, minimize, or mitigate adverse impacts or result in beneficial impacts. For example, see the applicant committed mitigation measures.
Chapter 5			
87.	5		DEIS Chapter 5 would benefit from a clearer and more complete description of the ESA and NHPA Section 106 consultations, which have been extensive and conducted in parallel with the NEPA compliance effort. In addition, without disclosing any confidential discussions, the Chapter could also identify any government-to-government consultations with Native American groups, and consultations with any non-governmental organizations that may have occurred.
88.	5.1.1.2	5-2	BIA will also be considering rights-of-way applications for NTEC roads, in addition to ROWs for the FCPP.
89.	5.1.1.2	5-2	1 The Navajo Nation is the beneficial owner of surface and minerals. The United States holds legal title to surface and minerals. 2 Clarify what is meant by "exclusive and concurrent" authority and responsibility. Consider striking the reference to "exclusive."
90.	5	5-2	To avoid confusion regarding BLM's role relative to OSMRE's role, consider inserting "Resource Recovery and Protection Plan (R2P2)" instead of the more generic "mining plans."
91.	5.1.3	5-4	The ESA and NHPA consultations also meet the regulatory requirements of those statutes as well. Consider broadening the reference to NEPA at the end of the paragraph to include the other statutes.

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Response 296.102

Comment noted.

Response 296.103

Section 5.1.3 has been updated with consultation activities that have occurred since publication of the Draft EIS.

Response 296.104

Language added.

Response 296.105

Changed this: "The Navajo Nation is the owner of both the surface and coal resources lying beneath Navajo Nation land impacts by the Project." to this: "The Navajo Nation is the beneficial owner of surface and minerals lying beneath Navajo Nation lands impacted by this Project; whereas the United States holds legal title to surface and minerals." The "exclusive and concurrent" statement remains unchanged.

Response 296.106

BLM has regulatory authority and approval for mining plans of operations issues relating to coal resource recovery and protection. No change required.

Response 296.107

No change made.

COMMENT #296

Attachment B: BHP Billiton Mine Management Company (MMCo) Errata Comments on the Office of Surface Mining Reclamation and Enforcement (OSMRE), Four Corner Power Plant and Navajo Mine Energy Project (FCPPNMEP) Draft Environmental Impact Statement, March 2014

No.	Section	Page	Comment	
1.	Global		Tables 3-8, 3-9, and 3-11 accurately describe the length of primary and ancillary roads associated with Alternatives A, B, and C. For clarification, MMCo suggests that the DEIS text describing road lengths be harmonized with these tables.	296.108
Chapter 1				
2.	1.1.1	1-1	BHP Billiton New Mexico Coal created BHP Billiton Mine Management Company (MMCo). MMCo suggests revising the verb tense in Section 1.1.1. of the DEIS on page 1-1 to indicate this as past action and make this change, as appropriate, throughout the Final EIS.	296.109
3.	1.2	1-3	Please correct the following distances cited in the text discussing the Navajo Mine lease: 39 miles 24 miles and 28 miles 18 miles .	296.110
Chapter 2				
4.	2.1.1	2-5	In the first sentence under the heading "Workforce", please change the sentence to read: "BHP Billiton Mine Management Company (MMCo) employs approximately 526 people at the mine site and Farmington office."	296.111
5.	2-2	2-6	Please delete the first paragraph under Figure 2-2 discussing underground mines in the Navajo Mine Lease Area because there are no abandoned underground mines within the Navajo mine lease area.	296.112
6.	2.1.2	2-6	Please correct Figure 2-2 to show Navajo Mine and FCPP are located west of Farmington.	296.113
7.	2.1	2-7	Recommend adding a new bullet # 8 to state that – "Repeat steps 5 through 7 for each minable seam".	296.114
8.	2.1.2.6	2-12	Note that the Burns Pass Temporary stockpile is not placed at a railroad spur as are the other field stockpiles.	296.115
9.	2.1.2.6	2-12	Please replace "MMCo employees" with "New Mexico Coal employees".	296.116
10.	2.1.4	2-13	Please correct the text to identify that the coal preparation facility is owned by NTEC and is within the Navajo Mine SMCRA permit area.	296.117
11.	2.1.6	2-15	Please change 2010 to 2009 in the last paragraph on page 2-15.	296.118
12.	2.1.7	2-16	Please replace "Navajo Mine" with "NTEC" in the following sentence: "Under NTEC's lease agreement with the Navajo Nation and NTEC's OSMRE SMCRA permit,...."	296.119
13.	2.1.7	2-16	Please change calcium sulfate formula from "CaSO ₃ " to "CaSO ₄ ".	296.120
14.	2.2.6.2	2-25	Please change December 31, 2014 to December 30, 2013.	296.121
15.	2.4.1	2-34	Permit 2838 has already been transferred to BHP Billiton New Mexico Coal (BBNMC).	296.122

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Response 296.108

The Final EIS has been reviewed to ensure that the numbers from Tables 3-8, 3-9, and 3-11 are used throughout.

Response 296.109

Tense corrected here and checked throughout.

Response 296.110

Change made

Response 296.111

Change made

Response 296.112

Change made

Response 296.113

The inset on Figure 2-2 has been modified such that the mine and power plant are located to the west of Farmington

Response 296.114

Change made.

Response 296.115

Comment noted.

Response 296.116

The Draft EIS already says New Mexico Coal employees.

Response 296.117

The Draft EIS does not say it is not owned by NTEC. Text inserted.

Response 296.118

Change made

Response 296.119

Change made

Response 296.120

Change made

Response 296.121

Change made

Response 296.122

Discussion edited as follows to reflect transfer of permit 2838: Prior to sale of NMCC, LLC's equity to NTEC, BNCC, the previous owner of Permit 2838, transferred its ownership interest in Permit 2838 to BBNMC. BBNMC will honor all existing contractual commitments for water deliveries (BNCC/NTEC/APS 2013).

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COMMENT #296

No.	Section	Page	Comment	
Chapter 3				
16.	3.2.1.1	3-3	The existing SMCRA permit area contains approximately 18,520 acres and not 20,590 acres.	296.123
17.	3.2.1.1	3-9	Please replace 2049 with 2041 in the second paragraph after Table 3-5.	296.124
18.	3.2.1.1	3-10	Replace "support facilities" with "buildings".	296.125
19.	3.2.6.5	3-36	Please change quantity to quality.	296.126
20.	3.2.6.9	3-44	There are no BIA requirements for grazing compensation and that language should be stricken.	296.127
21.	3.2.6.10	3-44	Please change the verb tense in the following sentence: NTEC has implemented a Native American hiring and vendor preference policy.	296.128
22.	3.3.4.4	3-54	Remove the bullet regarding revision to a Navajo Mine air emissions permit because the Navajo Mine is not required to have an air emissions permit.	296.129
23.	Table 3-11	3-57	Correct the Table 3-11 headings to match the titles of the alternatives used in the text.	296.130
Chapter 4				
24.	4.1	4.1-1	For completeness, add O ₃ to the list of criteria pollutants.	296.131
25.	4.1.1	4.1-2	The first paragraph states that Arizona, Colorado, New Mexico and Utah adopted NAAQS in lieu of more stringent state standards. However, New Mexico has adopted its own state ambient air standards (regulation 20.2.3NMAC) which may be different or in addition to NAAQS. An example of the more stringent state standard adopted by New Mexico is the 24-hr average standard for NO ₂ . There is not a federal 24-hr standard for NO ₂ .	296.132
26.	4.2.4.1	4.2-19	Please provide the emissions factors used to calculate the GHG emissions.	296.133
27.	4.2.4.5	4.2-23	Under Alternative E, please change "undefined" to "defined" in the last line.	296.134
28.	4.2.5	4.2-24	In the fourth line from the bottom of the first paragraph, please change "implanting" to "implementing".	296.135
29.	4.3	4.3-1	M/Co provides the following narrative to support the discussion of the last three sentences in the first paragraph to describe the proposed land disturbance: "The Pinabete Permit Area is wholly contained within the Navajo Mine mining Lease Area and is comprised of portions of the currently permitted Area IV North (Navajo Mine SMCRA Permit Area) (OSM Permit No. NM-0003F) and a portion of the unpermitted Area IV South (BNCC 2012). The planned land disturbances would occur only within the previously unmined areas of the Navajo Mine SMCRA Permit Area and Pinabete Permit Area (portions of Area IV North and Area IV South) and the FCPP lease area. Other than what is described in the Proposed Action, no additional land disturbances are planned within other portions of the Navajo Mine Lease Area, the FCPP lease area, or beneath the seven transmission lines with the exception of on-going reclamation and maintenance activities."	296.136

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Response 296.123

Text revised.

Response 296.124

Change made.

Response 296.125

Support Facility has been replaced with "buildings" in the first and last sentences of the paragraph.

Response 296.126

Change made.

Response 296.127

Change made.

Response 296.128

Change made.

Response 296.129

Change made.

Response 296.130

Change made.

Response 296.131

Change made.

Response 296.132

While the comment is true, the New Mexico Environment Department Air Quality Bureau does not have jurisdiction over facilities on Tribal Lands. In the interest of consistency across the tribal lands and two states, the Air Quality analysis in the EIS makes comparisons against the National Ambient Air Quality Standards. Mentioning the differences

for New Mexico standards would be informational, but would not change the analysis or the conclusions of the EIS.

No change was made to the EIS based on this comment.

Response 296.133

Section 4.2.2.2, Greenhouse Gases, provides the Global Warming Potential factor used for each GHG to quantify Carbon Dioxide Equivalents in the referenced table. No change was made to the EIS based on this comment.

Response 296.134

Change made.

Response 296.135

Change made.

Response 296.136

Have modified as follows:

The Pinabete Permit Area is wholly contained within the Navajo Mine Lease Area, located south of the Navajo Mine Permit Area (BNCC 2012)... with the exception of on-going reclamation and maintenance activities.

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No.	Section	Page	Comment
30.	Figures 4.3-3, -4, & -5		MMCo recommends removing the references and placeholders for confidential Figures 4.3-3, 4.3-4, 4.3-5 from the DEIS. 296.137
31.	4.3.2.2	4.3-4	Please clarify the descriptions of the following physical features: <ul style="list-style-type: none"> The San Juan River is an important surface water feature and needs to be identified as a landform or topographic feature. The Pinabete Diversion (Area IV South) should be removed from this figure as it would only be built as a component of Alternative B. The No Name Arroyo (Area IV South) continues to the Chaco River. In Figure 4.3-1, please identify No Name Arroyo within the Navajo Mine lease and the unnamed tributary to the west of the Navajo Mine lease as the No Name Arroyo. 296.138
32.	4.3.2.3	4.3-7	The text describes the multiple site-specific surveys within the Navajo Mine Lease Area, and information contained in the associated reports (Buchanan Consultants 2011). However, Figure 4.3-2 is based on the NRCS SSURGO data set and does not relate back to the text description. The BNCC Soils Resource Baseline Data reports submitted in June 2012 provided site-specific surveys for the Navajo Mine Lease Area and region surveys conducted by the NRCS. The DEIS mentions both the regional and site specific surveys. However the discussion of the different scales of the surveys can be improved to better lead into the regional scale mapping found on Figure 4.3-2. 296.139
33.	4.3.4.5	4.3-27	The DEIS states, "A slight permanent alteration in topographic relief would occur compared to the pre-mine conditions. These impacts are considered minor." We agree with the conclusion that the impacts would only be considered minor and note that reclamation designed to approximate original contours using geomorphic reclamation practices is not considered a "permanent alteration" but is a demonstrated enhancement of landform stability. 296.140
34.	4.4	4.4-1	Please add in Section 4.4 that cultural resources are not necessarily the same as "historic properties", as that term is used in the NHPA, because not all cultural resources are eligible for or included in the NRHP. 296.141
35.	4.5.1.3	4.5-5	The acute and chronic aquatic criteria for chromium II and zinc listed in Table 4.5-2 do not correspond with the criteria calculated using the hardness value of 108 mg/l as CaCO3. The acute and chronic aquatic criteria for chromium III in the table should be 0.6068 and 0.0789 mg/l, respectively. The acute and chronic aquatic criteria for zinc in the table should be 0.12508 and 0.1261 mg/l, respectively. 296.142
36.	4.5.2.1	4.5-7	MMCo suggests the following changes to Figure 4.5-1 to augment the information provided: <ul style="list-style-type: none"> Add all of the Navajo Mine alluvial monitoring wells in Area IV to the figure. Add coal seam wells KP98-02 and KP98-04 in Area IV South to Figure 4.5-1. Also add Piezometer VWP2007-01, located near the boundary between Area IV North and Area IV South, Figure 4.5-1. 296.143

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Response 296.137

The placeholders for confidential Figures 4.3-3, 4.3-4 and 4.3-5 and their associated in text citations have been removed from the document

Response 296.138

The Following modifications have been made to figure 4.3-1

- 1.) A label for the San Juan River has been added to the figure
- 2.) The Pinabete Diversion has been removed
- 3.) No Name Arroyo has been added to figure

Response 296.139

Description has been modified to tie the figure and text better.

Response 296.140

No change made. Geomorphic reclamation may be an enhancement of landform stability compared to traditional reclamation; however, it would be a stretch to globally say that geomorphic reclamation is an enhancement over the non-disturbed land.

Response 296.141

This section does not imply that cultural resources = historic properties. No change made.

Response 296.142

The table has been revised accordingly.

Response 296.143

The following edits have been added to Figure 4.5-1

- 1.) Missing alluvial wells have been added
- 2.) Piezometer VWP2007-01 has been added to the figure and labeled
- 3.) Coal seam wells KF98-02 and KF98-04 in Area IV South have been added to the figure and labeled
- 4.) The word "Monitoring" was removed from the legend headers (i.e. Navajo Mine ~~Monitoring~~ Wells and Navajo Nation ~~Monitoring~~ Wells)
- 5.) Upstream of Morgan lake the Chaco River has been changed to the "intermittent stream" type "symbol"
- 6.) CCR monitoring wells have been added to Areas I and II.

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			<ul style="list-style-type: none"> Remove the word "Monitoring" from the legend describing the wells. While some of the wells may be used for monitoring, most of the wells were installed for livestock watering. Modify the "perennial" symbol for the Chaco River. The Chaco River exhibits ephemeral channel characteristics until the confluence with the unnamed tributary exiting Morgan Lake. Downstream of the confluence with the unnamed tributary, the Chaco River exhibits perennial channel characteristics
37.	4.5.2.1	4.5-9	The last sentence on the page could be clarified to state that "Only one of the coal seam wells, well KF2007-01 completed in the No. 8 Coal in Area IV South, has sufficient yield to allow for a constant rate pumping test to determine hydraulic characteristics of the coal."
38.	4.5.2.1	4.5-10	<p>Please add the test results for transmissivity and hydraulic conductivity for well KF2007-01 (completed in the No. 8 Coal Seam in Area IV South) to Table 4.5-4. The well results are transmissivity 1.398 ft²/day and hydraulic conductivity 0.056 ft/day. For clarification, MMCo suggests the following footnotes to Table 4.5-4:</p> <ul style="list-style-type: none"> These test results are only for the No. 8 Coal Seam wells within Area IV North and Area IV South. The test results for the No. 2, No.4-6, and the No. 7 coal seams are from wells located within Area III. The Pictured Cliffs Sandstone results include tests at wells within Area IV North, Area IV South, Area V and adjacent to Area V. <p>Additionally, Table 18.2-6 of the Pinabete SMCRA Permit application package provides transmissivity results for Fruitland coal seams 2, 4-6, and 7 (BNCC 2012a). For clarification, MMCo suggests adding the following transmissivity results of 0.009 to 0.1 ft²/day for seam 2, 0.01 ft²/day for seam 4-6 and 0.01 to 0.04 ft²/day for seam 7 to Table 4.5-4."</p>
39.	4.5.2.1	4.5-13	Please clarify the last sentence to read: "While slight upward gradients from the PCS to the Fruitland formation occur at a few locations, the gradients are generally downward from the Fruitland to the PCS".
40.	4.5	4.5-13 to -17	The DEIS here presents a detailed discussion of the potential impacts of the placement of coal combustion byproducts (CCBs) and coal combustion residue (CCR) and should be referenced in other sections of the DEIS, such as 4.15 Hazardous, & Solid Waste and 4.18 Cumulative Effects.
41.	4.5.2.1	4.5-14	The DEIS text in section 4.5.2.1 discusses water quality characteristics of the Cottonwood, Pinabete, and No Name arroyos. Please clarify that this is alluvial ground water quality characteristics of the saturated alluvium along these arroyos and not surface water quality characteristics.
42.	4.5.2.1	4.5-18	Field reconnaissance or review of State of New Mexico and Navajo Nation water well records document that there are no alluvial livestock groundwater wells in the No Name Arroyo. Also, the No Name Arroyo alluvial groundwater is limited, intermittent and the quality is unsuitable for livestock use.
43.	4.5.2.1	4.5-19	Table 4.5-5 indicates that arsenic, barium cadmium, chromium, copper, lead, mercury selenium, silver, uranium and

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Response 296.144

Comment noted, does not affect analysis.

Response 296.145

Comment noted, requested changes made, does not affect analysis.

Response 296.146

Cannot find where this is to be changed, and does not affect analysis. No change made.

Response 296.147

Sections 4.15 and 4.18 now reference this section.

Response 296.148

It is in the groundwater section, thus no clarification necessary.

Response 296.149

Both the EIS and commenter agree that the groundwater does not meet livestock watering criteria. The statement that there are no alluvial livestock groundwater wells in No Name Wash Arroyo within the lease area is true. However, the CHIA assessed the water quality of several alluvial washes against the NNEPA livestock water quality criteria. Based on that review against surface water quality criteria for livestock, alluvial groundwater is unsuitable for livestock watering. While there were some historical attempts to use alluvial groundwater for livestock watering (mainly in the Chaco), the sentence has been revised to indicate that the alluvium is not currently used for that purpose.

Response 296.150

The table includes results from KF-98-02 per Section 18 of the PAP. There is no mention of KF 98-01 in Section 18 of the PAP.

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			zinc were not sampled at the Fruitland coal wells; however, these constituents were analyzed in 6 samples from well KF98-01 and from 5 samples from well KF2007-01 obtained in 2007 and 2008. These values are provided in the Pinabete SMCRA Permit Application Package (BNCC 2012a).
44.	4.5.2.2	4.5-21	Navajo Reservoir is not located on the Navajo Nation. The northern end of Navajo Reservoir extends into Colorado. The Southern Ute reservation extends along the northwest side of the reservoir.
45.	4.5.2.2	4.5-27	Either revise the title of Table 4.5-7 to include "intermittent and ephemeral drainages within or in proximity to the Pinabete Permit Area" (emphasis added), or remove the No Name Arroyo values from Table 4.5-7. The No Name Arroyo is not within the Pinabete Permit area.
46.	4.5	4.5-29	Figure 4.5-6 Jurisdictional Waters of the US within the Pinabete Permit Area displays both jurisdictional and non-jurisdictional drainages as the same map symbol. Please display the non-jurisdictional drainages as a separate line symbol. See Appendix B (USCOE draft permit evaluation document) for example.
47.	4.5.2.2	4.5-29	To enhance the reader's understanding of the Project area, we suggest the following revisions to Figure 4.5-6. <ul style="list-style-type: none"> Dixon Pit is in the southern portion of Area III, not Area IV North; Gilmore pit is in Area IV North; The sediment ponds are proposed features that would be constructed as part of the Pinabete Permit, they are not existing structures; The "unnamed arroyo" is actually the No Name Arroyo described in the text; <ul style="list-style-type: none"> "Pinabeta" Arroyo should be "Pinabete". Please see MIMCo/NTEC's December 2013 response to OSMRE Technical evaluations for pond names.
48.	4.5.2.2	4.5-31	The Chinde Wash monitoring stations upstream of Navajo Mine are not upstream of all indirect seepage from NAPI irrigation.
49.	4.5	4.5-32	Reference to "SJ-2917" should be changed to SJ-2197. For clarification please state that the "SJ-2197" water permit is to allow San Juan Coal Company to pump ground water from the underground San Juan Mine. BBNMC Permit 2838 water right provides water for use at FCPP and Navajo Mine.
50.	4.5	4.5-34	The third sentence in the paragraph under the heading "Water Use", should be deleted as the FCPP is not the owner of the water rights.
51.	4.5	4.5-37	Current Navajo Nation Water Quality standards are based on dissolved chromium and dissolved lead, rather than total chromium and total lead.
52.	4.5.4.1	4.5-44	Ground water sampling of the Chaco River alluvial aquifer is not required by the Navajo Mine SMCRA permit or included in the Pinabete SMCRA Permit Application Package ground water monitoring plans.
53.	4.5.4.1	4.5-44	Please note in the second paragraph under "Groundwater Quality Impacts", that the Navajo Nation does not

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Response 296.151

Deleted "on the Navajo Nation"

Response 296.152

Have added "... in proximity to..."

Response 296.153

Both jurisdictional and non-jurisdictional Waters of the US are depicted with the same symbol on figure 4.5-6; however, jurisdictional waters are depicted in blue and non-jurisdictional waters are depicted in purple. As such, it is not necessary to modify the figure.

Response 296.154

- 1) Dixon Pit label has been moved into Area III
- 2) Gilmore Pit has been added to Area IV N
- 3) The figure pertains to both existing and proposed structures – no change made.
- 4) Unnamed Arroyo changed to No Name Arroyo
- 5) Pinabete Arroyo typo corrected

Response 296.155

The Draft EIS does not indicate that they are upstream of all indirect seepage. In fact, it indicates just the opposite. No change made.

Response 296.156

Removed the reference to SJ-2197 from the paragraph since it refers to water use for the San Juan Mine and not the Navajo Mine.

Response 296.157

Sentence deleted.

Response 296.158

Figures updated accordingly.

Response 296.159

Removed Chaco River from the sentence.

Response 296.160

Changed "irrigation" to "agricultural water supply" which is the term used in the standards.

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No.	Section	Page	Comment
54.	4.5	4.5-44	include irrigation in its 2008 Surface Water Quality standards and thus "irrigation" should be deleted from this sentence. 296.161
55.	4.5	4.5-44	"As shown in Table 4.5-5, a comparison of monitoring data from wells within the areas of CCR placement to the baseline Fruitland coals (see Figure 4.5-2)..." This paragraph as written implies a comparison of data from wells within CCR placement areas to baseline Fruitland coal wells. However, Table 4.5-5 does not provide that comparison. Recommend removing "As shown in Table 4.5-5" from the sentence or adding a new table that shows the comparison. 296.162
56.	4.5	4.5-45	"Median" values are discussed and Table 4.5-5 is referenced but reports averages (means) not median values. Recommend eliminating the reference to Table 4.5-5 and referencing BNCC 2012a. 296.163
57.	4.5.4.1	4.5-46	In the last sentence on page 4.5-45 it states "Transport to the north and east is limited." Consider adding "by the low hydraulic conductivity of the Picture Cliff Sandstone (PCS)" to the end of this sentence. 296.164
58.	4.5	4.5-46	The DEIS discussion about surface waters would benefit from including more references to Appendix C – the USACE Draft 404(b) Alternatives Analysis. 296.165
59.	4.5.4.1	4.5-52	MMCo has provided updated technical evaluation responses to OSM for the Pinabete permit based on a revised post-mining topography. The current SEDCAD results differ from those identified in Tables 4.5-12 and 4.5-15, and are attached as Tables 41.3-4 and 41.3-5. Please note that while projections of post-mine yields are slightly higher than pre-mine yields, the values are insignificant and within the error projections associated with the model. 296.166
60.	4.5.4.1	4.5-52	For clarification, as stated in the Pinabete Permit Application Part 6 Section 42 Monitoring Maintenance Inspections and Examinations: Surface water quality and quantity monitoring would be conducted at five stations (three historic and two new stations) and would be collected quarterly in accordance with the Surface Water Monitoring Plan submitted as part of the Pinabete Permit. Please ensure consistency between the DEIS and the USACE's Table 4 in Appendix C [Preliminary Draft Pinabete Permit Evaluation]. The USACE's Table 4 accurately describes the shorter length and smaller area of Waters of the US (WUUS) delineated in Pinabete Permit area. The USACE 404(b)(1) Alternatives Analysis, Appendix C, states approximately 16.2 miles 29.0 acres of WUUS are within the Pinabete Permit SMCRA area. 296.167
61.	4.5	4.5-54	The proposed Pinabete Permit SMCRA area will not impact any WUUS, or other drainage features within the No Name Arroyo watershed. All of the WUUS impacted will be within the Cottonwood Arroyo and Pinabete Arroyo watersheds. No impacts will occur to wetlands or other special aquatic sites. The following addition would add clarity for the reader: "The SEDCAD results indicate that peak flows and runoff volumes to Pinabete and Cottonwood arroyos would be reduced during operations with maximum disturbance acreages representing worst-case projections." 296.168

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Response 296.161

"As shown in Table 4.5-5" deleted.

Response 296.162

Removed reference to table 4.5-5. Added table on page 4.5-44 comparing median values of monitoring data within areas of CCR placement to baseline fruitland coals.

Response 296.163

The entire paragraph references the PCS, therefore no change necessary.

Response 296.164

Added "Appendix C includes the USACE 404B Alternatives Analysis for the submitted permit application" to the end of the sub-section titled "Impacts to Waters of the US".

Response 296.165

Table 4.5-15 has been updated accordingly.

Response 296.166

Comment noted.

Response 296.167

Sentence has been updated accordingly.

Response 296.168

Sentence revised to include "maximum disturbance acreages representing".

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COMMENT #296

No.	Section	Page	Comment	
62.	4.5.4.1	4.5-55	In the first paragraph on the discussion on Channel Morphology, consider noting that impacts to channel pattern and geometry will be major during mining activities (since channels will be mined through), but those impacts will be negligible or even beneficial following reclamation activities.	296.169
63.	4.5.4.2	4.5-60	In the surface water resources discussion in Alternative B, please revise the last sentence to clarify that the mitigation plan for impact the Waters of the US (WUS) would only be submitted to the USACE.	296.170
64.	4.5	4.5-60	To further support the analysis MMCo recommends the following discussion be added to Alternative B: "Engineering for the Pinabete diversion would be designed to minimize additional dewatering in No Name Arroyo by attenuation of peak flows from the diversion and stabilizing the No Name Channel at existing head cut locations downstream of the diversion. Reconstruction of Pinabete Arroyo post mining would include geomorphic reclamation strategies designed to emulate the pre-mine channel."	296.171
65.	4.5.4.2	4.5-60	MMCo agrees that Alternatives A & B would have similar impacts on the ground water and surface water. However, MMCo believes there would be subtle differences between the two alternatives, such as mining through Pinabete Arroyo and its alluvial ground water in Alternative B. The channel design of the reconstructed Pinabete Arroyo incorporates design features to mitigate the effects of mining to the alluvial ground water post-reclamation.	296.172
66.	4.5.4.2	4.5-61	For clarification, the Navajo Mine SMCRA Permit and the Pinabete SMCRA Permit, if issued, do not have an "Erosion Control and Sediment Plan" as described in the DEIS. Rather they have drainage and sediment control plans. In the Navajo Mine SMCRA Permit these plans are found in Chapter 11. In the Pinabete SMCRA Permit Application, the proposed Sediment and Drainage Control Plans are found in Part 4, Section 25 and Section 26, respectively.	296.173
67.	4.5.4.5	4.5-63	During demolition and reclamation activities, NTEC would maintain the same level of BMPs and sediment control as during mining operations. There would be no change in its management of surface water or ground water during reclamation activities.	296.174
68.	4.6.1	4.6-1	Please note that the Navajo Nation does not have a noxious weed list as stated in the DEIS.	296.175
69.	4.6.2.1	4.6-2	Please delete the reference to the "Society for Range Management's 1974 Range Management, 2nd Edition"; this is not a valid reference. Vegetation communities were mapped and characterized using the standard sampling method Point intercept method along a 30 or 50 meter transect. This method was used for the Navajo Mine, Pinabete Permit Area, and Burnham Road realignment.	296.176
70.	4.8	4.8-2	The description of the timing and process for formal consultation in this paragraph is not consistent with the ESA consultation schedule for the Four Corners Power Plant and Navajo Mine Energy Project (FCPPNMEP). Please update this paragraph based on the overall FCPPNMEP project schedule, including Section 7.	296.177
71.	Figure 4.9-1	4.9-5	Based on Figure 4.9-1, the Four Corners Power Plant and Navajo Mine Lease and rights-of-way, excluding the transmission lines, do not intersect only the San Juan Chapter.	296.178

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Response 296.169

The text already states that "Changes in runoff or in sediment yield from watershed affected by mining...cause major changes in the existing channel pattern and geometry...the impact of the mine on the geometry, morphology, or location of the natural stream patterns is expected to be negligible post-reclamation."

Response 296.170

Change made.

Response 296.171

Change made.

Response 296.172

Changed the end of the paragraph as follows: Groundwater impacts due to the diversion would be negligible because the channel design of the reconstructed Pinabete Arroyo would incorporate design features to reduce the effect of mining to the alluvial groundwater post-reclamation; therefore, impacts to groundwater quantity and quality during operation would be as described for the Proposed Action. Operation and reclamation activities would be similar to those described for the Proposed Action, except that the mine plan would involve mining through Pinabete Arroyo.

Response 296.173

Have clarified.

Response 296.174

Have clarified.

Response 296.175

Navajo Nation removed from the list.

Response 296.176

Reference deleted. Deleted also in references as this is the only instance of this citation.

Response 296.177

Updated

Response 296.178

Figure 4.9.1 has been updated and text has been revised.

Attachment B: M/Co Errata Comments on the FCPP Draft Environmental Impact Statement, March 2014
COMMENT #296

No.	Section	Page	Comment	
72.	4.9.2.1	4.9-7	For clarification, the nearest NAPI field to the Navajo Mine Lease Area is located near Area I (approximately <0.01 mi away).	296.179
73.	4.9.2.1	4.9-7	Section 2.1 provides a detailed description of the current and historic mining activities in the Navajo Mine Lease Area. M/Co recommends that this description be carried through the other FEIS sections such as Section 4.9.2.1.	296.180
74.	4.9.2.1	4.9-7	For clarification the proposed Burnham Road realignment is wholly with in the Nenahnezad Chapter boundaries and does not intersect the Tiis Tsoh Sikaad (Burnham) or San Juan Chapter boundaries.	296.181
75.	4.9.2.1	4.9-8	For clarification the Pinabete Permit Area only intersects two Navajo Nation Chapters; Tiis Tsoh Sikaad (Burnham) and Nenahnezad.	296.182
76.	4.9.2.2	4.9-12	The DEIS make a references an "Area IV" of the Navajo Mine Lease. Area IV North and Area IV South are unique resource areas within the Navajo Mine Lease Area and should be called out individually. NTEC/MMCo does not recognize a combined "Area IV" resource area.	296.183
77.	4.9.2.2	4.9-12	For clarification roads open for public use within the Navajo Mine Lease area are; Ramp 7 (North in Area I), Table Mesa Road (BIA N-4104) and the Burnham Road. All other road intersecting within the Mine lease are control and not open the public transportation.	296.184
78.	4.9.2.2	4.9-12	For clarification, M/Co completed a permanent reroute of the Burnham Road (N-5082) in July and August 2012. This reroute eliminated the portion of the road with a 20 MPH sharp curve. The permanent reroute is designed to BIA road specification for all weather travel with proper drainage. The permanent reroute has also diverted traffic away from mining activities in Area III.	296.185
79.	4.9.2.2	4.9-12	For clarification the last sentence on page 4.9-12 should be revised to read: "Equipment weighing less than 25 tons can be delivered directly to the Area III industrial facilities..." There are no facilities in Area IV North or South.	296.186
80.	4.9.2.2	4.9-16	As accurately noted in the DEIS Section 2.1.4, the railroad is owned by NTEC and is within the Navajo Mine Lease and associated ROWs. This ownership should be reflected in section 4.9.2.2	296.187
81.	4.9.4.1	4.9-18	For clarification, 30 CFR 761.14 does not require NTEC to develop resource protection measures to eliminate, minimize, and/or mitigate any effects on public roads. 30 CFR 761.14 requires the OSMRE designated road authority to determine if the interests of the public and landowners will be protected and describes the public comment process the road authority must follow. (See Section 3.2.1.1 comment on the "Road Authority" designation).	296.188
82.	4.18.3.9	4.18-49	The DEIS appropriately includes several projects within the boundary of the Navajo Nation however, the San Juan Generating Station and the Animas-La Plata project are located outside the boundary of the Navajo Nation.	296.189
83.	4.10.3.2	4.10-25	In table 4.10-25 replace "Navajo Mine" with "FCPP."	296.190
84.	4.10.3.2	4.10-27	In the first sentence please change "fiscal contribution of Navajo Mine to NTEC" to "fiscal contribution of Navajo Mine	296.191

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Response 296.179

Corrected.

Response 296.180

This section has been updated to reference Section 2.1, where applicable.

Response 296.181

Clarified.

Response 296.182

Clarified.

Response 296.183

Clarified globally.

Response 296.184

Clarified.

Response 296.185

Clarified.

Response 296.186

Clarified.

Response 296.187

Clarified.

Response 296.188

Clarified.

Response 296.189

The San Juan Generating Station and the Animas-La Plata project were deleted.

Response 296.190

The two rows have been changed to say "FCPP"

Response 296.191

Change made.

Attachment B: MMCo Errata Comments on the FCPP Draft Environmental Impact Statement, March 2014
COMMENT #296

No.	Section	Page	Comment
			to the Navajo Nation.”
85.	4.11	4.11-2	It appears that McKinley County is within the ROI as shown in Figure 4.11-1 and 4.11-2. Please include McKinley County within the paragraph on Page 4.11-2 Region of Influence. 296.192
86.	4.11.1.2	4.11-6	The DEIS text in section 4.11.1.2 references pink highlighting to indicate environmental justice low income populations on Figure 4.11-2. Please include the highlighted references on Figure 4.11-2. 296.193
87.	4.12.2.2	4.12-2	For clarification there will be approximately 50 miles of proposed power lines within Navajo Mine Lease area. This should be reflected in appropriate sections of the DEIS. 296.194
88.	4.12.4.1	4.12-4	The following sentences on page 4.12-4 state: <i>Under Alternative A, the coal would be mined subject to proposed Lease Amendment #3 between the Navajo Mine and the Navajo Nation. The Secretary of the Interior must ensure that Lease Amendment #3 meets the objectives of established Federal trust management policies so that the action is in the best interest of the Navajo Nation and Federal Government (25 CFR 211.3).</i> Amendment No. 3 is between APS and the Navajo Nation. These sentences should be deleted as they do not apply to Navajo Mine. 296.195
89.	4.12.4.1	4.12-7	In regards to compensating the land user for the use of a CUA during mining, NTEC negotiates with the holder of the CUA not the Navajo Nation. The Navajo Nation is a witness to the negotiation. 296.196
90.	4.12.4.1	4.12-7	The reference to the DFADAs should be deleted from this paragraph because the construction of DFADAs is an FCPP proposed action on the FCPP lease, and not an NTEC proposed action. 296.197
91.	4.12.4.2	4.12-11	NTEC's SMCRA permits for the Navajo Mine Permit Area and the proposed Alternative B permit would specify a primary post mining land use of livestock grazing and a secondary post-mining land use of wildlife habitat. The reclaimed lands would not be designed or constructed for a post-mining land use of agriculture. The post-mining land use of livestock grazing and wildlife habitat are consistent with pre-mine land uses within the Navajo Mine lease area. 296.198
92.	4.12.4.3	4.12-12	Section 4.4 defines "Cultural Resources" as, "prehistoric and historic resources archeological resources (e.g., sites and isolated finds), historic resources (e.g., buildings, structures, objects, and districts), and properties of religious and cultural significance, including Traditional Cultural Properties (TCPs)." Given this definition, would it be better to refer here to "cultural resources" rather than "pre-historic resources"? In addition, please consider whether the NHPA Section 106 term "historic properties" should be added to the definition of "cultural resources" in Section 4.4? 296.199
93.	4.12.4.5	4.12-14	MMCo has mitigated all sites in Area III and IV North. If the No Action Alternative is chosen there would be no new land disturbance and consequently, reclamation activities would not impact new cultural resources. 296.200
94.	4.12.4.5	4.12-14	It is unclear why the discussion of the two paleontological resources occurring in the pre-2016 dragline areas is in the discussion of the No Action Alternative. Please clarify. If they will be impacted under other alternatives, this information should appear in those discussions. 296.201
95.	4.15.2.1	4.15-7	MMCo does not refer to the mine backfill areas as Dry Fly Ash Disposal Areas or DFADAs. DFADA is a FCPP specific 296.202

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Response 296.192

Change made.

Response 296.193

The labels for each census block have been highlighted pink and the pink label symbol has been added to the legend to reduce confusion.

Response 296.194

This section refers to existing infrastructure on Navajo Mine. Text has been revised as follows: Infrastructure and associated activities related to the Navajo Mine on Navajo Nation trust land include surface coal mining, reclamation activities, access roads, haul roads, a proposed 6.3-mile transmission line (for a total of approximately 50 miles of transmission lines within the lease area), a 15-mile railroad, and coal handling facilities.

Response 296.195

Change made.

Response 296.196

Clarified.

Response 296.197

Deleted.

Response 296.198

Clarified.

Response 296.199

Changes made.

Response 296.200

Clarified.

Response 296.201

Change made.

Response 296.202

Clarified.

Attachment B: MMCo Errata Comments on the FCPP Draft Environmental Impact Statement, March 2014
COMMENT #296

No.	Section	Page	Comment
96.	4.15.2.1	4.15-7	term. CCB material was placed in mine backfill areas of Navajo Mine. The DEIS correctly notes that MMCo has not filed a TRI Report since 2008, because MMCo stopped receiving CCBs from FCPP in 2008. Once MMCo stopped receiving CCBs from FCPP, it no longer met the reporting requirements of the TRI Program.
97.	4.15.4.2; 4.15.4.3	4.15-28; 4.15-29	NTEC is not proposing to place coal CCBs within the Pinabete Permit Area or proposing any new mine backfill location within the Navajo Mine. CCB placement activities in mine backfill at Navajo Mine ceased in January 2008 and all CCB placement areas have been regarded, topdressed, and seeded according to the existing Navajo Mine SMCRA permit conditions. For clarification, Alternatives B and C should be harmonized with the discussion in Alternative A and recognize that NTEC is no longer receiving CCB material and all mine backfill locations have been reclaimed permit conditions
98.	4.15.4.3	4.15-29	The DEIS text cites "Larger volumes hazardous materials and wastes would be generated during construction of the additional roads." NTEC's management of these materials would not change between Alternative A-D. These generated materials are not consistently discussed.
99.	4.16.4.1 and 4.16.4.5	4.16-11 and 4.16-13- 14	Please replace reference BNCC, 2012] with BNCC, 2012g.
100.	4.16.4.3	4.16-13	As described in Section 3.2.3.1, page 3-23, Alternative C does not include mining through the Pinabete Arroyo and does not require diversion of flows around mining. Please ensure consistency with 3.2.3.1.
101.	4.17.1.1	4.17-2	The reference to HAPs regulation is Section 112 of the CAA (Title I – Air Pollution Prevention Control) rather than Title III.
102.	4.17.4.1	4.17-21	The DEIS describes OSMRE's conservative Health Risk Assessment (HRA) for Diesel Particulate Matter (DPM). Please clarify that the nearest resident to the Area IV SMCRA permit boundary is approximately 0.5 mile (approximately 804 meters) and approximately 0.9 mile (approximately 1,448 m) to the proposed mining operations.

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Response 296.203

Comment noted.

Response 296.204

The text does not imply that CCR will be placed in the mine; however, to ensure clarity, the text has been revised as follows: "Potential impacts from historical mine placement of CCRs (practice ended in 2008) would remain after Navajo Mine closure."

Response 296.205

The following sentence has been added to the Final EIS: "These wastes would be managed as described for Alternative A and in accordance with applicable EPA and Department of Transportation regulations"

Response 296.206

Have checked for consistency.

Response 296.207

Change made.

Response 296.208

Change made.

Response 296.209

Clarified.

COMMENT #297

NTEC

Navajo Transitional Energy Company, LLC

June 27, 2014

Ms. Deanna Cummings
Regulatory Division
U.S. Army Corps of Engineers
4101 Jefferson Plaza NE
Albuquerque, NM 87109

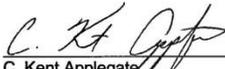


**Re: Transmittal of MMCo comments on the U.S.ACOE Preliminary Draft Permit Evaluation,
Pinabete Individual Permit (Application No. SPA-2012-00253-ABQ)**

Dear Ms. Cummings,

BHP Billiton Mine Management Company (MMCo) appreciates the opportunity to submit comments on the U.S. Army Corps of Engineers Pinabete Individual Permit, Preliminary Draft Permit Evaluation (Action ID: SPA-2012-00253-ABQ) released for public comment on March 28, 2014. MMCo is submitting the attached comments for the agency's consideration in preparing the Pinabete Individual Permit.

Sincerely,


C. Kent Applegate
Superintendent, Environmental Projects
BHP Billiton Mine Management Company

Cc: Sam Woods, Navajo Transitional Energy Company
Marcelo Calle, Office of Surface Mining Reclamation and Enforcement

**Comment Letter 297.....Applegate, K.
MMCo**

Response 297.001

Comment Noted.

COMMENT #297

BHP Billiton Mine Management Company (MMCo) Comments on the United States Army Corps of Engineers, Preliminary Draft Permit Evaluation on the Pinabete Individual Permit Application, March 2014

No.	Section	Page	Comment
1.	Global		MMCO suggests the name of owner and applicant and mine manager be revised throughout the USACE preliminary draft permit evaluation to represent the change in ownership of Navajo Mine. Navajo Transitional Energy Company (NTEC) is the new owner of Navajo Mine. BHP Billiton Mine Management Company (MMCo) operates Navajo Mine on behalf of NTEC and is the applicant for pending Clean Water Act permitting for Navajo Mine. References to the "Pinabete Pond" name should be revised to "Pond 4N". This change will make the revised pond name consistent with MMCo's Dec 2013 response to OSMRE's technical comments on the Pinabete SMCRA Permit application package.
3.	2.4	4	In lines 26-29 on page 4, MMCO suggests the following edits: 1) revising the spelling of "Pinabete" and 2) revise "it" to "its". The sentence should read "Because coal produced within the proposed Pinabete permit area would be transported to the processing facility at the north end of the mine permit and lease area; and because mine-associated potential impacts extend to approximately the mine lease boundary; the Corp extends its scope of analysis to the entire mine project and mine area, to include associated infrastructure improvements." (emphasis added).
4.	2.4	4-5	In line 35 on page 4, MMCO suggests revising "My analysis" to "The analysis". Additionally, MMCo suggests changing "project area" to "Permit Area" in line 37 of page 4 and continuing to line 1 of Page 5.
5.	4.2.1	18	In line 4 on page 18, MMCo suggests changing "Section 2.3" to "Section 2.1"
6.	7.1.9	54	In line 7-9 on page 54 the DEIS and the USACE preliminary draft permit evaluation should be harmonized. The DEIS on page 4.5-43 states, "Proposed mining would be expected to result in limited drawdown of groundwater within the Pinabete Alluvium based on [MMCo]'s surveys of nested wells and the location of perched groundwater in the alluvium." The USCAE's document states on page 54 lines 8-9: "...therefore, no impacts to the Pinabete alluvium are expected by mining operations." MMCo agrees with the DEIS that there may be limited drawdown of the groundwater within the Pinabete alluvium, and suggests revising the language in the USACE preliminary draft permit evaluation on page 54 to state "...therefore, negligible impacts to the Pinabete alluvium are expected by mining operations." In line 3 on page 64, MMCO suggest deleting "lease agreements" from the sentence. The revised sentence should read "Due to BLM regulations/requirements to maximize economic recovery..."
7.	7.5	64	
8.	7.6.2	64	MMCo suggests deleting the empty section, "Section 7.6.2 to be determined".

THE NAVAJO NATION



BEN SHELLY PRESIDENT
REX LEE JIM VICE PRESIDENT

June 27, 2014
Via electronic mail to mcalle@osmre.gov

Marcello Calle, Project Coordinator
Four Corners Power Plant and Navajo Mine Energy Project
Office of Surface Mining Reclamation and Enforcement
1999 Broadway, Suite 3320
Denver, CO 80202-3050

Re: Comments of the Navajo Nation on the Four Corners Power Plant and Navajo Mine Energy Project Draft Environmental Impact Statement

Dear Mr. Calle:

The Navajo Nation (Nation) appreciates the time and effort expended by the Office of Surface Mining and Reclamation Enforcement (OSM), other cooperating agencies, consultants, and others to ensure that this EIS is completed in a timely manner. Based on the information presented in this DEIS, the Nation supports OSM's conclusion that Alternative A is the preferred alternative. The comments provided herein are to assist in making it as complete of a document as possible. 298.001

In accordance with the National Environmental Policy Act (NEPA), OSM prepared a Draft Environmental Impact Statement (DEIS) for the Four Corners Power Plant and Navajo Mine Energy Project. On March 28, 2014, the DEIS was made available to the public with a public comment period end date of May 27, 2014. On May 16, 2014, the public comment period was extended to June 27, 2014.

OSM evaluated five alternatives and proposed Alternative A under which OSM would approve Navajo Transitional Energy Company's (NTEC) Pinabete Surface Mining Control and Reclamation Act (SMCRA) permit application and Navajo Mine SMCRA application for permit renewal. In addition, BIA would approve Amendment 3 of the Four Corners Power Plant (FCPP) lease with the Nation as well as approve the right-of-way (ROW) renewal for the four associated transmission lines, and Navajo Mine access roads.

The Nation has been a Cooperating Agency throughout the EIS process and expects to continue to work closely with OSM and the consultants in producing the final EIS to insure that all the information presented is accurate. The Nation takes this opportunity to provide comments on the DEIS. Some comments take issue with the approach taken in the DEIS, while others provide clarification to the DEIS to improve the accuracy of the document. These comments are addressed to the corresponding sections of the DEIS. 298.002

**Comment Letter 298.....Shelly, B.
The Navajo Nation**

Response 298.001

Thank you for your comment. OSMRE is considering all of the alternatives that were analyzed in the Draft EIS and will inform the public of its decision via the Record of Decision, anticipated in the spring of 2015.

Response 298.002

Thank you for your comment.

COMMENT #298

General Comments

Many people within the Nation who read this document had difficulty locating the explanation of the acronyms. Perhaps putting the acronyms in the glossary would be a more logical location than the Table of Comments. 298.003

Throughout the document, the DEIS discusses the baseline in the document, but seems to be inconsistent in its application without explanation when the baseline varies from the established definition, which appears on page 4-1. The DEIS enumerates the completed federal actions that comprise the environmental baseline. Specifically, the sentence states "These completed federal actions form part of the environmental baseline to which the effects of continuing operations and the Proposed Actions are compared." However, this statement is inaccurate. Throughout the document, there are numerous instances where data was used from a different period of time. Some instances were noted, for example, in the following locations:

- 4.1.2.5, page 4.1-44: The ozone baseline uses 2005 emissions
- Table 4.1-46, page 4.1-93: Projected numbers for MDN deposition rates are compared with numbers from prior to the 12/30/2013 shutdown of units 1-3.
- Table 4.1-47, page 4.1-95: Projected numbers for AMoN concentrations are compared with numbers from prior to the 12/30/2013 shutdown of units 1-3.
- Section 4.1.4.1, page 4.1-97: Reductions in NOx and PM are from historic levels, not current levels.
- Section 4.1.4.5, page 4.1-104: Table 4.1-51 emissions are based on the "2005-2011 baseline period (Units 1, 2, 3, 4, and 5)." 298.004

Although due to the recent shut down of units 1-3, utilizing historic data prior to 2014 is unavoidable, notation of this should be made throughout the document as well. It should also be noted in the explanation of the baseline that data for the baseline of three units shut down are unavailable.

Throughout the document, CAA 821 is mentioned. However, this is not accurate, as it has never been codified. FCPP is nevertheless subject to greenhouse gas reporting requirements pursuant to 40 CFR Part 98. It is recommended that throughout the DEIS, wherever CAA 821 is listed as the source of the requirement for FCPP to monitor or regulate GHG emissions, that reference should be substituted with the GHG Reporting Rule, 40 CFR Part 98. 298.005

On May 12, 2014 US EPA proposed the approval of the New Mexico Regional Haze State Implementation Plan (SIP) for the San Juan Generating Station (SJGS). SJGS is just a few miles from FCPP and is also part of the San Juan Air Basin. Pursuant to the SIP, SJGS would install Selective Non-Catalytic Reduction (SNCR) controls on Units 1 and 4 by the later of within 15 months after US EPA final approval or January 31, 2016 and retire Units 2 and 3 by December 31, 2017. There will also be reductions of SO2 298.006

Response 298.003

Thank you for your comment.

Response 298.004

See Master Response #14, Baseline.

The baseline consists of historic operations prior to 2014 (Units 1-5 operating), and the transitional period during which BART is implemented. The discussion of setting makes this distinction clearly, with chapter headings. The comment cites locations and data within the document that the commenter feels are inaccurate; however, the data in those locations is correct as the baseline has been established. Table 4.1-51, evaluates the No Action Alternative. The No Action Alternative contemplates shutdown of FCPP in 2015. The Action Alternatives, which evaluate to 2041, use Units 4 and 5 as the baseline. However, the No Action Alternative timing would only include a portion of the implementation of FIP for BART (for example, SCR would not be installed under No Action). Therefore, the analysis used a conservative approach to evaluate changes relative to baseline. A footnote has been added to the table to explain this.

Response 298.005

The suggested change was made throughout. Wherever CAA 821 is listed as the source of the requirement for FCPP to monitor or regulate GHG emissions, the reference was changed to the GHG Reporting Rule, 40 CFR Part 98.

Response 298.006

The cumulative impact analysis has been updated to reflect the information provided for the San Juan Generating Station. The description of the San Juan Generating Station in Table 4.18-1 has been amended as follows: San Juan Generating Station is operated by PNM and consists of four coal-fired, pressurized units that generate about 1,800 gross megawatts of electricity. San Juan Generating Station went online in 1973. It is the seventh-largest coal-fired

generating station in the West, and is PNM's primary generation source, serving 58 percent of the power needs of PNM customers. The regional haze provision of the Clean Air Act requires the San Juan Generating Station to reduce NO_x emissions by September 2016 through the installation of Best Available Retrofit Technology, or BART. The New Mexico Regional Haze State Implementation Plan (SIP), which was approved by EPA in May 2014, requires SJGS to install Selective Non-Catalytic Reduction (SNCR) controls on SJGS Units 1 and 4 by Final EPA approval or January 31, 2016, and shut down the remaining Units 2 and 3 in 2017. These measures are expected to significantly reduce NO_x (62%), SO₂ (67%), PM (50%), CO (44%), GHG (50%), VOC (50%), and Mercury (50%).

Table 4.18-1 provides description of facilities actively or planning to reduce emissions. This table provides project-level descriptions and not a regional perspective; however, collectively, the projects implementing emissions reductions capture the initiative to improve regional haze and air quality.

COMMENT #298

emissions from Units 1 and 4. The expected reductions in emissions from installation of SNCRs and unit closures are: NOx 62%, SO2 67%, PM by 50%, CO 44%, GHG 50%, VOC 50%, and Mercury 50%. Since FCPP and SJGS are the two major sources of emissions in San Juan Air Basin, the recent federal and state Best Available Retrofit Technology (BART) requirements for the Regional Haze Rule and other recent rulemakings like the Mercury and Air Toxics (MATS) regulations will contribute significantly to improve the air quality of the Four Corners region and result in significant improvement in visibility in the surrounding Class I areas.

Executive Summary

Some comments in this section may also apply to the corresponding part of the DEIS in section 4. Although we attempted to ensure that it was covered in both places, if there is a change noted in Section 4, OSM should also confirm that the change is made to the Executive Summary.

The last paragraph on page ii should be modified as follows:

APS operates all of FCPP as the operating agent for all the co-owners and owns 63 percent of the total plant capacity. A Lease Agreement between the Navajo Nation and APS, Public Service Company of New Mexico (PNM), El Paso Electric (EPE) Company, Salt River Project, Tucson Electric Company, and Southern California Edison was signed in 1960 and indentured the lease of Navajo Nation Trust Lands for the purpose of constructing and operating the FCPP. ~~In accordance with the FCPP lease, the Navajo Nation does not apply tribal regulation to the FCPP lease area.~~ The Lease Agreement also authorized associated rights-of-way for ancillary facilities (i.e. transmission lines, water pipelines, access roads) on Navajo tribal trust lands. The 1960 Agreement was amended in 1966 to allow the construction of Units 4 and 5 and in 1985 to encompass additional lands for mining operations. APS recently executed a third lease amendment (Lease Amendment No. 3) with the Navajo Nation to extend the term of the lease for the FCPP an additional 25 years, to 2041, but this action is subject to US Department of Interior Secretarial approval and evaluated in this EIS. Pursuant to the third lease amendment, the Navajo Nation does not intend to regulate the FCPP lease area.

298.007

Agency and Authorities

Table ES-2 at page vi, Federal and Tribal Authorities and Actions.

The references in the table to EPA's authority should also include reference to Clean Water Act (CWA) Section 402, Resource Conservation and Recovery Act (RCRA), and Safe Drinking Water Act permits. Table ES-2 is similar to Table 1.1 on page 1-9, and should be changed to be consistent with this recommendation.

298.008

Response 298.007

See Master Response #11, Covenant 17. The Executive Summary has been updated to be consistent with edits to Section 1 as referenced in Master Response #11.

Response 298.008

The focus of this summary are those federal actions that would rely on this EIS for NEPA compliance.

COMMENT #298

Table ES-11, at pages xxi-xxiii, Applicant Proposed Measures, Best Management Practices, and Standard Operating Procedures Applicable to All Alternatives

Under the heading Air Quality, page xxi:

- Navajo Mine column – Fugitive dust control measures. It is not only dust that is a concern, the public will be interested to include: coal dust, blasting, ground vibrations [potential impact to Bisti], mining heavy equipment machines 298.009
- FCPP column – should include reportable emissions from ancillary infrastructures.

Under the heading Water Quality/Hydrology, page xxi:

- Navajo Mine should include the stormwater pollution prevention plan to meet CWA Section 402. 298.010
- Transmission Lines – include crossing of US and Navajo Nation waters to meet CWA Section 401 permitting.

Hazardous and Solid wastes, page xxiii:

- The specific measures attributable to the Navajo Mine should also be included for FCPP and the transmission lines. 298.011

Introduction

On page 1-2, the last paragraph should be modified as follows:

APS operates all of FCPP as the operating agent for all the co-owners and owns 63 percent of the total plant capacity. A Lease Agreement between the Navajo Nation and APS, Public Service Company of New Mexico (PNM), El Paso Electric (EPE) Company, Salt River Project, Tucson Electric Company, and Southern California Edison was signed in 1960 and indentured the lease of Navajo Nation Trust Lands for the purpose of constructing and operating the FCPP. ~~In accordance with the FCPP lease, the Navajo Nation does not apply tribal regulation to the FCPP lease area.~~ The Lease Agreement also authorized associated rights-of-way for ancillary facilities (i.e. transmission lines, water pipelines, access roads) on Navajo tribal trust lands. The 1960 Agreement was amended in 1966 to allow the construction of Units 4 and 5 and in 1985 to encompass additional lands for mining operations. The lease was amended in 1966 to add on Units 4 and 5; 1978 to expand the lease for additional ash disposal areas; 1985 to expand mining operations; and 2011 to allow for SCE to sell its interest to APS. Also in 2011, APS executed a lease amendment (Lease Amendment No. 3) with the Navajo Nation to extend the term of the lease for the FCPP an additional 25 years, to 2041. This lease

Response 298.009

The Navajo Mine fugitive dust measures are expanded upon in Air Quality discussions throughout the document. Sources of fugitive dust are inclusive of the activities listed in the comment; for example, see Table 4.1-7. Ground vibration is handled in the “Noise and Vibration” section. While the Executive Summary table lacks the requested detail, the detail is provided throughout the document.

Response 298.010

These are addressed in their respective resource categories.

Response 298.011

Not all of the mine related measures are applicable to the FCPP and transmission lines.

Response 298.012

Last sentence has been replaced with: “The Navajo Nation has stated that the Tribe has never conceded that Covenant 17 in the original 1960 lease, and Covenant 22 in the amended 1966 lease, prevented the application of tribal regulation on the FCPP lease area; however, the Navajo Nation does not intend to regulate the FCPP lease area due to its interpretation of the stipulations provided in FCPP Lease Amendment No. 3 (2011). APS contends that Covenant 17 allows for the operation of FCPP without compliance with Navajo Nation environmental standards.”

COMMENT #298

amendment is subject to Secretarial approval and evaluated in this EIS. Pursuant to the third lease amendment, the Navajo Nation does not intend to regulate the FCPP lease area.

1.4.2.6 The Navajo Nation

Although there is a covenant not to regulate FCPP, Navajo Nation Environmental Protection Agency (NNEPA) should be included as they are responsible for inspection of: CWA Section 401; seeking permits for Air Quality Operating Permit Program; hazardous materials and storage, including chemicals; Safe Drinking Water Act, and petroleum storage greater than 100 gallons.

298.013

Section 3 Description of the Proposed Action and Alternatives

3.2.6.13 Visual Resources

Aesthetic impacts from the fly ash wind debris and from the smokestacks should be included and thoroughly discussed in the Four Corners Power Plant section.

298.014

3.2.6.14 Noise and Vibration

Potential impact to ground vibration should be included and discussed thoroughly here since the Navajo Mine is close to the Bisti Wilderness Park.

298.015

3.2.6.15 Hazardous and Solid Wastes

The DEIS does not include a hazardous waste management plan for FCPP.

298.016

3.4 Summary of Impacts and Identification of Preferred Alternative

Based on the information presented in this DEIS, the Nation supports OSM's conclusion that Alternative A is the preferred alternative.

298.017

Section 4: Affected Environment, Impacts, and Mitigation

It appears that Section 4 was written before the 12/30/13 shutdown of units 1-3, and that the effects of that action were only partially incorporated into the analysis. A casual reader is likely to be misled and may believe that reductions in environmental impacts

298.018

Response 298.013

Thank you for your comment. The Navajo Nation is a cooperating agency. NNEPA is listed in the applicable regulatory agency with regard to CWA Section 401, SDWA, and Air Quality Operating Permit Program in the applicable sections of the EIS. Please also see Master Response #11.

Response 298.014

The wind debris includes other sediment besides fly ash, and as such is part of the background condition. The smokestacks are discussed in visual resources.

Response 298.015

These issues are addressed in their respective resource categories. The Bisti Wilderness is outside the area affected by these impacts.

Response 298.016

The section addresses the regulatory framework under which the FCPP operates. Discussion of the FCPP Hazardous Waste Management Plan is located on page 4.15-10 of the Draft EIS.

Response 298.017

Thank you for your comment. OSMRE is considering all of the alternatives that were analyzed in the Draft EIS and will inform the public of its decision via the Record of Decision, anticipated in the spring of 2015.

Response 298.018

See Master Response 14, Baseline.

COMMENT #298

that are discussed in the EIS would result from the proposed project, when in fact those reductions resulted from a separate compliance action that already has been completed. Some examples are noted below, but the entire section should be carefully read and edited with this issue in mind.

4.1 Air Resources

The Navajo Nation Environmental Protection Agency (NNEPA) is a Navajo Nation regulatory agency. NNEPA received delegation for the Operating Permit Program (OPP) from US EPA Region IX on Oct. 13, 2004, and received a supplemental delegation specifically covering FCPP and Navajo Generating Station (NGS) on March 21, 2006. This authority allows NNEPA to administer an OPP under the CAA. NNEPA administers the OPP in compliance with the federal operating permit regulations codified in 40 C.F.R. Part 71, the Navajo Nation Operating Permit Regulations, and other environmental standards and regulations. Under the OPP, major sources on the Navajo Nation are required to obtain five-year operating permits that include emission limits and compliance measures, such as monitoring, record-keeping, reporting and testing, and to comply with those limits and requirements in accordance with Navajo Nation Operating Permit Regulations, Navajo Nation Acid Rain Deposition Control Regulations, and all other applicable Navajo and federal regulations.

On page 4.1-1, the EIS references VOCs as “criteria emissions.” Reactive or volatile organic compounds (ROCs and VOCs) are not criteria pollutants under the CAA. The reference to ROCs and VOCs as “criteria emissions” should be struck from the text above. If “criteria emissions” means something other than a criteria pollutant designated under the CAA, that term should be defined. Otherwise, any other place in this DEIS that refers to VOCs as a criteria pollutant or lists them under “criteria emissions” should be deleted, including the references found in 4.1.1.5 and 4.1.2.3. Any table that lists VOCs as a “criteria emissions” should also be edited, including Table 4.1-6, Table 4.1-7, Table 4.1-39 and Table 4.1-40.

The first footnote on page 4.1-1 discusses the Voluntary Compliance Agreement (VCA). The text of this footnote is inaccurate. The Nation recommends the text of the first footnote state the following: In 2005, the Nation and owners of the FCPP entered into a VCA under which FCPP agreed to apply for and obtain a CAA Title V operating permit from NNEPA provided, among other things, that permit requirements would be no more stringent than federal requirements unless FCPP agreed to more stringent requirements and the administration and enforcement of the permit would be no more stringent than what EPA would do and that would be required under federal court decisions.

4.1.1.4: Federal Visibility Protection and Atmospheric Deposition Control Programs

Relationship to NAAQS

Response 298.019

The main distinction between “criteria pollutants” and “criteria emissions” is that the criteria pollutant ozone is not directly emitted, rather, its precursors NO_x and VOC are the criteria emittents (regulated pollutants) which react with sunlight to form ground-level photochemical ozone, as identified in the last sentence.

For better clarity, the paragraph was revised to read as follows:

The Navajo Mine and FCPP are located on Navajo sovereign tribal land; therefore, air emissions and air quality are under the jurisdiction of the Navajo Nation Environmental Protection Agency (NNEPA) and overseen by the EPA Region IX in San Francisco. Federal and tribal law defines criteria pollutants to include ozone (O₃), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), respirable particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), and lead (Pb). Elimination of tetraethyl lead in motor gasoline has eliminated emissions of lead from vehicles and portable equipment, although tetraethyl lead is still used in some types of aviation gasoline. Ozone is not directly emitted, rather, its precursors NO_x and VOC are the pollutants which react with sunlight to form ground-level photochemical ozone and contribute to regional haze, along with SO₂ and particulate matter. Criteria emissions – also referred to as regulated pollutants – caused by the Action include reactive or volatile organic compounds (ROCs or VOCs), nitrogen oxides (NO_x as NO and NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), respirable particulate matter (PM₁₀), and fine particulate matter (PM_{2.5}).

Response 298.020

The requested modification will be made. See also Master Response #11, Covenant 17.

Response 298.021

The change was made, as suggested. The words “primary and” were deleted in front of the word “secondary” in the referenced sentence.

COMMENT #298

On page 4.1-10, the statement regarding the primary NAAQS for PM_{2.5} as “requisite to protect the public welfare” is incorrect. In actuality, primary NAAQS standards are established to protect the public health, in accordance with CAA Section 109A. They are not established to protect the public welfare. It is secondary NAAQS standards that are established to protect the public welfare, in accordance with CAA Section 109B.

Atmospheric Deposition

On page 4.1-12, there is discussion about the Cross-State Air Pollution Rule. The final EIS should reflect the fact that the Supreme Court reversed the DC Circuit Court of Appeals in *EPA v. EME Homer City Generation*, 134 S. Ct. 1584 (2014), upholding EPA’s Cross-State Air Pollution Rule.

298.022

Also on page 4.1-12, in the last paragraph of this subsection, the Mercury Air and Toxics standards are discussed. The final EIS should reflect the fact that the Court of Appeals upheld the Mercury and Air Toxics Standards in *White Stallion Energy Center v. EPA*, No. 12-1100, 748 F.3d 1222 (D.C. Cir. 2014).

298.023

The potential implications of these recent court cases should also be addressed.

Acid Rain Program

On page 4.1-13, regarding acid rain, the acid rain program is a federal program, and its requirements cannot be made more stringent by states or tribes. FCPP agreed to have NNEPA administer the acid rain program. The program is also administered by U.S. EPA, not just EPA Region IX. The Nation suggests that the first sentence of the paragraph should state: “FCPP is subject to the Acid Rain Program, as administered by NNEPA and U.S. EPA.

298.024

4.1.1.5: Federal Prevention of Significant Deterioration (PSD) Program

On page 4.1-13 in the second to last paragraph, the text references a “recent DC Circuit Court decision on PSD rules related to PM_{2.5} increments and baselines could affect FCPP in the future.” The case the text is referencing is *Sierra Club v. EPA*, 2014 WL 2619824 (D.C. Cir. 2014). The final EIS should reflect any updates concerning the PSD PM_{2.5} rules and potential implications.

298.025

4.1.1.6: Federal Stationary Source Regulations

Much of the air quality discussion is confusing due to use of the terms “historic baseline” and “pre-2014 baseline,” using numbers prior to 2014, and discussing emission reductions post-2014 in relation to this pre-2014 baseline. This gives the impression that the actions upon which this DEIS are based will result in a reduction of emissions, when in fact the emissions may remain essentially the same in comparison to the 2014 baseline. *E.g.*, Tables 4.1-31, 4.1-32. The FEIS should compare baseline (current) to projected (future) emissions.

298.026

Response 298.022

The suggested text was added to the end of the first bullet at the top of the referenced page, to bring the status of the described court case up to date.

Response 298.023

The suggested text was added to the referenced paragraph, to bring the status of the described court case up to date.

Response 298.024

The first sentence of the last paragraph in section 4.1.1.4 was changed to the sentence provided in the comment to reflect the larger regulatory authority of EPA.

Response 298.025

To bring the referenced text up to date, the following was added: “On November 26, 2013 the EPA issued a good cause final rule to remove elements of the Clean Air Act Prevention of Significant Deterioration (PSD) program for fine particle pollution. These elements address air quality modeling and monitoring provisions for fine particle pollution in areas protected by the PSD program.”

Response 298.026

The citations in this comment are consistent with how we describe the baseline in the EIS: First provide emissions that occurred prior to the FIP for BART (Units 1-5), and then in the next subsection describe the emission reductions that occur as a result of implementing BART (shut down Units 1-3 in December 2013, install SCR by 2017). Where the text quantifies the emission reductions due to the implementation of BART, it is clear that the reduction is part of baseline, not as a result of the Proposed Action. In addition, please see Master Response 14, Baseline.

COMMENT #298

Title V Operating Permits

On page 4.1-15, enforceable limits are listed for the current Part 71 permit for FCPP, which expired August 1, 2013. The permit mentioned is expired but FCPP submitted a timely permit renewal application on January 25, 2013. FCPP may operate according to their present permit terms and conditions until NNEPA either issues them a new permit or denies their renewal application. 298.027

Continuous Emissions Monitoring

Page 4.1-15 discusses requirements of Sections 412 and 821 of the Clean Air Act, 42 U.S.C. 7401-7671, et seq. Pursuant to the section in this document called "General Comments," please change Section 821 to 40 CFR Part 98. 298.028

4.1.2.5 Visibility/Regional Haze

Page 4.1-45, the first two full paragraphs discuss using 2005 data as the baseline data. It is not clear if the 2018 base case took into account the fact that three of the units operating in 2005 would not be in operation in 2018. Clarification of how the "base cases" for 2005 and 2018 were determined would be helpful. If the model was run with that information, please provide an explanation as to why the emissions did not change when the number of units in operation decreased. 298.029

4.1.4 Environmental Consequences

Table 4.1-36 on page 4.1-77 should be edited to reflect the fact that there are only six (6) criteria pollutants: NOx, SOx, PM, CO, ozone and lead. 298.030

On page 4.1-80, the EIS states that "A train transports coal from Lowe Stockpile to the processing area where the railcars are unloaded into one of two hoppers, displacing air upward, which entrains some coal dust." There is no reference to these PM emissions in the PM tables. Tables 4.1-7 and 4.1-40 reference PM from loading the railcars but not from unloading them. Table 4.1-6 includes this note: "PM₁₀ and PM_{2.5} for exhaust only, fugitive dust accounted for in BNCC FONSL." If this refers to dust from railcar unloading, it is not included in this DEIS, although it is referenced on page 4.1-80. Although it may be a minor contribution to PM emissions, on page 4.17-19, PM₁₀ is noted as the "air pollutant of primary public health concern associated with the Proposed Action at the Navajo Mine," so emission numbers should be all-inclusive. 298.031

On page 4.1-81, several sentences relating to plume contrast and plume perceptibility are repeated. 298.032

Response 298.027

The text was changed to include the information provided in the comment regarding the operating authority under the expired Title V permit.

Response 298.028

The suggested change has been made throughout the EIS.

Response 298.029

The text was changed to clarify that both the 2005 and 2018 data points include operation of Units 1, 2, and 3. The text was also changed to clarify the point that the regional analysis is not significantly affected by inclusion of the operation of the units and to include a reference to tables in Section 4.18 that show a regional perspective. The new text reads: "The comparison between 2005 baseline and projected 2018 emissions are a comparison of Four Corners Regional air quality, where the operation of Units 1, 2, and 3 are included in the analysis. The comparison is valid in a regional context, as the shutdown of Units 1, 2, and 3 in beginning in 2014 do not result in substantial changes the regional modeling projection. Tables 4.18-2 and 4.18-3 show the percentage changes in SO₂ and NO_x emissions for 17 regional electric power producers in geographic New Mexico, Arizona, and Colorado. Regional emissions reductions also include FIP compliance at other power plants." See Master Response 14, Baseline.

Response 298.030

The table title was changed to 'PSD Emission Significance Thresholds' to be inclusive of all compounds listed in the table. The left column heading is also changed to 'PSD Pollutants'.

Response 298.031

Both tables (4.1-7 and 4.1-40) include a row titled "Unloading at Stockpiles and Railcar Loading." The unloading operation is included in the tables and the analysis.

COMMENT #298

4.1.4.1 Alternative A – Proposed Action

On page 4.1-93, at Table 4.1-47, Projected Normalized MDN Deposition Rates for Region. The projected numbers for MDN deposition rates are compared with numbers from prior to the 12/30/2013 shutdown of units 1, 2 and 3. This should be clearly indicated. If there is a way to provide the current data from the last six months of operation with only two units as compared to the projected range, this would be helpful.

298.033

Likewise, on page 4.1-95, at Table 4.1-47, the projected numbers for AMoN concentrations are compared with numbers from prior to the three unit shut down.

298.034

4.2 Climate Change

The Nation reiterates that the closure of three units, Units 1, 2 and 3, the older, less efficient units on the plant, will significantly reduce carbon emissions. From 2013 to 2014, the FCPP will see a significant drop in emissions from all pollutants to include CO₂.

Throughout this section, older IPCC reports are cited. However, a Fifth Assessment Report was released in 2013. It is recommended that the statements in this section that are based on information from older IPCC reports be revised or supplemented to reflect updated information in the Fifth Assessment Report.

Page 4.2-1, the third paragraph should be modified as:

In its *Inventories of U.S. Greenhouse Gas Emissions and Sinks: 1990–2014* (EPA 2012b), the EPA provides summary information on greenhouse gas emissions by sources and removals by sinks ~~the work of in accordance with commitments under the United Nations Framework Convention on Climate Change (2009) and the IPCC (1990–2007)~~; key information from that report is summarized below.

298.035

On page 4.2-1, the definition for climate change is contained in the UNFCCC, Article 1, (*available at: http://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf*) but the source listed as the reference to this definition is the UNFCCC glossary (http://unfccc.int/essential_background/glossary/items/3666.php), which does not contain this term. The source should be updated in the DEIS list of references in Section 8.

4.2.1.1 Federal Regulations

It is recommended that this subsection reference EPA's proposed carbon pollution rule, which carries implications for the regulation of GHG emissions from FCPP. EPA recently released a proposed rule regulating GHG emissions from existing coal-fired power plants. See 79 Fed. Reg. 34830 (June 18, 2014). The rule consists of state-

298.036

Response 298.032

Thank you for your comment. The text has been adjusted accordingly.

Response 298.033

More recent MDN data would not be available, as data are not released until the whole year is released. Because MDN data are regional in nature, changes due to the shutdown of Units 1, 2, and 3 would barely be detectable at the closest MDN detection point (Mesa Verde). Also, please see Master Response 14, Baseline.

Response 298.034

AMON data would not be available, as data are not released until the whole year is released. Also, please see Master Response 14, Baseline.

Response 298.035

The Fifth IPCC Assessment Report has been reviewed and incorporated into Section 4.2 of the EIS as appropriate; however, after careful review of the Fifth IPCC report, it was concluded that the report reinforces the conclusion from the previous IPCC reports. The latest IPCC report does not change the analysis or conclusions presented in the Draft EIS.

The page 4.2-1 text was changed as suggested.

Regarding the definition for climate change, the following definition was included in the EIS: "'Climate change' means a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods." (United Nations 1992.)

Response 298.036

Suggested edits have been made.

COMMENT #298

specific rate-based goals to lower carbon emissions from power plants and guidelines to help states develop plans to meet the goals. However, EPA specified that it was not proposing emission rate goals or guidelines for affected sources located in Indian country, including FCPP. 79 Fed. Reg. at 34854. EPA explained that it will establish plans for areas of Indian country where affected EGUs are located, “[i]f it determines that such a plan is necessary or appropriate,” unless the tribe on whose lands the source is located seeks and obtains authority to establish a plan pursuant to the Tribal Authority Rule, 40 C.F.R. §§ 49.1 – 49.11. *Id.* If a tribe obtains authority to establish a tribal plan, “it is the EPA’s intention that the tribe would have flexibility to develop a plan tailored to its circumstances, in the same manner as a state, to meet CO₂ emission performance goals that would be established by the EPA based on application of the BSER [Best System of Emission Reduction] to that area of Indian country.” *Id.*

On page 4.2-2, the following sentence should be changed as noted to be consistent with GHG Mandatory Reporting Rule. See 74 Fed. Reg. 56260, 56285 (Oct. 30, 2009). “Mandatory Reporting of Greenhouse Gases Rule: The rule requires specified industrial source categories and facilities with an aggregated heat input capacity of 30 mmBTU or more per hour or that emit 25,000 metric tons or more per year (MT/yr) of CO₂ equivalent (CO₂e) GHG emissions to submit annual reports to the EPA.

298.037

4.2.1.2 State Rules

Executive Order 2009-047

Page 4.2-3: This Executive Order is dated December 4, 2009, not the 7th.

298.038

It appears that New Mexico is no longer involved in the Western Climate Initiative, although this is not made clear in the document. The Western Climate Initiative website and the WCI, Inc. website (“a non-profit corporation formed to provide administrative and technical services to support the implementation of state and provincial greenhouse gas emissions trading programs”) both show that New Mexico is no longer working on developing emissions trading program policies under the Western Climate Initiative.

New Mexico Environment Department Title V GHG Reporting Requirements

In the last paragraph at the bottom of page 4.2-3, the first sentence should be modified to read:

For Title V sources that are not oil and gas facilities, the existing rule requires CO₂ and CH₄ emissions to be quantified and reported in accordance with 40 CFR Part 98. In accordance with NMED GHG reporting and quantification procedures, Title V sources that are not oil and gas facilities shall quantify and report CO₂ and CH₄ emissions using EPA GHG reports; EPA methods applied to facilities not subject to EPA reporting; NMED procedures; or Best Available Data only for sources lacking quantification methods under EPA methods or NMED procedures.

298.039

Response 298.037

Suggested edits have been made.

Response 298.038

Thank you for your comment.

Response 298.039

The suggested change to the text was made.

COMMENT #298

4.2.2.3 Emission Sources

On page 4.2-6, an outdated inventory was cited. The current inventory, as published by USEPA, shows that electric power accounts for 32% of GHG emissions, transportation is 28%, industry is 20%, commercial and residential make up 10%, and agriculture makes up 10% of GHG emissions. The current inventory is found at <http://www.epa.gov/climatechange/ghgemissions/usinventoryreport.html>. 298.040

4.2.2.4 Emission Trends

On page 4.2-7, the GHG emissions increase in the US is inaccurate. They have not increased 10%, but 4.7%. <http://www.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2014-Main-Text.pdf>. Emissions decreased by 3.4 percent from 2011 to 2012 due to a decrease in the carbon intensity of fuels consumed by power producers to generate electricity. *Id.* 298.041

4.2.2.5 Electric Power Generation

This section also contains outdated data. Please review the updated Inventory found at <http://www.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2014-Main-Text.pdf>, which will show reduced emissions from coal sources. 40% of the CO₂ emissions come from fossil fuel combustion in electric generation as opposed to the cited 81%. 298.042

4.2.4 Environmental Consequences

Page 4.2-16: The proper citations are 40 CFR Part 98, Subpart D and 40 CFR Part 75. 298.043

4.2.4.1 Alternative A

This section should include information pertaining to EPA's proposed rule regulating GHG emissions from existing power plants, discussed above. 298.044

4.3 Earth Resources

4.3.2.4 Paleontological Resources

Navajo Nation Minerals Department has the authority to issue Geological and Paleontological Reconnaissance Permits and Paleontological Collection Permits. Because of that authority, Minerals reviewed the Paleontological Resource Management Plan (the Plan) for the Navajo Mine, made comments, and their comments were included in that Plan. Although the Plan was not formally approved, Minerals determined that the Plan presents the appropriate measures to follow for mitigation. The Plan exceeds Navajo Nation requirements for such a plan. The Plan is consistent with the federal 298.045

Response 298.040

Data from 2012 were used in the Draft EIS. The new values were added to the Final EIS, but they are similar to the 2012 data and do not change the analysis or conclusions.

Response 298.041

Data from 2012 were used in the Draft EIS. The new values were added to the Final EIS, but they are similar to the 2012 data and do not change the analysis or conclusions.

Response 298.042

Data from 2012 were used in the Draft EIS. The new values were added to the Final EIS, but they are similar to the 2012 data and do not change the analysis or conclusions.

Response 298.043

Suggested edits have been made.

Response 298.044

In June 2014, EPA issued the "Clean Power Plan" proposal to cut carbon pollution from existing power plants. The proposal establishes state-by-state goals to reduce greenhouse gases by 2030. The focus is on power plants, but states have discretion to meet goals with a combination of industries. The proposed regulation is subject to comment and finalization. Additionally, tribal lands are not given goals at this time. A proposed timetable is suggested for moving into the process with tribes, with July 2017 being when EPA would have a proposed goal for tribal lands. States are given a year to establish programs, with a provision for a 2-year extension; therefore, 2020 is when states are required to have a program in place. The tribes will likely lag that by a year or two, with the compliance timeframe lagging also. The EIS was changed to acknowledge the proposed plan; however, because of the uncertainties with whether the plan will be

adopted or modified, or how it would be implemented on the Navajo Nation, there is no change to the conclusions or analysis in the EIS.

Response 298.045

The EIS has been revised to more clearly state the following: (1) The Navajo Nation retains ownership of all paleontological resources. (2) Through the permit and implementation of the Paleontological Resources Management Plan, OSMRE requires the proponent to include in the Permit Application Package the process for managing paleontological resources. (3) If a permit is approved, the way in which paleontological resources are managed is decided by the Navajo Nation, and OSMRE oversees the process.

COMMENT #298

Paleontological Resources Preservation Act of 2009. That law does not apply to Indian land, but Minerals agreed, in the spirit of cooperation, to use the Act as a guide in developing the Plan.

Therefore, the mitigation offered in 4.3.5, to have a paleontologist available to monitor during activities, is not necessary due to compliance with the Plan.

4.4 Cultural Resources

The Nation strongly urges OSM to continue and increase the levels of consultation regarding cultural resources. As a reminder, work needs to be authorized by Navajo Nation Historic Preservation Department (HPD) prior to commencing any work or claiming that an area has clearance. Also, mitigation needs to be discussed with HPD prior to deciding the final form of mitigation. HPD looks forward to continuing consultation with OSM on these issues, and looks forward to hearing from OSM and the consultants early and often.

On page 4.4-5 and 4.4-6 at Table 4.4.1, please delete the reference that Navajo has been here from 1450 to present. Navajo culture asserts existence in the area from time immemorial, and specifying this date is inconsistent.

On page 4.4-6, and anywhere else this reference occurs, please delete the reference that the Anasazi are "Ancestral Puebloan". This is also inconsistent with Navajo belief, based on an inaccurate assessment of language, and is an outdated theory.

4.4.2.4 Properties of Religious and Cultural Significance

On page 4.4-17, there is a typo under the subsection entitled "Navajo Mine." In the paragraph that starts "In 2006," the following words should be "the Navajo Nation Archaeological Department," not the "Navajo National. . ."

4.5 Water Resources/Hydrology

Page 4.5-1, third paragraph. It is unclear how OSM determined the Region of Influence (ROI) for deposition to be only 20 miles to the northeast of FCPP (as compared to 30 miles to the northwest and southeast) when the prevailing winds are from the southwest.

Page 4.5-1, second paragraph. The construction of the transmission lines may involve the grading, clearing or grubbing for access roads or pads. The new disturbance of more 1.0 acre of land surface will require coverage under the NPDES general permit for storm water discharges associated with construction activities (Construction General Permit or CGP). [Also applies to Transmission Lines section on page 4.5-41.]

Response 298.046

Thank you for the comment. A complete description of all consultation conducted as part of the Section 106 process is included in Chapter 5 of the Draft EIS. This consultation was completed and two Programmatic Agreements drafted and signed prior to publication of the Final EIS.

Response 298.047

Suggested edits have been made

Response 298.048

Suggested edits have been made

Response 298.049

Suggested edits have been made

Response 298.050

The EIS was edited so that text in Section 4.5 matches the description in Section 4.1 to state the deposition area is less than 50 km. With regard to the direction of areas within the deposition area, the Ecological Risk Assessment used the CalPUFF model to determine where areas where the concentration of constituents was greater than background concentrations.

Response 298.051

Added the following language to the paragraph: "NTEC will be required to obtain a construction general permit for extension of transmission lines and construction of new roads associated with the development of the Pinabete permit area." The subject transmission lines included as connected actions do not involve any new construction or land disturbance. Therefore, a construction general permit is not applicable to the operation and maintenance of these structures.

COMMENT #298

4.5.1.1 Federal Regulations

Section 402

The NPDES permit No. NM0000019 for FCPP expired on April 6, 2006, but was administratively extended by U.S. EPA Region 9 due to uncertainty about the future operations of FCPP with expected unit closures and/or plant shutdown. Permit renewal was also delayed to allow for NPDES compliance inspection evaluation (CEI) by one of the Region's federal inspectors. The inspection was conducted on May 8, 2012. The renewed NPDES permit for the FCPP will likely have a special requirement for fly ash pond management.

The NPDES permit No. NN0028193 for the Navajo Mine that expired on April 6, 2013 has also been administratively extended. National Historic Preservation Act (NHPA) and Endangered Species Act (ESA) information gathered for this draft EIS will be used in the renewal process for of the NPDES permit for BHP Navajo Coal Company (BNCC)/NTEC. The NPDES permit renewal is also dependent upon the selected coal mining areas ultimately approved. In the NPDES permit for the Navajo Mine, discharge outfalls in areas undergoing reclamation will be subject to 40 CFR Part 434 Subpart H, which requires the permittee to submit a Sediment Control Plan to U.S. EPA and implement this plan in a manner that will result in average annual sediment yields that will not be greater than the sediment yield levels from pre-mined, undisturbed conditions (no numeric limit or standard to meet).

Page 4.5-2: Table 4.5-1 lists NPDES permit effluent limitation parameters for all the outfalls at FCPP (permit no. NM0000019). This table should include the monitoring frequency for each parameter for each outfall. A table listing all the permit effluent limitation parameters for all the outfalls at Navajo Mine should be included as well (permit no. NN0028193).

298.052

Page 4.5-2 contains the statement "A review of EPA records also verified that BNCC and APS have no recorded NPDES permit violations." It is not clear which EPA records are referred to, and whether discharge monitoring reports, CEI reports, and analytical data are included. For example, on February 19, 2010, BNCC had an accidental release of water from a sediment pond into a FCPP canal and hot pond which leads into Morgan Lake. The federal Office of Surface Mining Reclamation and Enforcement (OSMRE) issued a Notice of Proposed Civil Penalty Assessment to BNCC in connection with the incident. This should be verified and corrected in the record.

298.053

Other Federal Programs

Page 4.5-3. The first paragraph should read as follows:

298.054

~~"Prior to MATS and CSAPR, the EPA sought to address interstate deposition-related pollution through CWA programs. Specifically Under~~



Response 298.052

A new table has been added providing discharge limits applicable to Navajo Mine. Information regarding monitoring frequency would not affect any of the analysis or conclusions and is not presented.

Response 298.053

The cited case was an OSMRE action, that was also provided to the EPA. The EPA did not issue a notice of violation.

Response 298.054

Suggested edits have been made.

COMMENT #298

the CWA, states and tribes with approved programs typically establish water quality standards based on EPA-recommended criteria for surface waters. If a surface water does not meet standards, the CWA generally requires a Total Maximum Daily Load (TMDL) to be established that identifies the maximum amount of pollutant that can enter the water and still meet standards. ~~States are responsible for taking actions to ensure the TMDL is not exceeded.~~ For point sources of pollution, such as an outfall from a sewage treatment plant, CWA permitted discharge limits are to be consistent with the TMDL. However, there is no similar regulatory requirement for nonpoint sources of pollution, such as atmospheric deposition over states, tribal lands, or other regions. States and tribes may take actions, such as providing technical or financial assistance to limit pollution from nonpoint sources through nonpoint source management controls, but legal obstacles arise when atmospheric deposition affecting state waters originates in emissions from another state (GAO 2013).”

Page 4.5-3. This section should address whether any Notices of Proposed Civil Penalty Assessment or other similar type notices have been issued by OSM for BNCC operations at Navajo Mine for water related incidents.

4.5.1.2 State Regulations

Page 4.5-4. This section should be corrected to note segment-specific criteria for temperature, phosphorous, bacteria, and/or conductance have been set for all but one segment of the San Juan River Basin, not just the La Plata and Animas rivers.

4.5.1.3 Tribal Standards

Page 4.5-4: The first few sentences of this section should be changed to read as follows:

“The Navajo Nation has adopted the Navajo Nation Surface Water Quality Standards (NNEPA 2008), which establish various surface water use quality standards and which have been approved by EPA. These standards apply to all surface waters of the Navajo Nation, which include, but are not limited to, ephemeral, intermittent, and perennial streams, springs, wetlands, and any natural or man-made depressions or basins that impound water within the Navajo Nation’s border jurisdiction. However, due to a covenant in the lease between APS and the Navajo Nation (Covenant 17: Operation of Power Plant, 1960 et seq.), NNEPA water quality standards do not apply to Morgan Lake, which is the only surface water into which the facilities or operations of the FCPP discharges. The NNWQS do apply to the surface waters into which, only the Navajo Mine discharges.”



298.055

298.056

298.057

Response 298.055

The notice of violation for the release from the sediment pond has been noted.

Response 298.056

The following text has been added to Section 4.5.1.2 State Regulations of the EIS, “Specific water quality standards for temperature, phosphorus, bacteria and conductance have been set for all but one segment of the San Juan River.” This comment does not change the basis for the analysis in the EIS.

Response 298.057

Change made.

COMMENT #298

These changes are made to correctly describe the state of Navajo law and authorities. The Nation has not yet promulgated groundwater quality standards, so adding "surface" in the second sentence notes this fact.

Page 4.5-4 states that there are no water quality standards for total dissolved solids (TDS), sulfate, or fluoride. Despite this statement and the lack of such standards in the Navajo Nation Surface Water Quality Standards (NNSWQS), Table 4.5-2 contains livestock watering standards for fluoride, sulfate and TDS. It is not clear how OSM arrived at the standards presented in the table.

Page 4.5-5 discusses the draft 2013 Surface Water Standards, and mentions "2010 standards." To clarify, on March 28, 2009, US EPA approved the most recent water quality standards amendments, which were submitted to USEPA in December 2008. These are the most recent amendments that were approved by both USEPA and Navajo Nation Council.

4.5.2 Affected Environment Pre-2014

4.5.2.1 Groundwater

The Four Corners Power Plant (FCPP) would be a major source, through travel and deposition, of air pollutants. To the south and west are areas of major recharge, i.e., the Chuska-Carrizo Mountain Range. The Chuska Sandstone aquifer is the hub of several springs and shallow water sources, including the several lakes that are located atop the mountain. Another major recharge area to the west is the Defiance Plateau which includes a major drinking water aquifer source, namely the De Chelly Sandstone which caps the plateau regionally. The ROI also include major recharge areas discussed above, including all highland areas that bound the San Juan Basin which consist of less than 2,000 square miles of climatic conditions that provide greater than 12 inches (16-27 inches during wet years) of precipitation annually. The Deposition Area ERA (4.5-14, 1-6) model evaluation describes some of the metals and contributors of the potential impacts to described areas but not to the major recharge areas discussed above, although no map of the Deposition ERA model was located in this EIS.

The water resources that bound the area of influence include the San Juan River (SJR) bordering in the north and in the west and then the south by the Chaco River. There are no water bearing formations that contribute to public drinking water supply wells within the ROI. However, from mineral exploration drilling, water well resources that were found or intercepted include the: Ojo Alamo Sandstone; Kirtland-Fruitland Formations and; Pictured Cliffs and Cliff House Sandstones; and the Menefee Formation. None of these aquifers are used in the area because of elevated Total Dissolved Solids (TDS) and their concerning fluoride levels. The alluvium or alluvial valley deposits from the SJR and Chaco River (and its tributaries) contributes significantly to various domestic and agricultural uses, namely in the Fruitland and Nenahnezad area. The water sources in this area are marginal to poor with high TDS' and some fluoride concentrations that are

Response 298.058

Table 4.5-2 in the DEIS is now Table 4.5-3. Standards for TDS, sulfate and fluoride have been removed from this table. However, the text of the document still references benchmark values for TDS, sulfate and fluoride as these are relevant standards useful for comparison to the data. The text includes reference to the source for these benchmark values and is clear that these are not enforceable standards.

Response 298.059

Revised accordingly.

Response 298.060

Thank you for your comment. A map of the Deposition area has been added to Section 4.5 of the EIS.

COMMENT #298

below the (Navajo Nation Safe Drinking Water Act (NNSDWA) secondary MCL of 2.0 ppm.

On Figure 4.5-1, at page 4.5-7, Water Wells and Springs, there are actual well identification numbers associated with the wells on the maps. Each should also have a GPS point of each water well and spring. The well identification number should be an actual Tribal Well Identification Number that is associated with that Grazing District, namely Land Management District 13 for the Navajo Nation. The tribal well identification number is given to all permitted wells drilled on the Navajo Nation by the Navajo Nation Water Code Administration. The wells and the associated identification number should be listed for well construction and aquifer reference.

298.061

Page 4.5-9. With respect to seeps and springs, in the recent past, Navajo EPA has observed and sampled seeps coming out of the east bank of Chaco Wash west of the ash disposal ponds. A large spring or flowing well located at the base of the Hogback across from the mouth of Chinde Wash is not shown on this figure or mentioned in this section (although it is clearly visible on Google Earth). The DEIS should address this water source and it's connectivity to the proposed mining activities.

298.062

Page 4.5-10. With respect to the final paragraph, for a period of time, APS was unsure of the origin of water present in the alluvial formation. APS was trying to determine if the hydraulic head of the water in the alluvium was from the ash disposal ponds or Morgan Lake further east. The ultimate determination should be noted in this section. The last sentence is incorrect. Table 4.5-4 is unrelated to the FCPP monitoring wells. Table 4.5-6 provides water quality summaries for the groundwater around the FCPP, not physical characteristics of the wells.

298.063

With respect to the last paragraph on page 4.5-14, a supplemental groundwater study program and monitoring well installation includes a list of constituents that are monitored. The hydrogeology in the area includes the Mancos Shale that lies below the water bearing formations discussed throughout section 4.5. Most of Navajo Nation's groundwater resources for public and domestic supplies include aquifers below the Mancos Shale and located more west (in general) of the ROI site. However, because of the network of tributaries to both Chaco and San Juan Rivers, another major concern includes the list of chemical constituents that contribute to the water quality of these surface water sources. Downstream several miles of the San Juan River is the Mexican Hat Water Treatment Plant & Community Water System. According to the NNEPA PWSSP's water quality data base, "hits" (concentrations found above the laboratories detection limit) were found for Antimony, Arsenic, Barium, Chloride, and Mercury in 2011. An actual secondary MCL exceedance of Sulfate occurred in 2010. Considering the distance from the treatment plant, it is unlikely that these "hits" or the exceedances comes directly from the Navajo Mine or FCPP, however, the NNEPA continually monitors these constituents as required and will follow up with upstream potential contaminant sources that may be contributing to elevated concentrations with Mitigation Measures found in the Mexican Hat Source Water Protection Plan, which is available for NTEC to consider as it implements best management practices regarding groundwater

298.064

Response 298.061

The appropriate Well Identification numbers have been added to the wells depicted on figure 4.5-1

Response 298.062

Information included in the EIS is consistent with CHIA and SMCRA permit applications. The EIS has been revised to state that information regarding additional seeps was provided by Navajo Nation and mentioning seeps near the FCPP in the environmental setting (these seeps were already discussed in the impact analysis).

Response 298.063

In addition to the provided gradient in the EIS calculated from wells 41, 42, and 43, OSM also calculated the gradient between 41, 12R, and 43 which showed groundwater moving southwest from Morgan Lake. These two calculations together show that groundwater moves radially from Morgan Lake. Text in section has been revised. As such, the water chemistry and water quality data provided does not indicate significant contribution of water from the ash ponds as indicated in the comment. A description of water quality beneath the ash ponds has been added to page 4.5-24.

Response 298.064

Thank you for your comment.

COMMENT #298

quality impacts. All Source Water Protection Plans (SWPPs) are updated as needed. In regards to the Navajo Mine and FCPP, NNEPA PWSSP will be updating the Mexican Hat SWPP to include both Navajo Mine and the FCPP.

Pages 4.5-13 to 4.5-20. This section overall was a bit disorganized and confusing at times. For example, the first paragraph is repeated three paragraphs later, the discussion of coal combustion residue (CCR) placement is just thrown in without a heading or context, and the discussion of the "Alluvium Aquifer" begins five paragraphs before the appropriate sub-heading and introductory paragraph. 298.065

Page 4.5-14. This section should include a discussion of the impacts to groundwater from CCR placement in the ash ponds near the FCPP. 298.066

Figure 4.5-3 at page 4.5-15. A much smaller scale figure would aid in the evaluation of the contents of this figure. 298.067

Page 4.5-17. In the sixth paragraph it is unclear which wells are considered to be "background" and what how that determination was reached. 298.068

Table 4.5-6 Summary of Groundwater Quality Monitoring Results at FCPP

APS has wells completed in both the alluvium and the Lewis Shale. They also have wells upgradient and downgradient from the ash ponds. It is unclear which well data are summarized in this table. The time period is covered is also unclear. If "background" wells exist, they should be presented separately like the baseline data for the mine? More information is needed to make this table useful. 298.069

Further, this table contains inaccurate information. The Navajo Nation Primary Drinking Water Regulations are available on the Navajo EPA's website (www.navajopublicwater.org). The following constituents were found in error on the table: 298.070

Primary Constituent	EPA MCL (mg/l)	Navajo Water (mg/l)	EPA Standard MCL	Drinking MCL
Antimony	0.006	0.006		
Barium	2.0	2.0		
Uranium	30 micrograms/liter (µg/l)	30 µg/l		

Secondary Constituent	EPA Secondary MCL	Navajo Water Standard MCL	EPA Secondary MCL	Drinking Secondary
Chloride	250	250		
Iron	0.3	0.3		
Manganese	0.05	0.05		

Response 298.065

Thank you for your comment. The text has been revised accordingly.

Response 298.066

The EIS section has been revised to acknowledge the Final CCR rule and associated groundwater monitoring requirements.

Response 298.067

The figure includes more components than would be accommodated by the smaller scale, as such no change made.

Response 298.068

Wells considered background are those upgradient of the ash disposal areas (MW-43, MW-12R, MW-41, LS-1, LS-2). The text has been updated in the section.

Response 298.069

Table 4.5-7 has been revised to include three columns (Min, max, average) for water quality results for MW 41, 43, and 12R to provide a comparison to the water quality results shown. The other columns provide the min, max, and average values for all other monitoring wells in the ash disposal area. In addition, text summarizing the water quality data has been added to page 4.5-24.

Response 298.070

Suggested edits have been made.

COMMENT #298

pH	6.5-8.5	6.5-8.5
Silver	0.10	0.10
Sulfate	250	250
TDS	500	500
Zinc	5.0	5.0

4.5.2.2 Surface Water (including waters of the US)

Page 4.5-21, first paragraph. Please correct the Hydrologic Unit Code (HUC) to reflect that the northern part of the Navajo Mine falls within the Middle San Juan River HUC 14080105. 298.071

Page 4.5-21, first paragraph, last sentence. Roads used to maintain the transmission lines can affect the water quality of the many water bodies they cross. The FEIS should discuss them in this section. 298.072

Page 4.5-21, first paragraph under Regional Surface Water Resources, last sentence. Roads used to maintain the transmission lines can affect the water quality of the many water bodies they cross. The FEIS should discuss them in this section. 298.073

Page 4.5-21, last paragraph. This section should be updated to reflect the most recent assessment by New Mexico Environment Department (NMED). Also, Navajo Reservoir is not located on the Navajo Nation. 298.074

Page 4.5-22. The section on NNEPA monitoring is not complete. Several years of data are not mentioned for Bitsui and Chinde Washes. Most of the exceedances for the Chaco, San Juan, Chinde, and Bitsui Washes are not mentioned, suggesting that available data identify no water quality issues when in fact there are possible impairments due to aluminum, lead, arsenic, mercury, gross alpha, selenium, and TSS. In addition to the data used for this section, data for the San Juan River at the Four Corners collected between 2012 and 2013 indicate that other parameters such as beryllium, barium, and chromium may be a concern within the ROI. These results are preliminary, but should be addressed in the FEIS. These data are available from NNEPA upon request. 298.075

Page 4.5-28. Mention is made of how New Mexico increased its selenium standard to 0.05 mg/L, however the Navajo Nation Acute and Chronic Aquatic and Wildlife Habitat standards are still 0.033 mg/L and 0.002 mg/L, respectively on the San Juan River. Our Agricultural Water Supply standard is also 0.020 mg/L. Navajo Nation standards should be addressed in this section. 298.076

Page 4.5-31, first paragraph. The NNEPA water quality standard referenced is for "Aquatic and Wildlife Habitat—Chronic." 298.077

Page 4.5-31, third paragraph: The USGS data require further examination. The data available to NNEPA does not show any exceedances of the Secondary Human Contact 298.078

Response 298.071

Suggested edits have been made.

Response 298.072

This was evaluated based on proximity to waters of the U.S. There will be no new roads and changes to existing access roads as part of the Proposed Action.

Response 298.073

This was evaluated based on proximity to waters of the U.S.

Response 298.074

The EIS has been updated with the correct information for San Juan River and the more recent 2014-2016 citation included. The text has been revised accordingly.

Response 298.075

Figure 4.5-9 has been updated with the more recent monitoring data. The text on page 4.5-22 has been revised as follows: The Chaco River had the longest dataset of record with sampling from 1998 to 2013. Chinde Wash data covered the period 2001, 2003, 2004, 2009-2011, Bitsui Wash only had data for 2001-2003, 2010 and 2011 and data collected in the San Juan River was for the years 2006, 2011-2013.

Response 298.076

The following sentence was added to the paragraph: "The Navajo Nation also has standards for the segments of the San Juan River which flow through tribal lands, as shown on Table 4.5-2."

Response 298.077

Thank you for your comment. The text has been revised accordingly.

Response 298.078

The data in this paragraph is directly from the OSMRE CHIA. The following sentence has been added to the paragraph: It is important to note however that water quality sampling conducted by NNEPA at various stations along the Chaco River have not indicated any exceedances of NNEPA standards for cadmium, secondary human contact (NNEPA 2013). NNEPA sampling also found exceedance of the lead standard for all designated beneficial uses at all stations in the Chaco River (NNEPA 2013).

COMMENT #298

standard for cadmium. On a related note, NNEPA has found lead in excess of the NNEPA water quality standards, but these exceedances were not mentioned.

Page 4.5-31, last paragraph: The source of the data are used for this “similar analysis” is unclear.

Page 4.5-33. APS data from the Morgan Lake blowdown should be presented in this section.

Page 4.5-33 to 4.5-34 last paragraph on 33. The source of this data should be included, as well as information regarding the sampling locations in reference to the distance upstream and downstream. Also, the data presented in the figure referenced cover a much longer time period than October 2008-August 2009, and the correct time period should be indicated.

Page 4.5-34, first full paragraph. The DEIS incorrectly treats TDS and sediment loading as correlated, which is not necessarily the case. Morgan Lake is a perfect example of this.

Page 4.5-37, Figure 4.5-8. All of the charts seem to be truncated—the text states that the data in this figure are from 2003-2010 (see p. 4.5-33, “Water Quality”, 2nd paragraph). Including graphs with the entire date range would be more helpful.

Page 4.5-40, Figure 4.5-9. The figure should be clarified to further identify particulates addressed. It is not clear if “SO” refers to SO₂ or SO₃, or all oxides of sulfur. The reference to “NO” without further qualification is similarly problematic.

Page 4.5-42, second to last paragraph. This section should be clarified to state that the NPDES permit for the FCPP is written to ensure that it is in compliance with NNEPA water quality standards.

Page 4.5-42, last paragraph. As noted earlier, roads used to maintain the transmission lines can affect the water quality of the many water bodies they cross, and road and possible environmental impacts should be discussed in this section.

4.5.4 Environmental Consequences

4.5.4.1 Alternative A—Proposed Action

Page 4.5-43, second paragraph. It is stated that two existing livestock wells are not currently being used because regulated constituents in the water exceed livestock criteria. It is unclear how the determination was made that these wells are not being used. Exceedance of standards alone does not prevent the use of non-compliant wells.

Page 4.5-44, second paragraph. Table 4.5-5 does not provide a comparison of wells within the areas of CCR placement to baseline Fruitland coals. No table does this, and one should be developed for the FEIS.

Response 298.079

The citation for this analysis is OSMRE 2012c.

Response 298.080

The following sentence was added to the section: Water quality results from a single sample event in 2010 in the Chaco River at the point of Morgan Lake blowdown was available. For this sample event, pH was 8.4, TDS was 723, and all metals and other constituents met NNEPA standards, with the exception of aluminum which was elevated above acute and chronic wildlife habitat at 4mg/L.

Response 298.081

The paragraph has been revised as follows: Water quality data for samples collected in the Chaco River both upstream and downstream of the FCPP discharge location were also available (see Figure 4.5-9). Samples were collected by APS between October 2008 and August 2009 (APS 2013). In addition, the data includes samples collected by NNEPA between 1998 and 2013, although sampling data upstream and downstream of FCPP only extends through 2012 (NNEPA 2013). An independent comparison of the upstream and downstream sample data was conducted and found no statistically significant difference between the sample sets for any of the constituents tested, with the exception of boron and sulfate. The data sets for sulfate, while significantly different between upstream and downstream do not exhibit a systematic pattern of either location having higher concentration than the other. All sample results for boron are well below all beneficial use water quality standards, as shown in Figure 4.5-9; however, the boron concentrations (total and dissolved) are higher downstream of the FCPP than upstream.

Variations in data post-2009 are not statistically significant and appear to be similar both upstream and downstream of the facilities.

Response 298.082

The primary point in the paragraph related to concentrations of elevated aluminum detected in the Chaco River, and their correlation

with elevated sediment load. As a secondary observation, the paragraph noted that elevated aluminum also correlated with elevated TDS. Morgan Lake was not mentioned in this paragraph about the Chaco River.

Response 298.083

The figure has been revised to include all data within the range for which the constituents were detected.

Response 298.084

The figure has been revised to state “SO₄” and “NO₃”

Response 298.085

Not all constituents required to be monitored for the NPDES have tribal standards (e.g., oil and grease, flow). The following sentence has been added to the EIS: Further, the NPDES permit includes monitoring for some constituents for which NNEPA standards exist; these permit limits match the NNEPA standards.

Response 298.086

Impacts to surface water quality resulting from transmission lines is included on page 4.5-59 of the Draft EIS.

Response 298.087

Use of wells (or lack thereof) was provided by applicant. Added in Citation for the Pinabete Permit application at the end of this sentence.

Response 298.088

The data for the analysis is provided from the CHIA. Baseline characterization for Fruitland Formation Baseline Quality is presented in the CHIA at Section 4.2.4.4. The assessment of the Fruitland Formation and PCS Formation is presented in Section 5.3.5.3, and a subsection specific to CCB disposal is presented at Section 5.3.5.3.1. Additionally, a Coal Combustion Byproduct Assessment is provided in the CHIA at Appendix G.

COMMENT #298

Page 4.5-57, second paragraph. There is no discussion of the groundwater under the dry fly ash disposal area (DFADA) in the Affected Environment section. All parameters in Table 4.5-6 that exceed the MCL should be addressed, not just selenium. 298.089

Page 4.5-57, third paragraph. Information available to the Nation suggests that the trench was excavated into the Lewis Shale, but not to the bottom of it. This statement should be verified. 298.090

Pages 4.5-59 to 4.5-60: BMPs for transmission line roads should include berms and/or rolling dips to reduce erosion. 298.091

4.5.4.2 Alternative B—Navajo Mine Extension Project

Page 4.5-60. The increased flow into No Name Arroyo caused by diverting water from Pinabete Arroyo would likely increase erosion within the former arroyo, and the possibility of further erosion should be addressed in the FEIS. 298.092

4.6 Vegetation,
4.7 Wildlife and Habitats, and
4.8 Special-Status Species

The Biological Assessment (BA) associated with this EIS is still in draft form. Before the EIS becomes final, the BA will be completed. Navajo Nation Department of Fish and Wildlife (NNDFW) is a cooperating agency, and as such, was given an opportunity to review the BA and submitted comments on May 16, 2014. Any changes made to the BA should be incorporated into the EIS to make a more thorough and accurate document. In order to facilitate this, NNDFW is ready, willing and able to assist OSM and the consultants in the ongoing consultation process as a cooperating agency. 298.093

In regards to Section 4.6 on Vegetation, the Nation would like to point out that Navajo Mine operators have historically been diligent about promptly re-vegetating areas of the mine that are mined-out. The Nation would like to emphasize that all seed mixes used for re-vegetation should consist solely of native seeds. Though it is generally not uncommon for seed mixes to consist of a mix of native and exotic seeds, we feel this approach is risky and unnecessary. Many of the plants that are currently considered to be noxious weeds were purposely introduced to the landscape for restoration-related purposes. In the event that Navajo Mine is currently using a seed mix that includes exotic species, we recommend changing to an all-native seed mix. 298.094

Response 298.089

Table 4.5-7 has been revised to provide columns showing constituent concentrations for background wells (MW-41, MW-43, MW-12R). In addition a note has been added to the original three columns indicating that they represent the min, max, and average values of all other monitoring wells beneath the ash disposal area. Text summarizing the data has also been added to page 4.5-24.

Response 298.090

Sentence has been revised to state that the trench was excavated to the Lewis Shale.

Response 298.091

APS and PNM have included applicant proposed measures to reduce erosion as described on pages 3-38 and 3-39 of the Draft EIS. No change made to the EIS.

Response 298.092

The analysis is at a comparable level as for the proposed action and allows meaningful comparison of the effects of the alternatives.

Response 298.093

Thank you for your note and the EIS has been updated with the Final Section 7 consultation results and the BA/BO.

Response 298.094

Thank you for your comment.

COMMENT #298

Section 4.10 Socioeconomics

4.10.2.2: Economic Conditions

Page 4.10-13. Table 4.10-13 should be modified as follows:

Table 4.10-13 Summary of Navajo Nation Taxes and Royalties Paid by BNCC

	2008	2009	2010	2011
Tribal Royalties	\$32,219,881	32,202,529	\$26,802,424	\$31,375,436
Navajo Business Activity Tax	\$4,436,285	\$5,440,000	\$4,174,703	\$4,892,589
Navajo Possessory Interest	\$4,800,000	\$3,672,180	\$4,460,992.98	\$4,045,137
Annual Average of Total Navajo Nation Payments	\$39,630,539			

298.095

By way of explanation:

- 1) The Nation does not receive Fuel Excise Tax from BNCC, so that row should be removed. It is unclear why there were figures inserted into 2008 and 2009 for Fuel Excise Taxes. An explanation of where those numbers came from would be helpful.
- 2) The tribal Royalty payments were accurate.
- 3) The Annual Average needs to be corrected.
- 4) The information in this chart comes from the Navajo Tax Commission and should be noted as such.

4.10.3.2 Economic Conditions

Page 4.10-25 Although the DEIS mentions NTEC purchased Navajo Mine in section 4.10.3, section 10.3.2 mentions some compelling economic contribution statistics tailored solely to San Juan County and State of New Mexico. There is no mention of the economic impacts to Navajo Nation revenues in light of the NTEC purchase of the mine. Inclusion of similar references of the projects' economic contributions to the Navajo Nation would make the economic analysis more complete and more relevant.

298.096

The tables referenced below illustrate the economic contributions of the Navajo Mine and Four Corners Power Plant to San Juan County and State of New Mexico. The Nation recommends that similar tables addressing economic contributions to the Navajo Nation be included.

- Table 4.10-7- Current Economic Contribution to San Juan County, New Mexico (2011) for Navajo Mine
- Table 4.10-8- Current Economic Contribution to State of New Mexico (2011) for Navajo Mine

Response 298.095

Suggested edits have been made

Response 298.096

Section 4.10.3.2 includes the following language: “Now that NTEC owns the Navajo Mine, the baseline fiscal contribution of the Navajo Mine to the Navajo Nation is expected to be higher than the estimated \$28.1 million with existing ownership. Because NTEC would be exempt from some local, state, and Federal taxes, net revenues after taxes would be higher, so conceivably more revenue would be available to the tribal government.” Thus, acknowledging the additional potential benefits to the Navajo Nation from NTEC’s ownership of Navajo Mine.

However, based on information provided by the Navajo Nation, the following details have been included for clarification: From 2004 to 2013, the Navajo Nation has received an average of \$29.1 million per year in coal royalty payments from the Navajo Mine and an average of \$7.0 million per year from FCPP lease payments.

Fiscal Impacts in Section 4.10.3.2 provides specific information on the monetary benefits the Navajo Nation receives from Project operations.

COMMENT #298

- Table 4.10-9- Current Economic Contribution for San Juan County, New Mexico (2011) for Four Corners Power Plant
- Table 4.10-10- Current Economic Contribution to State of New Mexico (2011) for Four Corners Power Plant

4.11 Environmental Justice

The DEIS adequately describes the federal responsibility in addressing environmental justice consultation requirements pursuant to federal law and guidance. The Nation will continue to work with OSM in consultations for environmental justice issues. 298.097

On page 4.11-20 and continues on to 4.11-23, the DEIS discusses the transportation of ammonia versus the transportation of urea. Nation also has concern regarding the storage on site and transportation of ammonia in connection with emission reduction technologies proposed. Ammonia is a required component in the operation of selective catalytic reduction (SCR) controls. The three types of ammonia source being considered by FCPP are anhydrous ammonia, aqueous ammonia, and solid urea-derived. Storage of anhydrous ammonia would require 8 tanks of 20,000 gallons capacity each and 12 truck shipments per week, aqueous ammonia would require 18 tanks of 20,000 gallons capacity each and 29 truck shipments per week, and dry urea would require 18 tanks of 20,000 gallons capacity each and 17 truck shipments per week. Considering the risk factors involved with the storage and transportation, the Nation strongly endorses OSM's recommendation of the use of urea over anhydrous ammonia and aqueous ammonia. 298.098

4.11.1 Alternative A—Proposed Action

Page 4.11-14, sixth paragraph. The first sentence should start: "Future operation of FCPP would emit..." 298.099

Section 4.12 Indian Trust Assets

On page 4.11-43, the second sentence in the first paragraph of this section states "An ITA can be anything that is owned or has established right of use (such as a lease) by a tribe or individual and that has a monetary value." This sentence is inconsistent with the first sentence and should be deleted. 298.100

Water rights, whether quantified or unquantified, are Indian trust assets, and Interior agencies have recognized them as such. By way of example, the Bureau of Reclamation, which is frequently engaged in actions that affect tribal water rights, includes unquantified water rights claims as Indian Trust Assets deserving special protection. See *Reclamation's NEPA Handbook* (February 2012), Appendix 9 – *Bureau of Reclamation Indian Trust Asset Policy and Implementing Procedures* (August 31, 1994) at I-1 ("Examples of things that can be ITAs are lands, mineral, water rights, hunting and

Response 298.097

Thank you for your comment.

Response 298.098

The following clarification has been included: "The operation of SCR devices on Units 4 and 5 would require the use of ammonia and hydrated lime. Any potential spills of urea (a type of ammonia) or lime during transport, or on-site would be unlikely to drain to nearby surface water features since both would be transported in dry form."

Response 298.099

Suggested edits have been made

Response 298.100

Suggested edits have been made

COMMENT #298

fishing rights, other natural resources, money, or claims.”) (emphasis added). In addition, Reclamation has specifically identified the Nation’s unquantified water rights as ITAs in NEPA compliance activities. See, e.g., Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead FEIS, Vol 1 at 3-96 (“Unquantified water rights of the Navajo Nation are considered an ITA.”) Accordingly, the third sentence in paragraph 4.12 should be rewritten as:

Examples of ITAs may be underground minerals or energy resources, agricultural lands, fishing/hunting rights, and water rights, including unquantified water rights.

The parentheticals and statements illustrating examples found throughout section 4.12 are not necessary and should be struck from the document. The parentheticals give less weight to the statements and potentially exclude valid considerations not included in parentheticals.

298.101

Further, Navajo Nation’s General Leasing Regulations have been signed by the Secretary of the Interior. This would render the next to last sentence in the first paragraph of section 4.12 inaccurate. The Nation suggests adding “unless otherwise provided by federal law” to the end of the sentence “ITAs cannot be sold or leased without prior approval....”

298.102

Paragraph 4.12.2.3 should be rewritten to accurately reflect the recent action by the New Mexico District Court recognizing the Nation’s water rights in the San Juan River Basin in New Mexico and to reflect that unquantified water rights are trust assets. The paragraph should be rewritten as:

The 1908 Supreme Court decision in *Winters v. United States*, known as the Winters Doctrine, decreed that the establishment of an Indian reservation also required that a sufficient amount of water be reserved for the tribe’s present and future use. The Winters Doctrine allows for a legal process, as determined by a judge or arbitrator, for settling water rights between the U.S. and Indian Tribes when those rights are not clearly defined. According to the Winters Doctrine, nonuse of reserved water will not result in forfeiture of the reserved water rights. The Navajo Nation’s and Hopi Tribe’s surface and groundwater rights, whether quantified or unquantified, are ITAs. The Navajo Nation’s water rights in and the State of New Mexico settled their water right on the San Juan River Basin in New Mexico have been quantified pursuant to a settlement agreement between the Nation, the United States and the State of New Mexico executed in December 2010 2005. The District Court for the San Juan Adjudication in New Mexico entered signed the Supplemental Partial Final and Partial Final Decree on November 1, 2013, quantifying that approved the Navajo Nation’s allocation of the San Juan River. This water right partially quantified These water rights from the San Juan Basin are based on historic use and reserved water rights.

298.103

Response 298.101

The parentheticals are important to communicate the full meaning.

Response 298.102

Suggested edits have been made.

Response 298.103

Suggested edits have been made.

COMMENT #298

Section 4.15 Hazardous and Solid Wastes

4.15.1.1 Federal Regulations

On page 4.15-1, RCRA is cited as “42 U.S.C. Part 6901 et seq.”. “Part” is used in the Code of Federal Regulations; “Section” is used in the U.S. Code. This should say “42 U.S.C. § 6901 et seq.”

298.104

RCRA authorizes EPA to set standards applicable to hazardous waste generators, see 42 U.S.C. § 6922, where “generator” is defined as “any person, by site, whose act or process produces hazardous waste...or whose act first causes a hazardous waste to become subject to regulation,” 40 CFR § 260.10. Further, the term “facility” only encompasses sites used for treating, storing or disposing of hazardous waste, not generating hazardous waste. See 42 U.S.C. § 6903. Thus, a “generator” should not be classified as a type of “facility” for purposes of RCRA. Further, RCRA authorizes EPA to set standards applicable to owners and operators of hazardous waste treatment, storage and disposal facilities, see 42 U.S.C. § 6924, but not to facilities that manage hazardous waste. “Hazardous waste management” is defined more broadly than treatment, storage and disposal to include collection, processing, and recovery. See 42 U.S.C. § 6903. Finally, RCRA authorizes EPA to set criteria “for determining which facilities shall be classified as sanitary landfills and which shall be classified as open dumps,” 42 U.S.C. § 6944. EPA has used this authority to set criteria for municipal solid waste landfills as well as other types of solid waste disposal facilities. See 40 CFR Parts 257, 258. Therefore, EPA is limited to setting criteria only for municipal solid waste landfills. The second sentence at 4.15.1.1 should read:

RCRA defines solid and hazardous waste, authorizes EPA to set standards applicable to the owners and operators of hazardous waste treatment, storage and disposal facilities for facilities that and to hazardous waste generators and transporters, or manage hazardous waste, establishes a permit program for hazardous waste treatment, storage, and disposal facilities, and authorizes EPA to set criteria for disposal facilities that accept municipal solid waste and other solid waste.

298.105

Also on page 4.15-1, in reference to the Amendments of 1984. The Amendments prohibited land disposal of hazardous waste without pretreatment or a demonstration that land disposal will not result in hazardous waste migration. See 98 Stat. 3227-28. In addition, the Amendments did not establish criteria applicable to municipal solid waste landfills; EPA established those criteria under RCRA authorization in 40 CFR Part 258. This sentence should be revised as follows:

The amendments set deadlines for permit issuance, prohibited the land disposal of many types of hazardous waste without prior treatment or a demonstration that land disposal will not result in hazardous waste migration, established ~~criteria applicable to municipal solid waste landfills~~, and established a new program regulating underground storage tanks.

298.106

Response 298.104

Suggested edits have been made.

Response 298.105

Suggested edits have been made.

Response 298.106

Suggested edits have been made.

COMMENT #298

Also on page 4.15-1, the sentence referring to 40 CFR Part 260 reads as though this is the only place where RCRA related regulations are found. However, 40 CFR Parts 239-282 contain all RCRA-related regulations. See EPA, "Resource Conservation and Recovery Act." at <http://www.epa.gov/oecaagct/lrca.html>. 298.107

Asbestos Hazard Emergency Response Act, Toxic Substances Control Act, Emergency Planning and Community Right-to-Know Act

On pages 4.15-1 through 4.15-2, the citations for these sections are incorrect. As noted earlier, "Part" is not the proper citation for the Code. The proper citations are 15 U.S.C. § 2641 et seq. and 42 U.S.C. § 7401 et seq.; 15 U.S.C. § 2601 et seq.; and 42 U.S.C. § 11001 et seq., respectively. 298.108

The summary regarding Section 304 of the emergency notification requirements is somewhat misleading. It is recommended that the sentence be revised to say: "EPCRA Section 304 requires facilities to notify the Tribal Emergency Response Commission in three circumstances: first, there is a release of an extremely hazardous substance listed in 40 CFR Part 355 for which notification is required under CERCLA § 103(a); second, there is a release of an extremely hazardous substance listed in 40 CFR Part 355, notice is not required under CERCLA § 103(a) but the release occurs in a manner that would require such notice, and the release exceeds an amount for which notice is required; and third, there is a release of substance which is not an extremely hazardous substance listed in 40 CFR Part 335 but for which notification is required under CERCLA § 103(a) and a reportable quantity has been established under CERCLA § 102(a) or more than a pound has been released." 298.109

On page 4.15-3, in the first and second full paragraphs, any reference to terms "tribal lands" and "their lands" be changed to "Indian country," which has a specific meaning in federal laws and regulations affecting tribes. For further explanation, see <http://www2.epa.gov/toxics-release-inventory-tri-program/tri-reporting-indian-country>. The rule being referred to is "Toxics Release Inventory (TRI) Reporting for Facilities Located in Indian Country and Clarification of Additional Opportunities Available to Tribal Governments Under the TRI Program," 77 Fed. Reg. 23409 (April 19, 2012). 298.110

On page 4.15-3, the citation should be 27 CFR Part 555, Subpart K. 298.111

4.15.4 Environmental Consequences

On page 4.15-17, Table 4.15-6, This table repeatedly refers to the definition of "hazardous material" in 40 CFR 302. 40 CFR § 302.3 (part of EPCRA) defines "hazardous substance" as "any substance designated pursuant to 40 CFR part 302." However, 40 CFR § 302.3 does not define "hazardous material." 298.112

Response 298.107

The citation is relevant for the issue.

Response 298.108

Suggested edits have been made.

Response 298.109

This discussion is no longer relevant because APS has committed to the urea transport option.

Response 298.110

This does not affect the analysis or presentation.

Response 298.111

Suggested edits have been made.

Response 298.112

This does not affect the analysis or presentation.

COMMENT #298

4.15.4.1 Alternative A—Proposed Action

On page 4.15-27, CCR management discusses fly ash disposal. As a suggestion, in order to reduce onsite storage, the Nation recommends that FCPP look into increasing their sales of fly ash for commercial use which is currently only at 20%.

298.113

Appendix A

A.1.1 Acid Rain Program

On page A-1, FPCC is subject to Part 71 permitting requirements “under the authority of” both NNEPA and EPA, not just NNEPA. NNEPA received delegated authority to administer a Part 71 operating permit program for affected sources, including FCPP, but EPA and NNEPA have joint enforcement authority under the delegation agreement. Further, the Part 72 Acid Rain Program requirements appear to be enforceable by NNEPA and EPA because NNEPA administers the acid rain program. The following changes are suggested: “FCPP is subject to both Parts 71 and 72 as administered by the Navajo Nation EPA and EPA and is required to hold sufficient Part 73 SO₂ allowances to cover annual emissions.”

298.114

Also on page A-1, the text cites to Section 821 of the Clean Air Act, 42 U.S.C. 7401-7671, et seq. Pursuant to the section in this document called “General Comments,” please change Section 821 to 40 CFR Part 98.

298.115

A.2 PSD Permitting Requirements

On page A-4, the summary discusses application of PSD and NSR. This summary is misleading, as it contrasts NSR (which contains nonattainment and PSD permitting programs) with PSD (which is part of NSR). In fact, EPA Region IX has a page dedicated to definitions of these terms. In addition, VOCs are not criteria pollutants with NAAQS and should not be included in the list of pollutants that contribute to nonattainment. It would be more accurate to say: “In contrast, nonattainment permitting applies to new major sources or major modifications at existing major sources located in areas of NAAQS nonattainment (e.g., major sources emitting NO_x and PM₁₀ in large urban areas), and is more stringent than PSD. For example, if an area is in attainment for CO and nonattainment for ozone, PSD requirements would apply to CO emissions while nonattainment requirements would apply to NO_x.”

298.116

Also on page A-4, the document discusses criteria pollutants. As is stated in a previous comment, VOCs are not criteria pollutants with NAAQS and should therefore be excluded from this list.

298.117

Page A-5 discusses the D.C. Circuit Court decision without citing to it. As noted in a previous comment, the case is *Sierra Club v. EPA*, 2014 WL 2619824 (D.C. Cir. 2014).

298.118

Response 298.113

Thank you for your comment.

Response 298.114

The text was modified to include the phrase “under the authority of both NNEPA and EPA.” The clarifying language provided in the comment is also included.

Response 298.115

“Section 821” was changed to “40 CFR Part 98.”

Response 298.116

The comment refers to the inclusion of VOCs as criteria pollutants. The criteria pollutant ozone is not directly emitted; however, its precursor compounds NO_x and VOCs are emitted and react with sunlight to form ground-level photochemical ozone. No change made.

Response 298.117

As indicated in associated comment responses, the criteria pollutant ozone is not directly emitted, rather, its precursors NO_x and VOCs are the criteria emittents (regulated pollutants) which react with sunlight to form ground-level photochemical ozone. Appropriate text was changed to clarify references to VOCs as criteria “emittents” rather than “pollutants.”

Response 298.118

Thank you for your comment.

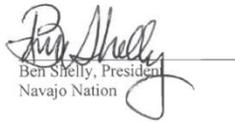
COMMENT #298

Conclusion

The Navajo Nation provides these comments to serve as substantive and constructive suggestions that will guide OSM in its completion of the EIS. The Nation looks forward to continued consultation as a cooperating agency. The Nation expects that this EIS continues on the same timeline for completion by January 2015 and we look forward to further discussions concerning the final outcome.

If you have any questions regarding our comments, please contact Toni Flora, Attorney with the Navajo Nation Department of Justice, at [REDACTED]

Sincerely,


Ben Shelly, President
Navajo Nation

6/30/2014

DEPARTMENT OF THE INTERIOR Mail - Draft EIS for Four Corners and Navajo Mine Energy Project

COMMENT #299



FCCP-Navajo-Energy-EIS, OSM <osm-fcpp-navajo-energy-eis@osmre.gov>

Draft EIS for Four Corners and Navajo Mine Energy Project

1 message

Ray Hagerman

Fri, Jun 27, 2014 at 3:49 PM

To: "FCCPNavajoEnergyEIS@osmre.gov" <FCCPNavajoEnergyEIS@osmre.gov>

Dear Sir or Madam:

The purpose of this e-mail is to provide comment for the record in support of the OSMRE adopting Alternative A as outlined in the draft EIS. As an economic development organization, we are certainly respectful of good stewardship of our natural resources, but we are equally mindful of the need to provide good, well-paying jobs for the citizens of our region. Between the Navajo Mine and the Four Corners Power plant, several hundred persons are employed in our region. Further, in the event Alternative E (No action) occurs, APS shareholders will likely not invest in the appropriate BART equipment, the facilities would be shut down and the combined direct and indirect job loss would be over 2000 and a loss of \$150 million in annual payroll.

299.001

This is an economic blow, our community cannot stand. Replacement of those displaced workers in retail or call center work would not create the same level of wages. Since a great majority of the workers at both Four Corners plant and Navajo Mine are Native Americans, displacement would cause an extreme disparagement in economic inclusion. In short, adoption of anything other than Alternative A would disproportionately penalize Navajo citizens at a time when they can least afford it given the economic disadvantage experienced by many Native Americans.

PLEASE adopt Alternative A to save the economic future of our community. While the marginal environmental benefits of adopting anything less might help preserve natural resources, there would be a far lesser number of local people who could afford to enjoy them.

Very respectfully,

Ray Hagerman

Chief Executive Officer

Four Corners Economic Development



<https://mail.google.com/mail/b/349/u/0?ui=2&ik=6ac25a16cb&view=pt&search=inbox&th=146d4dc3bcd4c91&siml=146d4dc3bcd4c91>

1/2

Comment Letter 299.....Hagerman, R.

Response 299.001

Thank you for your comment.

6/30/2014

DEPARTMENT OF THE INTERIOR Mail - support of Four Corners Power Plant

COMMENT #300



FCPP-Navajo-Energy-EIS, OSMI <osm-fcpp-navajo-energy-eis@osmre.gov>

support of Four Corners Power Plant

1 message

Sherry Galloway [REDACTED]
To: FCPPNavajoEnergyEIS@osmre.gov

Fri, Jun 27, 2014 at 12:07 PM

To Whom It May Concern:

I am writing in support of Alternative A for the Four Corners & Navajo Mine Energy Project. I believe this plan is both economically and environmentally sound.

Thank you
Sherry Galloway

Comment Letter 300.....Galloway, S.

Response

Thank you for your comment. OSMRE is considering all alternatives analyzed in the Draft EIS and will notify the public of its decision via the Record of Decision, anticipated in spring of 2015.