



BRISTLECONE ALLIANCE, *ET AL.*

179 IBLA 51

Decided April 14, 2010



United States Department of the Interior
Office of Hearings and Appeals
Interior Board of Land Appeals
801 N. Quincy St., Suite 300
Arlington, VA 22203

BRISTLECONE ALLIANCE, *ET AL.*

IBLA 2009-104, 2009-105

Decided April 14, 2010

Appeal from a record of decision approving rights-of-way and a subsequent land sale for construction and operation of the White Pine Energy Station, a coal-fired power plant. NV-040-07-5101-ER-F344 (N-78091, *et al.*).

Affirmed.

1. Federal Land Policy and Management Act of 1976: Rights-of-Way--Rights-of-Way: Applications--Rights-of-Way: Federal Land Policy and Management Act of 1976

Under section 501(a)(6) of FLPMA, 43 U.S.C. § 1761(a)(6) (2006), a decision to issue a right-of-way is discretionary and will be affirmed where the record shows the decision to be based on a reasoned analysis of the facts involved, made with due regard for the public interest, and appellants have not shown error in the decision.

2. Environmental Quality: Environmental Statements--National Environmental Policy Act of 1969: Environmental Statements

BLM properly decides to approve rights-of-way and the eventual sale of public land for construction and operation of a coal-fired power plant, following preparation of an EIS, where, in accordance with section 102(2)(C) of NEPA, 42 U.S.C. § 4332(2)(C) (2006), it has taken a hard look at the potentially significant environmental consequences of doing so, including the reasonably foreseeable and calculable impacts on climate change caused by greenhouse gas emissions from the project. BLM's decision will be

affirmed where the appellants do not demonstrate by a preponderance of the evidence that BLM failed to consider a substantial environmental problem of significance to the proposed action, or otherwise failed to abide by the statute.

3. Environmental Quality: Environmental Statements--
National Environmental Policy Act of 1969: Environmental
Statements

Where an EIS prepared to study a project proposed by an applicant states that the purpose of, and need for, BLM's action is to provide public land for energy production through issuance of rights-of-way and by conveyance as authorized by FLPMA, and separately states that the purpose of, and need for, the project is to develop coal-fired facilities for energy production, the consequent identification of reasonable alternatives appropriately reflects the goals and objectives of the project as stated by the applicant.

4. Environmental Quality: Environmental Statements--
National Environmental Policy Act of 1969: Environmental
Statements

NEPA requires consideration of a reasonable range of alternatives to a proposed action, including a no-action alternative. Appropriate alternatives are those that would accomplish the intended purpose of the proposed action, are technically and economically feasible, and will avoid or minimize adverse effects. A "rule of reason" governs the selection of alternatives that an agency must discuss and the extent to which it must discuss them. Where the record adequately documents the alternatives that were identified and the reasons for eliminating them from further consideration, an EIS that analyzes only two alternatives is not improper.

5. Endangered Species Act: Generally

Where BLM has formally consulted with the FWS regarding a listed species, and FWS concurs in the conclusion that the proposed action will not jeopardize the continued existence of the threatened and endangered

species or destroy or adversely modify critical habitat, no violation of section 7 of the Endangered Species Act of 1973, 16 U.S.C. § 1536 (2006), has been shown.

APPEARANCES: George Torgun, Esq., Paul Cort, Esq. (Earthjustice), Oakland, California; John Barth, Esq., Hygiene, Colorado; and Amy Atwood, Esq., Portland, Oregon (Center for Biological Diversity), for appellants; Mike Malmquist, Esq., and Jim Butler, Esq., Salt Lake City, Utah, for White Pine Energy Associates (Intervenor); Brendan Hughes, Joshua Tree, California, *pro se*; Luke Miller, Esq., Office of the Regional Solicitor, U.S. Department of the Interior, Sacramento, California, for the Bureau of Land Management.

OPINION BY ADMINISTRATIVE JUDGE ROBERTS

Bristlecone Alliance, Sevier Citizens for Clean Air and Water, Sierra Club, Center for Biological Diversity, Progressive Leadership Alliance of Nevada, Great Basin Resource Watch, Post Carbon Salt Lake, Nevada Wildlife Federation, Utah Physicians for a Healthy Environment, Western Resource Advocates, and National Parks Conservation Association (collectively, Bristlecone) have appealed from the December 18, 2008, Record of Decision (ROD) approving the issuance of rights-of-way (ROWs) and a subsequent land sale to White Pine Energy Association (WPEA)¹ for the construction and operation of the White Pine Energy Station (Station, WPES, White Pine, or Project), a 1,590-megawatt (MW) coal-fired electric power plant in White Pine County, Nevada. *See* 73 Fed. Reg. 78389 (Dec. 22, 2008). The Board docketed their appeal as IBLA 2009-104. Brendan Hughes also filed an appeal from BLM's ROD. The Board has docketed Hughes's appeal as IBLA 2009-105.²

¹ By order dated Feb. 18, 2009, the Board granted WPEA's motion to intervene in the subject appeals.

² By order dated Mar. 26, 2009, the Board took under advisement BLM's motion to consolidate the two appeals, but granted BLM leave to file a single answer to both appeals, as appropriate. We now consolidate the two appeals.

On Mar. 26, 2009, Bristlecone filed with the Board a motion for clarification regarding the need to proceed with issuance of the ROWs and land sale for the WPES, given that WPEA has indicated that it is indefinitely postponing the project "due to current economic conditions and increasing regulatory uncertainties." Bristlecone's Response to BLM's Motion to Consolidate, Ex. 1. Bristlecone suggested, *inter alia*, that "it may be appropriate for BLM to suspend or terminate the ROWs" *Id.* WPEA responded that it has not abandoned the ROWs and that BLM should not suspend or terminate them, as suggested by Bristlecone, and that under 43 C.F.R. § 2807.17(c) it has 5 years to use an ROW before it will be presumed

(continued...)

The WPES and its associated facilities, as proposed by WPEA and approved by BLM, would include electric generation facilities, a water supply system, an electric distribution line, a rail spur from the Nevada Northern Railway (NNR) to the power plant to supply coal, and access roads, and would be located primarily on lands managed by the Ely District Office (DO) of BLM in the Steptoe Valley of White Pine County, Nevada. ROD at 1. The ROD followed BLM's release of the Final Environmental Impact Statement (FEIS) for the WPES in October 2008.

Appellants challenge the ROD under various sections of the Federal Land Policy and Management Act of 1976 (FLPMA), 43 U.S.C. §§ 1701-1785 (2006); section 102(2)(C) of the National Environmental Policy Act of 1969, 43 U.S.C. § 4332(2)(C) (2006); and section 7 of the Endangered Species Act (ESA), 43 U.S.C. § 1536 (2006). For the most part, they frame their arguments in terms of BLM's failure to properly evaluate the WPES in the context of global warming. Based upon our consideration of the parties' extensive pleadings and the voluminous record developed in this matter, we conclude that the ROD complies fully with the requirements of FLPMA, NEPA, and the ESA. Our reasons are set forth below.

DISCUSSION

A. FLPMA

1. Standard of Review

[1] Under section 501(a)(6) of FLPMA, 43 U.S.C. § 1761(a)(6) (2006), BLM has the discretion to accept or reject an ROW application. *See, e.g., Santa Fe Northwest Information Council*, 174 IBLA 93, 104 (2008); *Wiley F. & L'Marie Beaux*, 171 IBLA 58, 66 (2007); *Mark Patrick Heath*, 163 IBLA 381, 388 (2004). The Board will affirm a BLM decision approving or rejecting an ROW application where the record shows that the decision represents a reasoned analysis of the factors involved,

² (...continued)

abandoned. On Sept. 8, 2009, Bristlecone filed a notice of supplemental evidence regarding its motion for clarification, asserting that, because WPEA has indefinitely postponed commencing activities related to the project, the ROWs should be presumed abandoned under 43 C.F.R. § 2807.17(c). BLM filed a Response on Sept. 28, 2009, opposing Bristlecone's motion, stating that it would be "improper for BLM to make the conclusive leap that the rights-of-way have been abandoned, especially as the Applicant has affirmatively noted they have not abandoned them." BLM Response to Appellant's Notice of Supplemental Evidence at 4. We agree with BLM. To the extent Bristlecone's motion for clarification and notice of supplemental evidence constitute a request for the Board to suspend or terminate the ROWs on the basis that they have been abandoned, we deny that request.

made with due regard for the public interest, and where no reason is shown to disturb BLM's decision.³ *Santa Fe Northwest Information Council*, 174 IBLA at 104; *James Shaw*, 130 IBLA 105, 115 (1984); *Mark Patrick Heath*, 163 IBLA at 388. As we have said, to successfully challenge a discretionary decision,

[t]he burden is upon an appellant to demonstrate by a preponderance of the evidence, that BLM committed a material error in its factual analysis or that the decision generally is not supported by a record showing that BLM gave due consideration to all relevant factors and acted on the basis of a rational connection between the facts found and the choice made.

International Sand & Gravel Corp., 153 IBLA 293, 299 (2000); *see also Santa Fe Northwest Information Council*, 174 IBLA at 104.

As discussed below, Bristlecone has not shown that BLM's decision to grant ROWs for the WPES is contrary to the public interest; nor has Bristlecone demonstrated error in BLM's analysis or shown that BLM failed to give due consideration to all relevant factors, including the contribution of Project emissions to global warming, in addressing the potential impacts of the WPES on the environment.

2. *The WPES, Global Warming, and the Public Interest*

Bristlecone argues that BLM's decision to grant the ROWs associated with the construction and operation of the WPES, and to approve the subsequent land sale, violates FLPMA. Bristlecone contends that (1) approval of the WPES is not in the public interest because it contributes to global warming; and (2) BLM's approval of a coal-fired power plant, rather than a clean fuels alternative, is contrary to the "multiple use" provisions of FLPMA, 43 U.S.C. §§ 1701(a)(7) and 1732(a) (2006).

Bristlecone states that global climate change is "one of the most pressing environmental challenges of our time, creating serious risks to our environment,

³ Bristlecone states that BLM's action in this case, allegedly involving violations of FLPMA and NEPA, is reviewed under the Administrative Procedure Act (APA), 5 U.S.C. §§ 701-706 (2006), which requires an agency's actions to be set aside if they are "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). What Bristlecone has invoked is the standard governing Federal Court review of a decision by this Board, rather than this Board's review of BLM's action. As we make clear, BLM's decision in this case involves an exercise of discretionary authority, subject to the well-settled principles we herein set forth.

public health, the stability of our economy, and our national security.” Statement of Reasons (SOR)⁴ at 5 (citing Center for Biological Diversity’s DEIS [Draft EIS] Comments, Bristlecone SOR, Ex. 2 at 8). Bristlecone states that the WPES is expected to release 12.88 million tons of carbon dioxide (CO₂), the primary greenhouse gas (GHG) “responsible for global warming, into the atmosphere each year over the course of its 40-year lifespan,” and that because of severe impacts of GHG “emissions on the human health, welfare, and economy, and the environment, the construction and operation of the White Pine Energy Station is not in the public interest.” SOR at 7. Bristlecone avers that BLM failed to consider whether power production and economic development, which may be legitimate objectives under FLPMA, “are outweighed by other public objectives and values, such as preventing the serious consequences of global climate change, the degradation of local air quality and groundwater resources, or harmful impacts to nearby Great Basin National Park.” SOR at 9 (citing 43 U.S.C. § 1713(a)(3)).

BLM has filed its Answer⁵ in which it correctly states that “[o]ne of the multiple uses for which the public lands have routinely been used is the locating of energy generation facilities and energy transmission facilities.” BLM Answer at 7. BLM emphasizes that “[i]t is pursuant to section 501(a)(4) of FLPMA . . . that the Secretary of the Interior is authorized to grant rights-of-way over public lands for ‘systems for generation, transmission, and distribution of electric energy’” *Id.* (quoting 43 U.S.C. § 1761(a)(4)). BLM notes that “approving rights-of-ways, and the environmental analysis associated therewith, is, generally, a matter of Departmental discretion.” BLM Answer at 7 (citing *Mary C. Scott*, 150 IBLA 234, 238 (1999); *Platronics Communications*, 142 IBLA 136, 157 (1998); *John M. Stout*, 133 IBLA 321, 327-28 (1995)). “Such cases are evaluated to determine if the BLM decision is reasonable. One seeking to show error in a decision upon which the grant of a[n] ROW rests must show by a preponderance of the evidence that the agency decision is unreasonable.” BLM Answer at 7-8 (quoting *Mary C. Scott*, 150 IBLA at 238, citation omitted (citing *Stewart Hayduk*, 133 IBLA 346, 354 (1995))).

BLM’s decision reflects an awareness of the present and future need for reliable and affordable energy. BLM states that its approval of the WPES “is not an attempt to undermine investment in or creation of other energy sources besides coal-fired energy,” but rather “simply helps fill the immediate projected energy needs until such other energy sources can be built and implemented on the scale necessary to

⁴ References to SOR herein are to Bristlecone’s SOR. Hughes also filed a brief Notice of Appeal/Statement of Reasons, which is referred to as NA/SOR.

⁵ BLM’s “Response to Appellants’ Statement of Reasons” is properly deemed its Answer. 43 C.F.R. § 4.414. WPEA has also filed an Answer in this case. We will cite to their responsive pleadings as “BLM Answer” and “WPEA Answer,” respectively.

meet the energy demands of this portion of the country.” BLM Answer at 9. BLM takes the position that “[s]topping the construction of needed and affordable energy generation now . . . can have serious economic and public interest implications.” *Id.* BLM argues that we “simply cannot say that the barely measurable and speculative effect this power plant may have on global warming or climate change outweighs the present and future public interest in providing available, affordable power, which supports public services economic development.” *Id.*⁶ BLM states that Bristlecone’s “concern over greenhouse gas emissions is representative of a difference of opinion about the various public interest values,” but that such concern “is not enough to overturn a rationally evaluated and documented BLM decision.” *Id.* at 10. We agree with BLM’s analysis.

3. *The WPES and Multiple Use*

Bristlecone’s multiple use argument turns upon its view that disposal of public land for the construction and operation of a coal-fired utility is not in the national interest and is not an acceptable use of the public lands because such facilities contribute to global warming. As with BLM’s decision to approve an ROW, the sale of public land pursuant to section 203(a) of FLPMA, 43 U.S.C. § 1713 (2006), is a discretionary matter. *E.g., Martin S. and Joann Chattman*, 154 IBLA 64, 69 (2000); *Padilla v. BLM*, 199 IBLA 33, 34 (1991). An exercise of BLM’s discretionary authority must be supported by a rational and defensible basis which is set forth in BLM’s decision, or it will be found to be arbitrary and capricious. *E.g., Martin S. and Joann Chattman*, 154 IBLA at 69; *Echo Bay Resort*, 151 IBLA 277, 281 (1999). We have stated, *supra*, an appellant’s burden in challenging an exercise of discretionary authority by BLM in the ROW context. The burden is the same with regard to a challenge to the sale of public land under section 203(a) of FLPMA. *E.g. Echo Bay Resort*, 151 IBLA at 281. As discussed below, we conclude that Bristlecone has failed to demonstrate that BLM’s decision to convey land to WPEA for Project purposes is an arbitrary and capricious exercise of its discretionary authority under section 203(a) of FLPMA.

According to Bristlecone, in approving the WPES, BLM failed to consider the need to take immediate action to address the threat of global climate change, to properly balance the statutory factors required by FLPMA, and “to demonstrate that its decision will achieve ‘multiple use and sustained yield’ land management.” SOR at 5. Bristlecone’s argument runs as follows: approving the ROWs and the future land sale will contribute to global warming; a decision that adds to global warming is not in the public interest; a decision that is not in the public interest, *i.e.*, approving a coal-fired power plant rather than adopting a clean fuels alternative,

⁶ See also the discussion of the impact of the Project relative to global climate change issues *infra*.

violates the multiple use and sustained yield provisions of FLPMA. *See* 43 U.S.C. §§ 1701(a)(7) and (a)(8) (2006); 43 U.S.C. §§ 1702(c) and (h) (2006).

Bristlecone begins with the “national interest” element of section 203(a)(3) of FLPMA, asserting that “Congress has declared that it is the policy of the United States that ‘public lands be retained in Federal ownership’ unless BLM determines as part of its land use planning ‘that disposal of a particular parcel will serve the national interest.’” SOR at 4 (quoting 43 U.S.C. § 1701(a)(1)) (2006); *see* 43 U.S.C. § 1713(a)(3) (2006) and 43 C.F.R. § 2710.0-3(a)(2). Bristlecone rejects BLM’s claim that the ROD is consistent with the Ely Resource Management Plan (RMP), which “includes authority for disposal of up to 4,500 acres for power plant purposes.” SOR at 9 (quoting ROD at 27). It contends that the RMP “does not authorize, let alone even mention, that such power plants would be coal-fired facilities.” *Id.* Bristlecone asserts that “a primary goal of the Ely RMP is to provide ‘opportunities for development of renewable energy sources such as wind, solar, biomass, and other alternative energy sources.’” *Id.* at 10 (quoting Ely RMP (SOR, Ex. 8) at 73-74). Bristlecone states that the Ely RMP shows numerous areas of White Pine County, including the project area of the WPES, as having high potential for wind and solar energy development. SOR at 10; *see also* Ely RMP, App. F, Maps 13-14.

In response, BLM notes that in *Rainer Huck*, 168 IBLA 365 (2000), the Board stated that the multiple use mandate includes “the management of public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people,” and further that “the essence of the multiple use mandate is simply to require a choice regarding the appropriate balance to strike between competing resource uses, recognizing that not every possible use can take place on any given area of the public lands at any one time.” BLM Answer at 10 (quoting 168 IBLA at 400); *see also Utah Trail Machine Association*, 147 IBLA 142, 144 (1999). The Board stated that in order to show error in BLM’s multiple use determination as reflected in the ROD, appellants must demonstrate that BLM’s weighing of the resource values was unreasonable, and that general disagreements with the balance BLM chose is not sufficient to establish that the use of these public lands for the WPES violated FLPMA’s multiple use mandate. *Rainer Huck*, 168 IBLA at 400.

We agree with BLM that Bristlecone fails to meet this standard. Bristlecone plainly would prefer a renewable energy project or no project to the proposed coal-fired plant, but that does not imply that BLM’s contrary choice was an unreasonable weighing of resource values or contrary to the national interest.

In addition, BLM states that “‘multiple use’ issues are generally considered at the level of land-use planning by the BLM,” and that “[o]nce BLM has adopted a certain use of land which is represented through its resource management plan,

such use need not be considered anew each time BLM decides to implement such use.” BLM Answer at 10 (citing *Southern Utah Wilderness Alliance*, 157 IBLA 150, 165 (2002)). As noted, the Ely RMP indeed provides in explicit terms for the transfer of public land for power plant purposes, stating: “If rights-of-way are approved for power plants, dispose of up to 4,500 acres in White Pine County by direct sale.” Ely RMP at 68. We see no validity to Bristlecone’s argument that because the Ely RMP does not clearly mention “coal-fired facilities,” and because some lands have been identified for potential renewable energy resources, then coal-fired facilities have not been authorized. See SOR at 9; WPEA Answer at 3.

We agree with BLM that nothing in the Ely RMP suggests that BLM is somehow prevented from authorizing the sale or use of public lands to construct a coal-fired facility. BLM correctly asserts that approval of the necessary ROWs does not diminish or negate compliance with other provisions of the Ely RMP regarding renewable energy projects, and that BLM retains its authority to approve potential projects proposed in “renewable energy applications.” BLM Answer at 11; WPEA Answer at 4; see also Ely RMP at 73-74 and Maps 13 and 14 (more than 4,500 acres are shown as potential renewable energy acres).

The fact is that WPEA has not proposed a “renewable energy” project. BLM’s evaluation and approval of the ROW applications submitted by WPEA does not, *per se*, constitute an unreasonable balance of resource values, as Bristlecone argues, “keeping in mind that the IBLA has recognized that such balance often means the exclusion of some uses of the public lands.” BLM Answer at 12 (citing *Rainer Huck*, 168 IBLA at 400). We conclude that BLM reasonably balanced the competing resource values at issue in deciding to approve the ROW applications, and thus fulfilled FLPMA’s multiple use mandate. As we said in *Friends of the Bow*, 139 IBLA 141, 143-44 (1997), “[m]ultiple use necessitates a trade-off between competing uses *Multiple-use management . . . does not dictate the choice or require that any one resource, or corresponding use, take precedence.*” (Emphasis added.)

B. NEPA

1. Standard of Review

[2] We will begin our NEPA analysis, as did BLM, by quoting from *Wyoming Outdoor Council*, 176 IBLA 15 (2008), in which the Board set forth the following legal framework for evaluating challenges to NEPA compliance:

NEPA is a procedural statute designed to “insure a fully informed and well-considered decision.” *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc.*, 435 U.S. 519, 558 (1978).

NEPA does not bar actions which affect the environment, even adversely. Rather, the process assures that decisionmakers are fully apprised of likely effects of alternative courses of action so that selection of an action represents a fully informed decision. *In re Bryant Eagle Timber Sale*, 133 IBLA 25, 29 (1995). When BLM has satisfied the procedural requirements of section 102(2)(C) of NEPA, it will be deemed to have complied with NEPA, regardless of whether a different substantive outcome would be reached by appellants, this Board, or a reviewing court. *National Wildlife Federation*, 169 IBLA 146, 155 (2006).

An EIS is judged by whether it constitutes a “detailed statement” that takes a “hard look” at the potentially significant environmental consequences of the proposed Federal action and reasonable alternatives thereto, considering all relevant matters of environmental concern. *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n.21 (1976); *Western Exploration Inc.*, 169 IBLA 388, 399 (2006); *Southwest Center for Biological Diversity*, 154 IBLA 231, 236 (2001); see 40 C.F.R. § 1502.2(a). We are guided by a “rule of reason.” *IMC Chemical, Inc.*, 155 IBLA 173, 195 (2001). The EIS must contain a “reasonably thorough discussion of the significant aspects of the probable environmental consequences” of the proposed action and alternatives. *California v. Block*, 690 F.2d 753, 761 (9th Cir. 1982), quoting *Trout Unlimited, Inc. v. Morton*, 509 F.2d 1276, 1283 (9th Cir. 1974). Significant impacts are expected when an agency prepares an EIS. *Western Exploration Inc.*, 169 IBLA at 399, citing 40 C.F.R. § 1502.16 (EIS must include discussion of “adverse environmental effects which cannot be avoided”); 42 U.S.C. § 4332(2)(C) (2000) (EIS required when significant impacts are found. [Footnote omitted]).

176 IBLA at 25 (quoting *Biodiversity Conservation Alliance*, 174 IBLA 1, 13-14 (2008)).

An appellant bears the burden to show, by a preponderance of the evidence, with objective proof, that “BLM failed to adequately consider a substantial question of material significance to the proposed action, or otherwise failed to abide by Section 102(2)(C) of NEPA.” *Id.* Further, when issues of a highly technical nature are involved, BLM may rely upon the opinions of its technical experts concerning matters within their expertise, and a challenge to those opinions, which are reasonable and supported by the record, must demonstrate, by a preponderance of the evidence, error in data, methodology, analysis, or conclusions of the experts. *Id.* (citations omitted). Mere differences of opinion, even expert opinions, do not

suffice to prove a failure by BLM to comprehend the nature or scope of a significant impact. *Id.* (citing *Fred E. Payne*, 159 IBLA 69, 78 (2003)).

2. *Statement of Purpose and Need*

[3] Bristlecone's first NEPA argument is that the statement of purpose and need in the FEIS is misleading and deficient. The FEIS states that the purpose of the WPES is "to supply reliable low-cost electricity in an environmentally responsible manner to meet baseload energy needs in Nevada and the western United States, and to bring economic benefits to White Pine County, Nevada." FEIS at 1-2. Bristlecone challenges virtually every aspect of this statement, asserting that the WPES "will not supply 'low-cost electricity in an environmentally responsible manner.'" SOR at 14 (quoting FEIS at 1-2). In Bristlecone's view, BLM's assertion is "devoid of any meaning because even the least environmentally friendly means of generating electricity can qualify as 'environmentally friendly' as long as it meets all applicable regulatory requirements, which, of course, it must meet anyway." SOR at 14 n.11. Bristlecone states that "[t]he construction and operation of a conventional pulverized coal boiler is one of the most heavily polluting ways to generate electricity," and that "[c]oal-fired power plants are the largest individual source of global warming pollution . . ." *Id.* at 14. Bristlecone states that the WPES "is expected to emit 12.88 million tons of carbon dioxide each year during its 40-year lifespan," *id.* at 14-15, and will "result in massive emissions of criteria pollutants such as sulfur dioxide and nitrogen oxides," as well as mercury. *Id.* at 15.

Bristlecone questions BLM's assertion that "[t]he construction of new power generation and transmission facilities is required to meet increasing demands for electricity," FEIS at 1-2, and claims that the growing need for additional electricity may be met by other sources of energy. SOR at 16. Bristlecone asserts that the FEIS fails to acknowledge that Nevada Power Company, the State's largest public utility, has stated that it will not purchase power from WPEA because it intends to serve its own power needs; that BLM has failed to identify proposed customers for the electricity generated by the WPES; and that BLM "inaccurately portrays the ability of WPEA to . . . sell its electricity in the Nevada market or elsewhere . . ." *Id.* at 17.

In response, BLM states that it did not itself propose the project under review, and that the purpose and need statement appropriately reflects the goals and objectives of the applicant. BLM Answer at 15 (citing *Oregon Chapter Sierra Club*, 176 IBLA 336, 349 (2009); *Northern Alaska Environmental Center*, 153 IBLA 253, 263-64 (2000)). BLM argues that in evaluating WPEA's ROW applications, it was "obligated to base its scope of review and range of alternatives considered on the needs and purposes defined by the applicant." BLM Answer at 15. The record makes clear that BLM examined the applicant's purpose and need to determine if it were consistent with FLPMA and the governing land use plans, including the Ely RMP.

Bristlecone focuses upon BLM's assertion that it based its "scope of review and range of alternatives considered on the needs and purposes of the applicant." BLM Answer at 15. According to Bristlecone, this statement is evidence that the range of alternatives "was improperly limited by the goals of the project applicant." Supplemental Authority at 2. We do not agree. Bristlecone has misconstrued the FEIS and the record in this case.

BLM asserts that the purpose and needs statement in the FEIS was appropriate for the action that was proposed by WPEA, *i.e.*, to construct, own, operate, and maintain an approximately 1,590-MW coal-fired electric power generating plant. BLM Answer at 16; *see* FEIS at 1.1. The purpose that correlates with the proposed action is, the FEIS states, "to provide public land for the development of energy production by allowing for the construction of a power plant on public lands managed by BLM." FEIS at 1-2. The need for the Project "is to supply reliable, low-cost electricity in an environmentally responsible manner to meet baseload energy needs in Nevada and the western United States, and to bring economic benefits to White Pine County, Nevada." *Id.*

The FEIS substantiates the statement that construction and operation of the WPES will help to provide affordable and reliable baseload energy production for a part of the country where energy needs are expected to increase quite dramatically over the next few decades. *See* FEIS at 1-2, 1-3, 1-4. The FEIS notes that the Western Electricity Coordinating Council (WECC) has forecast that projected additions to energy capacity for the region are not likely to be sufficient to meet peak demand and energy requirements throughout the 2005-2014 period. FEIS at ES-3. The WECC projects that there will be a need for approximately 20,500 MW of new power generation in the western United States in the next 6 years and 72,500 MW over the next 21 years. *Id.* at 1-3. Of that needed new energy development, the WECC expects that coal-fired generation is expected to supply 7,600 MW in the next 6 years and 51,000 MW over the next 21 years. *Id.* WECC forecasts that Nevada alone will need to secure approximately 5,500 MW of additional electric capacity in the next 6 years. *Id.* Bristlecone does not seriously dispute the growing need for electricity. SOR at 16. Nor does Bristlecone acknowledge that the other power plants it identifies, if constructed, together will supply only 5,010 MW for the western United States, far short of projected needs. Under the circumstances, the failure to identify specific purchasers of electricity to be generated by the WPES does not demonstrate a lack of current and identifiable need for the WPES. *See* BLM Answer at 18-19.

WPEA includes as Exhibit 1 to its Answer a December 18, 2008, memorandum from Jane Peterson, Energy Project Lead, on behalf of the BLM team that processed WPEA's ROW applications and the NEPA documents involved, to the Ely District Manager, BLM, recommending that the ROD for the Project be approved as proposed

by WPEA. Peterson's recommendation took into consideration many factors, including the purpose and need for the action. That BLM was guided by its own purpose and need, which was also appropriate for the action that was proposed by WPEA, is reflected in the following summary from Peterson's memorandum:

The purpose of the BLM's action is to provide for the development of energy production facilities on public land. An important BLM objective is to meet public needs for use authorizations such as ROWs, permits, leases, and easements while avoiding or minimizing adverse impacts to other resource values. WPEA's proposal to construct, operate, and maintain a power plant on public lands would be in accordance with this objective. The need for BLM action is established by FLPMA, which requires BLM to respond to applications for ROW grants and requests for land disposal. The Ely RMP states that public land in the Ely District may be disposed of under a variety of authorities administered by the BLM. . . . The Ely RMP specifies that if rights-of-way are approved for power plants, BLM may dispose of up to 4,500 acres in White Pine County by direct sale. Therefore, the Proposed Action, including the proposed rights-of-way and direct sale, is consistent with FLPMA and the Ely RMP.

For WPEA, the purpose of the Proposed Action is to supply reliable, low-cost electricity in an environmentally responsible manner to meet baseload energy needs in Nevada and the western United States and to bring economic benefits to White Pine County, Nevada. As demonstrated in Chapter 2 of the FEIS, the Proposed Action with the proposed project technologies and design features best meets the Applicant's purpose and need. The Proposed Action will assist White Pine County with the implementation of long held economic development objectives, including the utilization of ground water rights intended for power generation and the reinstatement of rail-freight operations on the Nevada Northern Railway.

WPEA's Answer, Ex. 1 at 3. These principles are stated very clearly in the FEIS. See FEIS at 1.2.2 (BLM Purpose and Need) and 1.2.3 (Project Purpose) and 1.2.4 (Project Need).

Bristlecone has submitted a Notice of Supplemental Legal Authority (Supplemental Authority) in which it offers the Ninth Circuit's decision in *National Parks Conservation Ass'n v. Kaiser Eagle Mountain (National Parks)*, 586 F.3d 735 (9th Cir. 2009), as support for its argument that BLM's statement of purpose and

need is deficient under NEPA.⁷ Our consideration of *National Parks* begins with the Ninth Circuit’s statement that “[a]gencies enjoy ‘considerable discretion’ to define the purpose and need of a project.” 586 F.3d at 746 (quoting *Friends of Southeast’s Future v. Morrison*, 152 F.3d 1059, 1066 (9th Cir. 1998)). The Ninth Circuit’s analysis in *National Parks* only strengthens our conclusion that BLM’s statement of purpose and need meets the standards of NEPA. In *National Parks*, the Ninth Circuit viewed the purpose and need statement as improperly responding to Kaiser’s goals, not those of BLM, stating:

[A]gencies must look at the factors relevant to the definition of purposes. . . . Perhaps more importantly [than the need to take private interests into account], an agency should always consider the views of Congress, expressed, to the extent that the agency can determine them, in the agency’s statutory authorization to act, as well as in other congressional directives.

586 F.3d at 746-47 (quoting *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 196 (D.C. Cir. 1991)).⁸ The Ninth Circuit stated: “Our task is to determine whether the BLM’s purpose and need statement properly states the BLM’s purpose and need, against the background of a private need, in a manner broad enough to allow consideration of a reasonable range of alternatives.” 586 F.3d at 747. It held that “BLM adopted Kaiser’s interests as its own to craft a purpose and need statement so narrowly drawn as to foreordain approval of the land exchange,” and that “[a]s a result . . . , the BLM necessarily considered an unreasonably narrow range of alternatives.” *Id.* at 748 (footnote omitted).

The Department anticipated the need to use and transfer public land for power plants, as reflected in the Ely RMP, which provides: “If rights-of-way are approved for power plants, dispose of up to 4,500 acres in White Pine County by direct sale.”

⁷ *National Parks* involved an application by Kaiser Eagle Mountain (Kaiser) to build a landfill on a former Kaiser mining site near Joshua Tree National Park. Kaiser sought to exchange private lands for several parcels of public land administered by BLM surrounding the mine site. The District Court held that the EIS was deficient with respect to BLM’s statement of the underlying purpose and need for the proposed action.

⁸ In *National Parks*, the Ninth Circuit indeed stated that, in accordance with the Department’s *NEPA Handbook*, the “purpose and need statement for an externally generated action must describe the BLM purpose and need, *not an applicant’s or external proponent’s purpose and need.*” 586 F.3d at 747 (quoting *NEPA Handbook 35*, citing 40 C.F.R. § 1502.13) (emphasis added by the Ninth Circuit).

Ely RMP at 68. In this regard, we note that Congress has conferred upon BLM the discretionary authority to grant ROWs (section 501(a) of FLPMA) and to dispose of public land by direct sale (section 203(a) of FLPMA). 43 U.S.C. §§ 1761(a) and 1713(a) (2006), respectively. In the *BLM Purpose and Need* section of the FEIS for the Project, BLM clearly describes its multiple use mandate and the competing uses and values it must balance, noting that it is required to respond to ROW applications filed pursuant to section 501 of FLPMA. FEIS at 1.2.2. BLM also included WPEA's separate *Project Purpose* and *Project Need* sections in which background information explaining the genesis of WPEA's ROW applications for energy production was provided. Bristlecone nonetheless suggests that BLM formulated a narrow range of alternatives based solely on WPEA's project needs. We turn to that issue now.

3. *Failure to Adequately Analyze or Consider Reasonable Alternatives*

[4] In addressing Bristlecone's assertion that BLM's development of alternatives subject to consideration was improperly narrow, we begin with the proposition that under section 102(2)(E) of NEPA, BLM is required to consider appropriate alternatives to a proposed action and their environmental consequences. See, e.g., *Biodiversity Conservation Alliance*, 169 IBLA 321, 347 (2006). Such alternatives are deemed reasonable if they are able to accomplish the intended purpose, are technologically and economically feasible, and have a lesser impact on the environment. *Id.* (citing 40 C.F.R. § 1500.2(e)). BLM properly asserts that "the intended purpose of a proposed action essentially defines the scope of alternatives analysis," and that when the range of alternatives is dictated by "the stated goal of a project," only those alternatives that accomplish the goal need be considered." BLM Answer at 20 (quoting *Pit River Tribe v. BLM*, 30 F. Supp. 2d 929, 239-40 (E.D. Cal. 2004)); see *Escalante Wilderness Project*, 163 IBLA 235, 240 (2004). BLM need not analyze environmental consequences of alternatives it has in good faith rejected as too remote, speculative, impractical, ineffective, or repetitive. BLM Answer at 20 (citing *Fuel Safe Wash v. FERC*, 389 F.3d 1313, 1323 (10th Cir. 2004); *All Indian Pueblo Council v. United States*, 975 F.2d 1437, 1444 (10th Cir. 1992)).

a. *BLM's Use of Six Criteria to Identify Alternatives*

Bristlecone first challenges the six criteria developed by BLM for evaluating alternatives considered during its review. The six criteria were as follows:

- Capable of providing approximately 1,590 MW of reliable baseload power generation capacity
- Environmentally permissible
- Cost effectiveness relative to pulverized coal
- Commercially proven and reliable

- Place water held by White Pine County for power production in Steptoe Valley to beneficial use for power production
- Provide traffic for the NNR

DEIS at ES-7. Bristlecone complains that “BLM never sought public comment on these ‘six criteria’ that it self-selected for determining which alternatives to accept for detailed analysis.” SOR at 21. In their comments on the DEIS, appellants requested BLM to consider a full range of alternatives in the FEIS. SOR, Ex. 2 at 14-16; Ex. 3 at 7-13.

However, Bristlecone argues, in the FEIS issued on October 3, 2008, BLM again failed to incorporate alternatives that it and the other appellants had offered, and considered only two alternatives to the proposed action: the “no-action alternative” and “Alternative 1,” and used its “overly narrow criteria to ‘scope-out’ all alternatives other than construction of a 1,590 MW coal plant on federal lands.” *Id.* at 23. Bristlecone asserts that BLM does not explain how the criteria were developed or why each of them “must be met before the BLM would carry forward alternatives for detailed analysis.” *Id.* at 23-24. In Bristlecone’s view, “BLM intentionally selected overly narrow criteria that could be satisfied by only one alternative—the construction and operation of a 1,590 MW coal plant on this parcel of federal land.” *Id.* at 24.

With regard to the first criterion, BLM states that “[t]he reasoning behind why this proposed plant should generate 1,590 MW of power versus 1,500, 1,000, or 500, or whatever megawatts is a matter for the Applicant,” and that “BLM is not in a position to rewrite or redefine the goals of a project for the applicant.” BLM Answer at 21 (citing *Oregon Chapter Sierra Club*, 176 IBLA at 349). BLM contends that the range of alternatives correlates directly with WPEA’s stated goals, and that NEPA requires BLM to evaluate alternatives that meet those goals. *Id.* (citing *Escalante Wilderness Project*, 163 IBLA at 240). We agree with BLM that its “obligation was to evaluate alternatives that could provide similar megawatts and therefore meet the purpose of Applicant’s proposal,” and that the first criterion, which simply articulates BLM’s obligation, “is not an unreasonable narrowing of potential alternatives.” *Id.*

We fail to see the logic to Bristlecone’s argument that the next criterion, that the project be “environmentally permissible,” improperly narrows the scope of BLM’s alternatives analysis. BLM aptly states that “it appears somewhat counterintuitive to think that Appellant would be opposed to BLM’s further evaluation of proposed alternatives in light of that alternative’s ability to comply with environmental regulations and is otherwise environmentally permissible.” *Id.*; see FEIS at 1-2. BLM correctly observes that reviewing a proposed alternative in terms of whether it is “environmentally permissible does nothing to improperly narrow or ‘scope-out’ a potential viable alternative” BLM Answer at 21-22 (quoting SOR at 23).

The third and fourth criteria relate to the Project's cost-effectiveness. BLM states that its objective is to consider alternatives that are "commercially, or technologically, proven and reliable in relation to the proposed project." *Id.* at 22 (citing *Biodiversity Conservation Alliance*, 169 IBLA at 347). We see nothing improper in BLM's exploring alternatives that employ proven and reliable technology and that are economically viable, and that by doing so, it "is only seeking to compare appropriate alternatives to the proposed action." *Id.* at 22.

BLM explains that the last two criteria are unique to WPEA's proposal, with WPEA having obtained the water rights necessary to operate the energy station, and with White Pine County working with WPEA in developing a new rail spur from the NNR to the WPES to supply the coal. *Id.* BLM received several comments regarding the rationale behind these criteria, including one from EPA asking BLM to further explain why they were appropriate. *See* EIS App. R-18. In response to the Environmental Protection Agency (EPA) and other commenters, BLM explained why they were indeed appropriate, supplemented the discussion in the FEIS to better explain the rationale, and noted that no alternatives were eliminated from consideration based solely on these criteria. *See, e.g.*, FEIS App. R at R-19 (Response at 41-12); EIS App. T at T-39 to T-40; T-171, T-175, T-179 (Responses G1-28, G5-3, G5-4, G6-3 to G6-7); FEIS at 1-4 to 1-6. In its comment letter on the FEIS, EPA no longer questioned the purpose and need evaluation criteria. *See* SOR, Ex. 9 (Nov. 24, 2008, Letter from Kathleen P. Goforth, EPA, to Jane Peterson, BLM).

The point of these two criteria was not to restrict possible alternatives to only those that would in fact use a volume of water comparable to the proposed WPES, and that would in fact increase railroad traffic on the NNR. In view of the purpose and need discussion, the apparent point of these criteria was that an alternative would need to include adequate rights to use whatever water is necessary, and would not involve an access method significantly more costly or resource-disturbing than constructing the proposed new spur railroad line to the plant. If there were an alternative that would accomplish the equivalent power-generation objective as the proposed WPES that (1) would require less or approximately the same amount of ground water that the proposed coal-fired plant would require (with whatever water rights were necessary); (2) would not require constructing an access more costly or resource-disturbing than the proposed spur line; and (3) would meet the other four criteria described above, BLM would need to analyze it. If the proposed alternative did not meet these characteristics, there is no point in analyzing it because it would not be a "reasonable alternative[] to a proposed action which will accomplish the intended purpose, [is] technically and economically feasible, and yet ha[s] a lesser impact." *Sierra Club Uncompahgre Group*, 152 IBLA 371, 378 (2000) (citing, *inter alia*, *Headwaters, Inc. v. BLM*, 914 F.2d 1174, 1180-81 (9th Cir. 1990); *City of Aurora v. Hunt*, 749 F.2d 1457, 1466-67 (10th Cir. 1984); and *Defenders of Wildlife*,

152 IBLA 1, 9 (2000)); *see also, e.g., Great Basin Mine Watch*, 159 IBLA 324, 354-55 (2003), and cases cited; 40 C.F.R. §§ 1500.2(e) and 1502.14(a). However, Bristlecone has not suggested any such alternative.⁹

We agree with BLM that use of the selection criteria does not reflect “an effort to unnecessarily narrow alternatives,” but were used to “keep the analysis of alternatives focused on those options that were truly technologically, economically, environmentally, and otherwise comparable . . . to the proposed action.” BLM Answer at 23. Bristlecone has not shown that use of the six criteria impermissibly narrowed the range of alternatives considered by BLM, contrary to NEPA. Nor do we find error because BLM did not subject the criteria to public comment. To the contrary, the criteria represent a rational framework for considering potential alternatives to the proposed project. Bristlecone has not shown otherwise.

b. Evaluation of Alternatives on Private Land

Bristlecone asserts that BLM should have conducted a detailed analysis of whether the WPES could be constructed on private land in White Pine County as an alternative to conveying 1,500 acres of public land to WPEA to build the facility. Bristlecone argues that “BLM never undertook a detailed analysis to determine whether a private property alternative was viable.” SOR at 25. According to Bristlecone, a private property alternative should have been considered “because it would eliminate or mitigate environmental impacts on almost 1,500 acres of public lands.” *Id.* Bristlecone deems this failure to be “fatal” to the FEIS and ROD. *Id.*

Bristlecone’s concern is misplaced. As BLM points out, the Ely RMP provides for the transfer of public land for power plant purposes, stating that “[i]f rights-of-way are approved for power plants, [BLM may] dispose of up to 4,500 acres in White Pine County by direct sale.” Ely RMP at 68. Clearly, BLM has made the management decision authorizing the issuance of ROWs and the subsequent conveyance of public land for a power plant such as the WPES, and we are without authority to reconsider that management decision in the context of the current appeal. *See Southern Utah Wilderness Alliance*, 157 IBLA at 165. Further, White Pine County is approximately

⁹ In theory, a nuclear-powered generation plant could meet this standard. However, there is no indication that WPEA possesses either the technical capability or capital to construct a nuclear-powered generation facility, or that it is eligible to obtain a license to operate a nuclear facility. Further, the record does not indicate any expression of any interest, on the part of any party, in building a nuclear generation plant at the site contemplated for the WPES or anywhere else in the vicinity. A nuclear generation plant thus would appear not to be a feasible or practical possibility, and therefore is not an alternative requiring analysis. Nor did Bristlecone suggest a nuclear-powered facility as an alternative.

93 percent public lands. FEIS at 1-5. In order to address the public land/ Federal land disparity in White Pine County, Congress “passed specific legislation directing BLM to sell public land for private development.” BLM Answer at 23; *see* White Pine County Conservation Recreation and Development Act of 2006, Pub. L. No. 109-432, Dir. C, Title III, 12 Stat. 3032 (codified in scattered sections of 16 U.S.C.) (directing BLM to make available for disposal up to 45,000 acres).

In looking at the FEIS, we see that BLM evaluated the study area because “of the features, or infrastructures components, that are necessary for the project.” FEIS at 2-100. The FEIS states that “[a]ccess to railway facilities, the SWIP [Southwest Intertie Project] corridor, water resources, and highways are an integral part of the White Pine Energy Associates proposed project,” and that “[f]ew areas in White Pine County could meet these basic requirements.” *Id.* The FEIS explains that WPEA conducted a study of “13 potential site locations, several of which included, at least in part, private lands, but no private land alternative appeared to provide a better option or take precedence over public land options.” *Id.* at T-61 (Mar. 26, 2008, WPEA Siting Study). WPEA’s analysis shows that private land siting simply was not feasible, given the project criteria.

c. Renewable Energy Alternatives

Bristlecone argues that BLM refused to conduct a detailed analysis of “renewable energy power systems in the FEIS because the agency concluded either that adequate renewable resources were not available in Nevada or that renewable alternatives would not meet its overly narrow self-selected criteria (e.g., the use of White Pine County water or utilization of NNR railroad.” SOR at 26. Bristlecone relies, in part, upon the 2007 Resource Plan issued by the Public Utilities Commission of Nevada, which states that “Nevada has little or no natural gas, petroleum, or coal,” but does have “an abundance” of geothermal and wind resources. SOR, Ex. 17 at 2.

Bristlecone states that according to the Programmatic EIS (PEIS) issued by BLM and the U.S. Forest Service, entitled *Geothermal Leasing in the Western United States*, “the entire state of Nevada has geothermal potential.” SOR at 27; *see* 73 Fed. Reg. 63430, 63431 (Oct. 24, 2008). The PEIS indicates that Nevada has the “most federal land (BLM and USFS) available for geothermal development in the United States,” and that “White Pine County has significant federal lands open to geothermal leasing.” *Id.* Noting that “[a]t least three quality geothermal sites exist in the Steptoe Valley,” Bristlecone challenges BLM’s assertion that “renewable energy development is unavailable to provide 1,590 MW of baseload electricity.” SOR at 27. Bristlecone states that BLM eliminated renewable energy alternatives from detailed consideration, and instead considered only “two nearly identical alternatives requiring the construction and operation of a heavily polluting 1,590 MW coal-fired power plant.” *Id.* at 29. Bristlecone asks the Board to remand the FEIS and ROD to

BLM with instructions to conduct a full and complete analysis of renewable energy alternatives.

In response, BLM asserts that options advanced by Bristlecone as alternatives would “fundamentally alter” the project proposed by WPEA. BLM argues that “the range of alternatives is dictated by ‘the stated goal of [the] project.’” BLM Answer at 25 (quoting *Escalante Wilderness Project*, 163 IBLA at 240). Citing *Fuel Safe Wash v. FERC*, 389 F.3d at 1323, BLM contends that WPEA sought “permission to build a certain type of facility (i.e., a coal plant),” and that it would have been inappropriate for BLM to select “an alternative to build a completely different type of facility (i.e., a geothermal, solar, or wind energy plant).” BLM Answer at 25.

Nothing in the record supports the proposition that geothermal power projects that could supply the 1,488 MW needed by 2015, as projected by the Western Governors Task Force. Of those geothermal sites that could be productive, all are in western Nevada, and none are in White Pine County. FEIS at 2-83; *see* BLM Answer at 26. The lack of future known capacity, coupled with the higher costs of generating geothermal power (up to \$80 per MWh) as compared to the costs of using pulverized coal (approximately \$50 per MWh), were “two leading factors” against selection of geothermal power as an alternative to the WPES. FEIS at 2-83, 2-84; BLM Answer at 26-27.

While there is a commitment to increase energy production from renewable energy sources in Nevada, none of the options outlined by Bristlecone constitutes an alternative capable of generating an adequate, reliable power supply. “In fact,” BLM argues, “the discussion actually buttresses the need for such interim baseload power contemplated under the proposed action until such renewable sources are more viable.” *Id.* at 27. BLM cites Nevada Energy’s decision not to proceed with construction of its coal-fired plant as contributing to the need for the WPES—“there is obviously going to be less available baseload power available to meet the energy needs of Nevada and the west.” *Id.*

In the FEIS for the project, BLM described the obstacles to developing solar power at a capacity that would be even “remotely comparable . . . to one power plant.” *Id.*; *see* FEIS at 2-80. In discussing solar power as an alternative, BLM projected “that 20,000 acres worth of solar farms, or 8,700 acres of solar collector projects, would be necessary to generate the electrical generating capacity of the White Pine Energy Station,” and that “with a cost of roughly \$157 per MWh for photovoltaic solar power and \$168 per MWh for solar thermal power, this resource is four-times more costly to develop than coal-fired power.” *Id.*; *see* FEIS at 2-80, 2-81. BLM adds that “[t]he costs of developing such power, along with its smaller

scale of power/acre development, are not as problematic as the fact solar power is only intermittent power, not baseload power.” BLM Answer at 28; *see* FEIS at 2-80.

In discussing wind power as an alternative, BLM states that it “is not considered on-demand baseload capable.” *Id.* at 28; *see* FEIS at 2-79. According to BLM, “[t]hat factor alone keeps this source from being a comparable alternative to a plant that produces 1,590 MW of power on demand.” BLM Answer at 28.

As BLM observes, Bristlecone “appears to recognize the problems associated with the potential MW replacement ability of its proffered alternatives” *Id.*; *see* SOR at 29. We see merit in BLM’s assertion that Bristlecone “is trying to place an obligation on BLM to create alternatives to a proposed action by combining multiple hypothetical energy projects, from multiple sources of speculative energy resources, in order to come up with an alternative that will equate to a ‘no action’ alternative in relation to the proposed project.” BLM Answer at 28. We agree with BLM that NEPA does not impose this obligation. *Id.* (citing *Westlands Water District v. United States*, 376 F.3d 853, 872 (9th Cir. 2004)).

d. Alternatives to Supercritical Boiler Methods

Bristlecone next faults the FEIS for its failure “to adequately analyze the availability and reliability of alternatives to a supercritical boiler as the means of producing electricity by coal.” SOR at 30-31.¹⁰ Citing to a 2006 report in which “EPA combustion experts” studied the wide range in efficiencies between “sub-critical, supercritical, ultra-supercritical, and IGCC [integrated gasification combined cycle] coal plants,” Bristlecone asserts that “[r]egardless of the type of coal burned, ultra-supercritical and IGCC technologies are more thermally efficient than the supercritical boiler technology selected for the WPES.” *Id.* at 32. Bristlecone estimates that use of “IGCC technology would require only 91.7 percent of the fuel needed for the supercritical boiler technology proposed by WPEA—an 8.3 percent reduction in fuel use and corresponding carbon emissions from burning of this fuel,” and that use of “ultra-supercritical technology . . . shows a still larger improvement requiring only 89.9 percent of the fuel and a corresponding 10.1 percent reduction in fuel use and resulting CO₂ emissions.” *Id.* Bristlecone argues that “BLM’s failure to

¹⁰ Bristlecone distinguishes the technology in terms of the amount of coal needed to produce one MW of electricity, with corresponding CO₂ emissions from burning that amount of coal. Bristlecone states that “[c]arbon dioxide emissions are directly related to the amount of coal burned. The more coal burned to produce one megawatt of electricity, the more carbon dioxide emitted. Similarly, the less coal burned the lower the emissions of regulated pollutants, including carbon dioxide.” SOR at 31.

consider these less environmentally harmful alternatives is a fatal flaw of the FEIS and ROD.” *Id.* at 32.

The FEIS indicates that IGCC technology cannot be evaluated in a manner that would render it a present legitimate alternative. FEIS at 2-96. No large coal-fired plants are being considered with IGCC technology because of lower efficiency, and no IGCC plants have been shown to operate on Powder River Basin coal, the coal to be used for the WPES project. *Id.* at 2-95, 2-96. Moreover, IGCC project plants are substantially more expensive to construct and operate, and most are funded in part by Government subsidies. *Id.*

BLM supplemented the FEIS with Appendix H, in which it addresses several alternative coal-fueled technologies, providing evidence that IGCC technology is presently unproven and unreliable as a commercial matter, and that most of the IGCC projects that have been proposed have been cancelled or are awaiting funding. FEIS App. H, Table 5. Bristlecone has offered nothing that persuasively contradicts BLM’s findings. Bristlecone has not shown that BLM failed to consider the IGCC technology option, or that BLM erred in eliminating this option from further analysis. BLM was obligated by NEPA to provide a brief statement regarding an alternative that it reasonably excluded from further analysis. We agree with BLM that the cited section of the FEIS and the related Appendix meet this standard. *See* BLM Answer at 30.

With regard to ultra-supercritical boilers, BLM responds that it “addressed this very point raised by [Bristlecone] in prior comments to the DEIS.” *Id.* at 31. A subcategory of supercritical technology, the FEIS states that ultra-supercritical boilers produce steam at higher pressures than supercritical boilers, resulting in higher electric generating efficiency at 1 percent. FEIS at T-71. The only two ultra-supercritical boilers in the United States encountered technical problems. *Id.* Because of the lack of commercial experience with the technology, EPA deems it unproven, with potential technical and economic risks. *Id.* BLM properly dismissed this technology from further evaluation. *See* BLM Answer at 31.

e. Clean Fuel Alternatives—Biomass and Natural Gas

The last alternative that Bristlecone faults BLM for not properly considering is the category of “clean fuel alternatives.” *See* SOR at 33-34. Bristlecone argues that BLM should have conducted a detailed analysis of clean fuel alternatives using biomass (including wood wastes, agricultural waste, switch grass, and prairie grasses) and natural gas, both of which “can be co-fired with coal to substantially reduce the emissions of pollutants, including carbon dioxide.” *Id.* at 33. Bristlecone asserts that “[t]he alternatives analysis should have, at least, considered mixing cleaner fuels with coal in the White Pine boiler to lower emissions.” *Id.* at 34.

Contrary to Bristlecone's argument, the FEIS considered not only the categories of fuel alternatives mentioned by Bristlecone, but expanded its review to include biogas and municipal solid waste. See FEIS at 2-86, 2-87. According to BLM's findings, none of the "clean fuel" options were economically feasible or could provide MW of power comparable to the WPES. *Id.* BLM found further that the sources of biofuels considered were not reliable on a sustained basis, or would be too costly to ship to the WPES, given its location, to offset the cost of the plant itself. *Id.* Bristlecone has not established any reason to reject BLM's conclusions regarding other fuel alternatives or the information it relied on to reach them.

Accordingly, Bristlecone has failed to show that BLM's consideration of various renewable energy resources was improperly dismissed from further review. See BLM Answer at 32. As a consequence, we also reject Bristlecone's assertion that the range of alternatives was unreasonably narrow or based on a purpose and need statement drawn so narrowly that approval of the ROWs was foreordained. *National Parks* is therefore inapposite.

4. *Failure to Take a Hard Look at Significant Environmental Impacts*

Bristlecone rightly notes, preliminarily, that "[a]n EIS must 'provide full and fair discussion of significant environmental impacts and shall inform decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.'" SOR at 34 (quoting 40 C.F.R. § 1502.1). The required "discussion must include an analysis of 'direct effects,' which are 'caused by the action and occur at the same time and place,' as well as 'indirect effects' which are 'later in time or farther removed in distance, but are still reasonably foreseeable.'" *Id.* at 34 (quoting 40 C.F.R. §§ 1502.16 and 1502.8; citing *Idaho Sporting Cong. v. Rittenhouse*, 305 F.3d 957, 963 (9th Cir. 2002)). Further, "[a]n EIS must also consider the cumulative impacts of the proposed action together with past, present, and reasonable foreseeable future actions, including all federal and non-federal activities." SOR at 34-35 (citing 40 C.F.R. § 1508.7; *Kamath-Siskiyou Wildlands Center v. BLM*, 387 F.3d 989, 994 (9th Cir. 2004); *Kern v. BLM*, 284 F.3d 1062, 1075 (9th Cir. 2002)).

a. *Impacts of the WPES and other Nearby Facilities on Air Quality*

Bristlecone begins its environmental impacts challenge to the FEIS with an assertion that BLM failed to take a hard look at the significant adverse impacts on air quality that will be caused by operation of the WPES. SOR at 35. Bristlecone notes that, according to the FEIS at 4-103, the WPES "will emit 2,687 tons per year of particulate matter (PM₁₀), 6,071 tons per year of sulfur dioxide (SO₂), 4,812 tons per year of oxides of nitrogen (NO_x), and 10,287 tons per year of carbon monoxide (CO)." *Id.* Bristlecone puts this emissions data into perspective by observing that

under the Clean Air Act (CAA), 42 U.S.C. § 7479(1) (2006),¹¹ “[i]n areas that are considered ‘clean’ (i.e., areas with air quality meeting the national standards), a major source is defined as a source emitting 100 or 250 tons per year of any of these pollutants (depending on the type of facility).” SOR at 35. Bristlecone concludes that “[t]he projected emissions from White Pine will be massive by any definition.” *Id.*

Bristlecone states that “[t]he prevention of significant deterioration (PSD) program in the Clean Air Act establishes maximum allowable increases in ambient concentrations allowed for certain pollutants (‘PSD increments’).” *Id.* at 37. Bristlecone asserts that BLM did not conduct its own analysis in evaluating the significance of adverse effects caused by the “huge amounts of Pollutants to be emitted by the proposed White Pine facility,” but relied instead “upon the *preliminary* PSD permit determination prepared by the state air permitting agency – the Nevada Division of Environmental Protection (NDEP).” *Id.* Bristlecone then states that “NDEP’s determination has no real analysis prepared by the agency, but is based on the analysis prepared by WPEA.” *Id.* at 38 (footnote omitted). According to Bristlecone, although BLM claims NDEP’s report to be “independent,” *see id.*, Ex. 5 at 19, the report represents “the company’s technical argument for receiving a PSD permit.” SOR at 38. Bristlecone claims that “BLM’s refusal to conduct the required analysis of air quality impacts and blind reliance on the state permitting agency is a plain failure to meet the agency’s obligations under NEPA.” *Id.*

Bristlecone states that the defects in NDEP’s analysis results in a serious underestimation of the air quality impacts of the WPES. Bristlecone states, for example, that “during periods of startup and shutdown, the facility, under the draft PSD permit, would be allowed to emit at rates much higher than those used in the air quality modeling.” *Id.* (citing SOR, Ex. 5 at 23). Bristlecone calls this a “defect” in NDEP’s analysis that “undermine[s] the claims that air quality will not deteriorate beyond allowable PSD increments or even the health-based NAAQS themselves.” *Id.* at 40 (footnote omitted). Bristlecone complains that “BLM knows the analysis of air quality impacts, including the demonstration of compliance with the NAAQS and PSD increments, is wrong, but will rely on NDEP to fix the permit to match the modeling results.” *Id.* at 41. Bristlecone argues that under NEPA, BLM was required

¹¹ Bristlecone reviews provisions of the CAA pursuant to which the EPA has established national ambient air quality standards (NAAQS) for pollutants such as particulate matter, ozone, and SO₂. *See* 42 U.S.C. § 7409 (2006) and 40 C.F.R. Part 50. In an area that meets designated NAAQS, the CAA prohibits the construction of new sources that will cause the area to violate the NAAQS. *See id.* at § 7475(a)(3). The CAA seeks to keep these “clean” areas clean by limiting the degree by which air quality will be allowed to deteriorate. *See id.* at § 7473(b).

to conduct its own independent analysis, rather than “deferring to whatever conclusions are ultimately reached by NDEP.” *Id.*

In responding to Bristlecone’s criticism, BLM also reviews key provisions of the CAA, 42 U.S.C. §§ 7401-7671 (2006), and the application of NAAQS in protecting human health and welfare. BLM focuses upon the governing regulatory framework, noting that under the CAA, the EPA may delegate to States control of air quality compliance after certain conditions are met, with continuing oversight of the EPA, *see* CAA, 42 U.S.C. §§ 7410, 7413; and that Nevada has been delegated such compliance authority, which is carried out by NDEP. *See generally* Nev. Rev. Stat. (NRS) §§ 445B.100–445B.825, 486A.010–486A.180. Pursuant to this delegated authority, NDEP has adopted procedures with which an entity, such as WPEA, must comply in applying for an air permit related to a project such as a coal-fired power plant. *See* Nev. Admin. Code (NAC) §§ 445B.287–445B.497. The prescribed process calls for the proponent to provide information, such as modeling of projected emissions, which is then evaluated to determine whether the project will improperly impact the NAAQS. *Id.* at § 445B.308. Upon approval, the applicant will receive a permit showing that the project is in compliance with the PSD program.

An understanding of this framework, pursuant to which WPEA received a permit from NDEP for the proposed project, exposes the fundamental flaw in Bristlecone’s related arguments that the “analysis” prepared by WPEA is merely its “technical argument for receiving a permit”; that NDEP’s review of this modeling was not independent and led to issuance of a faulty preliminary PSD permit; and that BLM improperly relied upon this faulty permit in evaluating the cumulative impacts of the WPES’s emissions. We agree with BLM that “there is absolutely nothing wrong with a PSD permit applicant providing the modeling information to NDEP for evaluation in regards to compliance with NAAQS,” given that “[t]hat is actually the requirement.” BLM Answer at 35; *see* NAC § 445B.308. As BLM states, “there is nothing wrong with BLM also using the modeling data to evaluate the proposed project’s emissions in relation to air quality standards.” BLM Answer at 35.

The record confirms that NDEP in fact provided an independent review of the permit analysis for the Project, a process that “took several years and is partially reflected in a detailed technical report by NDEP’s permitting engineers, which is available on NDEP’s website, along with other documents demonstrating the depth and detail of NDEP’s review.” WPEA Answer at 13. WPEA includes one letter from the voluminous administrative record for the PSD permit process for the WPES that illustrates “the depth and detail of NDEP’s review.” *See* WPEA Answer, Ex. 5.

Bristlecone offers the opinion in the recently decided *South Fork Band Council of Western Shoshone of Nevada v. U.S. Dep’t of Interior*, __ F.3d __, 2009 WL 4360798

(9th Cir. 2009),¹² in support of its argument that the FEIS fails because BLM did not conduct its own, independent evaluation of the Project's compliance with NAAQS, and instead relied upon the PSD permit issued by NDEP. See Supplemental Authority at 2. In that case, the Tribes claimed that BLM violated NEPA by failing to analyze, in its EIS, the air quality impacts of the transportation of ore to an off-site processing facility. BLM argued that *no* analysis of the environmental impacts was required because no increase in the rate of toxic ore shipments was proposed, and the off-site facility is permitted under the CAA. The Ninth Circuit rejected the first assertion as a factual matter. With regard to the second assertion, the Ninth Circuit stated:

BLM argues that off-site impacts need not be evaluated because the Goldstrike facility operates pursuant to a state permit under the Clean Air Act. This argument is also without merit. A non-NEPA document—let alone one prepared and adopted by a state government—cannot satisfy a federal agency's obligations under NEPA. *Klamath-Siskiyou Wildlands Center v. BLM*, 387 F.3d 989 (9th Cir. 2004).

2009 WL 4360798 at *5-6. According to Bristlecone, “BLM's similar reliance on a draft PSD permit analysis prepared by the state permitting agency—the Nevada Division of Environmental Protection—renders its WPES ROD arbitrary and capricious.” Supplemental Authority at 2.

Unlike the situation in *South Fork Band Council*, the FEIS contains a lengthy, substantive analysis of air quality impacts of the WPES. See generally, FEIS at §§ 3.6, 4.6, 4.19.3.6, App. L. BLM did not avoid analyzing air quality impacts on the basis that NDEP had issued a PSD permit. As BLM responds, “BLM utilized information from a state air quality permitting process to help analyze the proposed Energy Station's impacts, but this is not the same situation in *South Fork Band* where no analysis was undertaken at all.” BLM Response to Supplemental Authority at 4.

Looking more specifically at the air quality analysis set forth in the FEIS, it becomes clear that rather than avoiding the subject, as in *South Fork Band Council*, BLM provided details based upon actual plans for operating the project, including WPEA's planned startup and shutdown procedures. Moreover, the modeling conservatively assumed that all three units would start cold simultaneously every day. WPEA states that the maximum anticipated cold starts would be 16 per year per unit. WPEA Answer at 15 n.11; see FEIS Comment Analysis and Responses at 51. BLM's analysis is clearly outlined in several sections of the FEIS, as well as

¹² *South Fork Band Council* was decided by the Ninth Circuit in the context of an appeal from the denial of a preliminary injunction in an environmental challenge to a gold mining project in Nevada.

Appendix L. See FEIS at 4.6, 4.19.3.6, App. L. BLM's "hard look" at air quality impacts was based upon projections of how WPEA plans to operate the plant. Although the permitting agency may later determine that further maximum emission rate evaluations are necessary, BLM requires that all environmental permits, including final PSD permits, be obtained before construction can begin on the project. See 43 C.F.R. § 2805.12(i)(2). This framework would necessarily require WPEA, as the applicant, to make basic projections as to Project operations. Thus, BLM based its analysis of the probable environmental consequences upon WPEA's projections, safeguarded by a requirement that further evaluations may be necessary to ensure continued CAA compliance. We conclude, as did BLM, that this constitutes the hard look mandated by NEPA.¹³ See *California v. Block*, 690 F.2d 753, 761 (9th Cir. 1982).

Thus, we see no legitimacy to Bristlecone's argument that BLM failed to take a hard look on the premise that BLM deferred to EPA's delegated authority as to matters of CAA compliance.¹⁴ As BLM notes, for the WPES, "BLM requires compliance with all environmental laws and state permitting before construction can begin, and has required continued monitoring of emissions as required for a Class I Air Quality Permit." BLM Answer at 39; see ROD at 5. We agree with BLM that it acted properly in deferring to NDEP on matters of CAA monitoring and compliance, and that with NDEP's oversight, coupled with the active role that BLM will take in continual monitoring of the plant for compliance with WPEA's Class I Air Quality Permit, Bristlecone's argument is unfounded.

¹³ The FEIS indicates that Susan Caplan, an air quality specialist in BLM's Air Quality and Climatology Office, Denver National Science and Technology Center, was part of an interdisciplinary team that prepared the Draft and Final EIS. In addition, the private contractor hired by BLM to assist in EIS preparation included an air quality specialist on its team. FEIS at 5-9. The FEIS presents a detailed treatment of air quality impacts, including the technical air quality appendices created solely for the EIS analysis. See, e.g., FEIS App. D (Evaluation of Alternative Control Strategies); App. H (Alternative Coal-Fueled Generating Technologies); App. L (Cumulative Analysis for Air Quality); and App. M (Understanding and Evaluation of Climate Change).

¹⁴ We note that in his NA/SOR, Hughes asserts that BLM infringed on the authority of NDEP and the State of Nevada by not waiting until an air quality permit was finalized before issuing the ROD. Hughes NA/SOR at 2. We fail to see how requiring compliance with Nevada air quality permits and requirements before construction of the project can begin amounts to an infringement on NDEP's jurisdiction or authority.

b. Impacts Relating to Global Climate Change

Bristlecone argues that BLM has resisted taking a hard look at the impacts of the WPES related to global climate change. Asserting that “[t]here is an overwhelming scientific consensus that the emission of greenhouse gases, primarily from the burning of fossil fuels for energy, is causing the climate to warm and change in many ways,” Bristlecone states that “[s]erious and damaging impacts to human health, to plants, animals, and ecosystems, and to the environment are already underway, and failing to reduce greenhouse gas emissions in the near term will result in truly devastating environmental and health consequences.” SOR at 43 (footnote omitted); see SOR, Ex. 3 at 15-20; SOR, Ex. 5 at 2-8, 11-20. Bristlecone asserts that “BLM ignores this reality entirely.” SOR at 43.

Bristlecone contends that BLM “frames its analysis . . . as if ‘small’ contributions to this problem can be dismissed,” when in fact the GHG emissions that will be added to the atmosphere by the WPES “can hardly be characterized as ‘small.’” *Id.* Bristlecone states that the WPES facility “will emit nearly 13 million metric tons of CO₂ per year.” *Id.* at 44.

Bristlecone argues that under NEPA, “BLM was required to rigorously explore how ongoing climate change has impacted the environmental baseline in the project area, and how those changes will combine with and exacerbate the impacts from the WPES approval.” *Id.* Bristlecone argues that the FEIS stopped short of explaining how emissions from the WPES “will contribute to the environmental problems associated with climate change,” and calls this “an abdication of BLM’s duty to take a hard look at the issue under NEPA.” *Id.* Bristlecone states that “BLM’s attempt to hide behind uncertainty is unfounded,” and that “[m]any impacts of global warming in the project [area] have been predicted with a high degree of certainty and precision” *Id.* Bristlecone argues that “[d]eclining air quality due to global warming could combine with White Pine’s other air impacts to result in substantially worse air quality than disclosed in the FEIS, yet BLM failed entirely to discuss this critically important issue.” *Id.* at 46.

In response, BLM states that contrary to Bristlecone’s assertion, it “is not avoiding the issue of estimating the project’s impacts on climate change, but instead has taken a hard look at the available evidence and resources” BLM Answer at 45. In fact, the record shows that BLM incorporated into the FEIS relevant climate change information as it became available, including the major findings of the Intergovernmental Panel on Climate Change (IPCC) Reports.¹⁵ WPEA Answer

¹⁵ The IPCC “was set up jointly by the World Meteorological Organization and the United Nations Environment Programme to provide an authoritative

(continued...)

at 17. The FEIS quotes IPCC's conclusion that "[m]ost of the observed increase in global average temperatures since the mid-20th century is very likely because of the observed increase in anthropogenic greenhouse gas concentrations." FEIS App. M at 24; FEIS at 4-135. In the FEIS, BLM stated that "[a]lthough it is possible to estimate the Station's incremental contribution to the global carbon dioxide emissions pool, it is not possible to determine whether or how the Station's relatively small incremental contribution might translate into physical effects on the environment." FEIS at 4-136, 4-137.

In response to an EPA comment, BLM referenced EPA's own analysis of a hypothetical power plant with annual CO₂ emissions of 14.1 million tons, or about 20 percent more emissions than that of WPES. ROD at 17; BLM Answer, Ex. 3 at 5-7. The results of EPA's analysis showed a mean global temperature increase between 0.00022 to 0.00035 degrees Celsius occurring approximately 50 years after a facility begins operations, a maximum global increase of atmospheric CO₂ of 0.06 parts per million, and a reduction of ocean pH of approximately 0.0001 units in 2070. *Id.* These findings led EPA to conclude that estimated temperature and CO₂ changes and impacts would be "too small to physically measure or detect." *Id.*

The EPA comment referred to a National Highway Transportation and Safety Administration (NHTSA) study that had addressed the extent of GHG emission impacts from a single source that can be modeled and quantified. *See* ROD at 19. The NHTSA study was conducted for an EIS regarding Corporate Average Fuel Economy (CAFE) standards for certain model years of light trucks, sport utility vehicles, minivans, and pick-up trucks, and involved a complex modeling and scaling analysis to estimate global warming/climate change. The study concluded that the proposed action's effects on climate change were too small to address quantitatively in terms of their impacts on resources. *Id.*; *see* Answer, Ex. 4 at 4-75 (NHTSA FEIS, Corporate Average Fuel Economy Standards, Passenger Cars and Light Trucks, Model Years 2011-2015, Oct. 10, 2008). BLM points out that the NHTSA study involved "an entire fleet of vehicle emissions, well beyond a single power plant's emissions." *See* BLM Answer at 45 n.11.

In arguing that BLM failed to adequately consider the WPES's impacts on climate change, Bristlecone relies upon an EPA document entitled *Technical Support*

¹⁵ (...continued)

international statement of scientific understanding of climate change." *Climate Change 2007—The Physical Science Basis*, "Contribution of Working Group I to the Fourth Assessment Report of the IPCC." The IPCC issued two reports, *Climate Change 2007* in February 2007, and *Synthesis Report of the IPCC Fourth Assessment Report* in November 2007.

Document for Endangerment Analysis for Greenhouse Gas Emissions under the Clean Air Act, Sixth Order Draft, dated June 21, 2008 (Answer, Ex. 5 at 70). BLM argues that this document “does not establish to any precise degree what air quality ozone and particulate matter impacts will actually result from any global warming temperature increase for an area like that of the proposed project.” BLM Answer at 46. As BLM points out, this EPA document indicates that “large uncertainties remain for many issues,” and that regional differences are impediments to providing “a simple quantitative description of the interaction between biogeochemical processes and climate change.” *Id.* (quoting BLM Answer, Ex. 5 at 70). Based upon our review of the EPA document, we agree with BLM that it “in no way establishes a well known and proven global warming air quality degradation impact relative to this project area that BLM failed to recognize or had an obligation to analyze in the FEIS.” BLM Answer at 46.

c. Impacts of Global Warming on Water Availability

Bristlecone next asserts that “[g]lobal warming is also having and will continue to have well-established impacts on . . . water availability.” SOR at 46. Thus, Bristlecone argues, “[t]he FEIS never discusses the combined impact of th[e] decreasing water availability and the project’s use of 5,000 acre feet per year of water, nor the cumulative impact of the water use from other coal fired power plants and other projects in the proposed area.” *Id.* at 46-47. The hydrological changes resulting from global warming may have “serious implications not only for human water use, but also for imperiled and sensitive plants and animals in the project area,” argues Bristlecone, “yet BLM never so much as touches on this issue, let alone analyzes it.” *Id.* at 47.

Bristlecone discusses the impacts of global warming on “many species of springsnails that occur in the Southwest, including many in Nevada.” *Id.*; SOR, Ex. 46 (Center for Biological Diversity, Petition to List 42 Species of Great Basin Springsnails from Nevada, Utah, and California as Threatened or Endangered Species Act (Feb. 17, 2009)). Bristlecone states that “the FEIS did not adequately consider the cumulative impact of the existing threats to springsnails that occur in the Steptoe Valley, including the emerging threat of climate change, together with the effect on these species that WPES will have,” but only considered impacts on only one of six imperiled springsnails that occur there (*P. Settata*), and relegated even that cursory analysis to an appendix.” *Id.* at 48; see FEIS, App. J at K. This analysis is deficient under NEPA, Bristlecone argues.

Bristlecone is incorrect in asserting that BLM failed to address the cumulative impacts of WPES operations, along with other proposed projects within the same hydrologic basin, as related to surface and ground water resources. See FEIS

at 4-276, 4-277. The FEIS includes a section entitled “Projected Climate Change in the Western United States and the Great Basin,” and summarizes several points related to Western stream water resources. *Id.* at 4-306. The FEIS notes that one other project, the Ely Energy Center, may have had an impact on groundwater resources, but, as Bristlecone notes, that project is no longer under consideration for construction. *Id.* at 4-277, 4-278. Hence, the cumulative impacts analysis of groundwater usage, as presented in the FEIS, is based upon the use of 5,000 acre feet of water for WPES purposes. The FEIS explains that WPEA has secured 5,000 acre feet of water, appropriated in 1983 when the basin only had 48,000 acre feet to appropriate, and that WPEA has priority over at least 32,000 acre feet of the current total allocation of 70,000 acre feet of water for the basin. *Id.* at 3-48. BLM explains that WPEA’s “appropriated water rights can be used in a manner that the Nevada State Engineer in charge of basin allocation has determined should not deplete the ground water in storage or cause deterioration of water quality.” BLM Answer at 47; *see* FEIS at 3-48. In the FEIS, BLM states that WPEA’s use should not deplete water in the basin, particularly since later-in-time appropriations representing 32,000 acre feet would have to be restricted, or limited, before it became necessary to restrict WPES’s basin user rights. *See* FEIS at 3-127. The FEIS concludes that there is no evidence that global warming will decrease water availability by 32,000 acre feet in this area of the basin, particularly in light of trends showing precipitation increases, not decreases. *Id.* at 3-127.

Based upon the record, we conclude that Bristlecone has failed to demonstrate that BLM failed to take a hard look at the potential cumulative impacts of the WPES’s water use in combination with other projects in the same hydrologic basin. The evidence in the record supports BLM’s conclusion that “any incremental impact of emissions from the project in relation to global warming impacts on potential water availability, are simply too small to accurately quantify in relation to water resources,” and that “the water rights secured by WPEA [will] be sufficient to operate this facility.” BLM Answer at 48.

d. Cumulative Impacts and WPES’s Contribution to Global Warming

Bristlecone repeats that BLM has “steadfastly refused all requests to discuss the White Pine Energy Station’s own substantial greenhouse gas emissions in any meaningful way” SOR at 49. Bristlecone states that “the contribution of WPES to global warming is not uncertain; it is a known figure.” *Id.* Bristlecone asserts that “[t]here is no dispute that White Pine will contribute to global climate change by emitting 12.88 million tons of carbon dioxide into the atmosphere every year for 40 years or longer, as well as small amounts of other powerful greenhouse pollutants,” and “in light of other past, present, and reasonably foreseeable actions, such as other nearby coal plants that, combined with White Pine, would release over 45 million tons of carbon dioxide each year.” *Id.*

Bristlecone complains that BLM should have conducted a cumulative impacts analysis of the impacts of White Pine's emissions, together with the emissions of other nearby facilities, on climate change. This "is precisely the kind of cumulative impact analysis that NEPA requires agencies to conduct." *Id.* (quoting *Center for Biological Diversity v. National Highway Traffic Safety Administration (CBD v. NHTSA)*, 538 F.3d 1172, 1217 (9th Cir. 2008)) (citation omitted); *Klamath-Siskiyou Wildlands Center*, 387 F.3d at 994)).

BLM responds that it drafted its FEIS in light of, and to be in compliance with, *CBD v. NHTSA*, in which the Ninth Circuit determined that an environmental assessment (EA), rather than an EIS, did not reflect a hard look at the potential environmental effects caused by an adjustment in the CAFE standards for certain model years of vehicles.¹⁶ The Ninth Circuit concluded that the petitioner in *CBD v. NHTSA* had raised a substantial question about whether the new CAFE standards may significantly affect the environment in light of global warming, and that NHTSA had not provided a sufficient justification for its finding that potential CO₂ emissions were not significant in relation to potential global warming issues. The Court found that the EA was insufficient on the basis that it failed to provide the context for what NHTSA had referred to as "incremental impacts" of CO₂ emissions on climate change, or on the environment in light of past, present, and reasonably foreseeable actions. 538 F.3d at 1216.

By contrast, BLM states that its FEIS "documents the estimated contribution of GHGs by the WPES to the global pool of carbon dioxide and analyzes that contribution primarily as a cumulative impacts issue." FEIS Comment Analysis and Responses at 7. The FEIS considers the emissions number for the WPES, 12.88 million tons per year of CO₂, in the context of estimates provided by the IPCC. FEIS at 4-136, Table 4.6-32. The FEIS compared WPEA's 12.88 million tons of CO₂ emissions per year to estimated global coal-fired power plant emissions of 7,722 million tons per year, global emissions from fossil fuels of 29,083 million tons per year, and total global emissions from land and ocean emissions at 855,592 million tons per year. *Id.* According to the IPCC, the range of uncertainty in total CO₂ emissions from fossil fuel combustion and cement production is

¹⁶ The Ninth Circuit ruled that the NHTSA had failed to provide a sufficient explanation of its conclusion that potential CO₂ emissions were not significant in relation to potential global warming issues, and that an EIS was not necessary. *CBD v. NHTSA*, 538 F.3d at 1223-25. The Court found that the EA failed to put into context what NHTSA had described as "incremental impacts" of CO₂ emissions on climate change, or on the environment in light of past, present, and reasonably foreseeable actions, and that NHTSA's cumulative impacts analysis was lacking. *Id.* at 1216.

+/- 1,212 million tons, so that WPEA's contribution to such emissions "is well within the range of uncertainty in the IPCC's estimate of the total global carbon dioxide emissions from fossil fuel combustion and cement production." FEIS at 4-136. The FEIS further explains:

Although it is possible to estimate the Station's incremental contribution to the global carbon dioxide emissions pool, it is not possible to determine whether or how the Station's relatively small incremental contribution might translate into physical effects on the environment. Given the complex interactions among various global and regional-scale physical, chemical, atmospheric, terrestrial, and aquatic systems that may result in the physical expressions of global climate change, it is not possible to discern whether the presence or absence of carbon dioxide emitted by the Station would result in any altered conditions. Additionally, given the uncertainties in the global carbon cycle and the range of climate predictions provided by the general circulation models, it is not possible to extrapolate any meaningful climate predictions that would result from the presence or absence of the proposed Station. This inability to predict any climate impacts attributable to the Station is compounded by an inability to predict the course and effectiveness of the technological, political, regulatory, and business response to climate change over the coming decades, which appears to be developing with increased rapidity in response to the findings of the IPCC and other evidence of changing climate.

Id. at 4-136 to 4-137.

As BLM states in its Answer, it attempted in the FEIS "to as accurately as possible describe the project's interaction with climate change as a cumulative impact." BLM Answer at 51. In the FEIS, BLM states directly:

Based on the extremely small incremental contribution of carbon dioxide emissions from the White Pine Energy Station relative to the total cumulative emissions in the global carbon cycle, 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 incremental cumulative contribution of the Station (or several new plants considered together).

FEIS at 4-307. The following discussion in the FEIS demonstrates that, within the uncertainties inherent in analyzing WPES' "small incremental contribution" of CO₂ to global warming, BLM proceeded to evaluate that contribution on a cumulative impacts basis:

Nonetheless, greenhouse gas emissions are appropriately considered a cumulative impacts issue, and the construction and operation of any new carbon dioxide source, including the proposed Station, would comprise an incremental increase (albeit very small) to cumulative greenhouse gas emissions, unless the increase were offset by reductions from other sources, such as the retirement of older, less efficient plants. Absent policy changes or market force changes, if there is a continuing trend over the next several decades of an increased number of fossil fuel-fired power plants in the US and around the globe, these plants would continue to be a major contributor to the cumulative anthropogenic emissions pool, absent offsets, capture and sequestration, etc. This anthropogenic carbon dioxide emissions pool would contribute to the total global emissions pool (which also includes natural sources), potentially resulting in a net positive radiative forcing on climate, could contribute to the current observed and predicted climate change impacts discussed in the previous text.

The White Pine Energy Station will be designed to accommodate the future addition of carbon capture equipment, and the Station will capture and sequester carbon dioxide if it becomes technologically viable in accordance with a memorandum of understanding between WPEA and NDEP (see Appendix F of this FEIS). Similar commitments have been made by the other proposed Nevada coal fired power plants considered as actions in this cumulative impact assessment. These commitments have the possibility of significantly decreasing the greenhouse gas contributions of these individual projects, but again given the very small incremental contribution of these facilities, the impact on climate change of such reductions would not be identifiable. If, however, similar reductions are implemented at existing and pending fossil fuel plants around the world (when the technology becomes available), and if carbon capture and sequestration technology is eventually developed to the point that it becomes an integral design component of future plants, then there could be significant reductions in the cumulative contribution of greenhouse gas from fossil fuel power production facilities.

Id. at 4-307 to 4-308.

This level of detailed analysis was lacking in *CBD v. NHTSA*. At issue therein were standards that regulate CO₂ emissions from the entire population of vehicles in the country, with car/light truck emissions being responsible for about 5 percent of the world's GHG emissions. The Ninth Circuit rejected NHTSA's contention that

it could not quantify those emissions and factor that data into its consideration of the global warming phenomenon, and held that NHTSA was required to “provide the necessary contextual information about the cumulative and incremental environmental impacts” of the proposed action and other “past, present, and reasonably foreseeable actions.” 538 F.3d at 1217. We agree with WPEA that the FEIS for the WPES does

exactly that, by casting the climate change discussion in terms of a cumulative global phenomenon, presenting the IPCC’s projections of how past, present, and projected future actions and emissions, including the construction and continued operation of coal fired power plants, are likely to affect climate change and environmental impacts, and quantifying and evaluating the incremental contribution of the WPES emissions against that context.

WPEA Answer at 19-20 (citing FEIS at 3.6.2, 4.62, 4.19.3, 4.21.5 and App. M). The record is clear that emissions from the WPES, a single coal-fired plant, will comprise a very small, incremental increase in cumulative GHG emissions. The FEIS shows that BLM evaluated the impacts of that increase as a global warming issue.

Bristlecone challenges BLM’s analysis on theoretical grounds, but fails to demonstrate that BLM failed to take a hard look at the global warming impacts of the WPES. That BLM was careful to address the issue is shown in its response to comments from the EPA indicating a potential disagreement with BLM’s conclusion that the sensitivity of current models does not allow the quantification of a project’s contributions to climate change. *See* Dec. 16, 2008, FEIS Comment Analysis and Responses at 2. EPA referred to its own recent attempts to quantify and model mean temperature change and other impacts of GHG emissions and those of the NHTSA. *Id.* EPA’s comment included the qualification that its objective was to make BLM aware of modeling efforts to analyze emissions, but not to suggest that agencies must quantify potential impacts in the context of NEPA analysis. *Id.* EPA recommended that agencies “include a general, qualitative discussion of the anticipated effects of climate change, including potential effects at a regional level,” in their cumulative impacts analysis. *Id.* As discussed earlier, BLM responded to EPA’s comments by reviewing EPA’s data, and information regarding NHTSA’s efforts to quantify climate change effects, and concluded that the potential climate change impacts of the proposed actions were too small to quantify into impacts on the environment. *Id.*

As noted, BLM draws a contrast between the cumulative impacts analysis found deficient in *CBD v. NHTSA* and that conducted for the WPES project. For the WPES, “BLM has presented the emissions from the project, put them into the context of other similar types of emissions, and provided a clear and supported rationale for why this project’s emissions contributions to the pool of greenhouse gases cannot be

shown to have discernable impacts on regional resources.” BLM Answer at 52. BLM emphasizes that “unlike *CBD v. NHTSA*, BLM is not trying to say project emissions are insignificant and therefore avoid a thorough review, . . . but [that] adding this project’s greenhouse gas emissions to the global pool of greenhouse gases does not result in any discernable impact beyond the projected global warming effects already modeled.” *Id.*; see also FEIS at 4-137. We agree with BLM that in setting out “the general understanding of the presently projected effects of global warming, in relation to available sources to analyze single-source emission additions to the pool of gases that are thought to cause global warming and climate change,” BLM provided “an appropriate cumulative impact analysis.” BLM Answer at 52.

In support of its contention that BLM failed to analyze the Project’s contribution to GHG and global warming, Bristlecone cites comments dated November 17, 2008, by the League of Women Voters (the League), and others, on the FEIS. See SOR, Ex. 5. In particular, the League relied upon “[o]ne computer model commonly used to predict . . . climate change impacts . . . referred to as PAGE2002” (PAGE2002 model). SOR, Ex. 5 at 5. The League states that it retained the services of Dr. Chris Hope, the IPCC member who developed the PAGE2002 model, and who “determined the impact WPES alone may have on global temperature and climate change impacts that may be caused collectively by the western coal plants proposed for federal lands (White Pine, Ely, Toquop, and Desert Rock).” *Id.*¹⁷ BLM considered the same economic impacts and the impacts of possible future large scale impacts as IPCC in the FEIS. ROD at 18. In considering the League’s comments (designated WRA-4), BLM stated that the League appeared to be making “two intertwined comments based on Dr. Hope’s report,” and responded as follows:

The first comment is that Dr. Hope was able to make an estimate of the temperature change that might occur from CO₂ emissions from the WPES, and also from three other proposed power plants. There currently is not a generally accepted methodology quantifying impacts on environmental resources from increases in global CO₂ levels that could occur from an individual emissions source like the WPES, or even from several coal fired power plants or other sources of GHG emissions. Although BLM is not defending the analytic methodologies used by Dr. Hope, we are not surprised by his ultimate conclusions. . . . [W]hile it may be possible to make an estimate of the potential temperature change from a single or a few sources, the resulting number is so small that its [sic] not possible to predict the environmental impacts that

¹⁷ Hope’s report, a background paper on the PAGE2002 model, and other publications relied upon by Hope, are cited in the League’s comments, but are not included as part of Exhibit 5 as indicated.

could result from such a temperature change. The temperature change estimates in Dr. Hope's report are not significantly different from those reached by the EPA or NHTSA, and so they do not change the conclusion in the FEIS. Notwithstanding, the temperature estimates in Dr. Hope's 2002 Policy Analysis of the Greenhouse Effect (PAGE2002) model are calculated as a function of the balance between the greenhouse effect, sulfate cooling, and transfer of heat to the ocean. This approach is extremely simplistic in comparison to the more robust general circulation modeling parameters summarized in FEIS Appendix M (for example, clouds, surface albedo, etc.), thus, for the relatively small emissions associated with a single carbon dioxide emissions source, the documentation of the PAGE2002 model provides no assurance that the model is sufficiently sensitive to provide a meaningful estimate of the temperature effects of a single GHG source considered by itself.

The second comment has to do with economic costs of CO₂ emissions, and consists of a comparison of the Hope report's estimate of the economic costs of the WPES and the three other power plants, with the estimated capital costs of constructing the plants. With respect to this argument, the BLM agrees that it is possible to utilize integrated assessment models to estimate the social costs (or economic impacts) associated with GHG emissions, but determining the social cost of CO₂ emissions is influenced by many factors, subject to great uncertainty. The WPES FEIS Section 4.19.3.6.2 provides a discussion of the social cost of carbon dioxide emissions (SCC), also referred to as the "marginal damage cost," noting that there is a wide range of estimated SCC costs in the published literature, from \$1 to \$31 per ton of CO₂. To illustrate one scenario of the potential SCC of the WPES. The EIS chose a value of \$12 per ton of carbon dioxide (\$50 per metric ton of carbon) based on a study that takes into account 28 published studies and is considered a conservative value representative of the body of peer reviewed SCC literature. As noted in the response to a comment by the EPA, this value could be approximately \$16 per ton of CO₂ (\$65 per metric ton of carbon) if converted to 2007 dollars, resulting in an annual SCC of \$206 million, or about 1.7 cents per kilowatt hour.

The commenter presents the evaluation of Dr. Hope, who estimates the marginal damage cost as \$14 per ton of carbon dioxide (\$58 per metric ton of carbon). . . . The SCC value published by the commenter's analyst is generally consistent with the value used in the FEIS.

The commenter's analyst presents an evaluation of the net present value of climate change impacts due to the WPES and subsequently attempts to imply a cost-benefit analysis based solely on comparing this marginal damage cost to the capital cost of the WPES. BLM notes that a cost-benefit analysis is not required under the applicable regulations and that no cost-benefit analysis is included in the FEIS. Further, the commenter's attempt at a cost-benefit analysis is incomplete and illogical in that it only considers and compares the marginal damage cost of carbon dioxide emissions against the capital cost of the WPES, without considering any other relevant costs or benefits.

FEIS Comment Analysis and Responses at 27-29; *see also* ROD at 18-19.

In responding to Bristlecone's argument that BLM should have addressed how emissions from the WPES are consistent with the need to reduce emissions, BLM states that "[i]n large part, this is a policy argument about how a reduction in greenhouse gas emissions should be accomplished and is beyond the reach of a BLM NEPA analysis of a single project." BLM Answer at 53. BLM states that it was aware of the policy debate, acknowledging that "the addition of more carbon sources, like this station, without policy or market force changes (to reduce carbon output), could eventually lead to 'net positive radiative forcing on climate, which could contribute to the current observed and predicted climate change impacts.'" *Id.* (quoting FEIS at 4-308). However, BLM states that "[t]his recognition was only a part . . . of the analysis and determination of project contributions of greenhouse gases and any resultant potential impacts on climate change caused by the contributions." BLM Answer at 53. As the FEIS notes, "it is not possible to ascertain with accuracy this project's impact on resources and climate change caused by global warming." FEIS at 4-127. BLM states that it did not reach this conclusion lightly or "due to avoiding a hard look at this issue, [but] it is simply based on the most widely accepted information available." BLM Answer at 53.¹⁸

¹⁸ On Feb. 18, 2010, the Council on Environmental Quality (CEQ) addressed a Memorandum to Heads of Federal Departments and Agencies captioned "Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions" (Draft Guidance). The purpose of the Draft Guidance is to help explain how agencies of the Federal government should analyze the environmental effects of GHG emissions and climate change when they describe the environmental effects of a proposed agency action in accordance with Section 102 of NEPA and the CEQ Regulations for Implementing the Procedural Provisions of NEPA, 40 C.F.R. parts 1500-1508.

(continued...)

e. Impacts on Imperiled Species

Bristlecone asserts that BLM acknowledges that the White Pine project will result in increases in mercury, selenium, and other heavy metals into the air and water, FEIS at 2-87, and that methylmercury “can bioaccumulate in the food chain,” “particularly in predator fish and piscivorous birds such as bald eagles,” FEIS at 4-99, “[y]et nowhere did the FEIS analyze impacts to wildlife, fish, and plants found within the area that could result from the deposition of heavy metals, including mercury.” SOR at 53-54. Bristlecone argues that BLM was required to consider the cumulative effects of emissions from the WPES as well as from other nearby coal-fired power plants proposed to be sited in BLM’s Ely District, including the Toquop Energy Project, a proposed 750 MW facility, and the Ely Energy Center, a proposed

¹⁸ (...continued)

Draft Guidance at 1. The following explanation from the Draft Guidance helps to place into context the formidable task facing BLM in evaluating the climate change impacts of the WPES, as well as Bristlecone’s numerous arguments that BLM’s analysis is deficient:

Under this proposed guidance, agencies should use the scoping process to set reasonable spatial and temporal boundaries for this assessment and focus on aspects of climate change that may lead to changes in the impacts, sustainability, vulnerability and design of the proposed action and alternative courses of action. At the same time, agencies should recognize the scientific limits of their ability to accurately predict climate change effects, especially of a short-term nature, and not devote effort to analyzing wholly speculative effects.

Id. at 2. CEQ encourages agencies to “determine which climate change impacts warrant consideration in their EAs and EISs because of their impact on the analysis of the environmental effects of a proposed agency action,” through scoping of an environmental document to “determine whether climate change considerations warrant emphasis or de-emphasis.” *Id.* at 6. BLM’s overall approach during consideration of the WPES in global warming terms was consistent with the following proviso from the Draft Guidance:

Research on climate change impacts is an emerging and rapidly evolving science. In accordance with NEPA’s rule of reason and standards for obtaining information regarding reasonably foreseeable significant adverse effects on the human environment, action agencies need not undertake exorbitant research or analysis of projected climate change impacts in the project area or on the project itself, but may instead summarize and incorporate by reference the relevant scientific literature. See, e.g., 40 CFR 1502.21, 1502.22.

Id. at 8.

1500 MW plant. SOR at 55; FEIS at 4-300 to 4-301. In addition, Bristlecone argues that BLM should have analyzed how global warming, and the WPES's contribution to it, will exacerbate the plight of the imperiled species. SOR at 56; see FEIS at 4-81 to 4-82.

In addressing Bristlecone's argument that BLM failed to consider impacts on imperiled species, as a NEPA matter, it is appropriate to review the biological assessment (BA) prepared by BLM for the WPES. That BA is consistent with the FEIS discussion of the issue. BLM clearly acknowledged that mercury is an element of concern for wildlife toxicity, in particular the issue of how mercury can be deposited within a water body and transformed by microorganisms into a toxic substance known as methylmercury. BA for WPES at 5-6, 5-7. BLM states that there is currently little information concerning effects of mercury deposits on wildlife, and that there are various factors that make forecasting mercury deposition rates in a given area subject to large margins of error. *Id.* BLM asserts that it engaged in a reasoned analysis based on available information, which is all that is required to comply with NEPA. *Id.* (citing *Wyoming Outdoor Council*, 176 IBLA at 25; *Headwaters, Inc. v. BLM*, 914 F.2d 1174, 1182 (9th Cir. 1990)).

BLM points out that it devoted an entire appendix to a discussion of the cumulative impacts on air quality associated with the WPES. Appendix L of the FEIS explains that identifying deposition levels of mercury is subject to a high level of uncertainty, and that predicting effects on wildlife through exposure to methylmercury is even more uncertain. FEIS, App. L at 29-30; see also ROD at 24. Appendix L also shows that BLM nonetheless undertook a review of mercury emissions in light of surrounding projects to determine if a cumulative impact could be ascertained. FEIS, App. L at 30. This review involved working under the conservative assumption that all of the surrounding projects' mercury depositions would overlap at the area of the potential highest mercury concentrations caused by deposition from the WPES, and showed that resultant effects would be at the maximum 3 percent over the current ambient mercury deposition concentrations and bioaccumulation rates. *Id.* Because the mercury deposition concentration is not expected to actually overlap with the WPES's highest deposition concentrations, any resultant effects are expected to be much less than 3 percent. *Id.* at 29. This highly conservative 3 percent estimate is well below the EPA's 30 percent chronic exposure threshold. *Id.*

Bristlecone is incorrect that BLM failed to consider the potential impacts of global warming, as contributed to by the WPES, on imperiled species. In fact, BLM provided an analysis of the potential impacts of climate change on Federally listed species. See FEIS at 4-81, 4-82. Concerning the ability to identify any climate change impact from the WPES on such species, BLM stated that "[t]here is currently no way to determine how the emissions from a specific project under consultation both

influence climate change and then subsequently affect specific listed species or critical habitat. . . .” *Id.* BLM concluded that there is not “sufficient data to establish the required causal connection to the level of reasonable certainty between an action’s resulting emissions and effect on species or critical habitat.” *Id.*¹⁹

In the FEIS, BLM concludes that while it may be possible to estimate the amount of GHG emissions the WPES will contribute into the global pool of GHG emissions, how the addition of WPES’s GHG emissions will affect endangered and threatened species is uncertain. FEIS at 4-137. Exhibit 9 to Bristlecone’s SOR consists of two letters: (1) the November 24, 2008, letter from the EPA to BLM; and (2) the October 3, 2008, letter from EPA to FWS and the National Marine Fisheries Service (NMFS) of the National Oceanic Atmospheric Administration (NOAA) regarding ESA compliance. In the November 2008 letter, EPA noted that the FEIS prepared for the WPES includes a “comprehensive discussion on climate change, alternative coal-fueled generating technologies, carbon capture and sequestration (CC&S), and the ground water monitoring program.” SOR, Ex. 9 (Nov. 24, 2008, Letter) at 1. In its discussion, EPA noted efforts undertaken to model and quantify emissions from a single source, but stated that its objective was not to “suggest that federal agencies must quantify any such potential links in the context of their NEPA analysis,” but rather to “recommend[] that an agency’s cumulative impacts analysis include a general, qualitative discussion of the anticipated effects of climate change, including effects at a regional level.” *Id.* at 3 n.3. EPA stated that “in response to a public comment suggesting that GHG emissions from an individual source could present potential risks for certain threatened and endangered species, EPA analyzed this issue within the contest of the Endangered Species Act,” and that the results of EPA’s assessments are described in the October 3, 2008, letter, cited above.

In that October 2008 letter, EPA sought to confirm the understanding of FWS and NMFS that

issuance of permits under the Clean Air Act for activities that emit GHGs in amounts equal to or less than those analyzed below does not require consultation with NOAA fisheries [FWS] under section 7(a)(2) of the ESA to address the remote potential [that] GHG emissions from an individual source could present for certain listed species.

¹⁹ BLM cites the Special Rule, 50 C.F.R. Part 17, Endangered and Threatened Wildlife and Plants; Special Rule for the Polar Bear (*Ursus maritimus*) Throughout Its Range, 73 Fed. Reg. 28306, 29313 (May 15, 2008)). BLM states that this Special Rule, issued by the U.S. Fish and Wildlife Service (FWS), is consistent with BLM’s cumulative impacts assessment of the WPES’s impacts in relation to global warming and climate change. See BLM Answer at 58.

SOR, Ex. 9 (Oct. 3, 2008, Letter at 1). While the focus of this letter is upon coral species, under the jurisdiction of NOAA Fisheries, and polar bears in Arctic regions, under the jurisdiction of FWS, EPA makes clear that its analysis is equally applicable to other threatened and endangered species, including those of concern to Bristlecone. EPA states:

As an additional basis for considering its ESA section 7(a)(2) obligations, EPA has analyzed whether GHG emission from a single source could be modeled to determine whether the risk of harm to any listed species—including the listed corals or polar bears, or to the habitat of such species—from the anticipated emissions of that single source would trigger ESA section 7(a)(2) consultation. As explained below, this additional analysis supports the same conclusion reached by FWS: consultation under ESA section 7(a)(2) would not be required based on GHG emissions from a single source authorized by EPA.

To date, research on how emissions of CO₂ and GHGs influence global climate change and associated effects has focused on the overall impact of emissions from aggregate regional or global sources. This is primarily because GHG emissions from single sources are small relative to aggregate emissions, and GHGs, once emitted from a given source, become well mixed in the global atmosphere and have a long atmospheric lifetime. The climate change research community has not yet developed tools specifically intended for evaluating or quantifying end-point impacts attributable to the emissions of GHGs from a single source, and we are not aware of any scientific literature to draw from regarding the climate effects of individual, facility-level GHG emissions.

Id. at 4.

Notwithstanding the “limited scientific capability in assessing, detecting, or measuring the relationship between emissions of GHGs such as CO₂ from a specific single source and any localized impact on a single species, its habitat, or its members for purposes of ESA considerations,” EPA sought to analyze “the anticipated GHG emissions from an individual source with the emissions estimates described [in the Oct. 3, 2008, letter], in relation to the two listed coral species and the polar bears.” SOR, Ex. 9 (Oct. 3, 2008, Letter at 4-5). Even so, EPA stated that there are “limited tools” available for assessing the effects of single source emissions on a listed species, such as corals. *Id.* at 7. With regard to the polar bear species, EPA stated that it was “not aware of modeling tools that could be used to analyze the implications of single source emissions on polar bear populations,” and further that

[a]ny attempt to scale the results of DOI's analysis based on the incremental CO₂ concentrations that would be due solely to a single source's emissions would represent a novel and untested application of model results, and thus would not be consistent with the best available data standard for ESA purposes.

Id. at 8. EPA's analysis, while phrased in terms of section 7(a) of the ESA, relates as well to Bristlecone's argument that BLM failed to address the Project's GHG impacts on imperiled species as a NEPA matter:

The best available climate change modeling tools predict that a source with GHG emissions in amounts equal to or less than those of the model facility analyzed above^[20] will have at most an extremely small impact on average global temperature and global atmospheric CO₂ concentrations over and beyond the anticipated functional lifetime of the proposed source. . . . While the foregoing conclusions apply to the listed coral species and polar bears, the MAGICC modeling is not specific to any particular species or its members or any specific location, and the same outputs would constitute the first step in an assessment of impacts on other species. Given the very small global mean climate change magnitudes projected based on the emissions of this type of single source, we believe the outputs of such a single-source impact analysis for other species in other locations would also be of an extremely small magnitude that is too small to physically measure or detect.

In these circumstances, also in light of the uncertainties in attempting to use the models' outputs to predict impacts at a local level, EPA has determined that the risk of harm to any listed species, including the listed corals or polar bears, or to the habitat of such species based on the anticipated emissions of the model facility as described above, or any facility with lower emission, is too uncertain and remote to trigger ESA section 7(a)(2) obligations.

²⁰ For assessment purposes, EPA used "a model facility with emissions estimates that are substantially greater than the emissions estimates from any actual project currently pending before EPA." *See* Oct. 3, 2008, Letter at 5 for specifics of the model facility. The "criteria pollutant and GHG emissions" for the model facility used by EPA "are 20 percent greater than the emissions estimates from one of the largest of the proposed facilities—the Desert Rock Energy Facility." *Id.* at 5 n.2. EPA further used "the well-established Model for the Assessment of Greenhouse-gas Induced Climate Change (MAGICC)," in projecting "changes in global CO₂ concentrations, global-mean surface air temperature and sea-level." *Id.*

Section 7(a)(2)'s purpose of ensuring no likely jeopardy to listed species and no destruction or adverse modification of designated critical habitat is not implicated by such remote potential risks. *See, e.g., Ground Zero Center for Non-Violent Action v. U.S. Department of the Navy*, 383 F.3d 1082 (9th Cir. 2004) (where the likelihood of jeopardy to a species is extremely remote, consultation is not required). This reasoning is consistent with the conclusion reached by FWS and DOI that consultation under ESA section 7(a)(2) is not required for GHG emissions from a single source.

Id. at 9; *see also* ROD at 28-29.

EPA's analysis effectively refutes Bristlecone's argument that BLM was deficient in its review of impacts of the WPES on imperiled species, as a NEPA issue. In addition, we conclude that Bristlecone has failed to show error in BLM's conclusion or that greater certainty is at this time possible.²¹

f. Impacts of Carbon Capture and Sequestration

Bristlecone faults BLM for not providing "an analysis of carbon capture and sequestration (CCS) in connection with WPES,"²² in the absence of which "there is no way for the public to evaluate the environmental impacts that might be caused by the CCS component of this project," such as "double the water consumption at the WPES." SOR at 58; *see* SOR, Exs. 25 and 26.

BLM responds that its staff reviewed whether impacts from future CCS facilities associated with the WPES could be accurately reviewed. *See* FEIS Comment Analysis and Responses at 34. BLM describes the level of "uncertainty regarding type, configuration, operational details, and timing and development" that prevent a more thorough review of this potential option in the FEIS. *Id.*; FEIS at 2.2.3.1.2. According to BLM, several factors make an evaluation of carbon capture technology uncertain, including the fact that there are several forms of carbon capture technologies subject to evaluation, including post-combustion capture, oxy-fuel combustion, separation by absorption, adsorption, low-temperature distillation, gas

²¹ We consider impacts of the Project on imperiled species in terms of whether BLM complied with section 7(a) of the ESA *infra*.

²² Bristlecone defines CCS as "the separation of CO₂ from fossil fuels, capture of the CO₂, and subsequent transportation to a storage location that allows for long-term isolation of CO₂ from the atmosphere." SOR at 58 (citing IPCC, Carbon Dioxide Capture and Storage: Summary for Policy Makers and Technical Summary 3 at 24 (2006), available at <http://www.ipcc.ch/ipccreports/srccs.htm>).

separation membranes, mineralization, and biomineralization. FEIS Comment Analysis and Responses at 35; FEIS App. E. Location and type of sequestration are speculative factors, including a variety of options such as oil and gas formations, coal seams, and saline aquifers. FEIS Comment Analysis and Responses at 35. BLM asserts that, given the uncertainties in technology, utilization, and geographic location of sequestered carbon, quantitative and qualitative assessments are highly speculative at the current time. *Id.* BLM recognizes that when CCS options become more viable, it may be appropriate to conduct another review and assessment under NEPA. *Id.* We see no NEPA deficiency in BLM's analysis of this issue. *See* ROD at 5 (WPEA and the State of Nevada have entered into a Memorandum of Understanding, included as Appendix F of the FEIS, providing that the WPES will be "Carbon Capture Ready" for implementation of future carbon capture technology).

5. *Need for Programmatic EIS for Coal Plant Development in the Region*

Bristlecone states that BLM is the lead agency for three coal-fired power plants in Nevada: WPES, the Tequop Energy Project near Mesquite, Nevada, and Nevada Power's Ely Energy Center. Bristlecone asserts that the WPES and the Ely Energy Center will be located within approximately 20 miles of each other near Ely, Nevada, and that WPEA and Nevada Power are asking BLM "to sell almost 6,000 acres of relatively pristine public land in Steptoe Valley for conversion to private industrial coal plant development." SOR at 59. The Tequop Energy Project would require the sale of 640 acres of BLM land in southern Nevada, and the Bureau of Indian Affairs is engaged in NEPA review for the 1,500 MW Desert Rock coal plant slated for Navajo lands in northwest New Mexico. Bristlecone states that the FEIS and ROD for WPES fail to analyze the combined impacts of WPES, the Tequop Energy Project, the Ely Energy Center, and Desert Rock, and that each EIS for these plants "largely ignores the other three." *Id.* Bristlecone argues that BLM should develop a programmatic EIS "to assess these four DOI coal plant proposals and their cumulative impacts." *Id.* at 60. According to Bristlecone, "[t]he Department of Interior's current unprecedented and simultaneous approval of at least four coal plants on public lands is the type of national or regional program that should be carefully assessed under a Programmatic EIS." *Id.* at 61.

BLM considered Bristlecone's comment and argument in preparing its FEIS. Relying on *Kleppe v. Sierra Club*, 427 U.S. 390, 414-15 (1976), BLM argues that a programmatic EIS is not necessary, given that there is no comprehensive plan guiding a set of actions in the region. BLM states that neither it nor the Department is in the process of developing a program for siting coal-fired power plants. FEIS Comment Analysis and Responses at 32. BLM determined that of the several power plants mentioned by Bristlecone, only two would be located sufficiently close to WPES to have any measurable cumulative impacts. *Id.* BLM was not persuaded that an analysis of reasonably foreseeable projects and their impacts

could not be discussed and reviewed in separate EISs. Rather, BLM states that a programmatic EIS is appropriate for programs, policies, new regulatory requirements, or Congressionally mandated reviews, and that deciding whether to approve the WPES, even in light of the other two projects in Nevada and one in New Mexico, does not give rise to such a need. We conclude that BLM's adopted approach is consistent with NEPA.

D. Section 7(a)(2) of the ESA

[5] As “ESA-listed species” occurring within the WPES project area, Bristlecone lists (1) the Mojave population of desert tortoise; (2) many ESA-listed fish species, including four species of endangered Colorado River fish as well as other listed fish species; and (3) the Southwestern willow flycatcher. SOR at 65 (citing Center for Biological Diversity Map (CBD Map) (SOR, Ex. 24)); BLM Answer at 65. Bristlecone states that “these species currently occur or historically occurred within a few hundred miles of the facility,” and that “White Pine is also located within a few hundred miles of critical habitat that has been designated for the bonytail, razorback sucker, and Southwestern willow flycatcher.” SOR at 65. Bristlecone asserts that neither BLM nor FWS considered the effects of the WPES on these species or other ESA-listed species. *Id.* at 71.

Bristlecone contends that BLM's issuance of the ROWs “may affect” listed species and/or their designated habitat. Specifically, Bristlecone states that “the desert tortoise will be affected by the construction and maintenance of transmission lines and utility corridors, which lead to impacts from off-road vehicles, predation, or, as BLM pointed out in the FEIS, the ‘destruction of burrows and trampling by vehicles.’” *Id.* at 74 (citing FEIS at 4-74, 4-286). Bristlecone asserts that the desert tortoise will be “indirectly affected by use of utility corridors for off-highway vehicle and recreational access.” SOR at 75 (citing Draft Revised Desert Tortoise Recovery Plan, SOR, Ex. 31 at 123, 128). Mercury emissions from the WPES will affect the desert tortoise, Bristlecone claims, due to the “link between toxicants like mercury and an increased susceptibility of tortoises to infectious diseases and mortality.” SOR at 75; *see* SOR, Ex. 31 at 127.

In addition, Bristlecone argues that emissions of mercury, selenium, and other heavy metals may affect “the various imperiled fish, . . . the bonytail, razorback sucker, Colorado pikeminnow, and humpback chub—as well as their critical habitat.” SOR at 75. Bristlecone asserts that “[o]ther ESA-listed fish may also be affected, including Railroad Valley springfish, White River springfish, White River spinedance, Pahump poolfish, Big Spring spinedance, and Pahranaagat roundtail chub.” *Id.* Bristlecone argues that “BLM was . . . duty-bound to conduct a consultation on the impact of its action on all of these and any additional potentially-affected listed species.” *Id.* at 76. “BLM was required to consult with FWS to consider these effects

under the ESA and insure no jeopardy,” states Bristlecone. *Id.* (citing *Florida Key Deer v. Stickney*, 864 F. Supp. 1222, 1229 (S.D. Fla. 1994); 51 Fed. Reg. 19926, 19949-50 (June 3, 1986)). Bristlecone contends that BLM was required to consult on the impacts of global warming on species not only in the Project area, but also on the cumulative impacts of global warming on all species. SOR at 77.

Contrary to Bristlecone’s argument, the record makes clear that BLM conducted an “appropriate consultation” with FWS. *See* BLM Answer at 62. On June 18, 2004, BLM formally requested in writing from FWS a list of endangered or threatened species, or critical habitat, that appear within the area of the proposed action, and on July 14, 2004, BLM received a letter from the regional FWS office indicating that two species (the threatened bald eagle and the “candidate for listing” yellow-billed cuckoo) may occur within the Project area. *See* FEIS App. K. More than a year and a half later, BLM requested by letter that FWS provide an updated list of any species or habitat that may need further review in light of the proposed action, and informed FWS that there was no suitable breeding habitat in the Project area for the yellow-billed cuckoo. *Id.* By letter dated March 8, 2006, FWS informed BLM that only the bald eagle was a potentially affected species, and that the yellow-billed cuckoo had been dropped because of a lack of habitat that would indicate its presence. *Id.*

BLM prepared a BA related to impacts of the WPES on the bald eagle and submitted it to FWS for review. BA dated April 2007. The FWS responded by letter dated September 2, 2007, advising that the bald eagle had been delisted and, therefore, no further consultation was required. *See* FEIS App. K. BLM asserts that ESA consultations were thereupon discontinued, in full compliance with the ESA and implementing regulations. *See* 50 C.F.R. § 402.12(d)(1).

In explaining why its ESA consultation did not encompass the species enumerated by Bristlecone, BLM refers to the scope of the Project area. The ESA regulations define “action area” as the areas “affected directly or indirectly by the Federal action and not merely the immediate area involved in the action.” 50 C.F.R. § 402.02. BLM asserts that this definition is “subject to interpretation,” and that “BLM’s guidance on how to establish an appropriate action area provides little more clarity.” BLM Answer at 64; *see BLM Manual* § 6840. BLM established an “action area” for the WPES project that surrounds all the major project related features, described as lying within the Steptoe Valley and crossing over the Egan Mountain Range into the Butte Valley, encompassing sagebrush shrublands, pinyon/juniper woodlands, salt desert scrub, greasewood playa, greasewood dunes, rabbit brush, and wetlands, with Duck Creek and its associated natural springs and wetlands as the primary hydrologic feature in the area. FEIS App. K, BLM Letter to FWS Seeking Updated Species List. In the BA, BLM addressed potential impacts

of the Project's heavy metal emissions, which went beyond the action area as established. *See* BLM BA at 5-6, 5-7.

Bristlecone defines the action area differently. Bristlecone states that BLM has acknowledged the impacts of the SWIP transmission line on the desert tortoise. SOR at 66, 74-75. The SWIP is referred to as a "connected action" in relation to the WPES, one that will directly impact areas of desert tortoise critical habitat. *Id.* at 66; *see* FEIS at 2-42. Bristlecone asserts that the Project's action area should be expanded to encompass the entire length of the SWIP transmission line. SOR at 74-75.

BLM responds that this argument is "misdirected." BLM Answer at 65. BLM recognizes that the SWIP transmission line, which is proposed to move power from the WPES to northern or southern Nevada, is a connected action in relation to the Station. *See* FEIS at 4-73. However, BLM contends that further review of the impacts on the desert tortoise is not required, since review and consultation with FWS has already occurred. More specifically, BLM states that "[t]he SWIP transmission line was approved in 1994 through an EIS and ROD issued by BLM." BLM Answer at 65; *see* BLM Answer, Ex. 6. Further, BLM indicates that it addressed SWIP impacts on the desert tortoise at that time (*see* BLM Answer, Ex. 7), and again in 2007, when the SWIP transmission line was evaluated in the context of an amendment, and that evaluation included new NEPA and ESA reviews. *See* BLM Answer, Ex. 8. BLM states that ESA compliance review again addressed potential impacts of the SWIP transmission line on the desert tortoise. *Id.* BLM argues, and we agree, that "[t]here simply was no reason, based on project connection to this transmission line, to expand the 'action area' which was associated with that project to encompass all of the SWIP line." BLM Answer at 65.

BLM disagrees with Bristlecone's argument that mercury emissions from the Project "clearly 'may' affect the desert tortoise." SOR at 75. BLM notes that the WPES's projected mercury increase, when added to current mercury concentrations, would bring the total to 3 percent of the total allowable 30 percent ambient air concentration levels allowed by EPA thresholds. BLM Answer at 66. While not directed at wildlife, BLM states that this comparison puts into perspective the potential impacts of the WPES on surrounding lands and animals. BLM states further that "as emissions travel over distances[,] the potential increases in impacts significantly decrease as the concentration decreases, and Appellant has not shown that tortoises 'within a few hundred miles' would be impacted by this project's emissions in any way." *Id.*

BLM's mercury analysis is equally applicable to the various fish species identified by Bristlecone. *See* SOR at 68, 75. BLM states that "[d]etermining this methyl mercury formation and subsequent accumulation (known as bioaccumulation) is subject to a high degree of error and relies on ecosystem-

specific parameters”; “that current models and available methods are not expected to reliably quantify methyl mercury bioaccumulation, and thus quantify potential effects from this element”; and that “[t]here essentially is relatively little information on mercury poisoning in wildlife.” BLM Answer at 66; *see* BLM BA at 5-7.

With regard to the Southwestern willow flycatcher, which Bristlecone argues may be affected by the WPES, BLM states that the discussions regarding impacts on the desert tortoise and the fish species apply. *See* BLM Answer at 67-68.

Bristlecone argues that BLM is required to address ESA consultation in the context of global warming, stating that the scope includes “not only the additional impact of global warming on species in the area that may be affected, but also the effects caused by the cumulative impacts of global warming to which this project will contribute.” SOR at 77. In response, BLM notes that this argument would require that the action area “now be redefined again to encompass essentially the entire United States.” BLM Answer at 69 n. 15. BLM argues that the ESA does not require consultation on such a scale. BLM states that the EPA and the FWS have taken the position that section 7 “consultation is not required for potential impacts of a single source of greenhouse gas emissions in relation to ESA-listed species due to climate change.” *Id.* at 69; *see* FEIS Comment Analysis and Responses at 2; Special Rule, 73 Fed. Reg. at 28313); *see also* BLM Answer, Exs. 3, 10, and 11. BLM asserts that “[t]his conclusion is consistent with BLM’s general cumulative impacts assessment of the project impacts in relation to the global warming and climate change.” BLM Answer at 70.

Bristlecone has not demonstrated reversible error in BLM’s analysis. We conclude that the GHG emissions of the WPES do not trigger an obligation under the ESA to expand the Project area and to further consult with FWS concerning the species of concern to Bristlecone.

CONCLUSION

BLM’s ROD, and the EIS developed for the Project, reflect BLM’s cognizance of the global warming debate and the fact that operation of the WPES will add to GHG levels in the project area as well as globally. BLM readily concedes that taking measures to reduce GHG emissions generally is desirable as a long-term public interest objective and is consistent with policy goals articulated by President Obama and by Secretary Salazar. However, BLM has balanced that interest against the present need for generating a sustainable energy source for the geographic region to be served by the WPES. BLM has juxtaposed that present need against the reality that industry technologies for the generation of geothermal, wind, and solar power are emerging and are currently incapable of supplying the energy that is available through coal-fired power plants. Hence, BLM resolved the dilemma between the

need to reduce GHG emissions, as a present and long-term goal, and the need for a present power source, in favor of approving the ROWs. We conclude that BLM's decision, and the extraordinary effort it undertook to analyze the impacts of approving the ROWs and the subsequent sale of land for the Project, fully complies with FLPMA, NEPA, and the ESA.

Therefore, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 C.F.R. § 4.1, the decision appealed from is affirmed.

_____/s/_____
James F. Roberts
Administrative Judge

I concur:

_____/s/_____
T. Britt Price
Administrative Judge