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

April 3, 2009

Joe Incardine
EEC Project Manager
Bureau of Land Management
Ely Field Office
HC 33 Box 33500
Ely, Nevada 89301-9408

Subject: Transmission Line Components of the Draft Environmental Impact Statement for the Ely Energy Center, Nevada [CEQ# 20080537]

Dear Mr. Incardine:

The U.S. Environmental Protection Agency (EPA) has reviewed the transmission line components of the Bureau of Land Management's (BLM) Draft Environmental Impact Statement (DEIS) for the Ely Energy Center. Our review and comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) Regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act (CAA).

The proposed project, as described in the DEIS, would include the construction of the Ely Energy Center (EEC) -- a 1,500 megawatt (MW) coal-fired power plant -- and ancillary facilities. The Notice of Availability for the DEIS was published in the Federal Register on January 2, 2009. On February 9, 2009, however, the project proponent Nevada Energy announced that it has postponed plans to construct the EEC due to increasing environmental and economic uncertainties, and will not proceed with the construction of the coal plant until the technologies that capture and store greenhouse gases are commercially feasible. It is EPA's understanding that, rather than postpone the entire project, Nevada Energy plans to proceed with one component of the project: the construction of the 250-mile 500 kilovolt (kV) transmission line linking northern and southern Nevada. In light of this decision and as my staff has discussed with you and Jane Peterson, we have limited our review to the transmission line components of the DEIS, rather than the entire project as described in the DEIS.

Based on our review of the transmission line components of the DEIS, we have rated this project as EC-2, Environmental Concerns – Insufficient Information (See attached "Summary of EPA Rating System"). Although the DEIS included the transmission line as part of the overall EEC project, pursuit of the transmission line components, alone, was not analyzed as an independent alternative in the DEIS. EPA recommends that the Final Environmental Impact Statement (FEIS) address the following topics in greater detail with regard to the transmission line: identification of project components, purpose and need, alternatives analysis, potential adverse impact to aquatic resources and endangered species, construction emissions, and greenhouse gas emissions. The FEIS should provide a detailed explanation as to why the

proponents have selected an alternative that was not considered to be a viable option in the DEIS, and how they intend to proceed with the regulatory process henceforth. The alternatives analysis should be expanded to include a discussion of renewable resource zones in Nevada, the existing grid infrastructure, and alternate transmission line routes. EPA also recommends BLM consider publishing a Revised DEIS (RDEIS) that includes the above information, prior to preparing the FEIS. Throughout our comments, any recommendation regarding the FEIS applies, as well, to any such RDEIS.

In the event a decision is made to pursue other components of the project described in this DEIS, we strongly recommend that BLM publish, for public review, a Revised or Supplemental DEIS, based on the most recent information available. Alternatively, if BLM determines that the existing DEIS reflects the most recent information available, BLM could re-open the comment period for that document to allow full public review of the relevant portions, which should be clearly identified at the time of re-opening. Our lack of comments, at this time, on components of the DEIS other than those pertaining to the transmission line should not be interpreted as an absence of concerns regarding those components; rather, we are reserving comment on the remainder of the DEIS pending such further notice from BLM.

We appreciate the opportunity to review the transmission line components of the DEIS and are available to discuss our comments. Please send one hard copy of the FEIS (or Revised or Supplemental DEIS) and one CD ROM copy to this office at the same time it is officially filed with our Washington D.C. Office. If you have any questions, please contact me at (415) 972-3521, or contact Ann McPherson, the lead reviewer for this project, at (415) 972-3545 or mcpherson.ann@epa.gov.

Sincerely,

Kathleen M. Goforth, Manager
Environmental Review Office

Enclosures: Summary of EPA Rating Definitions
Detailed Comments

cc: Col. Alex C. Dornstauder, U.S. Army Corps of Engineers
Kevin Roukey, U.S. Army Corps of Engineers
Michael Elges, Nevada Division of Environmental Protection
Matthew DeBurle, Nevada Bureau of Air Pollution Control
Colleen Cripps, Nevada Division of Environmental Protection
Russ Land, Nevada Bureau of Water Pollution Control
John Bunyak, National Park Service
Cindy Nielson, National Park Service
Curt Dimmick, National Park Service
Tracy Taylor, State of Nevada Water Resources State Engineer

SUMMARY OF EPA RATING DEFINITIONS [1]

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 IMPACTS 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 impact 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 analyzed 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 analyzed in the draft EIS, which should be analyzed 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.

[1] From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment.

US EPA DETAILED COMMENTS ON THE TRANSMISSION LINE COMPONENTS OF THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE ELY ENERGY CENTER, CLARK, ELKO, LINCOLN, NYE, AND WHITE PINE COUNTIES, NEVADA, APRIL 3, 2009

Project Description and Background

The proposed project, as described in the Draft Environmental Impact Statement (DEIS), includes the construction of the Ely Energy Center (EEC) -- a 1,500 megawatt (MW) coal-fired power plant -- and ancillary facilities. The project was originally divided into two phases. Phase 1 would include the construction of two 750-MW ultra-supercritical coal-fired generating units, a well field in the Steptoe Valley Hydrographic Basin, a 250-mile 500 kilovolt (kV) transmission line (Intertie), new switchyard and substation, communication facilities, and road and railway infrastructure. Phase 2 would include two 500-MW coal gasification units, additional water lines, and transmission lines. Two alternative site locations were considered for the proposed project, as well as a *No-Action Alternative*.

The Project Proponent, Nevada Energy, was formed when Nevada Power Company (NPC), Sierra Pacific Resources Company (SPRC), and Sierra Pacific Power Company (SPPC) merged in 1999. On February 9, 2009, Nevada Energy announced that it has postponed its plans to construct the EEC due to increasing environmental and economic uncertainties. Rather than postpone the entire project, however, Nevada Energy has decided to proceed with one component, the construction of the 250-mile 500 kV transmission line linking northern and southern Nevada. Due to this announcement, EPA has limited our review of the DEIS to the transmission line components, rather than the entire project as described in the DEIS.

EPA became a cooperating agency for the EEC project in 2007. In that role, we reviewed preliminary draft versions of the EIS and provided comments to the Bureau of Land Management (BLM) in May 2008. Under separate cover, EPA also sent comments on the draft air permit (January 23, 2008) to the Nevada Bureau of Air Pollution Control. As a cooperating agency, we encouraged BLM to consider other alternatives besides coal-fired generation. In that regard, we are pleased to see Nevada Energy postpone their plans to construct the EEC and focus instead on the infrastructure needed to develop renewable energy resources in Nevada. EPA supports an energy development approach that ensures the protection of human health and ecosystems.

Two other large coal-fired power plants have also been proposed in Nevada: the Toquop Energy Project (750 MW) near Mesquite, Nevada and the White Pine Energy Station (WPES) (1,590 MW) near Ely, Nevada. On March 5, 2009, White Pine Energy Associates, LLC announced that it has indefinitely postponed the construction of the WPES and will, instead, focus on completing the Southwest Intertie Project (SWIP). The SWIP is a 500-mile 500 kV transmission line that will extend from the Las Vegas area to southern Idaho, and is intended to provide efficient access to renewable energy resources. The southern portion of the SWIP consists of the 250-mile section extending from the Las Vegas area to Ely, Nevada, and transverses the same area as Nevada Energy's proposed Intertie.

Identification of Project Components

The electric transmission facilities for the EEC are described in Section 2.2.2 of the DEIS and include: 1) EEC 500 kV Switchyard; 2) EEC-Robinson Summit 500 kV transmission lines No. 1 & 2; 3) Robinson Summit 500/345-kV Substation; 4) Harry Allen-Robinson Summit 500 kV transmission line No. 1; 5) Harry Allen 500 kV Substation expansion; 6) Falcon-Gonder 345-kV line fold into Robinson Summit 500/345 kV Substation; and 7) Harry Allen-Robinson Summit 500 kV transmission line No. 2. Since the EEC and the WPES have been postponed, it is unclear whether all of the electrical components, as described in the DEIS, are still needed. The need for some of the electric transmission facilities would seem to be contingent upon the construction of either the EEC or the WPES; therefore, it seems likely that the description of electrical transmission components, as presented in the DEIS, is no longer accurate.

Recommendation:
The Final Environmental Impact Statement (FEIS) should clearly identify the electrical transmission components necessary for the construction of the 250-mile 500 kV transmission line. EPA also recommends BLM consider publishing a Revised DEIS (RDEIS) that includes the above information prior to preparing the FEIS. Throughout our comments, any recommendation regarding the FEIS applies, as well, to any such RDEIS.

Purpose and Need

The DEIS presents the purpose and need for the proposed action in terms constrained by the Proponent's stated need for additional baseload power. The Public Utilities Commission of Nevada (PUCN) recognized the Proponent's need to reduce their open position, add baseload capacity, and diversify their generation portfolio so that there is less reliance on natural gas and purchased power (pg. 1-4). The PUCN also recognized that the proposed transmission line would improve system reliability, promote diversity of supply resources, assist with the development of renewable resources, and promote retail price stability. The 250-mile transmission line (the "Intertie"), however, was not considered as a stand-alone action within the DEIS. According to the DEIS, it is doubtful that the Proponents, "*could economically justify the Intertie between NPC and SPPC without the EEC....the benefits of the Intertie would likely not justify the $400 million investment required for the line.*" As stated in the PUCN Order (Docket 06-06051; 06-07010), the proposed EEC would provide the anchor resource necessary to justify the Intertie linking the NPC and SPPC systems.

Recommendations:
The FEIS should be structured to reflect Nevada Energy's decision to proceed with the 250-mile transmission line and postpone the EEC, well field, railway, and other ancillary facilities. The FEIS should omit the detailed analysis associated with the postponed components of the project—so that the public and decision maker(s) clearly understand the scope of the currently proposed project.

The FEIS should discuss whether Nevada Power can economically justify the construction of the Intertie without the EEC as an economic anchor. If the Proponents

intend to use another project, such as the proposed expansion of coal-fired facilities at Valmy, as the economic anchor necessary to make the transmission line viable, this should be discussed within the FEIS.

EPA recommends that the FEIS either explain why additional baseload power is no longer needed, or include a discussion on how Nevada Energy intends to meet that requirement in the absence of the EEC, since the need for baseload power was a key element used to justify the selection of the EEC and to screen out other alternatives in the DEIS.

The FEIS should clarify how Nevada Energy will proceed with the environmental review process for the transmission line components of the project as well as the postponed components of the proposed project, including the EEC, well-field, and railway.

A recent PUCN Order (Docket 08-05014; 08-05015; October 1, 2008) concluded that the 2009 Integrated Resource Plan (IRP), due in July, should include an economic analysis of the Intertie and other transmission alternatives for linking NPC and SPPC, with and without the EEC, including an economic analysis of what load levels are necessary to make such projects economically feasible. Such information would help to clarify the need for the proposed project and the extent to which each alternative meets that need.

Recommendation:
EPA recommends that the FEIS present a summary of the economic analysis of the Intertie and other transmission alternatives for linking NPC and SPPC as described in the July 2009 IRP.

The DEIS states that one of the purposes of the transmission line is to access renewable resources in Northeastern Nevada. Specific resource areas were not identified in the DEIS. The first step in identifying where transmission lines are needed to access renewable energy is to identify where the renewable resources are in relation to the existing grid infrastructure.[1]

Recommendations:
EPA recommends that the FEIS identify the locations of renewable resources in relation to the existing grid infrastructure, and illustrate how the Intertie will aid in the development of renewable resources. We recommend that the Proponents consult with the Nevada Renewable Energy Transmission Access Advisory Committee (RETAAC).

The FEIS should discuss to what extent Nevada Energy is willing to commit to utilize the transmission line for renewable resources, such as by guaranteeing that a certain percentage of transmission capacity will be reserved for that purpose.

On March 5, 2009, White Pine Energy Associates, LLC announced that it is indefinitely postponing the construction of the WPES and focusing its efforts on completing the SWIP. The

[1] Governor Jim Gibbons' Nevada Renewable Energy Transmission Access Advisory Committee (RETAAC) Phase I Report, December 31, 2007.

SWIP is a 500-mile 500 kV transmission line that will extend from the Las Vegas area through eastern Nevada to southern Idaho. Construction on the southern segment of that line (250 miles) could begin as early as mid-2009. We note that Nevada Energy's proposed Intertie project would transverse the same area as the southern segment of the SWIP.

Recommendations:
EPA recommends that the FEIS discuss whether both the Intertie and the SWIP are needed. The two transmission lines would run adjacent to each other for most of the 250-mile segment between Las Vegas and Ely, Nevada. Either transmission line would be capable of linking the grids between northern and southern Nevada.

Should the NPUC determine that both projects are needed, EPA recommends that Nevada Energy consider whether the proposed Intertie project could be constructed in conjunction with the SWIP project, thus minimizing environmental impacts associated with multiple transmission lines. For example, perhaps both companies could utilize the same sets of tower structures supporting multiple transmission lines or the same access roads beneath the transmission lines.

Alternatives Analysis

The *Alternatives Analysis* in the DEIS focuses on different locations for the proposed coal-fired power plant (north site and south site) and includes a *No-Action Alternative*. Alternative power generating technologies, including renewable energy technologies, were considered but eliminated from further analysis primarily because they did not supply as much baseload power as the proposed EEC. Recent press releases have stated that although the EEC has been indefinitely delayed, Nevada Energy remains committed to build the transmission line as a means of enhancing the State's renewable energy production. With the exception of a reference to an electric transmission corridor south of the existing line in Smith Valley (pg. 2-77) and two SWIP Corridor alternatives (pg. 2-28), alternative pathways for the transmission line were not considered—nor were the locations of renewable energy resource zones within Nevada.

Recommendations:
EPA recommends that the *Alternatives Analysis* be restructured and revised based on the decision to proceed with the construction of the 250-mile 500 kV transmission line and postpone the construction of the EEC indefinitely.

EPA recommends that the FEIS identify renewable resource areas, constraints associated with these areas, and the existing grid infrastructure within Nevada. The FEIS should discuss in detail how the Intertie will aid in the development of renewable resources in Nevada.

EPA recommends that the *Alternatives Analysis* examine other routing alternatives that would link northern and southern Nevada and provide access to renewable resource zones.

EPA recommends the FEIS apply consistent screening criteria to each alternative analyzed and summarize the reasons for eliminating alternatives from detailed consideration.

To clearly assess the potential environmental impacts associated with the construction of the proposed transmission line, the *Alternatives Analysis* must include a *No-Action Alternative* as a point of comparison (40 CFR 1502.14(d)).

The proposed SWIP project would also connect the northern and southern sections of Nevada and transverse land in direct proximity to the Intertie. Great Basin Transmission, LLC, an affiliate of White Pine Energy Associates, LLC completed a Revised Environmental Assessment for the Southwest Intertie Project (Southern Portion) in July 2008 (NV-040-07-048). Construction for that project is expected to begin in mid-2009.

Recommendations:
EPA recommends that the *Alternatives Analysis* examine the feasibility of using the SWIP (Southern Portion) transmission line, in lieu of constructing the Intertie as proposed by Nevada Energy.

According to the DEIS, the 2006 PUCN Order confirms that a supercritical coal generation facility is the best option to provide an adequate supply of electricity at a predictable price with acceptable environmental impacts for the residents of Nevada (pg. 1-4). The DEIS concludes that, "*This decision by the PUCN Order eliminates the consideration of alternative generating technologies other than supercritical pulverized coal at a scale equal to EEC*" (pg. 2-62). We note, however, that a 2008 PUCN Order required the proponents to investigate other alternatives that do not include new coal options, and alternatives that assume all new incremental supplies are from renewable resources (Dockets 08-05014; 08-5015; paragraph 146). The decision to postpone the EEC suggests that a supercritical pulverized coal facility is not the only viable alternative.

Recommendation:
EPA recommends that the discussion concluding that there is no need to consider other alternative generating technologies other than supercritical pulverized coal at a scale equal to EEC be eliminated and/or revised in accordance with the most recent information available.

Water Resources

EPA is concerned about the potential adverse impact to aquatic resources that could result from the proposed project. The DEIS states that a consultant (JBR) conducted a delineation of waters of the United States (WOUS), including wetlands. However, a formal jurisdictional delineation of the extent of waters, including wetlands, on the project site has not yet been completed and verified by the U.S. Army Corps of Engineers (Corps). We are concerned that the impacts to aquatic resources may be underestimated since the formal jurisdictional delineation has not yet been completed.

In addition, the DEIS states that ephemeral washes and intermittent streams lacking a direct surface water connection with the perennial reach of Duck Creek are not considered jurisdictional (p. 4-3). We disagree with this conclusion and note that the December 2, 2008 EPA/Corps Memorandum, *"Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States*" provides guidance to EPA and the Corps in implementing the Supreme Court's *Rapanos* decision.

The applicant should coordinate with the Corps to determine if the proposed project will require a Section 404 permit under the CWA. If it is determined that there are jurisdictional waters within the project area, a Section 404 permit will be necessary for any discharges of dredged or fill material into these waters, including wetlands and other special aquatic sites. If a Section 404 permit is required, EPA will review the project for compliance with *Federal Guidelines for Specification of Disposal Sites for Dredged or Fill Materials* (40 CFR 230), promulgated pursuant to Section 404(b)(1) of the CWA. Pursuant to 40 CFR 230, any permitted discharge into WOUS must be the *Least Environmentally Damaging Practicable Alternative* (LEDPA) available to achieve the project purpose. No discharge can be permitted if it will cause or contribute to significant degradation of WOUS.

EPA recognizes that with certain projects, such as road crossings and transmission lines, there are opportunities to avoid and minimize impacts to waters through sensitive design criteria. Avoidance and minimization alternatives should be fully evaluated. The project proponent, however, bears the burden of clearly demonstrating that the preferred alternative is the LEDPA that achieves the overall project purpose, while not causing or contributing to significant degradation of the aquatic ecosystem. Based on the information available within the DEIS, the applicant has not demonstrated compliance with the 404(b)(1) Guidelines.

Furthermore, we note that although the DEIS contains detailed information related to water resources near the two proposed plant sites in Steptoe Valley (fig. 3.2-1), the DEIS does not contain as detailed information for the project area associated with the transmission line. The proposed transmission line will extend more than 250 miles from the Robinson Summit Substation (Ely, Nevada) to the Harry Allen Substation (Las Vegas, Nevada). The DEIS simply states that there are no perennial streams within the area of analysis in Elko, Nye, and Clark Counties, but notes that linear project elements cross several large, named ephemeral streams and washes, including Jakes Wash in White Pine County (Segment 6C); Big Spring Wash in Nye County (Segment 6C); and Bail, Silverhorn, Fairview, Porphyry, Red Rock, Cottonwood, Monkeywrench, Helen, Cedar, Kane Springs, and Pahranagat washes in Lincoln County (Segments 8, 9D, 10, and 11) (pg. 3-8). Maps or figures of water resources in these areas were not included in the DEIS. Figure 3.2-1 (*Water Resources in the Steptoe Valley*) illustrates water resources in Steptoe Valley, and does not include information relevant to those segments of the transmission line extending further south. We are concerned that impacts to aquatic resources along the length of the transmission line may have been underestimated.

Recommendations:
The FEIS should include a verified delineation by the Corps regarding the extent of jurisdictional waters on the project site.

If the project will result in discharge of dredged or fill material into WOUS, we recommend that the information necessary to complete a Section 404 evaluation be included in the FEIS. Specifically, the alternatives analysis should include a reasonable range of practicable alternatives that meet the project purpose and demonstrate the project's compliance with the 404(b)(1) Guidelines and authorization of LEDPA.

We recommend the FEIS quantify potential impacts to WOUS and discuss the steps taken to avoid and minimize impacts. To the extent any aquatic features that could be affected by the project are determined not to constitute WOUS, EPA recommends that the FEIS characterize the functions of such features and consider mitigation.

We recommend the FEIS include a functional assessment of the waters on the project site, including the Robinson Summit Substation, and the change to the function of those waters as a result of the proposed project.

We specifically recommend the FEIS include information on the functions and locations of ephemeral washes in the project area because of the important hydrologic and biogeochemical role these washes play in direct relationship to higher-order waters downstream.

We recommend that the FEIS include additional maps illustrating the water resources for the entire length of the transmission line, including White Pine County, Nye County, Lincoln County, and Clark County (Segments 6C, 8, 9A, 9B, 9C, 9D, 10, and 11). Segments containing wetlands and WOUS should be illustrated and discussed in greater detail within the FEIS.

Pursuant to the 404 Guidelines, the applicant must mitigate for unavoidable impacts to WOUS.

Recommendation:
Based on the information provided in the DEIS, the applicant should prepare a detailed compensatory mitigation plan for impacts to WOUS, including wetlands. This mitigation plan should include a comprehensive plan to mitigate for adverse effects to all WOUS, including wetlands.

Threatened and Endangered Species

EPA believes the FEIS should include a more in-depth discussion of the project's potential impacts to biological resources, including the desert tortoise. Up to 81 acres of desert tortoise habitat could be permanently impacted by the proposed transmission line. Long-term impacts may occur resulting from permanent loss of habitat, increased predation, and habitat

fragmentation. The DEIS states that a Biological Assessment is being prepared that analyzes the potential impacts, and that BLM will request a Biological Opinion from the U.S. Fish and Wildlife Service (pg. 4-112).

Recommendation:
EPA recommends BLM include the outcome of its consultation with the U.S. Fish and Wildlife Service in the FEIS.

The DEIS also states that implementation of mitigation measures such as those described in Section 4.8.2.5 would help reduce potential impacts to desert tortoise (pg. 5-80); however, we note that Section 4.8.2.5 does not contain any mitigation measures specific to the desert tortoise.

Recommendation:
EPA recommends that the FEIS discuss additional monitoring and mitigation for the desert tortoise, as appropriate, and delete or correct the reference to Section 4.8.2.5.

Air Quality

Section 3.6.4.2 presents a brief discussion of air quality along the proposed transmission line corridor. The DEIS states that the vast majority of the project area is in attainment or unclassified for all pollutants. The only portion that is considered non-attainment is the southernmost area along the SWIP Corridor in Clark County. Clark County is classified by EPA as serious non-attainment for total particulate matter less than 10 microns (PM_{10}) and carbon monoxide (CO) and has requested that current non-attainment status for ozone be lifted based upon monitoring since 2003 showing compliance with the ozone National Ambient Air Quality Standards (NAAQS) (pg. 3-76).

Recommendation:
EPA notes that Clark County did submit a request for an attainment finding for ozone in 2007. In late summer 2007, however, the area monitored an additional violation of the 8-hour ozone standard, preventing further consideration of the attainment finding. The area remains in non-attainment for the 1997 8-hour ozone standard, and EPA expects to designate the area as non-attainment for the revised 2007 8-hour ozone standard, as well.

Section 4.6.2.2 of the DEIS presents a brief discussion on the potential air quality impacts associated with the electric transmission facilities (pg. 4-70). Emissions from PM_{10} are estimated to be 930 tons, assuming watering of the earth moving areas several times a day for dust control. Impacts at all residences are considered to be brief, temporary, and likely small in magnitude. Operations, maintenance, and abandonment activities are estimated to have negligible impacts on air quality. Mitigation measures are listed in Section 4.6.2.5 and include recommendations regarding the placement of staging areas, car pooling, the transport of soil, sand, and loose material, and street sweeping (pg. 4-72).

Recommendations:
EPA recommends that the responsible agencies consult with the Clark County Department of Air Quality and Environmental Management to ensure that all proposed construction practices meet the applicable regulations.

EPA recommends that the responsible agencies commit to all feasible measures to reduce PM_{10} emissions, including implementing a *Construction Emissions Mitigation Plan* and adopting this plan in the ROD.

In addition to all applicable local, state, and federal requirements, EPA recommends that the following mitigation measures be considered in the *Construction Emissions Mitigation Plan* in order to reduce impacts associated with emissions of particulate matter and other toxics from construction-related activities:

Fugitive Dust Source Controls:

- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate. This applies to both inactive and active sites, during workdays, weekends, holidays, and windy conditions.
- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions.
- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph.

Mobile and Stationary Source Controls:

- Reduce construction-related trips of workers and equipment, and unnecessary idling from heavy equipment.
- Ensure that diesel-powered construction equipment is properly tuned and maintained, and shut off when not in direct use. Employ periodic, unscheduled inspections to limit unnecessary idling.
- Prohibit any tampering with engines to increase horsepower, and require continuing adherence to manufacturer's recommendations.
- If practicable, lease new, clean equipment meeting the most stringent of applicable Federal or State Standards.
- Require low sulfur diesel fuel (<15 parts per million), if available.
- Utilize EPA-registered particulate traps and other appropriate controls where suitable to reduce emissions of diesel particulate matter and other pollutants at the construction site.
- Locate diesel engines, motors, and equipment as far as possible from residential areas and sensitive receptors (schools, daycare centers, and hospitals).

Administrative Controls:

- Identify all commitments to reduce construction emissions, and update the air quality analysis to reflect additional air quality improvements that would result from adopting specific air quality measures.

- Identify where implementation of mitigation measures is rejected based on economic infeasibility.
- Prepare an inventory of all equipment prior to construction and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking
- Develop construction traffic and parking management plan that minimizes traffic interference and maintain traffic flow.
- Identify sensitive receptors in the project area, such as children, elderly, and infirm, and specify the means by which you will minimize impacts to these populations. For example, locate construction equipment and staging zones away from sensitive receptors and fresh air intakes to buildings and air conditioners.

Greenhouse Gas Emissions

The DEIS includes a short discussion on climate change in Section 3.6.3.3 (pg. 3-75), Section 4.6.2.7 (pg. 4-72), and Section 4.6.6 (pgs. 4-82 to 4-86). The DEIS focuses on greenhouse gas (GHG) emissions from the proposed EEC, rather than emissions associated with other components of the project. We note, however, that even without the EEC, the proposed transmission line would cause GHG emissions, specifically during project construction, operations, and maintenance. Power transformers and circuit breakers that use sulfur hexafluoride (SF_6) pose a concern because this pollutant can slowly escape from the equipment, and it has an extremely high global warming potential (one ton of SF_6 is equivalent to approximately 23,900 tons of carbon dioxide (CO_2)). During operation, minor quantities of SF_6 are likely to leak from equipment used in conjunction with the transmission line. Inspection and maintenance activities would also cause a small increase in GHG emissions.

Recommendation:
EPA recommends that the FEIS quantify and disclose GHG emissions associated with construction activities, SF_6 equipment leaks, and maintenance activities for the proposed transmission line.

The DEIS concludes that air quality would not be considered irretrievably impacted since cessation of activity at the facility at any time in the future would eliminate those emissions (pg. 4-72). Scientific literature, however, indicates that GHG emissions remain in the atmosphere for an extended period of time. The Intergovernmental Panel on Climate Change estimates that about 50% of a CO_2 increase will be removed within 30 years, and a further 30% will be removed within a few centuries. The remaining 20% may stay in the atmosphere for many thousands of years. SF_6 remains in the atmosphere for 3,200 years.

Recommendation:
EPA recommends that the conclusions presented in Section 4.6.2.7 be revised to note that irretrievable impacts may occur since the cessation of activity will not, in any reasonable length of time, eliminate the effect of emissions previously released to the atmosphere.

We note that if the proposed transmission line is used for the development of renewable power rather than the exportation of electricity from coal or gas-fired facilities, this may allow a

reduction in the use of other power generation facilities, allowing a reduction in GHG emission from electricity generation.

> *Recommendation*:
> EPA recommends that the FEIS quantify and disclose the indirect GHG emissions decrease that would result from using the proposed transmission line for electricity generated from renewable resources. We recommend that the FEIS utilize a range of values to represent varying degrees of transmission capacity allocated for renewable resources.