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June 16, 2007

Mr. John Ruhs
Field Manager
Bureau of Land Management
Ely Field Office
702 North Industrial Way
HC 33 Box 33500
Ely, Nevada 89301

Bureau of Land Management
JUN 18 2007
RECEIVED
Ely, NV

Re: Comments on White Pine Energy Center
Draft Environmental Impact Statement

Dear Mr. Ruhs:

In April 2007, the Nevada State Office of the Bureau of Land Management, U.S. Department of the Interior (BLM), released for public comment the Draft Environmental Impact Statement (DEIS) for the White Pine Energy Station (WPES) that LS Power has proposed be built on public land near Ely, Nevada. On behalf of Sierra Pacific Resources' operating utilities, Nevada Power Company ("Nevada Power") and Sierra Pacific Power Company ("Sierra") (collectively, the "Companies"), I am submitting the following comments as they pertain to the DEIS.

As you know, Sierra Pacific and Nevada Power also are seeking BLM approval for rights-of-way that will be needed for the construction of the Ely Energy Center (EEC), which is comprised of two coal-fired 750 MW ultra supercritical steam turbine units potentially scheduled for commercial operation in December, 2011, and June 2013 respectively, as well as two additional 500 MW integrated gasification combined cycle (IGCC) units scheduled for later construction on the same property. On April 5, 2007, BLM issued its Draft Scoping Report as part of the agency's process to satisfy its obligations under NEPA for our proposal. As the applicant, we are working diligently with our third party consultant to prepare our own DEIS.

Accordingly, our primary objective with the submittal of these comments on the proposed WPES project is to correct errors, omissions and/or misrepresentations as they relate to our own EED project, and to point out deficiencies in the WPES DEIS from a cumulative impacts perspective. Our second objective is to ensure that, just as BLM accords rigorous scrutiny to our application, that impacts being identified and assessed for the WPES have sufficient adequacy and detail to ensure a robust EIS is produced.

Sierra Pacific Resources and Nevada Power share with you an appreciation for the demands of the NEPA process in this type of matter. We also recognize that another component of the Department of the Interior, the Bureau of Indian Affairs, has worked diligently to fulfill its NEPA duties in connection with a proposal to construct similar coal-fired electric generating units on an Indian reservation, known as the Desert Rock Energy Project. Indeed, some of BIA's experiences in its

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No comments on the White Pine Energy Station DEIS were delineated for the part of the letter shown on the facing page.

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consideration of the Desert Rock Energy Project in New Mexico may prove helpful to BLM in the WPES context, and we call your attention to that document.[1]

Our review of the DEIS for the WPES has revealed that it is lacking in several critical areas. These flaws involve inadequate discussion of environmental impacts that are reasonably foreseeable and attributable to the proposed action under consideration. These impacts include: purpose and need; air quality (including both emission levels and visibility); global warming (greenhouse gas emissions); and overall cumulative impacts. Moreover, the WPES DEIS treats the EEC as if it was no more than a conceptual, strategic plan to address energy needs at some distant point in the future. Instead, our Environmental Impact Statement process by BLM is already well underway, and our application for Clean Air Act permits for the EEC from the Nevada Division of Environmental Protection (NDEP) also is under review. As a result, we believe BLM cannot consider the LS Power application without also considering potential cumulative impacts of our facility.

Purpose, Need and Background

The DEIS at ES-1 states that the purpose of the WPES is to "put water rights held by White Pine County for energy production in Steptoe Valley to a beneficial use in producing energy" and "provide traffic for the Nevada Northern Railway (NNR)". We maintain neither of the items thus
G3-1 referenced serve as a defensible purpose. Further, in the need and background section of the DEIS, the narrative makes repeated reference to the development of the WPES "to serve baseload electric needs." (DEIS 1-2). Of course, LS Power has no existing transmission facilities or service area in Nevada. Its proposal is a speculative investment in the generation of electricity. Indeed, a spokesperson for LS Power recently acknowledged that its construction of the WPES "depends on financing and finding buyers for the power produced." (Las Vegas Review Journal, June 5, 2007, "Park Service Opposes LS Power Project"). It is imperative that we (as Nevada Power and Sierra Pacific Power) state for the record that we do not have any contracts or agreements for power output from the WPES; have not requested any output from the WPES; and in fact are proposing our own EEC to meet the Companies' base-load generation needs. The Companies' remaining needs are for either renewable projects or non base-load, seasonal (intermediate or peaking) resources, i.e. projects of a totally different nature than the proposed WPES. Therefore, WPES has no justification from the
G3-2 perspective of fulfilling projected energy shortfalls on the Nevada Power or Sierra Pacific Power systems.

Air Quality

The DEIS contains some 35 pages of examination of air quality impacts. Included within these pages is a discussion of air dispersion modeling performed to assess potential impacts upon two important federal properties with Class I air quality: Zion National Park and Jarbidge Wilderness Area, located some 300 km to the south-southeast and 260 km north of the proposed facility, respectively. However, in earlier comments by the National Park Service to the NDEP on the Clean Air Act

[1] In April 2007, BIA made the Draft EIS for the Desert Rock Energy Project available for public comment. It can be found at www.desertrockenergy.com

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G3-1 Part of the purpose and need for the proposed project is to bring economic benefits to White Pine County, Nevada. The criteria stated in the DEIS that the project "place water held by White Pine County for power production in Steptoe Valley to beneficial use for power production" and that the project "provide traffic for the Nevada Northern Railway" are two objectives that have been identified as important economic objectives for White Pine County. Upgrading the rail line would permit use of the NNR for commercial freight service and allow for the expansion of tourist operations on the NNR north to Shafter. Railroad facilities, as well as use of White Pine County's water frights by WPEA for the proposed project, were included in the Interim Development Agreement between White Pine County and WPEA (see Appendix A, *Development Agreement*, in this FEIS).

It is appropriate for project developers and for the BLM to take into account the local government's planning objectives in project design and in associated National Environmental Policy Act (NEPA) and planning documents. In this instance, two of White Pine County's top economic planning priorities are to utilize permitted water rights for power generation and to establish freight service on the Nevada Northern Railway, as described in the following text. White Pine County views these economic objectives as catalysts for other types of economic development within the community. In 1983, the State Engineer issued an order designating Industrial/Power Generation as the preferred use of ground water in Steptoe Basin. As stated in a July 11, 2007, letter from White Pine County to the BLM (White Pine County, 2007), "[t]he development of water resources for power generation in Steptoe Valley and the ability to reinstate rail freight service on Class III track are basic to White Pine County's long term goals of strengthening and stabilizing the area's economy and improving the quality of life for all White Pine County residents." Thus, projects that contribute to the satisfaction of these objectives are consistent with the need to bring economic benefit to White Pine County.

G3-2 As stated in Section 1.2.1, *Introduction*, of this FEIS, the White Pine Energy Station is proposed in response to a need for new baseload generating capacity in the western United States. The Station was not proposed specifically to satisfy a capacity shortfall in the Nevada Power Company or Sierra Pacific Resources system. Construction and operation of a 500-mile 500-kV transmission line known as the Southwest Intertie Project (SWIP), which was approved by the BLM in 1994, is considered as a connected action in this FEIS. The SWIP transmission line would interconnect with the Duck Creek Substation adjacent to the White Pine Energy Station. The SWIP transmission line would allow power generated from the White Pine Energy Station to be transmitted not only throughout Nevada, but also throughout the western United States.

As discussed in the response to Comment G2-23, the proposed construction of the Ely Energy Center does not affect the purpose and need for the White Pine Energy Station because 1) because of uncertainties associated with the processes required to obtain real estate, water rights, and environmental permits (and none of these processes has been completed) it is not certain that the Ely Energy Center will actually be constructed and operated, and 2) there is a need for baseload generation in the western United States well in excess of the combined capacity of the two facilities (see the response to U.S. Environmental Protection Agency (EPA) Comment F1-10 for a discussion of the documented energy needs elsewhere in the western United States, including New Mexico, Colorado, Wyoming, Idaho, Utah, and Arizona).

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permit sought by LS Power under the Prevention of Significant Deterioration program, the Park Service was concerned that

- visibility at Great Basin National Park would be significantly affected by the proposed project
- sulfur deposition from the facility exceeds the Park Service's threshold for such an impact at Zion National Park
- it is likely that both the Park Service's sulfur and nitrogen deposition thresholds would be exceeded at Great Basin National Park because of this facility

More recently, the Park Service's own comments on this DEIS reveal its opposition to the construction of the WPES because of adverse air quality impacts upon federal lands.

G3-3 In light of the concerns expressed on this and other occasions by the Park Service in connection with the air permitting process for this facility, the treatment in the DEIS dealing with air quality on federal lands is deficient. There is no detailed discussion of the potential impacts of sulfur or nitrogen deposition at Zion, Great Basin, or Ruby Lake, other than the passing comment that "impacts in excess of a DAT [Deposition Analysis Threshold] do not necessarily represent an adverse impact…." (DEIS at 4-118 and 119). However, the Park Service concern that these emissions had the potential to impact both aquatic and terrestrial ecosystems remains unaddressed. (DEIS at 4-115). Similarly, treatment of visibility impacts at Great Basin and Ruby Lake is deficient.

Additional comments regarding air quality in chapter four of the DEIS (cited by section) include:

4.6.1.2.1 The DEIS states that because limited technical data are available, information from Toquop EIS (BLM, 2003) was used to estimate/extrapolate emissions for the construction phase. We note that the Toquop Project, as proposed in 2003, was a natural gas fired

G3-4 facility. Therefore, construction emissions from that project may not be representative for the WPES and its use would be suspect. Further, use of this data would also imply that the WPES has not done sufficient engineering studies to give an accurate picture of its expected emissions.

4.6.1.3.1 The referenced list of emission sources is not very specific and does not include emissions associated with wet cooling. Therefore, the mode of operation for the summer is implied to be dry, in spite of the fact that the proponents have stated that water sprays/ hybrid wet cooling would be used during hotter ambient conditions. It is especially

G3-5 important to know which system LS Power will employ because hybrid wet cooling could be expected to potentially increase the Particulate (PM) emission rate and should be included in the NDEP Draft Air Permit.

4.6.1.3.2 Estimates for hazardous air pollutants (HAPs) are not listed here (only criteria pollutants). Further, the diesel fuels are listed as having 0.05 percent sulfur which does not comply with 40 CFR Part 60 Subpart IIII as required. Further, the draft air permit

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G3-3 Additional information was added to Section 4.19.3.6.1, *Air Quality,* of this FEIS, which discusses the cumulative impact resulting from sulfur and nitrogen deposition (see *Cumulative Sulfur and Nitrogen Deposition Analysis*). In brief, based on a cumulative analysis of the existing sources, the White Pine Energy Station, and reasonably anticipated future sources, the White Pine Energy Station is not expected to cause or contribute to any acidification or nitrification problems in aquatic or terrestrial ecosystems.

There are no quantitative regulatory limits for changes in visibility at Class II areas (for example, Great Basin National Park and Ruby Lake), and the air quality analysis shows that impacts from the White Pine Energy Station would be less than the only air quality limits that have been established to protect against decreased visibility (that is, the NAAQS). Additional information regarding visibility changes at Great Basin National Park and Ruby Lake is provided in Section 4.19.3.6.1, *Air Quality* (see *Cumulative Visibility Analysis Results*) of this FEIS.

G3-4 Maximum construction emissions are expected to occur during site preparation (for example, earth moving and leveling) when a large number of diesel-driven engines would be operating onsite on throughout the work day. The number of bulldozers, front loaders, graders, etc. operating at any given time is related to the area of disturbance. Consequently, construction emissions for the White Pine Energy Station were estimated based on the area of disturbance and duration of the proposed project. Whether the project is based on natural gas or coal-fired electrical generation is not relevant to estimates of construction emissions. Emissions from construction activities (see Table 4.6-1 in this FEIS) would be much less than the operating emissions (see Table 4.6-4 in this FEIS), and would not be expected to be the source of the maximum impact.

G3-5 The proposed White Pine Energy Station cooling system is a hybrid system that would normally operate as a dry system. Water would be recirculated inside the plant to the maximum degree practicable. The hybrid cooling system is a closed loop, indirect cooling system operating dry except for the warmest days of the year. Because it is a closed loop system, it is not expected to create particulate emissions. Even when water sprays are used, the system would not be expected to create particulate emissions as would a conventional evaporative cooling tower. This is reflected in the PSD Air Permit issued for the White Pine Energy Station by the Nevada Division of Environmental Protection-Bureau of Air Pollution Control (NDEP-BAPC). Water that could no longer be reused would be discharged to the facility's three-cell, double-lined evaporation pond. Additional detail has been added in this FEIS to Section 2.2.3.1.1, *Power Island,* under the heading *Cooling Towers* describing the hybrid cooling system and use of cooling water.

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issued to WPES requires the use of ultra low sulfur diesel, which should therefore be referenced. Again, the DEIS falls short by not including critical information about potential emissions. G3-6

4.6.1.3.3 The DEIS states that a screening level ozone modeling has been done based on "accepted screening level methodology." However, the report is not clear what screening level methodology it is referring to. It is important to point out that the DEIS modeling results do not include background concentrations. The DEIS section also briefly discusses the wilderness areas and explains that concentration isopleths indicate that there is no significant impact. However, no modeling results are provided or referenced to substantiate that claim which would constitute a gross deficiency in the NEPA process. The Council on Environmental Quality requires that such statements be documented with references to the methodology employed in making such declarations. See, 40 C.F.R. § 1502.24. G3-7a G3-7b

4.6.1.3.7 Hazardous Air Pollutants (HAPs) resulting from operation of the WPES were not modeled independently. Instead, AERMOD modeling results have been prorated to estimate HAP impacts. The WPES analysis only looked at acute and chronic direct exposure through inhalation. They did not look at direct exposure through incidental ingestion of soil or any indirect exposure through ingestion of foodstuff. Risk assessments must look at the default exposure pathways recommended in the combustion guidance. Also, there are minor errors in the DEIS regarding selection of toxicity factors (e.g. missing or miscalculated values). There are no ecological conclusions in this section of the report and the DEIS does not address ecological receptors. G3-8

Greenhouse Gas Emissions

Section 4.6.1.3.9 at DEIS 4-119 presents a one paragraph discussion about greenhouse gas emission impacts. While noting that 98 percent of this facility's contribution to greenhouse gasses will be carbon dioxide, the DEIS contains projected emissions for carbon monoxide instead. These two gases are not interchangeable. As well, there is no data provided that would allow the reader to put this coal-fired power plant into perspective to other, recently approved coal-fired power plants in the western region of the country. G3-9

The discussion of greenhouse gas emissions in the DEIS is not sufficient to meet the NEPA requirements to identify and discuss in detail reasonably foreseeable environmental impacts. We suggest that the treatment of this issue by the BIA in connection with the proposed Desert Rock Energy Project may be helpful to BLM here. See, Desert Rock DEIS at 4-18 and 19; 5-12, and App. K at K-37, K43—45, and K-75. G3-10

Cumulative Impacts

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G3-6 Additional information was added to Section 4.6.1.3.7, *Class II Area Hazardous Air Pollutants*, and Table 4.6-8 that shows the amount of hazardous air pollutants (HAPs) that would be emitted annually. Comparisons to mercury standards are discussed in a separate revised Section 4.6.1.1.6, *Mercury*.

Also, text in Section 4.6.1.3.2, *Air Emission Controls*, and Section 4.6.1.3.3, *Magnitude of Emissions During Operation*, was edited to change "low sulfur" to "ultra low sulfur" and "500 ppm" to "15 ppm."

G3-7a Additional information about the ozone screening approach (Empirical Kinetic Modeling) used in the DEIS and this FEIS is discussed in Section 4.6.1.3.4, *Dispersion Modeling Methodology*, and Section 4.19.3.6.1, *Air Quality.*

Regarding impacts to Wilderness areas, results of the White Pine Energy Station Full Impact Analysis (see Table 4.6-6 in this FEIS) are applicable to the Wilderness areas listed in Section 4.6.1.3.5, *Class II Area Dispersion Modeling Results*. Discussions of impacts at the individual Wilderness areas were included to provide additional information only, and the results in Table 4.6-6 demonstrate that the White Pine Energy Station is not expected to cause or contribute to any violation of the NAAQS or PSD increments at the Wilderness areas or at any other Class II areas.

G3-7b See the response to Comment G3-7a. The modeling was conducted in accordance with NDEP and EPA-approved protocols and procedures (using the methodology referenced in Section 4.6.1.3.4 of the DEIS).

G3-8 White Pine Energy Associates' (WPEA's) hazardous air pollutant (HAP) modeling methodology, conducted by prorating the impacts from the pulverized coal-fired boilers, is consistent with HAP modeling methodologies commonly employed by air permitting agencies around the country and is considered appropriate for the risk assessment presented in this FEIS. Regarding the commenter's mention of a multipathway risk assessment "recommended in the combustion guidance," the commenter may be referring to the September 2005 "Human Health Risk Assessment Protocol (HHRAP) for Hazardous Waste Combustion Facilities" (EPA Document No. EPA520-R-05-006). Although this guidance is applicable to industrial facilities combusting hazardous waste and subject to Resource Conservation and Recovery Act (RCRA) permitting requirements, the White Pine Energy Station would neither store nor burn hazardous waste; thus, the hazardous waste combustion guidance is not applicable to the White Pine Energy Station. The primary HAP species of concern for pulverized coal-fired power plants are mercury, hydrogen fluoride, and lead. Air emissions of these species were modeled, and the resulting impacts were found to be below the applicable risk assessment thresholds. Text was added to Section 4.6.1.3.4, *Dispersion Modeling Methodology*, of this FEIS to clarify the methodology used in the analysis. See the response to Comment G1-2 for additional information regarding the mercury evaluations that have been added to this FEIS. Because of the minimal risk of incidental soil ingestion or foodstuff contamination, the inhalation pathway was the only risk assessment pathway analyzed. Results of the inhalation evaluation show that none of the risk assessment thresholds are exceeded, and no additional analysis is warranted.

The compounds for which ambient concentrations are missing (that is, 1,3-butadiene and propylene oxide) are not expected to be emitted from the White Pine Energy Station and were removed from Table 4.6-8 in this FEIS.

Ecological conclusions are not included in Section 4.6.1.3.7, *Class II Area Hazardous Air Pollutants*; however, ecological receptors are addressed in a revised cumulative impact analysis in Section 4.19.3.6.1, *Air Quality* and Appendix L, *Cumulative Analysis for Air Quality*. That cumulative analysis shows that air emissions from the White Pine Energy Station, together with existing and future sources, are not expected to result in damage to crops, vegetation, animals, or aquatic or terrestrial ecosystems.

G3-9 A typographical error on page 4-119 of the DEIS "carbon monoxide" has been replaced with "carbon dioxide" in this FEIS.

Further analyses of climate change have been added to this FEIS. Section 3.6.2, *Climate Change,* includes a broad discussion of the currently observed impacts to resources associated with climate change. Section 4.6.2, *Climate Change*, has been added to this FEIS to describe projected future changes in climate, along with discussions of the various factors thought to influence climate. Section 4.19.3.6.1, *Air Quality*, has been revised to discuss the potential incremental cumulative impacts of emission sources on climate change. Finally, Appendix M, *Understanding and Evaluating Climate Change,* has been added to this FEIS. The potential cumulative impacts of all global carbon dioxide emissions are summarized in Section 4.19.3.6.1, *Air Quality,* and in Appendix M, *Understanding and Evaluating Climate Change,* of this FEIS.

Human-caused carbon dioxide emissions make up 3 percent of the global total carbon dioxide emissions, the majority of which are emitted through natural processes in the earth's oceans and land area. Maximum carbon dioxide emissions from the White Pine Energy Station would be 0.001 percent (1 one-thousandth of 1 percent) of the global total carbon dioxide emissions.

G3-10 See the response to Comment G3-9.

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Section 4.19 contains a discussion of cumulative impacts, as promised at the outset of the DEIS. BLM stated: "Cumulative impacts are those incremental impacts that would result from the effects of the Proposed Action or Alternative I when added to the effects of other past, present, and reasonably foreseeable projects. The BLM recognized the need for a thorough analysis of potential cumulative effects, not only from power plant siting activities, but from other development activities as well." (DEIS at 1-8). This recognition is important because an EIS "must also include a *useful* analysis of the cumulative impacts of past, present and future projects." *Churchill County v. Norton,* 276 F.3d 1060, 1080 (9th Cir. 2001)(emphasis added).

Accordingly, the DEIS identifies the following large projects that would be considered in the cumulative impact analysis (id.):

- Southwest Intertie Project
- Nevada Northern Railway Upgrade
- Nevada Northern Railway Operation
- White Pine County Airport Expansion
- Basset Lake Expansion
- Egan Range Wind Generating Project
- Intermountain Power Project Phase III
- Newmont Gold Coal-fired Power Plant
- Southern Nevada Water Authority Groundwater Development Project
- Toquop Coal-fired Power Plant
- Ely Energy Center

At Section 4.1.3, the DEIS notes that CEQ has established a process at 40 C.F.R. 1502.22 for dealing with incomplete or unavailable information when preparing an EIS. Having earlier recognized the need for "a thorough analysis of potential cumulative effects," the DEIS here declares that "[p]otentially incomplete or limited information was available for many of the projects considered in the cumulative impact analysis. This necessitated a broad qualitative analysis and characterization of possible cumulative effects as opposed to a site-specific quantitative assessment." (DEIS at 4-3).

It appears that the DEIS has correctly identified these eleven activities as eligible for consideration of cumulative impacts. It was also permissible for the DEIS to rely upon CEQ's process for dealing with missing or incomplete information in order to assess cumulative impacts since some information about these activities may not be readily available. However, "Consideration of cumulative impacts requires "some quantified or detailed information; … [g]eneral statements about 'possible' effects and 'some risk' do not constitute a 'hard look' absent a justification regarding why more definitive information could not be provided. " *Kern v. U.S. Bureau of Land Management,* 284 F.3d 1062, 1075 (9th Cir. 2002). Yet, the DEIS is deficient in its study of cumulative impacts because it contains virtually no information about the reasonably foreseeable environmental impacts, particularly involving air quality, of many of these identified actions.

G3-11

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G3-11 Additional information on the air quality cumulative impacts analysis has been provided in Section 4.19.3.6.1, *Air Quality*, and Appendix L, *Cumulative Analysis for Air Quality*, of this FEIS. Cumulative impacts of the White Pine Energy Station, together with existing sources and reasonably expected future sources for which detailed information is available, are addressed. The reasonably foreseeable future actions evaluated in the cumulative air quality analysis are the Ely Energy Center, Toquop, Newmont, IPP Unit 3, and Nevco Sevier projects. Therefore, this FEIS provides a detailed cumulative analysis of the available information for the reasonably foreseeable future actions in the region.

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For example, in this DEIS, while stating that Newmont Gold is constructing a 200MW coal-fired plant near Elko, Nevada, with a start-up date set for 2008, there is no information about expected emissions from this facility, nor is there any discussion about whether the operation of the Newmont Gold plant is likely to exacerbate the concerns of the Park Service with respect to air quality in nearby National Parks and Wildlife Refuges. That is because the DEIS simply assumed without doing any analysis of available data that air quality impacts from the Newmont facility would be "insignificant." (DEIS at 4-269). However, the Newmont Gold Air permit has been available in the public domain for some time and the relevant emissions could not only have been easily obtained, but should have been analyzed accordingly and documented. Similarly, the DEIS states that the
G3-12 proposed 900MW Phase III unit to be built and operated by Intermountain Power appears to satisfy all Clean Air Act requirements, but then declares that no effort was made to determine if, when combined with emissions expected from the WPES proposed facility, the air quality impacts projected in this DEIS would remain valid. (DEIS at 4-261). Apparently, WPES's consideration of cumulative impacts includes only the identification of individual impacts, but no examination of whether these impacts might combine to produce a different result.

The Nevada BLM is also preparing EIS's for two other energy projects: the Toquop Energy coal-fired power plant, and, as noted earlier, the Ely Energy Center (EEC). Toquop has proposed a 750MW facility in Mesquite, Nevada, and the DEIS for WPES finds that it, too, is "well outside the radius of impact of the [proposed White Pine] Station. As such, the project was not considered for cumulative impacts analysis." (DEIS at 4-269). It is difficult to see why WPES found it appropriate to list these activities as initially appropriate for consideration of cumulative impacts but thereafter
G3-13 finds that such review is unnecessary. The question that BLM should be addressing with respect to Toquop and the EEC is whether plans for these facilities are "speculative and contingent" or whether it is reasonably likely that these facilities will be built. *Village of Grand View v. Skinner,* 947 F.2d 651, 659 (2nd Cir. 1991). The EEC is not a speculative and contingent project as evidenced by the fact the Public Utilities Commission of Nevada approved the Companies request for funds to proceed with development of the EEC by Order dated November 13, 2006. Further, we note the WPES project was denied intervention by the PUCN in the Companies' IRP filings because of their speculative business or marketing plan (as there was no executed contract with a Nevada certificated utility obligating the sponsors to perform).

Clearly, our own EEC project is not outside the study radius. However, the DEIS for the WPES instead asserts that there is no detailed emission information or stack height information, and therefore, it declines to address the cumulative impacts of building these two additional 750MW units relatively close to the proposed WPES units . (DEIS at 4-269). This is wrong, outdated information. Nevada Power had a publicly available application on file with the NDEP for a Clean Air Act permit for the EEC before this DEIS was completed and released for comment. But even if this information was not available, no effort was made to model cumulative impacts, or to use
G3-14 "research methods generally accepted in the scientific community" to determine if there is even a reasonable likelihood of cumulative impacts. 40 C.F.R. 1502.22(b)(4).

In many cases, agency use of mathematical models to predict cumulative impact has been upheld. *See, e.g., Inland Empire Public Lands Council v. Schultz*, 992 F.2d 977, 981 (9th Cir. 1993).

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G3-12 As discussed in the response to Comment G3-11, a cumulative air quality impact analysis has been added to Section 4.19.3.6.1, *Air Quality*, and Appendix L, *Cumulative Analysis for Air Quality*, of this FEIS. The cumulative impact analysis includes reasonably expected future sources. The reasonably foreseeable future actions evaluated in the cumulative analysis are the Ely Energy Center, Toquop, Newmont, IPP Unit 3, and Nevco Sevier projects. As shown in the cumulative air impacts analysis, the predicted cumulative impacts are all below the applicable Clean Air Act standards. The White Pine Energy Station is not expected to cause or contribute to any exceedance of an applicable air quality standard or result in any adverse effects.

G3-13 In the cumulative air quality impact analysis, reasonable and foreseeable projects were those projects that had submitted an air quality permit application. Although the proposed Toquop project is well beyond the radius of impact plus 50 kilometers (as defined in EPA's PSD guidance) for the proposed White Pine Energy Station, the Toquop project is evaluated in the revised cumulative air quality impacts analysis in Section 4.19.3.6.1, *Air Quality*, of this FEIS to ensure conservative estimates of air quality impacts. Moreover, the proposed Ely Energy Center is also included in the cumulative air quality impacts analysis. Also, see the responses to Comments G3-11 and G3-12 regarding projects analyzed in the cumulative air quality impact analysis and results of that analysis.

G3-14 The cumulative air quality impact analysis presented in Section 4.19.3.6.1, *Air Quality*, and Appendix L, *Cumulative Analysis for Air Quality*, of this FEIS considers the proposed Ely Energy Center based on the final air permit application and draft permit issued by NDEP-BAPC for the Ely Energy Center.

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Moreover, WPES cannot avoid study of cumulative impact simply because neither Toquop nor EEC has yet to receive final approval. "A project need not have received final approval to be 'reasonably foreseeable.'" *Surfrider Foundation v. Dalton*, 989 F. Supp. 1309, 1324 (S.D. CA, 1998), aff'd 196 F.3d 1057 (9th Cir. 1999).

G3-15 Even if WPES found itself handicapped by having to deal with missing or incomplete information at DEIS 4-3, 40 C.F.R. 1502.22 obligated the proponent to use the information that was available or to use reasonable research methods to gather additional information when addressing cumulative impacts to air quality. The DEIS makes no effort to present what information about Intermountain Phase III, the Newmont facility, Toquop or EEC might be known to state permitting agencies, the applicants or BLM. Ultimately, it is possible that NDEP will issue PSD permits to all three applicants. For now, however, especially in light of concerns raised by the National Park Service and the public about air quality impacts, BLM may not treat these three initiatives (or the other actions properly identified for cumulative impact analysis) as if the possible impacts attributable to each will have no effect upon the others. That may be the final result if the cumulative impact analysis is performed properly. However, at the present time, that outcome is only an untested supposition.

G3-16 Finally, BLM may not exclude from consideration the potential impacts of the EEC when completing the EIS for WPES simply because the LS Power application came before that of Nevada Power for the EEC. The same holds true for Toquop: the issue is not which application came first, or second, or third, but whether the EEC and or Toquop is "reasonably foreseeable" in terms of likelihood that it will proceed. If the answer is yes, then the proponent cannot ignore cumulative impacts. "NEPA is not designed to postpone analysis of an environmental consequence to the last possible moment. Rather, it is designed to require such analysis as soon as it can reasonably be done." *Kern v. U.S. Bureau of Land Management,* 284 F.3d 1062, 1072 (9th Cir. 2002).

In our contacts with the BLM regarding our application for the EEC, we are continually impressed with the dedication and diligence of agency personnel who address these demanding issues with limited resources. We are mindful that the same constraints affect the DEIS for the WPES proposal. Because our goal is to serve the people of Nevada by obtaining timely approval from BLM for all requisite permits so that additional electricity can be provided by the EEC in an environmentally responsible manner, the purpose of our comments here are to ensure thorough analysis of both our application and that of the WPES.

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P.O. Box 10100, Reno, Nevada 89520-0024 • 6100 Neil Road, Reno, Nevada 89511

G3-15 Since preparation of the DEIS, additional information has become available for several of the reasonably anticipated future actions. This FEIS includes a cumulative air quality impacts evaluation (revised Section 4.19.3.6.1, *Air Quality*, and new Appendix L, *Cumulative Analysis for Air Quality*), which considers the proposed Ely Energy Center, Toquop, Newmont, IPP Unit 3, and Nevco Sevier projects, in addition to the proposed White Pine Energy Station and existing sources in the region. As shown in the cumulative air quality impact analysis, the predicted cumulative impacts are all below the applicable Clean Air Act standards.

G3-16 The DEIS does not claim that the other projects can be excluded from consideration simply because the White Pine Energy Station was the first of the projects to submit a PSD air permit application. At the time the DEIS was prepared, information for these other projects was not available. However, since that time, information on these other projects has been made available, and the modeled air impacts associated with the proposed Ely Energy Center, the Toquop project, and the other reasonably expected future actions are included in the cumulative air quality impact analysis in Section 4.19.3.6.1, *Air Quality*, of this FEIS. Thus, the reasonably foreseeable actions are evaluated in the cumulative air quality impact analysis in this FEIS.

Nevada Power.
nevadapower.com

Sierra Pacific
sierrapacific.com

Thank you for accepting these comments and we look forward to continuing our work with you as we move forward through our own EIS process for the EEC project. If you have any questions or desire further clarification, please contact me at (702) 367-5669.

Sincerely,

Starla Lacy
Director, Environmental Services
Sierra Pacific Resources
6226 West Sahara Avenue
Mail Stop 30
Las Vegas, Nevada 89146

No comments on the White Pine Energy Station DEIS were delineated for the part of the letter shown on the facing page.

Jack Tribble,
Acting Assistant Field Manager,
Bureau of Land Management,
Ely Field Office, HC 33 Box 33500,
Ely, NV 89301-9408

Mr. Tribble:

I am writing to comment on the Draft Environmental Impact Statement released April 20, 2007, on the proposed White Pine Energy Station. The DEIS does not go far enough to
G4-1 address the significant environmental impacts that would occur if this poorly conceived project goes forward.

Among other impacts, more than 1,500 acres of wildlife habitat would be permanently disturbed. But by far the most serious concern is the immediate and cumulative impact that this ill-advised project, like other coal-fired power plants around the country, would have on both local environmental and recreational resources and on the global environment through the continued pumping of carbon-rich gases into the atmosphere.

The National Park Service and other agencies have amply demonstrated that the White Pine Energy Station would lead to a significant decline in air quality over the Jarbidge Wilderness Area and Zion National Park, both PSD Class I areas, as well as Great Basin National Park and Ruby Lake National Wildlife Refuge.

On a larger scale, this project would only accelerate the load of carbon dioxide and other proven greenhouse gases in the atmosphere, an environmental issue that threatens our national and global security. The Intermountain West and Great Basin areas, particularly, are suffering from the climate shift resulting from greenhouse gases in the atmosphere. Despite superficial claims to the contrary, this plant is still a coal-burning, greenhouse-gas belching, poorly designed and heavily polluting project that makes no sense at all except for those who intend to profit from the destruction of our environment.

For these reasons, we hope that the federal government will aggressively examine the environmental impact that would occur from this project and work towards a "no action" alternative for the proposed White Pine Energy Station.

Sincerely,

Launce Rake
Communications Director
Progressive Leadership Alliance of Nevada
732 S. 6th St., Suite 200
Las Vegas, NV 89101

G4-1 In response to the commenter's concerns regarding air quality impacts at Zion National Park and Jarbidge Wilderness Area, the predicted impacts at Class I areas (Jarbidge Wilderness Area and Zion National Park) were reviewed by the Federal Land Managers for these areas during the PSD air permitting process. The Federal Land Managers (who have an affirmative responsibility under the Clean Air Act to protect air quality related values at Class I areas) did not determine that adverse impacts would result at either Class I area. Additionally, as reflected in FEIS Section 4.6.1.3.8, *Class I Area Dispersion Modeling Results*, and Appendix L, predicted impacts at Great Basin National Park and Ruby Lake National Wildlife Refuge are within the applicable Clean Air Act standards.

Further analyses of climate change have been added to this FEIS. Section 3.6.2, *Climate Change,* includes a broad discussion of the currently observed impacts to resources associated with climate change. Section 4.6.2, *Climate Change*, has been added to this FEIS to describe projected future changes in climate, along with discussions of the various factors thought to influence climate. Section 4.19.3.6.1, *Air Quality*, has been revised to discuss the potential incremental cumulative impacts of emission sources on climate change. Finally, Appendix M, *Understanding and Evaluating Climate Change,* has been added to this FEIS. The potential cumulative impacts of all global carbon dioxide emissions are summarized in Section 4.19.3.6.1, *Air Quality,* and in Appendix M, *Understanding and Evaluating Climate Change,* of this FEIS.

As discussed in this FEIS, because of the low level of predicted carbon dioxide emissions from the White Pine Energy Station compared to the total emissions in the global carbon cycle (carbon dioxide emissions from the White Pine Energy Station would represent 0.001 percent (1 one-thousandth of 1 percent) of the total global carbon dioxide emissions) and the uncertainty in the global estimates of the relevant parameters, it is not possible to meaningfully predict any climate impacts that would be expected from the White Pine Energy Station (or several new plants considered together). This uncertainty is increased by an inability to predict the course and effectiveness of the technological, political, regulatory, and business responses to climate change over the coming decades, which appears to be developing with increased rapidity in response to the findings of the Intergovernmental Panel on Climate Change (IPCC) and other evidence of changing climate. Therefore, it is not possible to quantify any direct, indirect, or incremental cumulative environmental impacts associated with carbon dioxide emissions from the proposed White Pine Energy Station. The potential cumulative impacts of all anthropogenic carbon dioxide emissions are summarized in Appendix M, *Understanding and Evaluating Climate Change,* and in Section 4.19.3.6.1, *Air Quality*, of this FEIS.

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Ely, NV

June 19, 2007

Jeffrey A. Weeks,
Bureau of Land Management
Ely Field Office
HC 33 Box 33500
Ely, Nevada 89301-9408

*** VIA FAX ***

Re: White Pine Energy Station-Draft Environmental Impact Statement

Dear Mr. Weeks:

On behalf of the 5,500 members of the Toiyabe Chapter in Nevada and the eastern Sierra Nevada, I am submitting these comments on the Draft EIS for the White Pine Energy Station. These comments are supplemental to comments of Western Resource Advocates submitted by Charles Benjamin on behalf of several conservation groups including the Toiyabe Chapter. Many of the Chapter's members live near or recreate on public lands adversely affected by the proposed project including the Jarbidge Wilderness, Great Basin National Park, Ruby Lake National Wildlife Refuge, and BLM and Forest Service administered public lands.

The Toiyabe Chapter and its members have participated in land planning and management by the local offices of the Humboldt-Toiyabe National Forest Service, Ely and Elko Districts of the BLM, Great Basin National Park and the Ruby Lake National Wildlife Refuge for decades. Additionally, the Chapter and its members have participated in projects to improve range condition and wildlife habitat - especially for sage grouse - control noxious weeds, and build and enhance trails and other recreational facilities. The Sierra Club highly values these public lands and extremely concerned about the negative environmental impacts of the proposed project on the lands and on local communities and Native American Tribes.

The draft EIS is not responsive to many of our scoping comments of Sept. 2, 2004 and violates many requirements of NEPA including not establishing a need for the project, not providing a range of alternatives, insufficiently analyzing the direct and cumulative environmental impacts of the project. We request that these serious deficiencies be corrected and the BLM reissue the draft EIS for public comment.

G5-1 Need for the project: In 2004 we asked for information on the customers for this project and the draft EIS fails to provide that information.

G5-2 Air Quality: In 2004 we asked for analysis of the human health and environmental impacts of hazardous pollutants including CO2 and other greenhouse gases and on particularly toxic elements

G5-1 Section 1.2.1, *Introduction*, has been revised to reflect that White Pine Energy Associates (WPEA) is an independent power producer (IPP). Power from the White Pine Energy Station would be sold on a wholesale basis to utilities, municipalities, and/or cooperatives. These potential customers of the Station would in turn sell the power to the end users of the electricity. IPPs play an important role in the larger energy market by creating a competitive environment for electricity supply, thus lowering the cost of electricity for the end user. IPPs generally do not enter into power purchase agreements until the development stage of the project is complete and all major construction approvals have been obtained.

G5-2 It should be noted that the primary greenhouse gases include water vapor, carbon dioxide, methane (CH_4), nitrous oxide (N_2O), ozone (O_3), and halocarbons such as sulfur hexafluoride (SF6), and that they are not "hazardous pollutants" as defined by the Clean Air Act. Pollutant deposition analyses are summarized in FEIS Sections 4.6.1.3.7 *Class II Area Hazardous Air Pollutants, Mercury Deposition and Bioaccumulation*, and 4.6.1.3.8, *Class I Area Dispersion Modeling Results, Deposition and* are documented in Appendix L, *Cumulative Analysis for Air Quality*. Appendix M, *Understanding and Evaluating Climate Change*, has been added to this FEIS.

A memorandum of understanding (MOU) between WPEA and the State of Nevada, signed on November 20, 2007, would require the Station to be designed and constructed in a manner to be "Carbon Capture Ready" so that the facility can be retrofitted in the future with carbon dioxide capture and sequestration. As part of this requirement, 7 acres of land would be set aside for each coal-fired boiler to allow for the installation of this technology. The land set aside is discussed in the revised Section 2.2.3.1.2, *Land Set-Aside for Future Carbon Capture Technology*, and the MOU is included in Appendix F of this FEIS. Potential carbon dioxide control technologies are evaluated in FEIS Section 2.5.4 and Appendix E.

An analysis of hazardous air pollutants (HAPs) was included in the DEIS in Section 4.6.1.3.7, *Class II Hazardous Air Pollutants*. The results of that analysis were shown in Table 4.6-7 of the DEIS (Table 4.6-8 in this FEIS). The analysis showed no available standard was exceeded. Regarding mercury emissions, analyses of mercury emissions, deposition, and bioaccumulation have been added to this FEIS. Based on these mercury analyses, the estimated upper bounds for increases in air concentration and bioaccumulation rates are not expected to create adverse effects. Mercury control measures are evaluated in FEIS Section 2.5.4 and Appendix D (see the response to Comment G1-2 for additional information).

Pollutant deposition analyses are summarized in FEIS Sections 4.6.1.1.6, and 4.6.1.3.8, *Class I Area Dispersion Modeling Results*, and are documented in Appendix L. It is also noted that the frequency with which winds would send pollutants in any given direction is not necessarily indicative of the ambient impacts that would occur at a given area. The modeling analyses, which show that the WPES would not cause or contribute to any exceedance of the applicable ambient air quality standards which were set to protect public health and welfare, are based on a full year of meteorological data collected at the proposed site and are therefore considered representative of the expected range of actual conditions.

G5-2 (cont.) such as mercury and the draft EIS fails to provide that analysis. We requested that the EIS include analysis of the accumulation of mercury and toxic elements from emissions of the project and the draft EIS fails to provide that analysis. We requested that the EIS analyze aggressive mercury control measures and the draft EIS fails to do so. We requested that the draft EIS analyze CO2 control technologies and the draft EIS fails to do so. We requested an analysis of pollution transport and deposition for all known atmospheric conditions in all seasons especially "how frequently and the extent to which winds would take pollutants south toward Ely, east toward Mt Moriah and Utah cities, and north toward Elko, Wells, and Wendover" and the draft EIS failed to provide this information.

Alternatives to be considered:

G5-3 Criteria: The "criteria" developed to evaluate alternatives (page ES-7) are designed to eliminate consideration of any alternative except traditional coal-fired power generation nor do they require environmentally responsible power production. For example, criteria such as "providing traffic for the Nevada Northern Railway" can only be satisfied by shipments of coal. Also, "commercially proven and reliable" simply means old technology which pollutes the environment. "Cost effectiveness relative to pulverized coal" is simply an endorsement of the only alternative considered and assumes today's economic conditions will continue for the life of the plant. No alternative ways of putting White Pine Co. water to beneficial use were considered except for the WPES ignoring the other proposed power plant. "Environmentally permittable" is the lowest possible standard for environmental protection from a long-term source of pollution.

G5-4 No range of alternatives: Using these prejudicial criteria the dEIS fails to address substantive alternatives which we requested including meeting future electricity demand through energy conservation and efficiency improvements, the use of non-polluting renewable energy sources, the use of other less polluting fossil fuel alternatives such as natural gas, and lastly consideration of advanced technologies integrated gasification combined cycle (IGCC).

We are very disappointed that the dEIS is not responsive to our scoping concerns or the concerns of others. We believe that this dEIS is fatally flawed. We urge the BLM to drop the prejudicial criteria and fully comply with NEPA requirements of establishing a need for the project, providing a full range of alternatives, and doing an adequate analysis of direct and cumulative impacts of the alternatives. The dEIS should then be reissued for a full public review process.

Sincerely,

/s/

Dennis Ghiglieri
Conservation Chair
Toiyabe Chapter

G5-3 The criteria developed to evaluate alternatives were not designed to eliminate consideration of any alternative except traditional coal-fired power generation. Rather, the criteria were developed to determine whether alternatives were consistent with the purpose and need for the proposed project. See, generally, the response to Comment G1-28.

Although the commenter claims otherwise, other alternatives besides those requiring coal were found to provide traffic for the Nevada Northern Railway in the DEIS analysis, including biomass and municipal solid waste (see Table 2-4). Regarding the criterion of providing traffic for the Nevada Northern Railroad (NNR) contained in the DEIS, this objective was developed to support the purpose and need criterion of bringing economic benefits to the County, which currently does not have freight rail access. It is consistent with the purpose and need of the project (that is, to supply baseload power and bring economic benefits to the County) for the power plant to bring freight rail access to the County. White Pine County views this rail traffic criterion as a high-priority economic objective. As stated in a July 11, 2007, letter from White Pine County to the BLM (White Pine County, 2007), "[t]he development of water resources for power generation in Steptoe Valley and the ability to reinstate rail freight service on Class III track are basic to White Pine County's long term goals of strengthening and stabilizing the area's economy and improving the quality of life for all White Pine County residents." (White Pine County, 2007, , page 1). NNR railroad facilities were included in the Interim Development Agreement between White Pine County and WPEA for the proposed White Pine Energy Station (see Appendix A). Inclusion of the use of the NNR in the Purpose and Need Statement and as an alternative screening criterion in the DEIS and this FEIS is appropriate because it was a significant factor in locating the proposed White Pine Energy Station in Steptoe Valley.

Section 1.2.3, *Project Purpose*, in this FEIS has been expanded to discuss the meanings of specific terms used in evaluating the purpose and need. The "commercially proven and reliable" criterion refers to technologies that are operational at a commercial scale; can produce consistent, reoccurring results; are employed across numerous facilities; and do not require extended periods of testing and operational modifications to achieve the design performance.

The criterion that compares the cost effectiveness of alternatives relative to pulverized coal reflects the fact that electricity produced with pulverized coal is the lowest-cost option and is part of the proposed project. Electricity is essential to the livelihood of citizens and businesses and is necessary for the provision of essential governmental services such as public safety, transportation, education, and others. Therefore, low-cost electricity is in the public interest, and cost effectiveness is a valid consideration for evaluating alternatives with respect to the purpose and need.

Finally, "environmentally permittable" means that the proposed project or possible alternatives must be able to meet all applicable environmental regulations and be capable of obtaining all other necessary permits and approvals. If it is predetermined that the project or alternatives are not environmentally permittable, it would be irrelevant to proceed with analyzing those options because they would never be allowed to commence construction. Beyond being environmentally permittable, the White Pine Energy Station would produce electricity in an environmentally responsible manner, meaning that the White Pine Energy Station would meet or exceed all applicable environmental regulations and that environmental considerations were taken into account in the plant design and construction procedures. See to the response to Comment G2-6 for additional discussion of environmentally responsible aspects of the project.

G5-4 As discussed in detail in the responses to U.S. Environmental Protection Agency (EPA) comments (see the response to EPA Comment F1-10), energy conservation and efficiency improvements are not sufficient to offset the growing demand for baseload power in the western United States; thus, energy conservation and efficiency are not a viable alternative to the purpose and need of providing baseload power. Renewable energy sources, natural gas fuel, and integrated gasification combined cycle (IGCC) were evaluated in detail (see the response to Comment G1-28 and Section 2.5.1, *Alternative Power Generating Technologies*, in this FEIS) but were found not to be reasonable and/or not to satisfy the purpose and need criteria for the proposed project. For additional discussions of why IGCC was not carried forward for further analysis, see the responses to Comments F3-1, F4-1, G1-28, G2-7, and G2-16).

Great Basin Group
Sierra Club
P.O.Box 8096
Reno, Nevada 89507

June 13, 2007

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JUN 15 2007
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Ely, NV

Jeffrey A. Weeks
Bureau of Land Management
Ely Field Office
HC 33, Box 33500
Ely NV 89301-9408

Dear Sir:

I am submitting comments on the Draft Environmental Impact Statement for the White Pine Energy electric power generating plant (issued on 4/20/2007) on behalf of the Great Basin Group of the Sierra Club (representing northern Nevada).

The Conservation Committee of Great Basin Group of the Sierra Club strongly supports the "No Action Alternative" of the DEIS. We consider Alternatives 1 and 2, which are very similar and offer only minor adjustments in the project plan, to not be in the best interests of the public and not a wise and proper use of public lands managed by the U. S. government at this time. Our basis for this selection rests partly on procedural objections to the content of the DEIS and partly on well grounded concerns about greenhouse gas emissions' effects on the planet as a whole and on the United States in particular.

Procedurally, we object to the following points in the DEIS which have led to the "preferred alternative" of allowing the proposed coal-fired power plant:

A) The six (6) key criteria (pp. 2.64-2.65) are open to question and dispute. These criteria seems to flow from DEIS Section 1.2.2 ("Purpose"). This section could be written from many perspectives, but the perspective given there is clearly one that favors the WPEA proposal over other courses of action. No wonder the preferred alternative is to approve the plant when the criteria for judgement are so far skewed toward it. Specifically, we question

G6-1 1. Criterion 1 ("reliable baseload power"). The DEIS offers no quantitative arguments for why the capacity needs to fit the "reliable baseload" phrase. It is well known that power demand peaks during the daylight hours of the summer when especially cooling requirements are high. This daily demand peak extends into both spring and autumn for the electrical markets targeted by the proposed power plant. Intuition indicates that this market needs increments in peak, not baseload, power. We ask that Criterion 1 be re-evaluated in light of more probable market needs in the area which will be served.

G6-1 As documented in Section 1.2, *Purpose, Need and Background*, of this FEIS and the response to comment F1-10 from the EPA, there is a demonstrated current and future need for additional baseload generating capacity in the western United States. Based on the information in the previous text, new baseload generation is needed to satisfy growing demand in the western United States, and White Pine Energy Associates' (WPEA's) plans to construct additional baseload capacity are consistent with the documented needs of the market. See generally the response to Comment G1-28. The proposed Station is not intended to address the need for peaking capacity mentioned by the commenter.

G6-2 2. Criterion 3 ("cost effectiveness relative to pulverized coal"). The analysis is far too brief to unequivocally conclude that coal is a cheaper alternative than renewable energy sources. The analysis must be made considering all costs, and there are numerous and significant costs associated with the burning of fossil fuels which have not been addressed in this DEIS. First, the serious health effects of coal burning are well documented and have not been treated here. Second, the serious environmental degradation caused by coal production and transportation have not been treated here. Third, the serious loss of visual clarity associated with coal burning is a financial consideration for the surrounding area which now enjoys nearly pristine air quality, certainly a draw for visitors and prospective residents. Lastly, we point out that the cost comparison for various alternative energy systems in this DEIS is based on a constant cost for coal resources. A full and balanced economic appraisal should consider the likely cost increases associated with coal production and transportation as oil and gas supplies become even more subject to increasing "world" market prices.

G6-3 3. Criterion 5 ("place water held by White Pine Co. for power production in Steptoe Valley to beneficial use for power production"). At best this criterion seems contrived. Why does this project need to solve White Pine County's water issues? In fact, this water may have beneficial uses other than power generation; but no other possibilities were addressed in this DEIS. We strongly suspect that other beneficial uses could be found for these water rights and that they would have far less negative impact than coal-fired power generation. We ask that Criterion 5 be removed from the list.

G6-4 4. Criterion 6 ("provide traffic for the NNR"). Again, this seems contrived. Again, why should this project need to solve problems that exist for local jurisdictions and private entities? This does not seem to be a legitimate concern for this DEIS and it naturally weighs greatly in favor of the preferred alternative. We therefore ask that it be removed from the list of criteria.

B) The analysis of alternative energy solutions is too brief, cursory, and lacking basic justifications. We address specifically the inadequate development of Section 2.5.1 ("Alternative Power Generating Technologies") in the DEIS:

G5-5 1. Section 2.5.1.1.1 Wind. The fact that wind cannot offer baseload capacity due to the fact that winds mostly prevail during daylight hours cannot be used as an argument against wind energy. Energy demand peaks occur during daylight hours, especially for the hot areas (e.g., Las Vegas) which are targeted by this power generation. Daytime cooling demands for energy would be well served by wind power generation. A sound analysis of the power needs must account for the proportions of baseload and peak power which are truly needed. Moreover, wind power should not be discounted on Criteria 5 and 6, which we have already argued against keeping. Lastly, there is evidence that higher wind towers will benefit from nighttime sustained winds, which may even be greater than daytime winds.

G6-6 2. Section 2.5.1.1.2 Solar. The DEIS repeats much of the argument against wind energy in regard to solar energy, and we counter for the same reasons as for wind. Solar energy generation is well suited to peak power demands in the daytime, and a thorough analysis of the needs would address the peak-versus-baseload requirements and the ability of alternative energy to provide for peak

G6-2 Regarding externalized costs such as those related to health impacts or decreased visibility, the National Environmental Policy Act (NEPA) does not require an EIS to attempt a quantification and analysis of such costs, and the White Pine Energy Station DEIS and this FEIS do not do so. The appropriate forum for taking into account such costs is the legislative and policy arena, and society's determinations regarding such costs are reflected in the laws and regulations adopted by Congress and the regulatory agencies. The White Pine Energy Station would be required to comply with State and Federal environmental laws and regulations that reflect the chosen balance between benefits, environmental impacts, and any external costs. Additionally, the commenter mentions the impacts of coal mining activities. It is noted that these activities are addressed as required in separate impact analyses for the coal mining areas. The White Pine Energy Station may obtain coal from any of several mines in the Wyoming Powder River Basin. The BLM recently completed an EIS for mining coal from federal tracts adjacent to five of those mines. The impacts of the coal mining activities are addressed in the BLM Records of Decision for these tracts, available at http://www.blm.gov/wy/st/en/info/NEPA/cfodocs/prbcoal-rods.html.

Therefore, the DEIS and this FEIS appropriately focus on the reasonably quantifiable monetary costs associated with developing and operating the various technologies under the applicable regulatory regime. These costs are documented in Section 2.5, *Alternatives Considered but Eliminated from Detailed Evaluation.*

G6-3 See, generally, the response to Comment G1-28. Regarding the criterion of putting water rights held by White Pine County for energy production in Steptoe Valley to a beneficial use in producing energy, this criterion was developed to allow assessment of the purpose and need of bringing economic benefits to the County. It is consistent with the general purpose and need of the project (that is, to supply baseload power and bring economic benefits to the County) for these water rights to be used by the White Pine Energy Station, thus generating jobs and income (that is, economic benefits) for the County. In 1983, the State Engineer issued an order designating Industrial/Power Generation as the preferred use of ground water in Steptoe Basin. If these water rights are not utilized, the State Engineer could assign them to another use for another entity, potentially eliminating the economic benefits desired by White Pine County.

White Pine County views this beneficial water rights use criterion as a high-priority economic objective. As stated in a July 11, 2007, letter from White Pine County to the BLM (White Pine County, 2007), "[t]he development of water resources for power generation in Steptoe Valley and the ability to reinstate rail freight service on Class III track are basic to White Pine County's long term goals of strengthening and stabilizing the area's economy and improving the quality of life for all White Pine County residents." Therefore, this criterion will not be removed from the list.

It is additionally noted that no alternative was eliminated from further consideration based solely on the water use criterion.

G6-4 Regarding the criterion of providing traffic for the Nevada Northern Railroad (NNR) contained in the DEIS, this objective was developed to support the purpose and need criterion of bringing economic benefits to the County, which currently does not have freight rail access. It is consistent with the purpose and need of the project (that is, to supply baseload power and bring economic benefits to the County) for the power plant to bring freight rail access to the County. White Pine County views this rail traffic criterion as a high-priority economic objective. As stated in a July 11, 2007, letter from White Pine County to the BLM (White Pine County, 2007), "[t]he development of water resources for power generation in Steptoe Valley and the ability to reinstate rail freight service on Class III track are basic to White Pine County's long term goals of strengthening and stabilizing the area's economy and improving the quality of life for all White Pine County residents." (White Pine County, 2007, page 1). NNR railroad facilities were included in the Interim Development Agreement between White Pine County and WPEA for the proposed White Pine Energy Station (see Appendix A). Inclusion of the use of the NNR in the Purpose and Need Statement and as an alternative screening criterion in the DEIS

and this FEIS is appropriate because it was a significant factor in locating the proposed White Pine Energy Station in Steptoe Valley. Although the commenter believes that the rail traffic criterion contained in the DEIS naturally weighs greatly in favor of the preferred alternative, it is noted that four other alternatives besides the preferred alternative (that is, biomass, municipal solid waste, CFB, and IGCC) satisfied this criteria. It is additionally noted that no alternative was eliminated from further consideration in the DEIS based solely on the rail traffic criterion.

G6-5 See, generally, the response to Comment G1-28. An important project purpose and need is the ability to supply baseload energy. (The proposed Station is not intended to address a need for peaking power. See the response to Comment G6-1.) Baseload generation sources are intended to meet the constant demand for power that exists 24 hours per day. As discussed in detail in the responses to U.S. Environmental Protection Agency (EPA) comments in Letter F1 (reference response to Comment F1-10) and in the response to Comment G6-1, there is a demonstrated need for baseload power throughout the western United States. Wind is not always available to meet this constant demand for power and thus cannot be relied upon as a baseload resource. As a result, wind power cannot satisfy the purpose and need for the project.

While wind power would not put White Pine County's water rights to beneficial use or provide traffic for the NNR, the primary factor in the evaluation of wind power was its inability to provide baseload power.

Lastly, although the commenter suggests that higher wind towers would benefit from nighttime sustained winds, the commenter does not provide any evidence or justification demonstrating that higher towers could render wind power a viable baseload resource. Thus, wind power still cannot be considered a viable baseload resource. It is also noted that taller towers could potentially present increased hazards for civilian and military aviation and could potentially interfere with civilian and military radar systems, a significant concern in Nevada.

G6-6 An important project purpose and need is the ability to supply baseload energy. Baseload generation sources are intended to meet the constant demand for power that exists 24 hours a day. As discussed in detail in FEIS Section 1.2, *Purpose, Need, and Background*, and the responses to EPA comments in Letter F1 (see the response to Comment F1-10), there is a demonstrated need for baseload power throughout the western United States. Solar energy is not a baseload generating resource; therefore, solar power cannot satisfy the purpose and need for the project.

Although the commenter takes exception to the acreage estimate in Section 2.5.1.1.2, *Solar*, the conclusion of the Environmentally Permittable section was that solar energy should be permittable in Nevada. Therefore, the acreage estimate did not influence the outcome of the alternatives analysis. While the commenter does not provide the name of the concentrated solar facility that is now operating in southern Nevada, it is assumed the commenter was referring to Nevada Solar One, a peak 64-megawatt (MW) thermal solar facility utilizing a 350-acre solar collection grid (NDEP Factsheet for Industrial Process Wastewater Permit NEV2007503). Scaling these values to an output of 1,590 MW would result in a collection grid area of approximately 8,700 acres. Additional footprint would be expected to be required for support activities such as administration, maintenance, and evaporation ponds. This FEIS has been updated to incorporate the projected footprint of a 1,590-MW thermal solar collection grid.

Also, see the response to Comment G1-28.

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G6-6 (cont.) requirements. We take further exception to the slanted arguments of the DEIS against solar on the basis of its "footprint". First, the footprint quoted here, roughly 20,000 acres to produce 1.6 GW of power, is surely exaggerated in comparison to the footprint extrapolated from the concentrated solar facility now operating in southern Nevada. The DEIS needs to revisit the estimates of the solar footprint. Second, this footprint estimate entirely ignores the footprint required for the coal extraction to feed the coal-fired plant over its lifetime. This is undoubtedly thousands of acres and must be properly estimated to make a valid comparison. The fact that the coal extraction happens at another site is no reason to ignore it as an environmental impact to be treated in this DEIS.

G6-7 3. Section 2.5.1.1.4 Geothermal. This section starts curiously by claiming that it "is not available in sufficient capacity in White Pine County." While we agree with this statement, we question why it is assumed that the power capacity needs to be located in White Pine County. The federal government manages millions of acres elsewhere in Nevada where geothermal energy is deemed to be abundant. Development of those resources, most likely spread over many sites, should be able to supply the capacity equal to the project proposed here in White Pine County. Again, arguments for this project cannot properly be made on the basis of the best interests of White Pine County -- this is not acceptable in the case of federal public lands.

4. Entirely left out of the analysis here is the possibility of using alternative energy sources such as wind or solar to drive a pumping mechanism to move water upgrade to storage ponds (so-called "pumped storage hydroelectricity"). This could provide "baseload" capacity by charging the system during hours when wind or solar energy was prime and then releasing this energy (hydropower) during non-prime hours. This is proven technology. with many applications already in the United States. Such a "hybrid" renewable energy system would, conveniently, use the White Pine County water rights which are put forth as a criterion in the DEIS. We offer this omission of a "hybrid" system as an example of how the DEIS is deficient in considering options to the conventional fossil-fuel plant thinking. G6-8

G6-9 We question the basis for removal of consideration of energy conservation and efficiency as an alternative, as discussed in Section 2.5.2 of this DEIS. It simply defies the intent of "Environmental Impact Statement" if alternatives that has little or no environmental impact are not considered in the decision making. We believe that it is appropriate, now more than ever, to consider all alternatives to a coal-technology plant which would produce massive amounts of greenhouse gases over its lifetime.

End of procedural objections.

G6-10 On very basic premises, we object to ignoring the generation of greenhouse gases (primarily CO_2) in this DEIS. We do understand that the EPA at this moment in time has no regulatory guidance on this issue and that the DEIS can therefore, in principle, correctly ignore the issue. However, we believe that this DEIS arrives only a short time before such guidance will be issued. Our belief rests on 1) the very recent IPCC issuance of Climate Change 2007, which makes the case that "it is likely that anthropogenic warming has had a discernible influence on many physical and biological systems"; 2) on the very recent U. S. Supreme Court judgement that the EPA can and should be controlling greenhouse gases; and on the very recent commitments from the United States President (G8 Summit Meeting, June 7, 2007) to reduce

G6-7 An important component of the project purpose and need is the ability to provide economic benefit to White Pine County. An array of geothermal plants scattered around the state would not satisfy this component of the purpose and need. In addition, there is currently no plan for Nevada or the region to develop 1,500 MW of geothermal resources in the applicable time period, and the geothermal resources that are planned for development are taken into account in the projections of need for additional baseload capacity. An additional problem with the scattered array approach is that this configuration would not be expected to be able to support the transmission infrastructure that would be needed to distribute the power to the western United States. Conversely, the proposed White Pine Energy Station coal-fired plant would be located in White Pine County and would provide economic benefits as documented in various sections of this FEIS. Additionally, the proposed Station would contribute to the feasibility of a transmission line that would distribute the power to the western United States. This transmission line would also facilitate the development of intermittent resources (for example, wind and solar) in the area that would not be viable without the transmission infrastructure. See, generally, the response to Comment G1-28.

G6-8 There is no assurance that the commenter's proposed "pumped storage hydroelectricity" would be capable of providing true baseload electricity. For example, it is unknown whether the alternative energy source (wind or solar) would have sufficient excess capacity to pump water upgradient and provide for non-prime hours. Because baseload energy is intended to meet the constant demand for power that exists 24 hours a day, this type of uncertain reliability is not acceptable. Additionally, the relatively low energy density of pumped storage systems requires either a very large body of water or a large variation in height. For example, 1,000 kilograms of water (1 cubic meter) at the top of a 100-meter tower has a potential energy of only about 0.273 kWh. The only way to store a significant amount of energy is by having a large body of water located on a hill relatively near, but as high as possible above, a second body of water. Because of the topography in the area, it is not expected that a sufficient upgradient or downgradient storage space (that is, two very large reservoirs) would be available to supply such a system, and the amount of surface water that would be required would be enormous. Therefore, a pumped storage hydroelectricity system is not considered a reasonable and feasible alternative to the proposed project.

G6-9 While energy efficiency and conservation measures can offset some electrical demand, these measures alone will not meet the overall need for electricity in the future. As discussed in detail in the responses to Comment F1-10 by the EPA, G1-28, and Comment G6-1, there is a demonstrated need for new baseload power in the western United States, even when reasonably expected conservation and efficiency programs are taken into account. Because a need for new baseload power exists regardless of conservation or energy efficiency programs, new baseload power generation is a valid project purpose and need, and conservation and energy efficiency is not considered a reasonable alternative for meeting that need.

G6-10 Greenhouse gas emissions were addressed in the DEIS. A discussion of greenhouse gas emissions, including the projected carbon dioxide emission rate for the proposed Station, was included in DEIS Section 3.6.1.1.10 and 4.6.1.3.9.

Further analyses of climate change have been added to this FEIS. Section 3.6.2, *Climate Change,* has been revised to include a broad discussion of the currently observed impacts to resources associated with climate change. Section 4.6.2, *Climate Change*, has been added to this FEIS to describe projected future changes in climate, along with discussions of the various factors thought to influence climate. Section 4.19.3.6.1, *Air Quality*, has been revised to discuss the potential incremental cumulative impacts of emission sources on climate change. Finally, Appendix M, *Understanding and Evaluating Climate Change,* has been added to this FEIS. The potential cumulative impacts of all global carbon dioxide emissions are summarized in Section 4.19.3.6.1, *Air Quality,* and in Appendix M, *Understanding and Evaluating Climate Change,* of this FEIS.

As shown in Appendix M, because of the low level of carbon dioxide emissions from the proposed White Pine Energy Station compared to the total emissions in the global carbon cycle (carbon dioxide emissions from the Station would represent 0.001 percent (1 one-thousandth of 1 percent) of the total global carbon dioxide emissions) and the uncertainty in the global estimates of the relevant parameters, it is not possible to meaningfully predict any climate impacts that would be expected from the White Pine Energy Station (or several new plants considered together). This uncertainty is increased by an inability to predict the course and effectiveness of the technological, political, regulatory, and business responses to climate change over the coming decades, which appears to be developing with increased rapidity in response to the findings of the Intergovernmental Panel on Climate Change (IPCC) and other evidence of changing climate. Therefore, it is not possible to quantify any direct, indirect, or cumulative environmental impacts associated with carbon dioxide emissions from the White Pine Energy Station.

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greenhouse gas emissions over the long term. Clearly, this issue has gained widespread recognition across the world and within the United States, and U. S. governmental policy changes will surely follow soon. Therefore, we believe that the preferred alternative amounts to sneaking through the closing gate on greenhouse gas emissions and that the "No Action" alternative is very much in line with current thinking and future policy. We therefore suggest that a "hold" be placed on future generation of greenhouse gases such as will result with a decision for the preferred alternative. Taking the "No Action" alternative is reasonable and judicious at this time.

Respectfully yours,

David von Seggern

David von Seggern, Chair

Conservation Committee, Great Basin Group of the Sierra Club

No comments on the White Pine Energy Station DEIS were delineated for the part of the letter shown on the facing page.

Bureau of Land Management
JUN 21 2007
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White Pine Energy Station DEIS

In response to the proposed White Pine Energy Station DEIS, Utah Physicians for a Healthy Environment and the Wasatch Clean Air Coalition endorse the comments of the Western Resource Advocates, et al, and offers these additional comments: **We would like these to be added to the public record:**

G7-1 NEPA requires consideration of ALL FEASIBLE ALTERNATIVES. The scope of the DEIS alternatives is limited to one alternative site and the statutory no action alternatives. Other alternatives to the proposed project would also meet the objectives of electricity in the western US and economic development in White Pine County and should have been considered. General statements in ES.2.4 do not satisfy NEPA requirements. The U.S. Department of Energy has invested millions of dollars of public money into development of clean coal technologies. A formal analysis is needed before rejecting these emerging technologies as infeasible. The DEIS clearly states in section 3.6 and 4.6 that there are potential excedences of visibility standards in Jarbridge Wilderness and Zion N.P. This is unacceptable and design alternatives need to be considered.

G7-2 We feel that the **WPES** poses a serious threat to the health of Utah residents, especially the one million citizens along the Wasatch front communities of Salt Lake City, Ogden and Provo greater metropolitan areas. This is approximately 150 miles from **WPES**. The cumulative impacts of **WPES** along with several other proposed coal fired power plants were analyzed (Newmont Gold Coal –fired Power Plant, Toquop coal fired pp, Ely Energy Center); but there is no mention anywhere in the DEIS how the health and well-being of Utah residents would be affected by power plant emissions.

G7-3 The analysis of air pollution is not adequate: The DEIS does not consider PM2.5 even though a federal PM2.5 standard is now in effect and PM2.5 is a criteria pollutant. It is likely that most of the PM emissions from the plant operation will be PM2.5 which travels long distances. PM2.5 limits are lower than PM10 limits but plant PM impacts were compared only to the PM10 standard. The DEIS does not consider coarse PM (2.5-10 micron) separately. Coarse PM is likely to be regulated by EPA during the plant life time.

G7-4 The DEIS states that "Dispersion modeling demonstrates that acid deposition and visibility standards would be exceeded at Great Basin NP and Ruby Lake NWR. The prevailing winds at the Station site are from the south-southwest, which indicates that air-borne pollutants that could contribute to visibility degradation would travel toward the Tooele location more frequently than the Milford-Delta location." Again, what about the *Wasatch front communities*? Why weren't they included in the dispersion modeling? They are only a short distance from Tooele.

G7-1 See, generally, the response to Comment G1-28. The DEIS and this FEIS consider a reasonable range of alternatives to the proposed project. Section ES.2.4 of the Executive Summary of the DEIS (and of this FEIS) is a summary section only, and the feasibility of the various potential alternatives is documented in more detail in Section 2.5, *Alternatives Considered but Eliminated from Detailed Evaluation*. Those alternatives that were not reasonable or did not meet the project purpose and need were eliminated from detailed consideration

Regarding the visibility comments, Section 3.6.1, *Air Quality*, of the DEIS does not conclude that there will be regulatory exceedances. Although Section 4.6.1.3.8, *Class I Area Dispersion Modeling Results*, of the DEIS discussed exceedances of visibility criteria for Zion National Park and Jarbidge Wilderness Area, these criteria are not limits; rather, they are evaluation criteria above which the Federal Land Managers (in this case the National Park Service and USDA Forest Service) are instructed by their guidance to evaluate the frequency, magnitude, and duration of the impacts. As part of the air permitting process for the proposed White Pine Energy Station, Nevada Division of Environmental Protection-Bureau of Air Pollution Control (NDEP-BAPC) provided the Federal Land Managers with copies of the air permit application (including visibility analyses) and the draft air permit for the White Pine Energy Station. Since the writing of the DEIS, the comment period for the draft air permit for the Station has closed. Neither of the Federal Land Managers determined that the Station would create adverse impacts to air quality related values at the parks; therefore, impacts on Zion National Park and Jarbidge Wilderness Area are not considered adverse.

G7-2 A definition for the National Ambient Air Quality Standards (NAAQS) has been included in Section 3.6.1.1, *Background Data,* of this FEIS. The new text states that the Clean Air Act requires the U.S. Environmental Protection Agency (EPA) to set NAAQS for pollutants considered harmful to public health and the environment. The Clean Air Act established two types of national air quality standards. Primary standards set limits to protect public health, including the health of "sensitive" populations (for example, asthmatics, children, and the elderly) against the effects of the pollutants noted below. Secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings. The EPA has established NAAQS for six principal pollutants, which are called "criteria" pollutants and include particulate matter, carbon monoxide, ozone, sulfur dioxide, nitrogen dioxide, and lead." Based on these standards and the analyses conducted in Section 4.6.1.3.5, *Class II Area Dispersion Modeling Results*) and the revised Section 4.19.3.6.1, *Air Quality*, of this FEIS, which apply to all ambient air including air in Utah, cumulative impacts resulting from all the projects are not expected to exceed the NAAQS. Therefore, the health and well-being of Utah residents is not expected to be negatively impacted. Additionally, Appendix L, *Cumulative Analysis for Air Quality,* has been added to this FEIS.

G7-3 The DEIS and this FEIS include a comprehensive analysis of PM_{10} impacts, which demonstrates that predicted PM_{10} impacts are below the applicable NAAQS and PSD increment standards. With respect to fine particulate ($PM_{2.5}$), the Station's PSD air quality analysis relied on the PM_{10} analysis, consistent with EPA guidance and rulemaking, to provide a basis for demonstrating compliance with $PM_{2.5}$ requirements. Therefore, the evaluation of PM_{10} as a surrogate for $PM_{2.5}$ is consistent with the applicable new source review regulations and EPA guidance for demonstrating compliance with $PM_{2.5}$ requirements under the Clean Air Act. An additional evaluation has been included in Sections 4.6.1.3.5 and 4.19.3.6.1 of this FEIS to compare predicted $PM_{2.5}$ impacts to the $PM_{2.5}$ NAAQS. As documented in these sections, predicted $PM_{2.5}$ concentrations are less than the applicable NAAQS.

G7-4 It appears that this commenter is referencing Section 4.6.1.3.5, *Class II Area Dispersion Modeling Results,* of the DEIS. The situations described in this comment are not accurate. There is no visibility standard for Class II areas, which included Great Basin National Park and Ruby Lake National Wildlife Refuge; therefore, a visibility standard cannot be exceeded. Additional analyses have been conducted on cumulative impacts in this FEIS (see revised Section 4.19.3.6.1, *Air Quality*), which found that no adverse effects are expected. This includes impacts from sulfur and nitrogen deposition.

In response to the concern regarding air quality impacts to communities on the Wasatch Front Range, cumulative impacts resulting from the proposed White Pine Energy Station, existing sources, and anticipated future projects are not expected to create any violation of the NAAQS, which were established to protect public health and the environment. See FEIS Section 4.19.3.6.1 and Appendix L. These air quality analysis results apply to the Wasatch Front, along with Tooele and all other areas of Utah. Also see the response to Comment G7-2.

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The DEIS states that there will be Sulfur dioxide emissions of 6,108 tons per year and Nitrogen oxides emissions of 4,761 tons per year. Sulfur dioxide and nitrogen oxides react with other substances in the air to form acids, which fall to earth as rain, fog, snow, or dry particles. Some may be carried by the wind for hundreds of miles. Acid rain damages forests and crops, changes the makeup of soil, and makes lakes and streams acidic and unsuitable for fish. Sulfur dioxide also accelerates the decay of building materials and paints, including irreplaceable monuments, statues, and sculptures. **We the citizens of Utah don't desire to be in a downwind situation with respect to Nevada air pollution.**

According to Jackson Marufu, PhD Meteorologist in GEOPHYSICAL *RESEARCH LETTERS, VOL. 31,* L13106, doi:10.1029/2004GL019771, 2004

"The August 2003 North American electrical blackout provided a unique opportunity to quantify directly the contribution of power plants to regional haze and Ozone. Airborne observations over central Pennsylvania on August 15, 2003, 24 h into the blackout, revealed large reductions in SO2 (>90%), O3(50%), and light scattered by particles(70%) relative to measurements outside the blackout region and over the same location when power plants were operating normally and the visual range increased by >40 km. This clean air benefit was realized over much of the eastern U.S. Reported SO2 and NOx emissions from upwind power plants were down to 34 and 20% of normal, respectively. The improvement in air quality provides evidence that transported emissions from power plants hundreds of km upwind play a dominant role in regional haze and Ozone production."

It seems that Nevada is considering approving Newmont Gold Coal–fired Power Plant, Toquop Coal fired PP, Ely Energy Center and White Pine. Any of these coal fired PP and certainly their combined effect would have a deleterious influence on the health of a million people living along the Wasatch front, which is likely to be non attainment for Pm2.5. It was claimed that White Pine would not be a significant source of ozone based on the ratio of nitric oxide to organic emissions from the plant. This ignores that interaction of plant-emitted NO with organics in smoke from regional forest fires.

Section 3.6.1.1.2 Forest fire emissions contribute significantly to ozone formation in the rural west and the interaction of the plant emissions with regional smoke should be considered.

The lack of on-site ozone monitoring is a serious omission.

G7-5 The Table 3.6-1 data indicate that ozone at Great Basin NP was at the 8-hr ozone standard in 2002 and nearly every year has reached greater than 95% of the standard. This suggests that any additional ozone precursor sources could result in exceedances at the most impacted point. This is inconsistent with PSD rules. Summer background ozone in the west is already close to the new proposed standard. In summary The DEIS has no modeling data for dispersion of air pollutants and their effect on one million residents that are 150 miles away from proposed plant. These air pollutants have been associated with sudden death, asthma, coronary disease, chronic airway obstruction, lung cancer, prematurity and low birth weight infants. Given that this coal fired plant and others proposed will affect the health and well

G7-5 While the commenter states that "any additional ozone precursor sources could result in exceedances at the most impacted point," it should be clarified that ozone formation chemistry is complex, and under certain conditions, reductions in the concentration of an ozone precursor may cause increased ozone concentrations.

The monitored concentration appropriate for comparison with the 8-hour ozone standard is a 3-year average. Table 3.6-1 in this FEIS has been edited to better reflect the monitored data and the values to be compared with the standard. Additional information on ozone, the analysis conducted, and the results have been included in FEIS Section 3.6.1.1.2, *Ozone,* Section 4.19.3.6.1, *Air Quality*, and Attachment 2 of Appendix L, *Cumulative Analysis for Air Quality,* of this FEIS.

The NDEP-BAPC reviewed and approved White Pine Energy Associates' (WPEA's) PSD air permit application, including the results of the ozone analysis based on the empirical kinetic modeling approach (EKMA) methodology (which was the same methodology used in the DEIS and FEIS ozone analysis). Therefore, the ozone analysis was not inconsistent with PSD rules. The air quality analysis for the White Pine Energy Station shows that the Station is not expected to cause or contribute to any violation of the NAAQS for any pollutant; thus, no adverse health effects are expected for any residents of the region, including residents 150 miles away.

being of Utah citizens, we feel that added health care costs to Utah residents be included in this DEIS as part of cost benefit analysis.

Toxicity from Mercury is a major concern to the citizens of Utah.

G7-6 *In Section* 3.6.1.1.9 The DEIS does not evaluate *mercury* adequately. No background monitoring for *mercury* was done. This is a serious omission. Although DEIS states that background concentrations are assumed negligible, this is inconsistent with recent evidence of widespread *mercury* contamination of water bodies in NV, UT. ,and across the United States. Forty five states have issued advisories for not eating fish that contain elevated levels of mercury caught in certain lakes, streams and other bodies.

Coal-fired power plants are the largest source of uncontrolled *mercury* emissions, generating 48 tons of mercury emissions per year nationwide. Nearly all of the coal burned in the United States is contaminated with trace levels of *mercury*. Most of this *mercury* falls back down to the earth in rainwater, accumulating in sediment and plants, and then concentrating up the food chain in fish, other wildlife and ultimately, in people. When power plants burn coal, mercury can deposit onto land or water bodies within 50 to 500 miles of its source (oxidized and particulate-bound mercury) or be transported long distances within air masses. Nationally, EPA estimates that 33 percent of total U.S. mercury deposition is from U.S. power plants. It is important to note that this estimate of national deposition obscures the impact of local sources on mercury hot spots, or areas with high levels of mercury deposition.

Mercury* deposition is already a problem in Utah.** *Mercury* deposits where ground level ozone is high and salt is prevalent, conditions common at the Great Salt Lake. The U.S.G.S. and Fish and Wildlife Service researchers studying the Great Salt Lake have found alarmingly high levels of *mercury* in the water and in birds that feeds on the lake's brine shrimp. Concentrations of methyl *mercury,* the element's organic and most poisonous form, were some of the highest ever found in an inland waterway, exceeding 25 nanograms per liter of ***Great Salt Lake water. For comparison, fish consumption warnings in the Florida Everglades were posted when water there was found to have 1 nanogram per liter. People swim in the GSL . Utah is the only state with mercury advisories for waterfowl. In 2005 Northern Shoveler and Cinnamon Teal advisories were issued; in 2006, the Common Goldeneye was added to the list.

The Utah Department of Environmental Quality has issued several rounds of advisories for elevated levels of mercury in trout. Rivers and lakes in Northern and Southern Utah are already contaminated with mercury, prompting warnings about eating these fish.

All of the fish samples that the EPA tested from the nation's lakes and rivers in the 1990s were contaminated with mercury. The mean *mercury* concentration of the 520 fish samples was 0.22 ppm, or nearly twice EPA's safe limit for women of average weight who eat fish twice a week. 100% of fish samples collected in Nevada exceeded safe *mercury* limit for women. Carson River and Lahontin Reservoir in Nevada currently have *mercury* advisories.

G7-6 A new Section 3.6.1.1.7, *Mercury*, has been added to this FEIS that discusses mercury, mercury emissions trends in Nevada, and existing mercury levels in Nevada. A new Section 4.6.1.1.6, *Mercury*, also has been added to this FEIS to more fully discuss the impacts of airborne mercury to surface waters and associated biota. Additional information is presented in Appendix L, *Cumulative Analysis for Air Quality,* that has been added to this FEIS. See the response to comment G1-2 for further discussion of mercury and predicted mercury impacts.

In Feb, 2004, The EPA's top *mercury* scientist has found that 630,000 American children, one in every six, are born each year with potentially unsafe levels of *mercury* in their blood.

In March 2001 the Centers for Disease Control and Prevention issued a report on mercury. While "average" blood mercury levels among women were not of concern, the data indicates that in fully 10 percent of American women (roughly 7 million women of childbearing age) *mercury* levels were above the level that may put a fetus at risk for adverse nervous system effects. These women surely don't need more mercury in their system, least of all if they are already pregnant or nursing.

Additional research, reported in 2004 by the EPA, concluded that unborn children have much higher levels of mercury in their blood than their mothers do. As a result of these findings, EPA had to double the number of babies it estimated were born each year with unsafe levels of mercury to 630,000.

Mercury is also currently being investigated as a possible contributor to autism. The incidence of autism has increased 10-fold from 6 in 10,000 in the 1980s (Blaxill 2004), to about 60 in 10,000 today. In the longer term, the solution is to halt mercury pollution from coal-burning power plants and other sources so the contamination of fish is avoided in the first place.

In March, 2005 attorney generals from nine states filed a lawsuit challenging a federal Environmental Protection Agency (EPA) rule that they allege fails to protect the public from harmful *mercury* emissions from coal-fired power plants, which they say pose a grave threat to the health of children. The suit challenged an EPA rule that removed power plants from the list of pollution sources subject to stringent pollution controls under the federal Clean Air Act.

Because **there is no data whatsoever on cumulative impacts from mercury emissions at White Pine and other proposed coal fired power plants and from the large Nevada gold mines,** there is good reason to assume that the State of Nevada and its Dept of Environmental Protection would be vulnerable to similar litigation if these coal powered plants were approved.

Global warming

G7-7 Coal-fired power plants are a major source of the carbon dioxide emissions that are causing climate change which is threatening the very existence of our planet. In addition to White Pine, there are **cumulative impacts** from other plants-Newmont Gold Coal –fired Power Plant, Toquop coal fired pp, Ely Energy Center. The DEIS didn't consider that 14 coal fired pp are being considered for the Southwest. Carbon dioxide emissions for these plants would total 70 million tons each year, more than a 40% increase over the region's current burden from the same sector. White Pine's projected CO2 emissions are 5,500,000 tons per year. Ely Energy Center is projected to emit 12,600,000 tons per year of CO2. This would be the largest source of greenhouse gas emissions among the new coal fired pp. If the more than a dozen coal-fired power plants planned for Arizona, Colorado, Nevada, New Mexico and Utah begin operating, they would emit global warming pollution equivalent to the tailpipe exhaust of 12.5 million cars driving around the Southwest for a year. New plants, if built

G7-7 Further analyses of climate change have been added to this FEIS. Section 3.6.2, *Climate Change,* includes a broad discussion of the currently observed impacts to resources associated with climate change. Section 4.6.2, *Climate Change*, has been added to this FEIS to describe projected future changes in climate, along with discussions of the various factors thought to influence climate. Section 4.19.3.6.1, *Air Quality*, has been revised to discuss the potential incremental cumulative impacts of emission sources on climate change. Finally, Appendix M, *Understanding and Evaluating Climate Change,* has been added to this FEIS. The potential cumulative impacts of all global carbon dioxide emissions are summarized in Section 4.19.3.6.1, *Air Quality,* and in Appendix M, *Understanding and Evaluating Climate Change,* of this FEIS.

with conventional technology, will continue to pollute the atmosphere for decades. The White Pine Plant, if built, will be a polluting "dinosaur" for many years to come.

Coal is not the only local resource that can be used to meet the Southwest's growing power demand. The region is rich in renewable resources including solar, wind, biomass and geothermal energy sources. Energy efficiency is perhaps the most overlooked energy resource. The Southwest Energy Efficiency Project has concluded that available and proven energy-efficiency measures that could be implemented in the next 15 years could entirely eliminate the need for twenty-six 500-MW power plants in six western states.

California law precludes California cities and power companies from buying electricity from new coal plants that fail to address global warming. In April 2007 the Supreme Court ruled that the EPA violated the Clean Air Act because of its refusal to regulate greenhouse gases with regard to new vehicle emission standards.

In summary, air pollutants from White Pine have been associated with sudden death, asthma, coronary disease, chronic airway obstruction, lung cancer, prematurity and low birth weight infants. Given that this coal fired plant and others proposed will affect the health and well
G7-8 being of Utah citizens, we feel that added health care costs to Utah residents should be included in this DEIS as part of cost benefit analysis.

G7-9 Because of many reasons outlined above the DEIS is completely inadequate in addressing air pollution, added health care costs, global warming, and mercury toxicity.
We, the citizens of Utah, don't desire to be the recipient of air pollution from Nevada.
Copies of this letter have been sent to the Nevada Div of Env. Protection, Senator Harry Reid, Nevada Gov Jim Gibbons, Utah Gov Jon Huntsman Jr.

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G7-8 As a result of this and other comments, Section 4.19.3.6.1, *Air Quality*, has been revised to expand the cumulative analysis. As discussed in this section, the White Pine Energy Station is not expected to cause or contribute to any violations of the NAAQS, which were established to protect public health and the environment. Therefore, no added health care costs would be expected for Utah or any other state.

G7-9 See the responses to Comments G7-2 through G7-8.

Western Watersheds Project

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Ely, NV

Working to protect and restore Western Watersheds

June 4, 2007

RE: White Pine Energy Station Project DEIS

To: Mr. Jeffrey A. Weeks

Dear BLM,

Here are comments of Western Watersheds Project on the proposed White Pine Energy Center DEIS and many associated unassessed activities. Please apply them to all parts of the process, as well as the process for the neighboring and inter-related Ely Energy Center.

G8-1 BLM must fully reveal and present to the public the entire development of SWIP. Months ago, in trying to comment on the connected White Pine Energy Center, we contacted Idaho BLM (who your Ely staff said would have info) and have so far been unable to obtain any maps or information. This is outrageous. These are supposed to be public environmental review and disclosure processes, and there are many connected, linked and foreseeable powerline and development corridors being created and/or constructed, with processes purposefully segmented by power companies and federal agencies.

How can an agency produce a DEIS (and also have a White Pine scoping period) that does not include consideration of the full layout and effects of a massive new energy corridor, that may be linked to Northern Lights, DOE, or other corridors, and not provide the public with sufficient information to understand what is going on? INCUDING THE ENTIRE REGIONAL PATH OF A UTILITY CORRIDOR IT HAS TWICE "RE-AUTHORIZED" a ready-to-lapse permit for?

We are deeply concerned about the impacts of these and other coal-fired power plants, power line corridors/rights-of-way, and aquifer de-watering proposal on the entire region.

Idaho is currently receiving unprecedented amounts of mercury and other air pollution from Nevada mining and other activities. Nevada has carved its airspace up into meaningless small areas in order to avoid necessary regulation of pollution – and to allow mining, industry and now coal-fired power plants to spew pollutants across the region.

G8-1 The Southwest Intertie Project (SWIP) was included and analyzed both as a connected action and a cumulative project in the DEIS and this FEIS. Background information on the SWIP is presented in the description of connected actions in Section 2.2.3.7, *Connected Actions*. That section summarizes SWIP project history and description, preparation of an EIS for the SWIP per National Environmental Policy Act (NEPA) requirements by the BLM in 1993, issuance of a Record of Decision for the SWIP by the BLM in 1994, references text and maps on that portion of the SWIP that would be interconnected with the proposed White Pine Energy Station project, and references a map showing the locations of the SWIP corridor and other projects considered in the cumulative impacts analysis. Potential impacts of the entire SWIP in Idaho and Nevada are summarized in the connected action discussions for each resource area in Sections 4.2 through 4.18 of the DEIS and this FEIS. Those discussions focus on the potential for connected action impacts in areas where the SWIP corridor overlaps or interconnects with the White Pine Energy Station project area, and they have been included in the discussion of cumulative impacts in Section 4.19, *Cumulative Impacts*, as well. SWIP impacts were summarized from the impact analyses in the SWIP FEIS prepared by the BLM in 1993. In addition to the connected actions analysis, Section 4.19 of the White Pine Energy Station DEIS and this FEIS describes the potential cumulative effects of the SWIP and other projects considered in the cumulative effects analysis on all of the White Pine Energy Station project area resources. Quantitative impact information on the SWIP has been included in this FEIS in the connected actions and cumulative impacts analyses where quantitative information is available in the SWIP FEIS that specifically applies to the White Pine Energy Station analysis area for a given resource.

G8-2 There is little to no scientific basis for the small airsheds. BLM must provide much-expanded and science-based analysis of the REAL air movement patterns here, during all seasons of the year, and also overlay pollution form outside the region – such as from California and increasingly from China. The latter is responsible for increasing regional haze and contamination. How will the pollutants and the visual effects of the Ely plants (and other foreseeable) in combination – be expected to affect air quality (and human health and pollution "fallout" into surface waters or onto vegetation)over the entire life of the project?

On top of the horrendous amounts of mercury already released into the air that are going to be polluting regional waters for a very long time, gold mine gold ore roasting operations will foreseeably expand in the future as gold continues to skyrocket. There is already a Nevada coal-fired power plat at Valmy that is polluting air. There are mining and cement operations, and now foreseeable new and expanded cement processors. The regional source of mercury must be fully presented –as part of this process. The potential costs of removing mercury that has fallen as pollution into waters, or will foreseeably fall as pollution, must be fully revealed.

How will such pollutants (including those associated with these coal plants) affect or alter local or regional air patterns?

G8-3 How will pollutants from Oil and Gas - if the millions of acres that are leased are developed – affect air quality, and what will be the interaction with/synergistic effects, and cumulative effects, of power plant development on top of all this development. Water wells are also drilled with oil and gas exploration or development. Battle Mountain BLM and Elko BLM have just prepared large OG leasing EAs. Elko is offering (has already sold?) leases just to the north of the project area. What will be both the demand on aquifers as well as pollutants released, and effects of wildlife, recreation, etc. if all the OG development, on top of the coal plant development, on top of Las Vegas aquifer-de-watering and water export schemes were to occur? Where are all OG leases in Nevada, and who holds them? How much of a water demand – or how significant could impacts to water tables be –from other and associated effects of OG leasing and explo – if the leases held were developed? Please also consider the effects of development of geothermal leasing, as well.

G8-4 What air pollutants are being released by the military in the many actions occurring at Nellis? Fort example, this winter there was an EA on-line at the Langley site describing increased use of Depleted Uranium. Will pollutants (including potentially hazardous substances blown by the wind from Nellis bind with, or interact with, the pollutants from these coal plants?

G8-5 There is a SEPARATE power plant enterprise being planned for Ely (White Pine), and one for Toquop, and perhaps another in Butte Valley and others elsewhere in the wings, including plants long-sought by the gold mines (to fuel the gold roasting and mercury polluting). The EIS fails to fully assess the impacts and demands on exceedingly scarce resources of all the industrialization of the region that is underway, or how the various

G8-2 The airsheds that have been created by the Nevada Division of Environmental Protection (NDEP) do not decrease the validity of the air quality analysis presented in the DEIS. The Class II air quality dispersion modeling domain (the extent of the area analyzed) was determined based on the distance from the proposed White Pine Energy Station location to the farthest receptor, where a modeled ambient concentration exceeded the "significance levels" established under the U.S. Environmental Protection Agency's (EPA's) PSD guidance. A new Figure 3.6-1 has been added to this FEIS to show the modeling study areas (for both the AERMOD and CALPUFF analyses).

The meteorological data sets utilized in the air quality analysis for the White Pine Energy Station reflect the actual air movement patterns as measured for a full year at the proposed site (for the near-field analysis) and over three years at several meteorological monitoring stations in the region (for the long-range transport analysis). Because the air quality analysis utilized a full year of ambient pollutant monitoring data collected onsite at the proposed Station location, pollution from outside the region (for example, California and China) was accounted for in the analysis.

As a result of this and other comments, a revised cumulative analysis has been added to Section 4.19.3.6.1, *Air Quality*, of this FEIS. The analysis evaluates the air quality, deposition, and visibility effects that are expected from the White Pine Energy Station, existing sources, and anticipated future sources. The results of this analysis show that the cumulative effects will meet all regulatory standards for public health and the environment.

G8-3 Although the potential for oil and gas development in Steptoe Valley is considered moderate to high (see Section 3.2.3 in the DEIS and this FEIS), no specific oil and gas exploration activities are currently known to be planned for Steptoe Valley. Accordingly, the analysis of potential cumulative impacts associated with either the Proposed Action or Alternative 1 does not take into account speculative activities. As an example, the cumulative air quality analysis in Section 4.19.3.6.1, *Air Quality,* and Appendix L, *Cumulative Analysis for Air Quality,* of this FEIS evaluates the reasonably expected future actions in the region, including the Ely Energy Center, Toquop Energy Power Plant, Newmont Gold Power Plant, Intermountain Power Project Phase III, and the Nevco-Sevier Power Plant. The fact that the BLM is offering oil and gas lease sales in the Battle Mountain and Elko areas does not make large scale oil and gas development reasonably foreseeable, particularly given the lack of development that has occurred in Nevada from past sales and exploration. The development of all the oil and gas leases in the region is speculative at best, is not a reasonably expected future action, and is therefore not required to be included in the cumulative impact analysis in this FEIS.

G8-4 It is assumed the commenter is referencing the September 2006 Environmental Assessment for increased depleted uranium use at the Nevada Test and Training Range (NTTR) prepared for Nellis Air Force Base. The proposed White Pine Energy Station site location is approximately 275 kilometers away from the NTTR.

As shown in the EA, total NTTR criteria pollutant emissions are approximately 50 tons per year (see Table 3-3 of the EA). Because of the distance to the NTTR and the low emissions from the NTTR, criteria pollutant emissions from that facility would not be expected to have more than a negligible impact in the vicinity of the White Pine Energy Station, and the NTTR would be screened out of any cumulative criteria pollutant modeling analysis using the "20D rule" or another similar screening method. Regarding to depleted uranium oxides, the EA shows that maximum air quality impacts would be 20 to 25 times lower than the applicable standards at distances 17 to 19 kilometers from the emissions source (see Table 3-4 of the EA). In the vicinity of the proposed White Pine energy Station (approximately 275 kilometers from the NNTR), depleted uranium oxide impacts because of the NNTR would be expected to be significantly lower than those values reported in the EA, which were well below the applicable standards. Because the White Pine Energy Station would not emit depleted uranium oxides and the emissions from the Station are not known to interact with depleted uranium oxides, no cumulative effects from the White Pine Energy Station and the NTTR would be expected.

G8-5 The size of the cumulative impact analysis area for each resource area varies according to the nature of the resource, the geographic area in which impacts from the proposed White Pine Energy Station would occur, and the potential for overlapping cumulative effects of the White Pine Energy Station with other projects located in the analysis area. The cumulative impact analysis area for each resource was specifically defined for the proposed White Pine Energy Station. Projects located outside the analysis area for a given resource would not contribute to cumulative impacts when combined with the effects of the proposed White Pine Energy Station and, therefore, were not included in the cumulative impact analysis.

As discussed for ground water resources in the response to Comment G2-28, the anticipated ground water level declines in Steptoe Valley as a result of either the Proposed Action or Alternative 1 would not affect the amount or rate of ground water flow from Steptoe Valley to adjacent valleys because they are not hydrologically connected and, therefore, would not affect springs or surface water features in Snake Valley, Goshute Valley, or Spring Valley (see the response to comment G2-28). For this reason, the Kane Springs Valley Groundwater Development Project and the Lincoln County Land Act Groundwater Development Project were not included in the cumulative impacts analysis for ground water resources. The Clark, Lincoln, and White Pine Counties Groundwater Development Project was analyzed for potential cumulative impacts, although analysis showed there would be no cumulative effects based on results of the Draft BARCAS Report regarding lack of hydrological connectivity with ground water that would be used for the White Pine Energy Station. For air quality, the cumulative effects analysis area was defined to be much larger than that for ground water resources and included analysis of other coal-fired projects, such as the Ely Energy Center, Toquop Energy Coal-fired Power Plant, Newmont Gold Coal-fired Power Plant, and Intermountain Power Project Phase III Coal-fired Plant. Section 4.19, *Cumulative Impacts,* of this FEIS considers the effects of all past, present, and reasonably foreseeable actions with the potential to result in cumulative impacts when combined with the potential effects of the proposed White Pine Energy Station.

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G8-5 (cont.) powerlines, well fields, water pipelines, land disposals and sales, etc. may be related to all of this development.

There is a critical water shortage in this part of the Great Basin, and the fact that recent development and quid pro quo wilderness bills mandated water pipeline corridors to tap into Great Basin aquifers in some of the same areas where the powerline infrastructure would occur, and the potential linkages between water and power or other corridors associated with these bills and land disposals.

My jaw dropped when I examined EEC Map Figure 1 and I saw a water pipeline extending north towards Lages Junction. Just how much water is at this very dry site? We are greatly concerned that the White Pine Map does not show the entire array of wellfields and location of wells that will be drilled. G8-6

G8-7 Is a railroad spur (White Pine) in any way associated with more power development, or nuclear or other waste and what is the route?

G8-8 Please inform us who commissioned the various Consulting and all other studies, and potential biases, and the parameter and constraints. Just because "consulting" those studies picked these sites (rock bottom wages, clean air to pollute, some local people willing to do almost anything to the land) does not mean that the REST of the American people supports these power plant locations – as the are extraordinarily wasteful of energy and resources – and maximize destruction of public wild land, and important and sensitive species habitats.

Nevada is going the dead-opposite path of the rest of the country – carving the land up with new powerlines and pollution and maximizing its output of Global warming gases. Particularly ironic is that much of the energy in Nevada is used for non-essential things – gambling vacations and gold for ornaments and wealth speculation. As part of this analysis, please provide a "sustainability" study that will examine ways to provide for long-term clean air and clean water here. G8-9

G8-10 How much energy will be lost in transmission here, compared to if plants were developed at the sites where power would be used? Please consider a reasonable range of alternatives to do that – develop power where it will be used.

We very much recall old proposals to pipe water north-south over long distances, and it was being discussed around the same time as the SWIP proposal was emerging and that EIS was being prepared. It seems to us there are very foreseeable extensions of corridors and pipeline networks that may be incrementally built here, including northern segments of SWIP, that must be fully examined and disclosed.

For example Map Figure 1 shows a private land (colored pink) north of Currie, approx. 6 to 10 miles south of I-80 along the western edge of the Pequop Range. This is private land at Big Springs that had been owned by Vidler water, and sold in a secret deal to land developers or speculators.

G8-6 This comment appears to address a figure related to the Ely Energy Center that is not part of the DEIS or FEIS for the White Pine Energy Station. Figure 2-1 and 2-17 show the entire array of wells to be drilled for the White Pine Energy Station. See Section 4.19.3.4 for information on the cumulative impacts to ground water that has been added to this FEIS.

G8-7 The railroad spur that would be constructed between the existing Nevada Northern Railroad (NNR) and either the Proposed Action (1.3 miles) or Alternative 1 (3 miles) is needed solely for the White Pine Energy Station. The Proposed Action railroad spur is described in Sections 2.2.3.4, 2.2.4.6, and 2.2.5.4 of the DEIS. The route is shown in Figures 2-1 and 2-2. The Alternative 1 railroad spur is described in Section 2.3.3.4 of the DEIS. The route is shown in Figure 2-17. The spur between the existing NNR and the proposed White Pine Energy Station is not being considered by DOE or anyone else that BLM is aware of for shipments of nuclear waste. Neither will it be used to support any other power plant.

G8-8 The consulting studies required to complete the DEIS and this FEIS for the White Pine Energy Station were commissioned by the BLM.

G8-9 Preparation of a sustainability study examining ways to provide for long-term clean air and clean water is beyond the scope of this EIS.

G8-10 The White Pine Energy Station would be connected to the SWIP, a 500-kV transmission line, and to the Falcon to Gonder 345-kV line, which would minimize transmission losses. Power generated by the Station may be sent to the north, the south or the west, or may be used locally in White Pine County. Considering the efficiency of the large transmission lines that would wheel the project's power, losses are expected to be less than 1 percent per 100 miles.

Several important factors are considered in siting a power plant, such as rail access, water availability, road access, proximity to a population center, land availability, and access to transmission infrastructure. The confluence of these factors makes White Pine County a favorable location for a coal fired power plant. Because power may be distributed to a wide area of the western United States, alternative locations would not necessarily result in less transmission loss. Additionally, because the power would be used by a number of customers, including separate utilities, municipalities, and/or co-ops, it would not be possible to site the plant at a single-point-of-use.

WWP has been very involved in grazing issues in this region, and we are gravely concerned at BLM's failure to fully reveal what is foreseeable here, including amid important sage grouse, raptor and other wildlife habitats. We spend a lot of time on the ground, examining the effects of land use practices, and we would be exposed to the pollution, noise, haze and the contaminants it may contain, that would develop from these proposals.

To the North, across I-80 and off the map lies the Thousands Springs Valley, where there have long been water and power plant schemes. The relationship between any foreseeable extensions of SWIP, DOE corridors, private energy lines like Northern Lights, both AC and. DC lines or other infrastructure and associated development (there have been recurring rumors of coal or other power plants in the Montello region, or further to the West in association with gold mines – all must be examined for environmental effects and consequences. The total direct, indirect and cumulative impacts of these developments on lands, air, water, native biota, human health and quality of life must be fully assessed.

G8-11 What demands will be made, regionally, on the aquifers? Please provide detailed mapping and extensive scientific studies of these aquifers. We ask that aquifer, air and wildlife studies be vetted by impartial outside scientists – as there is far too great a likelihood of political pressures being brought to bear on local game agencies, local or state researchers, etc. As this project (and the others that it is linked to and that are being developed in a segmented fashion), has regional and national implications, This is a necessity, as Nevada politicians have already been deeply involved in setting the stage for these plants that can poison air across the region, scientific oversight and review of all environmental effects must come from a much broader arena. Neither Ely BLM nor Idaho BLM could even provide me with a map of the entire SWIP corridor, for goodness sake. There is no way that an agency that has already shown such purposeful ignorance can be trusted to oversee a fair and accurate scientific EIS process here.

G8-12 What is the current extent and volume of all aquifers affected by this? What are the demands on them? How will Global warming and elevated temperatures affect aquifer processes? How much more water is being removed (and foreseeably will be removed) over the life of this project - and how much will this exceed recharge rates?

G8-13 Please conduct detailed studies to provide a comprehensive baseline of information so that all impacts of the EEC, White Pine Energy Center, Las Vegas de-watering pipelines, and other likely drains on the water supply can be fully understood.

G8-14 What is the Global warming "Footprint" of the pollution, land alteration and development, associated with all aspects of this plant – for renovation of a railway to mining the coal in Wyoming, to building materials for the plant, to heat and all emissions generated?

G8-15 How much energy will be lost from transmission lines for this and other projects linked to the infrastructure development here? Why have you not considered very viable

G8-11 Inasmuch as the source of water for the Proposed Action and Alternative 1 is the local basin-fill aquifer in the Steptoe Valley Hydrographic Basin, the regional carbonate aquifer system would not be affected by either the Proposed Action or Alternative 1. The U. S. Geological Survey's recent determination that the ground water between valleys in Nevada is connected is from the Draft BARCAS Report. However, this conclusion of interconnectivity of ground water across hydrographic areas in White Pine County pertains to ground water in deep fractured-rock. These BARCAS Report findings are discussed in Section 3.4.2, *Local Conditions*, of this FEIS. The water supply for either the Proposed Action or Alternative 1 would be ground water from the basin-fill deposits of Steptoe Valley that are not directly connected hydrologically to adjacent hydrographic areas.

Also see the response to Comment G1-24.

G8-12 The potentially affected ground water environment for both the Proposed Action and Alternative 1 is described in Section 3.4 of the DEIS and this FEIS. See the responses to Comments G1-24, G2-36, and G2-64a for discussions of current and future demands on aquifers.

The effects of climate change on the affected ground water environment for the Proposed Action and Alternative 1 are unknown. The source of ground water recharge to the Steptoe Valley basin-fill sediments is precipitation that falls on the surrounding mountains, principally the Schell Creek Range and Egan Range. Should climate change significantly affect the amount of precipitation in these mountains, the result would be more or less water available to recharge the Steptoe Valley basin-fill ground water system.

G8-13 The cumulative impacts analysis area for ground water resources is restricted to basin-fill deposits in the Steptoe Valley Hydrographic Basin and includes the potential effects of the proposed Ely Energy Center and other planned uses of water in the Steptoe Valley (see the responses to Comments G1-23, G1-24, and G8-11).

G8-14 Further analyses of climate change have been added to this FEIS. Section 3.6.2, *Climate Change,* includes a broad discussion of the currently observed impacts to resources associated with climate change. Section 4.6.2, *Climate Change*, has been added to this FEIS to describe projected future changes in climate, along with discussions of the various factors thought to influence climate. Section 4.19.3.6.1, *Air Quality*, has been revised to discuss the potential incremental cumulative impacts of emission sources on climate change. Finally, Appendix M, *Understanding and Evaluating Climate Change,* has been added to this FEIS. The potential cumulative impacts of all global carbon dioxide emissions are summarized in Section 4.19.3.6.1, *Air Quality,* and in Appendix M, U*nderstanding and Evaluating Climate Change,* of this FEIS.

Emissions of carbon dioxide from locomotive transport, construction, and other project components are negligible in comparison to the annual carbon dioxide emissions from the pulverized coal-fired boilers and are therefore not included in this FEIS.

G8-15 It is not expected that electricity from the White Pine Energy Station would be sent exclusively to Las Vegas or any other single location. Power generated by the Station and other area projects would be carried by modern high-efficiency transmission with minimal line loss. Transmission losses are expected to be less than 1 percent per 100 miles. Because power may be distributed to a wide area of the western United States, alternative locations would not necessarily result in less transmission loss. Additionally, because the power would be used by a number of customers, including separate utilities, municipalities, and/or co-ops, it would not be possible to site the plant at a single-point-of-use. Therefore, a point-of-use siting analysis has not been conducted.

Several important factors are considered in siting a power plant, such as rail access, water availability, road access, proximity to a population center, land availability, and access to transmission infrastructure. The confluence of these factors makes White Pine County an ideal location for the White Pine Energy Station. Given Las Vegas's non-attainment status, its proximity to Class I areas, and other factors, Las Vegas is not considered an attractive, feasible, or environmentally preferable site for new fossil fuel-fired generation.

Also, see the response to Comment G8-10.

G8-15 (cont.) alternatives of siting these plants closer to Las Vegas, or other urban area so that MUCH LESS energy is lost in the process? Now that Las Vegas has gotten its water-sucking pipelines authorized in a Wilderness Bill, there is no need to develop a plant here. Instead, it can readily be developed in Las Vegas, where abundant infrastructure already exists. Please provide a detailed cost-comparison and development and global warming footprint of plant (and infrastructure development - including much less need for infrastructure development) in alternative siting locations. Please also provide analysis of a range of conservation actions that

Of great alarm is an activity that may further alter and desertify the climate in much of the area to be impacted by energy development and corridors here, is the potential for increased deforestation of the pinyon-juniper and other wildlands under various "Healthy Forests" or other type projects. This would be enabled by provisions of the recent White Pine Wilderness Bill that elevates the Eastern Nevada Landscape Coalition, with ties to the livestock industry and plans to deforest pinyon and juniper, as well as 'thin" mow or alter sagebrush to enhance "forage", and under the myth that killing woody vegetation may increase water volumes. ALL the many provisions of the Lincoln and White Pine County Bills, and the Lincoln County Land Act and other recent legislation must be examined so that a full understanding of potential demands (on aquifers if 100,000 acres in Lincoln County are privatized, and > 45,000 acres in White Pine County are privatized). Please be sure to assess impacts of all the foreseeable development on aquifers, watersheds, ecosystems, wild lands, air quality, sensitive and important species, quality of life in this region. G8-16

As previously discussed, you must assess all the impacts of foreseeable Oil and Gas, geothermal, mining and or other energy development in this regions, along with its demands on the aquifers. G8-17

Please describe in full detail all the relationship or foreseeable impacts of LS Power, White Pine Energy Center, Sierra Pacific, Nevada Power, Idaho Power, Calpine, Northern Lights, SWIP and all other development underway or foreseeable in this region. G8-18

G8-19 We simply are not clear on how and where all phases of this project may be developed.

Please provide a range of alternatives based on solar collection arrays, and other renewable energy actions that could occur in the general region, as well as locating powr sources close to the population that will use the power. G8-20

Please provide a detailed analysis of ALL sources of water for all aspects of plant or other development over the life of this plant, and discussion of all direct, indirect, and cumulative factors affecting these waters. What will happen to wastes material, and waste water – how will it be disposed of? What contaminants may be in water materials generated? G8-21

G8-22 How quickly will aquifers be drained? What springs, streams, wetlands, habitats, or water uses will be affected?

G8-16 Section 4.19 of the DEIS and this FEIS addresses potential cumulative impacts associated with reasonably foreseeable future actions and the Proposed Action and Alternative 1.

G8-17 Although the potential for oil and gas development in Steptoe Valley is considered moderate to high (see Section 3.2.3 in the DEIS and this FEIS), no specific oil and gas exploration activities are currently known to be planned for Steptoe Valley. Accordingly, the analysis of potential cumulative impacts associated with either the Proposed Action or Alternative 1 does not take into account speculative activities. As an example, the cumulative air quality analysis in Section 4.19.3.6.1, *Air Quality,* and Appendix L, *Cumulative Analysis for Air Quality,* of this FEIS evaluates the reasonably expected future actions in the region, including the Ely Energy Center, Toquop Energy Power Plant, Newmont Gold Power Plant, Intermountain Power Project Phase III, and the Nevco-Sevier Power Plant. The development of all the oil and gas leases in the region is not a reasonably expected future action and is therefore not required to be included in the cumulative impact analysis in this EIS**.**

G8-18 The reasonably anticipated cumulative impacts for the projects listed in this comment are air quality impacts. The cumulative air quality analysis in Section 4.19.3.6.1, *Air Quality,* and Appendix L, *Cumulative Analysis for Air Quality,* of this FEIS evaluates the impacts from the reasonably expected future actions for which information is available, including the White Pine Energy Station, Ely Energy Center, Toquop Energy Power Plant, Newmont Gold Power Plant, Intermountain Power Project Phase III, and Nevco-Sevier Power Plant. Additionally, air quality impacts resulting from existing sources were considered in the cumulative impacts analysis. The conclusions of the cumulative air quality analysis show that all impacts would be within the applicable standards. Additional information is included in Appendix L, *Cumulative Analysis for Air Quality,* of this FEIS. Also see the response to Comment G2-29 regarding the method for determining the cumulative impact analysis area for a resource.

G8-19 The location and configuration of the Proposed Action can be viewed on Figure 2-1 and Figure 2-2, respectively, in this FEIS. The location and configuration of Alternative 1 can be viewed on Figure 2-17 and Figure 2-18, respectively. The BLM has selected the Proposed Action as the preferred alternative (see Section 2.6 of the DEIS and this FEIS).

The details of how the Station would be constructed are presented in Section 2.2.4, *Construction Activities*, of this FEIS. The Station may be constructed in up to 3 phases using one of the following scenarios: (a) Units 1 & 2 would be constructed concurrently and Unit 3 would be constructed at a later time; (b) only Unit 1 would be initially constructed, then after some delay Unit 2 would be constructed, and finally after some delay Unit 3 would be constructed; or (c) all 3 units would be constructed concurrently.

G8-20 Numerous power generating technologies, including "clean energy" alternatives such as solar, wind, geothermal, and hydroelectric, were considered in the analysis of alternatives to the use of pulverized coal for the proposed project. While each of the clean energy alternatives has different levels of feasibility, none provide the reliable baseload generation capacity of approximately 1,590 MW proposed by White Pine Energy Associates (WPEA), nor do they meet several other criteria considered in determining whether alternative power generating technologies meet the purpose and need of the project. For example, wind power, because of its intermittent nature, cannot offer high reliability consistently and it cannot offer a reliable baseload operation capacity of 1,590 MW. Wind power also would not result in the beneficial use of water held by White Pine County for power production in Steptoe Valley, an important project purpose and need. Photovoltaic solar power can offer high reliability but solar thermal power cannot. Both types of solar power cannot offer baseload operation capacity of 1,590 MW, are not considered cost effective, require large land areas compared to a pulverized coal plant, and would not result in the beneficial use of water held by White Pine County for power production in Steptoe Valley. Geothermal power is not available in White Pine County in sufficient capacity to meet the project purpose and need of providing a reliable baseload

generation capacity of approximately 1,590 MW. Hydroelectric power cannot fulfill the need for approximately 1,590 MW of highly reliable baseload capacity because no such sites exist in Nevada beyond Hoover Dam. The combination of these clean energy sources with a pulverized coal technology also would not be able to offer a reliable baseload capacity of 1,590 MW because of the intermittent nature, limited supply, or periodic absence of the clean energy resources for use in generating their component of baseload power. Section 2.5.1, *Alternative Power Generating Technologies*, in the DEIS and this FEIS discusses in detail the various alternative generation technologies, including renewable non-combustible energy sources, renewable combustible energy sources, and non-renewable combustible energy sources, that were considered but eliminated from further consideration.

See the response to Comment G1-28.

G8-21 See the response to Comment G2-64a for a discussion of ground water supply, demand, allocations, and White Pine Energy Station needs.

Wastewater from the power plant site and stormwater runoff that has been collected after coming in contact with potential pollution sources would be discharged to an evaporation pond in accordance with applicable federal and state regulations (See Section 2.2.3.1.4 of the DEIS and this FEIS). See the responses to Comments G2-27, G2-42, and G2-60 regarding discussions of environmental protection measures associated with power plant wastewater, categories of stormwater retained on site and discharged from the site, and disposal of solid wastes.

G8-22 The potential impacts on water resources associated with pumping 5,000 acre-feet of ground water per year are addressed in Section 4.3, *Surface Water Resources*, and Section 4.4, *Ground Water Resources*, of the DEIS and this FEIS.

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G8-22 (cont.) What will happen to all water, and pollutants, that may be associated with this plant?

How will this affect important cultural sites, wild horse herd areas, Wilderness Areas, and WSAs?

G8-23 How will this affect air quality in Class I airsheds, such as the Jarbidge Wilderness – especially in combination with other changes such as altered, re-aligned or increased military overflights here?

G8-24 What is the significance – in terms of a larger grid or energy system and enabling or causing other development, and the direct, indirect and cumulative impacts of the new power and water corridors, pipelines, here? Who benefits and who or what loses?

We are particularly alarmed at the potential for renewal energy development here to wreak havoc with migrating birds, raptors, sage grouse, pygmy rabbit, bats, and other important and sensitive species.

Large-scale multi-year radar studies, ground census and other studies must be conducted year-round in all the areas and ranges of significance to resident and migrating birds and other important species here.

G3-25 What are the different population, their trends over time, their likelihood of decline or extinction – of all important and sensitive species affected by this proposal?

G8-26 Please provide a detailed economic analysis, of all aspects of this proposal. This includes a detailed analysis of the finances, financial involvement of various businesses parties, entities in this. This must be contrasted with the very serious adverse impacts to quality of life, public health (across the region), connectivity of habitats and viability of populations of important ad sensitive species across the zone of Project impact.

G8-27 Please provide detailed information on all foreseeable development (type, energy demands, energy produced, infrastructure, land disposals, impacts to soils, vegetation, waters; air quality, water quality and quantity, especially perenniality of flows and surface expression of waters; watersheds; native vegetation; risks of exotic species invasions; alterations of fire occurrence and cycles; expansion or spread; habitat fragmentation; sensitive and T&E species – occurrence, habitat composition, and population viability impacts; recreational; cultural; and other impacts).

G8-28 Comprehensive baseline studies and inventories must be conducted for all components of the environment. For native plant and animal species, these current systematic surveys must be conducted in a thorough and rigorous manner, to establish a comprehensive understanding of species occurrence, condition and composition of habitats, and populations and their viability.

G8-23 The air quality analysis in Section 4.6.1, *Air Quality*, of this FEIS shows predicted effects at Jarbidge Wilderness and other Class I airsheds. Additional cumulative analysis that includes reasonably expected future actions has been included in Section 4.19.3.6.1, *Air Quality*, and Appendix L (*Cumulative Analysis for Air Quality*) of this FEIS. Mobile emissions sources such as aircraft and not included in the analysis (EPA PSD Guidance).

G8-24 Chapter 4 of the DEIS and this FEIS discuss the direct and indirect effects of the Proposed Action and Alternative 1. Section 4.19, *Cumulative Impacts,* describes the impacts of the Proposed Action and Alternative 1, together with past, present, and reasonably foreseeable future actions for all project area resources.

G8-25 Sections 3.5.4, *Threatened, Endangered, Candidate, and Sensitive Species*, 4.5.4, *Threatened, Endangered, Candidate, and Sensitive Species,* and Section 4.19.4.3, *Threatened, Endangered, Candidate, and Sensitive Species* discuss affected environment, direct and indirect impacts, and cumulative impacts of the proposed Station on these species.

G8-26 The primary study area of White Pine County is examined for potential impacts to physical, biological, and socioeconomic resources in the DEIS and this FEIS. The goals of the socioeconomics sections (Section 3.17 and 4.17) are to provide a context and general overview of the local economy and establish a baseline for evaluation of the range of alternatives. The finances and financial involvement of WPEA and/or its business partners are not subject to BLM analysis**.**

G8-27 See the responses to Comments G1-24, G8-5, and G8-24 and Section 4.19, *Cumulative Analysis*, of this FEIS.

G8-28 Surveys were conducted for species of special concern for which current and adequate information was not available, including greater sage grouse, ferruginous hawks, and sensitive springsnails. Information was also collected regarding weeds and vegetation communities in the project area. In addition, wetland habitats were checked for amphibian species and relict dace populations. All other natural resources were noted during field surveys conducted during the period April through September. Field surveys conducted for vegetation, noxious weeds, wildlife and fisheries, and threatened, endangered, candidate and sensitive species are noted in Sections 3.5.1, 3.5.2, 3.5.3, and 3.5.4, respectively, of the DEIS and this FEIS. NEPA does not require comprehensive baseline surveys for all species that may occur within the project area. CEQ regulation Sec. 1502.22 allows for incomplete or unavailable information as long as it is documented in the EIS. NEPA allows for the use of existing data sources supplemented with field surveys to obtain additional information as appropriate for completing an impact analysis.

G8-29 Please provide a detailed analysis of who holds, and where they are located, all water rights and the allocations, that may be affected by the range of foreseeable development here.

G8-30 Please provide a detailed analysis of all mining, Oil and Gas, geothermal and other claims, who holds them.

While the scoping Notice boasts of an inflated work force during construction, this will certainly not be a permanent work force. This is part of the Boom and Bust cycle that promoters of these efforts make. This will have significant harmful impacts on quality of life, drug use such as methamphetamine, and all manner of abuses tied to such development in rural-type areas.

There are many other serious adverse ecological processes and practices occurring in the vast land area that will be affected by air pollution, water pollution, human disturbance, weeds, increased fire, habitat fragmentation etc stemming from these plants. Livestock grazing has a huge ecological footprint on virtually the entire landscape and important and sensitive species. All direct, indirect and cumulative impacts of this proposal affected by this proposal

We have often observed raptors perching on powerlines that are supposed to have anti-perch devices. Example: Raptor electrocutions are increasing causes of wild land fires – as cheatgrass and other weeds have increased. This will be even a greater concern with all the ancillary development and lines that are being proposed.

We are very concerned about all the additional roading, and increased risk of fire and weed invasion here. This will not only alter soils, vegetation composition and health, but also provide travel corridors for predators, human disturbance ranging from ranching activities to hunting to OHV use and even poaching, which is on the increase in Nevada.

G8-31 We ask that you consider a broad range of alternatives – like focusing on a range of distributive generation actions, solar arrays, and other actions.

G8-32 . Please also develop a full range of mitigations – such as buying out and retiring public lands grazing permits from grazing – to rest lands, reduce methane (a global warming gas generated by livestock), and allow functioning watersheds and full aquifer recharge.

G8-33 Local news reports say that the White Pine plant will be built in various stages, and it sounds like the latter phases are critical for less dirty air. Is that the case?

http://www.reviewjournal.com/lvrj_home/2007/Feb-13-Tue-2007/business/12553127.html

How do the White Pine predictions and modeling vary if not all mitigating components of all develoents are put into place?

G8-29 Figure 4.4-3 of the DEIS and this FEIS shows the locations of all currently permitted ground water rights' holders in Steptoe Valley. The DEIS and this FEIS examine the effects of water needs of the action alternatives, including the effects on and relationship among ground water, springs, and surface water. This amount of ground water level decline does not represent a significant environmental impact because within the area where this maximum ground water level decline would occur, there are no springs, surface water features, or other permitted wells that could be affected by a decline in ground water level.

G8-30 Although the potential for oil and gas development in Steptoe Valley is considered moderate to high (see Section 3.2.3, *Minerals*, in the DEIS and this FEIS), no specific oil and gas exploration activities are currently known to be planned for Steptoe Valley. Accordingly, the analysis of potential cumulative impacts associated with either the Proposed Action or Alternative 1 does not take into account speculative activities. The development of all the oil and gas leases in the region is not a reasonably expected future action and is therefore not required to be included in the cumulative impact analysis in this EIS.

G8-31 Numerous alternatives were considered, and those alternatives that were not capable of meeting the purpose and need for the project were not carried forward for detailed evaluation. See FEIS Section 2.5, *Alternatives Considered But Not Carried Forward for Detailed Evaluation,* and the response to Comment G1-28.

G8-32 It is unclear what impacts the commenter's suggested general measures would be mitigating. Mitigation for loss of habitat, grazing and other potential project impacts were addressed the DEIS and summarized in Section 4.20, *Summary of Mitigation Measures*, of the FEIS. Purchase and retirement of public grazing rights was not considered appropriate for the specific impacts predicted for the White Pine Energy Station.

G8-33 This comment appears to be referring to an article on Nevada Power's proposed Ely Energy Center, which would be constructed in phases. Impacts of phasing of that project will be addressed in the EIS currently being prepared for the Ely Energy Center. All three units at the White Pine Energy Station would be equipped with the Best Available Control Technology, and emission limits would not vary among the units.

Regarding the comment question on variations to the modeling analyses if mitigation measures are not put in place, it is noted that the modeling results reflect the Proposed Action, and any air quality mitigation measures required could reduce impacts below those reflected in the air quality evaluations.

G8-34 Please provide great details on just what all is in the Wyoming coal, how that pollution will mix with gold mine or other mine pollution, cement plant pollution, and other pollution and contamination in the air.

The Boise and Salt Lake areas already have terrible winter inversions, and often much smog in summer as well., Plus, we increasingly receive pollution from industrialization in China, especially in spring when air currents seem to be strongest.

G8-35 What is the added human health cost of these plants – and other development that they will cause, including to people suffering from asthma, or other health conditions? Also, more pollution worsens inversion conditions – with local and regional effects. Inversions and cooler temperatures elevate traffic accidents in fog and ice, with cooler temperatures in the valleys which are the areas inhabited by humans in this region. It is at times like these winter air inversions when conditions may greatly affect human health. In any study here, you must not "average' effects over time, but must look at effects – pollution, water depletion, haze (local and regional), etc. over a full spectrum of weather and other environmental conditions (drought, inversion, various temperatures) –and always with the full range of industrialization and development from these undertakings fully in mind.

G8-36 There are tremendous ancillary environmental effects from actions like these – ranging from new and expanded gravel pits and quarries to new roading on public lands to introduction of new invasive species to drying out of springs in the affected aquifers. You must closely detail all the spring systems potentially affected by the water use both for these and other coal plants and land disposal outcomes and development (industrial, other) that is foreseeable in the affected area – especially in light of the disposal of vast tracts of public lands enabled by the white Pine and Lincoln County wilderness Bills.

The proposed action will have serious adverse effects to terrestrial wildlife, and aquatic wildlife linked to scarce desert waters to be depleted or altered in this process. These include:

- Loss of breeding, foraging and cover habitats
- Increased animal displacement and loss
- Reduction in prey availability
- Reduction in overall biodiversity
- Loss of genetic diversity
- Reduction in regional carrying capacity
- Possible population declines

The end result of this process is incremental habitat loss and incremental extirpation of native species. Please see Wisdom et al. 2005, Connelly et al. 2004, Dobkin and Sauder 2004, Knick et al. 2003 to understand the significance and irreversible nature of the habitat alteration through fire, weed invasion and other disturbance that you will cause.

G8-34 Coal from the Powder River Basin in Wyoming consists primarily of carbon (approximately 50 percent), moisture (approximately 30 percent), oxygen (approximately 12 percent), ash (approximately 5 percent), nitrogen (approximately 0.7 percent), and sulfur (approximately 0.3 percent).

For information on cumulative impacts, see the response to Comment G8-18.

G8-35 The Clean Air Act requires the EPA to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. The Clean Air Act established two types of national air quality standards:

- Primary standards set limits to protect public health, including the health of "sensitive" populations (for example, asthmatics, children, and the elderly) against the effects of designated pollutants.
- Secondary standards (equal to or less restrictive than the Primary standards) set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings.

These standards were used to evaluate whether the White Pine Energy Station would result in air quality impacts in all areas. The results of the analyses presented in Section 4.6.1.3.5, *Class II Area Dispersion Modeling Results*, and Section 4.19.3.6.1, *Air Quality*, of this FEIS show that no adverse impacts are expected. As shown in the cumulative air quality analysis in Appendix L, *Cumulative Analysis for Air Quality,* of this FEIS, the White Pine Energy Station is not expected to cause or contribute to any violations of the NAAQS, which were established to protect public health and the environment. Therefore, no human health costs are expected. The definition of the NAAQS has been added to Section 3.6.1, *Air Quality*, of this FEIS.

Inversions are a localized meteorological condition and are not created by pollution. Ground level sources of air pollution like automobiles and dust from agricultural industries can be concentrated in the atmosphere near ground-level during inversion conditions. This is caused by the cooler air settling in valleys and low-lying areas and preventing the pollution from dispersing. The White Pine Energy Station is not likely to contribute to this localized effect because its air pollution emissions would be emitted through stacks that are 600 feet above ground level and typically above any inversion condition. This is demonstrated through results of dispersion modeling discussed in Section 4.6.1.3.5 of this FEIS. Because inversions are a localized effect, emissions from the White Pine Energy Station would not be expected to contribute to adverse impacts during inversions in cities like Boise or Salt Lake because they are too far away. Additionally, the full year of onsite meteorological data utilized in the air dispersion modeling analyses would have captured any inversion conditions that occurred during the monitoring period (that is, January 2005 to January 2006). Thus, the maximum concentrations reported in the modeling results would reflect any inversion conditions that actually occurred during the monitoring period.

G8-36 Potential impacts to springs from ground water withdrawals for either the Proposed Action or Alternative 1 are addressed in Section 4.4, *Ground Water Resources*, of the DEIS and this FEIS. Also see the response to Comment G1-6 regarding effects of ground water withdrawals on springs.

G8-37 How will ALL developments associated with this and ALL other foreseeable development in the region affect local, regional and rangewide populations of important, sensitive and declining species?

G8-38 Your action will lead to accelerated and increased rates of loss - and all direct, indirect and cumulative impacts to soils, vegetation, watersheds, water quality and quantity, microbiotic crusts, native vegetation communities, wildlife habitats and populations, recreational and scientific uses of these lands must be fully assessed in an EIS.

G8-39 Information from new studies conducted in Wyoming related to the impacts of energy development on sage grouse and other sagebrush-dependent species must be fully incorporate in your analysis. Energy-development studies include study of the effects of roads, developments, noise, human activity, etc. and so are very relevant to the effects of the increased disturbance of these lands associated with the intensive coal and water mining and other energy efforts here. See Holloran 2005, for example and other studies available on-line at:

http://www.voiceforthewild.org/SageGrouseStudies/index.html .Please incorporate all of this information into your decisionmaking process, analysis of effects, and development of appropriate mitigation.

G8-40 You must also fully consider the additional potential for West Nile virus transmission to wildlife and humans, or other diseases, from the various water uses, cooling, impoundments, well fields, leaks, etc. here.

We are very concerned about the disturbance to remote areas of the Goshute, Butte or other Valley areas or other sites where SWIP or other utility or ancillary lines will ultimately run here – these areas, including seasonally inundated playas in the center of the valley may be used by migratory birds.

We will be submitting comments on public lands grazing in the general region, and the Ely RMP, that we ask that you apply to this process, as they demonstrate the great deficiencies with land management here and the degradation that occurs must be fully considered as part of the cumulative impacts to public lands, wildlife and the quality of the human environment. Attached is also a bibliography that illustrates (as in Fleischner 1994) many of the harmful impacts of livestock grazing on the same resources that these developments would impact. Also please carefully review Connelly et al. 2004 and Holloran 2005 to understand some of the many impacts to sage grouse and other native species.

Sincerely,

Katie Fite
Biodiversity Director
Western Watersheds Project
PO Box 2863

G8-37 The reasonably anticipated potential direct, indirect, and cumulative effects on all resources in the project area that would result from constructing and operating the Proposed Action or Alternative 1 are addressed in Chapter 4 of the DEIS and this FEIS. *Section 4.19, Cumulative Impacts,* of this FEIS considers the effects of all past, present, and reasonably foreseeable actions with the potential to result in cumulative impacts when combined with the potential effects of the proposed White Pine Energy Station. Cumulative impacts were analyzed for all of the resources addressed in this FEIS, including threatened, endangered, candidate, and sensitive species.

G8-38 Effects of constructing and operating the White Pine Energy Station on each of the resources listed in this comment and on other resources not listed in this comment were analyzed in the DEIS and are analyzed in Sections 4.2 through 4.18 of this FEIS. Cumulative effects on these resources are analyzed in Section 4.19, *Cumulative Impacts*, of this FEIS. Also see the response to Comment G8-37.

G8-39 Impacts of energy development in Wyoming have been and would be addressed in relevant permit processes specific to those developments. They are not part of the Proposed Action or Alternative 1 and are not connected actions; therefore, such actions are not addressed in this EIS.

G8-40 Given other larger surface water bodies in Steptoe Valley (Comins Lake, Bassett Lake, Duck Creek), the White Pine Energy Station cooling ponds are not expected to add appreciably to breeding/brood areas for mosquitoes.

Boise, ID 83701

No comments on the White Pine Energy Station DEIS were delineated for the part of the letter shown on the facing page.