

**FINDING OF NO SIGNIFICANT IMPACT
NEW YORK CANYON GEOTHERMAL UTILIZATION AND
INTERCONNECT PROJECT
ENVIRONMENTAL ASSESSMENT
DOI-BLM-NV-W010-2012-0005-EA**

Based on the Environmental Assessment (EA) DOI-BLM-NV-W010-2012-0005-EA, dated May 2013, and after consideration of the environmental effects and recommended mitigation and monitoring, as disclosed in Chapter 4 of the EA, I have determined that implementation of Alternative 1 as analyzed in the EA and with implementation of the recommended mitigation, will not significantly affect the quality of the human environment and that an Environmental Impact Statement (EIS) is not required to be prepared.

I have determined that Alternative 1 is in conformance with the approved Sonoma-Gerlach Management Framework Plan as established pursuant to the Federal Land Policy and Management Act (FLPMA), and are consistent to the maximum extent possible by Federal law with the plans and policies of neighboring local, county, state, and federal agencies and governments. This finding and conclusion is based on my consideration of the Council on Environmental Quality's (CEQ) criteria for significance (40 CFR 1508.27), both with regard to the context and the intensity of impacts described in the EA).

Context

Terra-Gen Power (TGP) proposes to conduct geothermal development and utilization operations in the New York Canyon Geothermal Lease Area located approximately 25 miles east-southeast of Lovelock, Nevada in Pershing and Churchill Counties. The Lease Area is located on the west side of the Stillwater Range and consists of 13 federal geothermal leases covering approximately 28,618 acres. The Geothermal Development Area consists of 7,800 acres of lands within the Lease Area that have been surveyed for cultural and biological resources. The plans for development and utilization of the geothermal resources would include a well-field of up to 30 (in addition to 15 previously authorized exploration wells) production, injection and observation wells, a 70-Megawattpower plant, an air strip and hangar, and the associated pipelines and access roads. The Project Area for Alternative 1 includes (1) the Geothermal Development Area, (2) the 200-foot generation tie-line corridor that extends 24 miles, and (3) a 5 acre site on BLM-administered lands for a new substation.

Intensity

1) Impacts that may be both beneficial and adverse.

The EA has considered both beneficial and adverse impacts of geothermal resource utilization in the New York Canyon vicinity. Concerns related to Native American Religious Concerns and Cultural Resources arose through analysis and consultation; Mitigation measures have been developed to reduce or offset potential adverse impacts and minimize overall impacts.

2) *The degree to which the Proposed Action affects public health or safety.*

Alternative 1 would not adversely affect public health or safety. The plant location, well locations and the transmission line route have very low negative impacts to the health and safety of the public beyond the visual presence.

3) *Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.*

The geographic area of Alternative 1 is not located near any park lands, prime farmlands, wetlands, wild and scenic rivers and critical areas.

Native American Consultation has been continuous throughout the evaluation of this project. From previous consultations, it was known that there could be visual impacts from the exploration drilling and well pads (including sumps) on the setting of the Traditional Cultural Properties (TCPs). To assess any potential impacts to the eligible TCPs, a line-of-sight analysis and visual simulations were done from several key observation points (KOPs). The KOPs were determined by the users of the TCPs.

The viewshed analysis indicated the power plant, regardless of the site selected from amongst the four identified potential sites, would be visible from two of the thirteen KOPs. These two KOPs are not pine nut collection sites, but rather locations selected along the road that crosses Buena Vista Valley that would be traveled by automobile en route to the Stillwater Range. At the time the visual simulations were prepared, the Proposed Action included a gen-tie line that extended across the Fencemaker Pass into Dixie Valley (refer to Alternatives above for information regarding this route). This gen-tie came close to several KOPs and was highly visible. Given these results, it was determined that the Proposed Action could result in impacts on the viewshed from some of the TCPs through the introduction of gen-tie towers and lines in otherwise natural landscapes that are largely uninterrupted from other man-made features. The visual simulations were presented to part of the Lovelock Tribal Council on September 19, 2012.

TGP has been working with the Lovelock and Fallon Paiute Tribes through both the exploration and development EA processes. It was acknowledged that TGP's exploration and development plans would result in some level of impact to the natural and traditional quality of the setting for at least one of the TCPs. Based on the analysis of these issues, the BLM recommended the following mitigation to reduce impacts on TCPs. This FONSI is subject to all of these recommendations.

- TGP shall not block access for the Native Americans to CrNV-02-9535 and CrNV-02-9577, nor put any impediments along these two routes which would prohibit travel along these routes by the Native Americans. Allow Native Americans access to TCPs and sacred sites. TGP shall not block access to the road running along the ridge of the Stillwater Range.
- TGP shall not conduct any off-road or cross-country travel. All vehicular travel must be on roads built and maintained by TGP.

- Well pads including sump perimeters in the southern leases (N-86890, N-76300, and N-76299) shall be successfully re-vegetated within six months after drilling and flow testing. Re-seeding shall be done using weed free and BLM approved seed mixtures. If used for production, the remaining unvegetated area must be less than 15 feet x 15 feet.
- All non-emergency construction, drilling and maintenance shall be prohibited in the southern leases (N-86890, N-76300, and N-76299) during September and October. If the pine-nut season extends into November, the above-listed activities shall be prohibited during that month. Each year, through consultation with the tribes and TCP users, the BLM will determine if the pine nut season extends into November.
- All exploratory drilling shall be done within 3 years.
- To reduce visual impacts to the settings of the TCPs, unless used for production, all well pads outside of the leases mentioned in #3 will be reclaimed and revegetated within 6 months of exploratory/production drilling. For the wells used in production, the remaining unvegetated area must be less than 15 feet x 15 feet. All other areas of the production well pad must be re-vegetated within 6 months of construction.
- No pinyon trees marked as “Seed Trees” will be cut down for any of the construction.

This FONSI also assumes implementation of lease stipulations and applicant proposed environmental measures. All of these together are sufficient to mitigate the adverse effects to the NRHP eligible TCPs in the vicinity of the Project Area.

4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The effect on the quality of the human environment from development of geothermal fluid resources is well known and documented in northern Nevada and specifically within the jurisdiction of the Humboldt River Field Office.

This FONSI also assumes implementation of lease stipulations and applicant proposed environmental measures. Implementation of these measures and all recommended mitigation based on the EA, together are sufficient to mitigate the adverse effects to the NRHP eligible TCPs in the vicinity of the Project Area.

5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

Alternative 1 is not unique or unusual. The development of geothermal resources for the production of electricity is specifically regulated and follows accepted standard operating procedures and best management practices. The BLM has previous experience implementing similar actions in similar areas and have found the effects to be reasonably predictable. There are no known effects of the Alternative 1 identified in the EA which are considered uncertain or involve unique or unknown risks. While this is the case, the

limited water resources of the area will continue to be investigated through the Water Monitoring Plan.

6) *The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.*

There is potential that this action may establish a precedent or represent a decision in principle for future actions with regard to geothermal operations near TCPs. Also, the analysis of more than one plant location to allow flexibility for the proponent to decide at a later time may establish a precedent.

7) *Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.*

Based on the EA, no significant cumulative impacts are expected. Alternative 1, when evaluated together with other past, present, or reasonably foreseeable land disturbing activities in the area, would not result in cumulatively significant impacts at the local or watershed basin scale.

8) *The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the NRHP or may cause loss or destruction of significant scientific, cultural, or historical resources.*

This FONSI is subject to the implementation of all recommended mitigation and assumes implementation of lease stipulations and applicant proposed environmental measures. All of these together are sufficient to mitigate the adverse effects to the NRHP eligible TCPs or sites in the vicinity of the Project Area. No districts, highways, or structures would be affected by Alternative 1.

9) *The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the ESA of 1973.*

There would be no significant adverse impacts to threatened, endangered, or Nevada State sensitive species or associated habitat within the assessment areas. Based on the EA and implementation of mitigation, no significant or adverse impacts would result to these species from implementing Alternative 1. The U.S. Fish and Wildlife Service (USFWS) was consulted and the National Heritage Program database was researched in the development of this EA. An Eagle Conservation Plan was developed by the proponent and incorporated into the EA.

10) *Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.*

Alternative 1 does not violate or threaten any known Federal, State, or local law or requirement imposed for the protection of the environment.



Gene Seidlitz

District Manager
Winnemucca District

Date 6/3/13