**Director's Protest Resolution Report** 

# Quartzite Solar Energy Project and Yuma Field Office Resource Management Plan Amendment

May 24, 2013



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# **Reader's Guide**

# How do I read the Report?

The Director's Protest Resolution Report is divided into sections, each with a topic heading, excerpts from individual protest letters, a summary statement (as necessary), and the Bureau of Land Management's (BLM) response to the summary statement.

Report Snapshot							
Issue Topics and Responses	Topic heading						
NEPA	Submission number						
Issue Number: PP-CA-ESD-08-0020	10—Protest issue number						
Organization: The Forest Initiative							
Protester: John Smith							
Protester's na							
Issue Excerpt Text:	Issue Excerpt Text:						
Rather than analyze these potential im	Rather than analyze these potential impacts, as required by NEPA, BLM postpones analysis of						
renewable energy development project	renewable energy development projects to a future case-by-case analysis.						
Summary General statement summarizing the issue excerpts (optional).							
There is inadequate NEPA analysis in	There is inadequate NEPA analysis in the PRMP/FEIS for renewable energy projects.						
Response — BLM's response to	the summary statement or issue excerpt if there is no summary.						
Specific renewable energy projects are implementation-level decisions rather than RMP-level							
decisions. Upon receipt of an application for a renewable energy project, the BLM would require a							

How do I find my Protest Issues and Responses?

- 1. Find your submission number on the protesting party index which is organized alphabetically by protester's last name.
- 2. In Adobe Reader search the report for your name, organization or submission number (do not include the protest issue number). Key word or topic searches may also be useful.



# List of Commonly Used Acronyms

ACEC	Area of Critical Environmental		
	Concern		
APD	Application for Permit to Drill		
APE	Area of Potential Effect		
BA	Biological Assessment		
BLM	Bureau of Land Management		
BMP	<b>Best Management Practice</b>		
BO	Biological Opinion		
CAA	Clean Air Act		
CEQ	Council on Environmental		
	Quality		
CFR	Code of Federal Regulations		
COA	Condition of Approval		
CRIT	Colorado River Indian Tribes		
CSP	CSP Concentrated Solar Power		
CSU	SU Controlled Surface Use		
CWA Clean Water Act			
DEIS/DR	MPA		
	Draft Environmental Impact		
	Statement /Draft Resource		
	Management Plan Amendment		
DM	Departmental Manual		
	(Department of the Interior)		
DOI	Department of the Interior		
EA	EA Environmental Assessment		
EIR Environmental Impact Report			
EIS	Environmental Impact Statement		
EO	Executive Order		
EPA	EPA Environmental Protection		
	Agency		
ESA	Endangered Species Act		
FEIS	<b>'EIS</b> Final Environmental Impact		
	Statement		
FEIS/PR	MPA		
	Final Environmental Impact		
	Statement /Proposed Resource		
	Management Plan Amendment		
FLPMA	Federal Land Policy and		
	Management Act of 1976		
	-		

FO	Field Office (BLM)				
FWS	U.S. Fish and Wildlife Service				
GIS	Geographic Information Systems				
IB	Information Bulletin				
IM	Instruction Memorandum				
КОР	Key Observation Points				
MOU	Memorandum of Understanding				
NAGPRA Native American Graves					
Protection and Repatriation					
	Act				
NEPA	National Environmental Policy				
	Act of 1969				
NHPA	National Historic Preservation				
	Act of 1966, as amended				
NOA	Notice of Availability				
NOI	Notice of Intent				
NRHP	National Register of Historic				
	Places				
NSO	No Surface Occupancy				
OHV	Off-Highway Vehicle (has also				
	been referred to as ORV, Off				
	Road Vehicles)				
PV	Photovoltaic				
RFDS	Reasonably Foreseeable				
	Development Scenario				
RMP	Resource Management Plan				
ROD	Record of Decision				
ROW	Right-of-Way				
SHPO	State Historic Preservation				
	Officer				
SO	State Office (BLM)				
T&E	Threatened and Endangered				
USC	United States Code				
USGS	U.S. Geological Survey				
VRM	Visual Resource Management				
WA	Wilderness Area				
WSA	Wilderness Study Area				
WSR	Wild and Scenic River(s)				

# Protesting Party Index

Protester	Organization	Submission Number	Determination
Clark, Sara A.	Shute, Mihaly and Weinberger LLP / Colorado River Indian Tribes	PP-AZ-Quartzite-13-01	Denied
Figueroa, Alfredo Acosta	La Cuna de Aztlan Sacred Sites Protection Circle	PP-AZ-Quartzsite-13-02	Dismissed; letter postmarked after Jan. 28, 2013 deadline

# Issue Topics and Responses

# <u>NEPA</u>

Issue Number: PP-AZ-Quartsize-13-01-28 Organization: Shute, Mihaly & Weinberger LLP Protestor: Sara Clark

#### **Issue Excerpt Text:**

While the applicant cannot be forced to proceed with alternatives, the agencies must consider alternatives that would reduce Project impacts and avoid the need to amend land use plans, such as the RMP, intended to protect the environment. Issue Number: PP-AZ-Quartsize-13-01-4 Organization: Shute, Mihaly & Weinberger LLP Protestor: Sara Clark

#### **Issue Excerpt Text:**

The responses often point CRIT back to the same analysis on which the Tribes originally commented. This effort violates the National Environmental Policy Act ("NEPA"). 40 C.F.R. § 1503.4; State a/California v. Block, 690 F.2d 753, 773 (9th Cir. 1982) (lead agency must provide "good faith, reasoned analysis" in response to comments raised on draft environmental review documents). As BLM staff failed to address or even respond to the serious concerns raised by the Tribes, CRIT is compelled to file a protest letter seeking additional review. To proceed with this Project and its faulty FEIS would result in violations of both NEPA and the National Historic Preservation Act ("NHPA"), as discussed below.

#### **Summary:**

The Quartzsite Final Environmental Impact Statement/Proposed Resource Management Plan (FEIS/PRMPA) did not adequately address concerns raised with respect to the Draft Environmental Impact Statement/Draft Resource Management Plan Amendment (DEIS/DRMPA) by commenters and, additionally, should have considered alternatives that would lessen the impacts from the Project and would not amend the existing Yuma Field Office (YFO) Resource Management Plan (RMP).

#### **Response:**

With regard to the allegedly inadequate the National Environmental Policy Act of 1969 (NEPA) analysis and response to comments in the FEIS/PRMPA, the Bureau of Land Management

(BLM) notes that all nine of the comments received from the Colorado River Indian Tribes (CRIT) following the release of the DEIS/DRMPA were responded to fully with explanations addressing the specific concerns raised (Quartzsite DEIS/DRMPA, page 26-31 in the FEIS/PRMPA). Consistent with NEPA, the Quartzsite FEIS/PRMPA assessed and considered "comments both individually and collectively," and responded "by one or more of the means listed below, stating its response in the final statement" (40 CFR 1503.4). The BLM either explained how the comments had been addressed in the EIS or why they did not warrant further response. On review, the BLM's comment responses to CRIT on FEIS 26 – 31 did, indeed, show "good faith, reasoned analysis."

In response to the concerns about the range alternatives considered in the DEIS/DRMPA, the BLM notes that the EIS considers a full range of generation facility and plan amendment alternatives. With respect to the proposed plan amendment, the BLM further notes that it expressly considered an alternative that avoided an amendment to the YFO RMP. As explained in the FEIS/PRMPA, the main driver for the amendment to the YFO RMP is the need to reclassify the Project site's current Virtual Resource Management (VRM) Class III designation to a VRM Class IV designation as a result of Project impacts on visual resources if it were to be approved (Quartzsite DEIS/DRMPA, page ES-1). The alternatives that were analyzed in both the DEIS/DRMPA and FEIS/PRMPA included three PRMPA alternatives for reclassifying the Project's VRM designations including a No Action alternative. As explained in the DEIS/DRMPA, the Agency's Preferred RMPA Alternative was identified because it was the one that "would support all of the generation facility alternatives analyzed" in the DEIS/DRMPA, page ES-7).

#### Purpose and Need and Range of Alternatives

Issue Number: PP-AZ-Quartsize-13-01-26 Organization: Shute, Mihaly & Weinberger LLP Protestor: Sara Clark

#### **Issue Excerpt Text:**

Given recent changes in market conditions, solar technologies, and knowledge of the cultural resources located in the region, however, BLM and Western have alternatives to amending the RMP for this Project. In particular, the lower-profile of a photovoltaic project would reduce the visual impacts of the development and avoid the need to amend the RMP for this Project. The cost of photovoltaics has declined dramatically in the last few years. Installed Cost of Solar Photovoltaic Systems in U.S. declined Significantly in 2010 and 2011", September 15, 2011, Science Daily, available at http://www.sciencedaily.com/releases/2011/0 9/110915163959.htm.

#### Summary:

The BLM failed to analyze a reasonable range of alternatives. The BLM did not consider an alternative considering the use of other technologies that could be used for the Project. The BLM and Western Area Power Administration (Western) have alternatives to amending the RMP for this Project. In particular, the lower-profile of a photovoltaic (PV) project would reduce the visual impacts of the development and avoid the need to amend the RMP for this Project.

#### **Response:**

The purpose and need for the proposed action defines the range of alternatives to be considered. The BLM must analyze a range of reasonable alternatives, but is not required to analyze in detail every possible alternative or variation. According to the Council of Environmental Quality (CEQ) regulations for implementing NEPA, an agency may eliminate alternatives from detailed study with a brief discussion of the reasons for having been eliminated (40 CFR 1502.14(a)). For example, an alternative may be eliminated from detailed study if it is determined not to meet the proposed action's purpose and need; determined to be unreasonable given the BLM mandates, policies, and programs; it is substantially similar in design to an alternative that is analyzed; its implementation is speculative or remote; or it is technically or economically infeasible (BLM NEPA Handbook, H-1790-1, 6.6.3).

The CEQ regulations note that "reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the Applicant." (Forty Most Asked Questions Concerning CEQ's NEPA Regulations, #2a). While alternative power generating technologies can be considered, section 2.3.3 of the Quartzsite DEIS/DRMPA notes that the lead agency, Western, "has no authority/jurisdiction over the type of generation technology that an applicant chooses to interconnect to a Western facility" (Quartzsite DEIS/DRMPA, page 2-8). As the DEIS/DRPMA explains, while the Applicant's parent company has developed small-scale solar energy generation facilities utilizing PV technology, such an alternative was determined to be technically infeasible because it did not respond to the applicable objective to develop a solar energy project using the "Applicant's proprietary CSP [(concentrated solar power)] thermal storage technology that would allow the flexible and non-intermittent production of renewable power during peak and/or off-peak demand periods" (Quartzsite DEIS/DRMPA, page 2-9). As the Quartzsite DEIS/DRMPA notes, PV technology "cannot provide energy storage for reliable dispatchable generation" and the characteristics of the Project area, in particular, are better suited to utilize the CSP thermal storage technology (Quartzsite DEIS/DRMPA, page 2-9). In terms of the visual impacts that would result from the CSP thermal storage technology, section 2.3 of the Quartzsite DEIS/DRMPA discusses PV alternatives that were considered, but did not warrant further analysis. Indeed, the visual impacts from the CSP thermal storage technology project were addressed in the response to an issue from the draft document, which found that the visual impact would be moderate to low from the seven key observational points (KOPs) of Tribal concern (KOP 1, 5, 7, 13, 14, 16, 17). Low to moderate visual impact is in conformance to the VRM Class III objective. In fact, the only KOP found out of conformance was KOP 9 - SR95 where it was documented to have high visual impact out of conformance to VRM Class III

objectives. It is for this reason that an amendment was necessary; however, visual mitigation would be implemented to assure VRM Class III conformance from the seven Tribal sensitive KOPs. See also Quartzsite FEIS/PRMPA, pages 26 to 27.

#### **Cumulative Impacts Analysis**

Issue Number: PP-AZ-Quartsize-13-01-20 Organization: Shute, Mihaly & Weinberger LLP Protestor: Sara Clark

#### **Issue Excerpt Text:**

The EIS also relies on an artificially constrained idea of cultural resources; cultural resources include more than individual artifacts. The EIS must be revised to incorporate analysis of the cultural importance of resources such as viewsheds, flora, fauna and trail networks, particularly in the cumulative impact context. Such resources, crucial to the Tribes' ongoing cultural and religious practices, are facing severe pressure from the rush to transform this region. The EIR's omissions in this context violate NEPA. See 40 C.F.R. § 1508.7; Blue Mountains Biodiversity Project v. Blackwood, 161 F.3d 1208, 1215 (9th Cir. 1998) (NEPA requires analysis of the cumulative impacts of all "reasonably foreseeable" future projects); Grand Canyon Trust v. Federal Aviation Administration, 290 F.3d 339,347 (D.C. Cir. 2002) (holding that where many projects across a geographic area contribute to a similar environmental impacts, the cumulative impacts of all projects must be analyzed under NEPA).

#### Summary:

The EIS relies on an artificially constrained idea of cultural resources and must be revised to incorporate analysis of the cultural importance of resources such as viewsheds, flora, fauna, and trail networks, particularly in the cumulative impact context. The EIS's omissions in this context violate NEPA.

#### **Response:**

The commenter is incorrect. The EIS does address a variety of resources in their cultural contexts. Resources traditionally associated with specific tribal interests include cultural properties, defined by the National Historic Preservation Act (NHPA) as eligible for listing in the National Register of Historic Places (NRHP), and includes impacts to views from KOPs as identified through tribal consultation (DEIS section 3.13.2.1). Western's consultation with tribes

with traditional cultural associations with the Project area identified seven locations of cultural importance, including Copper Peak and Dome Peak. It is agreed that these KOPs warrant visual simulations to characterize the potential visual impacts of the Project. Western and the BLM conducted meetings with representatives of 10 tribes to share simulations and other information on the visual impacts analysis. The tribes did not offer substantive comments on the visual simulations or the Agencies' assessment of impacts from those points.

To assist in evaluating the potential indirect impacts of the Project to cultural resources, the BLM conducted an additional records review within 25 miles of the Project area to identify the presence of special-status cultural resources. Special-status cultural resources include properties such as National Historic Landmarks; National Parks; National Monuments established for cultural resources; BLM Area of Critical Environments designated to protect cultural resources; National Historic Trails; sites listed or eligible for listing in the NRHP under criterion A, B, or C; and sites developed for public visitation. The review identified eight special-status cultural resources, including prehistoric, historic, and commemorative properties (DEIS, Table 3-13). No trail networks, traditional cultural properties, or cultural landscapes were identified through initial inventory, tribal consultation, or the additional records review.

All other potential impacts to resource values present within the proposed Project area are analyzed in the EIS under the appropriate sections and headings. Native vegetation within the proposed Project area, for example, is predominantly creosote (Larrea Tridentata) and associated native vegetation. Analysis of the potential effects of the proposed Project on this plant community (DEIS 4.10.3.2) indicates that less than 7 percent of the vegetation will be completely removed, with the remaining 93 percent of the community's root mass left to regenerate beneath the heliostats.

# **Cultural**

Issue Number: PP-AZ-Quartsize-13-01-11 Organization: Shute, Mihaly & Weinberger LLP Protestor: Sara Clark for its conclusion that the Project will cause no adverse impacts to cultural resources.

#### **Issue Excerpt Text:**

Disturbing the remains and belongings of their ancestors causes these tribal members significant physical, spiritual, and emotional harm. Without assurance that avoidance and in situ preservation are the only mitigation measures that will be employed, unless a finding of infeasibility can be made, Western cannot rely on the Mitigation Plan

Issue Number: PP-AZ-Quartsize-13-01-13 Organization: Shute, Mihaly & Weinberger LLP Protestor: Sara Clark

# **Issue Excerpt Text:**

Without the opportunity to review and comment on the plan as drafted by the archaeological consultant, tribes cannot ensure that any requests made in the course of earlier consultation are actually considered and adopted.

Issue Number: PP-AZ-Quartsize-13-01-7 Organization: Shute, Mihaly & Weinberger LLP Protestor: Sara Clark

#### **Issue Excerpt Text:**

However, while previously inhabited sites are correlated to areas with an increased presence of buried archaeological resources, such resources are also found in areas that are "used primarily for travel and associated short-term activity," such as the Project site. Id. at 27. Many of the ancestors of CRIT members were relatively nomadic, resulting in a scattering of resources across this region. If individuals died while traveling, cremations were frequently performed at the site; therefore, it is not uncommon to find evidence of cremation far from known settlements. For these reasons, CRIT objects to the conclusion that there will be no adverse effects on cultural resources based on the premise that no resources are likely to be found.

# **Summary:**

Although habitation sites typically exhibit areas of increased sub-surface archaeological materials, such deposits can occur in areas not used for extended habitation. Many of the CRIT members' ancestors were nomadic, leaving widely-scattered remains potentially including cremations that are difficult to recognize and identify through routine cultural resources inventory used on projects such as this.

Disturbing the remains and belongings of their ancestors causes these tribal members significant physical, spiritual, and emotional harm. In lieu of opportunity to review the cultural resources mitigation plan, CRIT cannot assure its members that based on its prior requests, avoidance and *in-situ* preservation are the only mitigation measures to be employed regarding these dispersed resources. Lacking such assurance, CRIT maintains that Western cannot rely on the Mitigation Plan in concluding that the Project will cause no adverse impacts to significant cultural resources.

#### **Response:**

During a February 2012 tribal coordination meeting, participants voiced opposition to the proposed Project based on visual and ground-disturbing impacts. While raising concerns on the importance of maintaining visual and spiritual connections among places, sites, and topographic landmarks, the tribes did not identify any specific locations of importance, such as cremation sites, within the proposed Project area. Concerns expressed on the impacts to views from off-site features were previously addressed through additional visual resource analyses. "Western conducted meetings with the tribes to share information on the visual impacts analysis, to ensure that their views were taken into account in identifying and resolving any adverse effects" (FEIS, page 62).

Written comments on the DEIS/DRMPA were submitted in February 2012 by the Fort Yuma-Quechan Tribe, Cocopah Indian Tribe, and CRIT. Western responded to a request for additional cultural studies, including an ethnographic study, a trails study, and a regional synthesis seeking further tribal input "to better understand the geographic boundaries of the study areas or locations on which to focus, resources or places of traditional religious or cultural importance known to exist that might be impacted by the Project and which tribes that would participate in these studies through interviews" (FEIS, page 63). At the time of the FEIS publication Western had received no further information from the tribes regarding these issues/questions.

Based on tribal concerns regarding impacts to unknown subsurface cultural materials, Western and the BLM drafted a Monitoring and Discovery Plan and a Native American Graves Protection and Repatriation Act (NAGPRA) Plan of Action and provided those drafts for tribal review and comment. "In July 2012, Western received written comments on the draft plans from the Quechan Tribe, Cocopah Indian Tribe, CRIT, and Gila River Indian Community. Western and the BLM revised the plans to address the tribes' comments, and in August 2012 provided the revised plans to all consulted tribes, while those who had provided written comments were also given a detailed summary of how their comments were considered and addressed. The Monitoring and Discovery Plan describes the notification and consultation procedures that would be followed in the event of a discovery, and will be incorporated into the Record of Decision and any Right-of-Way (ROW) conditions" (FEIS, page 64).

# **Environmental Justice**

Issue Number: PP-AZ-Quartsize-13-01-24 Organization: Shute, Mihaly & Weinberger LLP Protestor: Sara Clark

#### **Issue Excerpt Text:**

CRIT is concerned about the Project because of its impacts on cultural resources and the

cultural landscape, as viewed from places with spiritual and religious importance; here, it is these cultural impacts, not air quality or traffic impacts, that make this Project an environmental injustice. The artificially narrow impact analysis offered in the EIS violates NEPA's requirements. Previous Comments in the Record: CRIT Letter of February 8, 2012 re: Quartzsite Solar

#### **Summary:**

Cultural impacts, not air quality or traffic impacts make this Project an environmental injustice. The artificially narrow impact analysis offered in the EIS violates NEPA's requirements.

#### **Response:**

The EIS considered the environmental consequences of the Project on cultural resources in Chapter 4, FEIS 4-79 to 4-83. As noted on page 4-79, "The methodology [of the analysis] takes into consideration previously recorded resources, the sensitivity of the resources, Project alternatives that have been systematically surveyed and anticipated Project disturbances."

Section 4.13.3.2 of the DEIS specifically analyzed the impacts on cultural resources of approving the Applicant's Proposed Project Alternative - Dry Cooled. The analysis concluded that the impacts were either negligible or easily mitigated:

"There are four cultural properties within the APE [area of potential effect] of the Applicant's Proposed Project. Two of these properties (AZ R:4:30[ASM] and AZ L:12:15[ASM]) are recommended or determined not eligible for inclusion in the NRHP, so the Applicant's Proposed Project would result in no effects to historic properties for these. For a third property (AZ L:7:30[ASM]), the portion of the property within the APE of the Applicant's Proposed Project does not possess characteristics of significance that contribute to the property's eligibility for inclusion in the NRHP. As a result, the Applicant's Proposed Project would result in no effects to historic properties for this property. A fourth cultural property (AZ R:4:18[ASM]) is an archaeological site within the APE of the Applicant's Proposed Project that was recommended during recordation as being potentially eligible for inclusion in the NRHP. The site is located 100 meters north of an existing utility structure, and the Applicant's Proposed Project may involve installation of fiber optic lines above the ground using existing utility poles. To avoid damage to or loss of this archaeological site as a result of implementation of the Applicant's Proposed Project, it is recommended that the site be avoided and that an archaeological monitor be present during construction activities in the vicinity of the site. If this recommendation is followed, this would result in the Applicant's Proposed Project having no adverse effects to cultural resources" (DEIS p. 4-81). Western and the BLM received concurrence from the State Historic Preservation Office on December 9, 2010 in a determination of no adverse effect to sites AZ R:4:18 (ASM), AZ L:12:15 (ASM), AZ L:7:30 (ASM), and AZ R:4:30 (ASM).

Therefore, even under a broader definition of environmental justice, there are no adverse effects to cultural resources from the Project/proposed plan amendment.

# **Tribal Interests and Cultural Resources**

Issue Number: PP-AZ-Quartsize-13-01-31 Organization: Shute, Mihaly & Weinberger LLP Protestor: Sara Clark

# **Issue Excerpt Text:**

In addition, consultation means more than simply providing information to interested Tribes and seeking comment. True consultation must respect, acknowledge, and address tribal concerns related to impacts to the ancestral landscape. Despite tribal input here, no modifications were made in response to comments by the various tribes. Moreover, as indicated above, BLM and Western even failed to provide adequate responses to many of these comments. Previous Comments in the Record: CRIT Letter of February 8, 2012 re: Quartzsite Solar Energy Project Draft Environmental Impact Statement, at 4.

# **Summary:**

Tribal consultation means more than simply providing information to interested Tribes and seeking comment. Consultation must respect, acknowledge, and address tribal concerns related to impacts to the ancestral landscape. Despite tribal input here, no modifications were made in response to comments by the various tribes.

#### **Response:**

Western initiated tribal consultation in September 2009, and worked to ensure that tribes had ample opportunities to identify concerns about historic properties; advise on the identification and evaluation of historic properties (including those of traditional religious and cultural importance); articulate views on the Project's effects on such properties; and participate in the resolution of possible adverse effects. Tribes that received letters include the Ak-Chin Indian Community, Chemehuevi Indian Tribe, Cocopah Indian Tribe, CRIT, Fort Mojave Indian Tribe, Fort Yuma-Quechan Tribe, Gila River Indian Community, Hopi Tribe, Hualapai Tribe, Pueblo of Zuni, Salt River Pima-Maricopa Indian Community, Tohono O'odham Nation, Twenty-Nine Palms Band of Mission Indians, Yavapai-Apache Nation, and Yavapai-Prescott Indian Tribe.

Western and the BLM subsequently held a series of six consultation meetings to further discuss the proposed Project's potential impacts to resource values of specific interest to the native community (see DEIS 5.1.3). Government-to-Government consultation with federally-Recognized Tribes is ongoing throughout Federal agency project planning. A complete summary of consultation at time of publication is provided at FEIS page 61.

Moreover, while the Agencies' obligations under Section 106 concluded upon receipt of the SHPO's concurrence in the "no effect" determination, tribal consultation continues with the coordination of developing a Discovery and Monitoring Plan and a Plan of Action under the NAGPRA. On June 13, 2012, Western mailed the interested Tribes the Discovery Plan and the

NAGPRA Plan of Action for review and comment. On June 20, 2012 the Cocopah submitted comments. On July 18, 2012, the CRIT submitted comments, and on July 18, 2012, the Quechan Indian Nation submitted comments. On September 6, 2012, Western responded to the Tribes outlining how their comments were addressed and what changes were made to the respective Plans.

# Visual Resource Management

Issue Number: PP-AZ-Quartsize-13-01-16 Organization: Shute, Mihaly & Weinberger LLP Protestor: Sara Clark

# **Issue Excerpt Text:**

In response to CRIT's previous comments regarding this unsupported conclusion,

Western merely asserts that "[i]mpacts are anticipated to be low to moderate." FEIS at 27 (emphasis added). Yet the FEIS offers no additional analysis or study of the glint and glare issues, nor does the FEIS address the clear intrusions created by the Project.

# **Summary:**

The FEIS offers no additional analysis or study of the glint and glare issues, nor does the FEIS address the clear intrusions created by the Project.

#### **Response:**

The visual analysis in the EIS thoroughly addressed the visual effects of the Project on other resources. See DEIS pages 4-100 through 4-118.

As noted on DEIS page 4-100, "Per BLM VRM [visual resources management] contrast methodology, the level of contrast associated with the Project was measured by assessing changes to the landscape's physical features (including land form/water, vegetation, and structures) in terms of form, line, color, and texture as seen from sensitive viewing locations. Contrast was documented using Visual Contrast Rating Worksheet – BLM Form 8400-4. Additional contrast resulting from the operations of the facilities was considered, such as the solar collecting tower glowing brightly, night-lighting, and glint and glare."

As noted in the DEIS at 4.16.1.2, the BLM completed contrast rating worksheets (BLM Form 8400-4) from critical KOPs. The impacts to sensitive viewers and their associated KOPs were

assessed for viewer sensitivity, distance of sensitive viewer from the Project, viewing position, and visibility (obstructed, screened, skylines, or backdropped views).

Glint and glare are expressly addressed on DEIS page 4-106. As noted on page 4-106: "A visible-light study has not been conducted for this specific Project; however, some of the following conclusions are based on the Central Tower Receiver Radiance report and supplement (Diep 2010), which discusses the optical hazards of an illuminated receiver in terms of radiometric (non-visible light) and photometric (visible light).

Based on this analysis, the EIS concludes that residential viewers would likely not be affected by glint from the heliostats, but glare would possibly be visible for long durations. Tribally-sensitive viewers would see glare for a longer duration, and from superior viewing positions, would be more likely to see glint from heliostats". The EIS goes on to point out, however, that "all tribal viewers are more than 5 miles away, with the likely impacts from glare being diminished" (DEIS page 4-106).

Section 4.16.4 of the DEIS discussed mitigation measures to reduce overall Project impacts. As noted on page 4-116, "The Project owner would submit to the BLM for review and approval a specific Surface Treatment Plan that would satisfy the following requirements. The treatment plan would include, among other requirements:

- A description of the overall rationale for the proposed surface treatment, including the selection of the proposed color(s) and finishes based on the characteristic landscape.
- A list of each major Project structure, building, tank, pipe, and wall; the transmission line towers and/or poles; mirror support structure; diversion berms/dikes, and fencing, specifying the color(s) and finish proposed for each. Surfaces of all ancillary facilities that are visible to the public, including the backs of the heliostat arrays, would be treated with paint colors that blend with the surrounding landscape and not create excessive glare."

In addition, mirrors would be required to "move to/from stow position in late evening or early morning to prevent any potential errant glint" (DEIS page 4-117).

Based on the preceding, the BLM believes that its analysis of visual impacts, including glint and glare, adequately disclose impacts from the Project, and that the mitigated visual intrusions are within acceptable limits.