

Power Resources (Cameco) Smith Ranch In Situ Recovery NRC Documentation of NHPA Section 106 Review (Draft Cultural Resources Sections of Environmental Assessment)

This document contains sections related to historical and cultural resources from Chapter 3, “Affected Environment,” and Chapter 4, “Environmental Impacts,” and Chapter 5, “Cumulative Impacts,” of the U.S. Nuclear Regulatory Commission (NRC) staff’s draft environmental assessment (EA) for the Smith Ranch In Situ Recovery license renewal. These sections include the staff’s documentation of its consultation activities pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA). For clarity, some additional text not specifically related to cultural resources (such as definitions related to impacts and general information pertaining to cumulative impacts) is provided. The “References” section at the end of this document contains all of the references cited in the sections provided below.

3 AFFECTED ENVIRONMENT

This section describes the historic properties that may be affected by the Smith Ranch ISR Project. The National Historic Preservation Act (NHPA) requires federal agencies to consider the effects of their undertakings on historic properties. Historic properties are defined as resources that are eligible for listing on the National Register of Historic Places (NRHP). The criteria for eligibility are listed in 36 CFR 60.4 and include (i) association with significant events in history; (ii) association with the lives of persons significant in the past; (iii) embodiment of distinctive characteristics of type, period, or construction; and (iv) sites or places that have yielded or are likely to yield important information (ACHP, 2012). The historic preservation review process (NHPA Section 106) is outlined in regulations the Advisory Council on Historic Preservation (ACHP) issued in 36 CFR Part 800, “Protection of Historic Properties.”

3.2.8 Historic and Cultural Resources

Numerous historic and cultural resource surveys have been performed at and in the vicinity of the Smith Ranch site since the 1970s. As licensed ISR-related activities have expanded at the site, additional surveys have been performed, at times overlapping previous surveys boundaries and updating the previous survey results.

The NRC is conducting the National Historic Preservation Act Section 106 process for the undertaking (i.e., the proposed license renewal action). This consultative process addresses the Smith Ranch site and the North Butte remote satellite site. BLM is the lead federal agency for the Section 106 process at the Gas Hills site. The results of the NRC’s conduct of its Section 106 consultation process for the license renewal is discussed in section 7.0 of this EA.

3.3.8 Historic and Cultural Resources

Class III cultural-resource inventories were conducted at the North Butte site in 2005, 2006, 2007, and 2010. The 2005, 2006, and 2007 surveys were conducted in support of planned CBM activities, while the 2010 survey was conducted in support of Cameco’s mine permit update with the WDEQ. By these four surveys, the entire North Butte remote satellite site has

been inventoried for historic resources. These surveys did not identify within the direct Area of Potential Effect (APE) any sites that are recommended for eligibility under the National Register of Historic Places (NRHP), but did identify several sites that are recommended for eligibility within the larger license area boundary for the North Butte site. Section 7.0 of this EA provides details about the NRC's NHPA Section 106 consultation process for the proposed license renewal.

3.4.8 Historical and Cultural Resources

Historic and cultural resources at and in the vicinity of the Gas Hills site were most recently described and discussed in Section 3.2 of the BLM EIS (BLM, 2013). Based on cultural resources inventories conducted at the site, a total of 78 prehistoric cultural resources are located within the site boundaries. Of these, 23 are eligible for listing on the NRHP and 55 are not eligible. A total of 9 NRHP-eligible sites and 16 ineligible sites are located in proposed disturbance areas and could be directly affected by ground-disturbing activities associated with the proposed action. For the sites located in proposed disturbance areas, nine sites required Native American consultation to determine their eligibility, and all were determined to be eligible for listing on the NHRP (BLM, 2013, Section 3.2.1.4).

The NRC's NHPA Section 106 consultation process for the Gas Hills site was conducted during and in support of the NRC's review and approval of the addition of this site to NRC License SUA-1548 in 2004. The discussion in the preceding paragraph is associated with the BLM's Section 106 process, conducted as part of BLM's review of Cameco's 2010 Plan of Operations for the Gas Hills site.

4 ENVIRONMENTAL IMPACTS

The NRC staff reviewed the applicant's environmental report; collected information from federal, state, and local government agencies; and evaluated the environmental impacts to the various resources of the affected environment from the proposed action.

The NRC staff used the guidance outlined in NUREG-1748 (NRC, 2003b) in its evaluation. In accordance with this guidance, the staff evaluated the direct effects and indirect effects that each resource area may encounter from the proposed action and the No-Action alternative. The NRC staff categorizes the impacts in terms of small, moderate, or large, defined as follows:

- **SMALL**—environmental effects are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource.
- **MODERATE**—environmental effects are sufficient to alter noticeably, but not to destabilize important attributes of the resource.
- **LARGE**—environmental effects are clearly noticeable and are sufficient to destabilize important attributes of the resource.

4.2.8 Historical and Cultural Resources

Historical and cultural resource impacts from the Project have been previously evaluated for the Smith Ranch site (NRC, 2001). The Wyoming State Historic Preservation Office (WY SHPO) has reviewed sites: 48CO352, 48CO1289, 48CO1291, 48CO2462, 48CO2463, and 48CO2464, these sites were determined to be not eligible for the National Register of Historic Places (WY SHPO, 2018). Because these sites were found to be not eligible, they will be removed from License SUA-1548 condition 9.9. One site (48CO1288) currently listed as eligible will remain in the license, and if Cameco develops the areas where the historic and cultural resources have been identified as eligible for the National Register of Historic Places (NRHP), they would be required to propose mitigation measures, for NRC review and approval, which will preserve the integrity of these sites. If an inadvertent discovery of historic or cultural resources is made, then Cameco would be required to cease work and all appropriate state, tribal, and federal parties must be contacted. Any discovered artifacts will be inventoried and evaluated in accordance with 36 CFR Part 800. Based on the license condition and commitments made by the licensee, the NRC staff concludes that historical and cultural resources would be protected from destruction or disruption by the proposed activities. Therefore, the NRC staff concludes that historic and cultural resources, although present, would not be adversely effected by the undertaking (i.e., the Proposed Action) at the Smith Ranch site.

4.3.8 Historical and Cultural Resources

As discussed in EA Section 3.3.8, the North Butte site has been inventoried for cultural resources. All of the sites identified as recommended for eligibility under the NRHP at the North Butte site are located outside the direct APE; therefore, the NRC staff concludes that these historic resources would not be adversely affected by the undertaking (i.e., the Proposed Action). If Cameco would want to develop the areas outside the direct APE where historic and cultural resources have been identified as eligible for the NRHP, the licensee would be required to propose mitigation measures, for NRC review and approval, which would preserve the integrity of these sites. If an inadvertent discovery of historic or cultural resources is made, Cameco would be required to cease work and all appropriate state, tribal, and federal parties must be contacted. Any discovered artifacts would be inventoried and evaluated in accordance with 36 CFR Part 800. Based on the license condition and commitments made by the licensee, the NRC staff concludes that historical and cultural resources would be protected from destruction or disruption by the proposed activities. Therefore, the NRC staff concludes that historic and cultural resources would not be adversely affected by the undertaking.

4.4.8 Historical and Cultural Resources

In its GEIS (NRC, 2009), the NRC evaluated the potential generic impacts to historical and cultural resources from ISR activities in the WWUMR (where the Gas Hills remote satellite site is located) and determined that impacts would be greatest during facility construction if the facility was located on a known resource(s). More recently, BLM analyzed the site-specific

impacts on historic and cultural resources as part of its permitting action for the Gas Hills site (BLM, 2013).

The BLM determined, in consultation with Native American tribes and the Wyoming SHPO, that certain identified sites would be adversely affected by Cameco's ISR planned activities at the Gas Hills site. Cameco would need to develop treatment plans in cooperation with the BLM for the identified sites prior to proceeding with construction activities for each of the mine units. BLM's determination of the need for treatment plans came from recommendations of the Wyoming SHPO (Wyoming SHPO, 2016).

The purpose of treatment plans is to mitigate the potential effects to identified sites of cultural interest. For this reason, the NRC concludes that impacts to historic and cultural resources from the Proposed Action at the Gas Hills site would be SMALL and not significant.

Under the No-Action Alternative, approximately 16 ha (40 ac) of land would be reclaimed (the Carol Shop, one access road, and previously disturbed land), and limited exploratory drilling would likely continue (BLM, 2013; Section 4.1.1). Additionally, the No-Action Alternative would require the proper abandonment of all drillholes and wells then present at the site.

The NRC staff expects that the treatment plans to be developed would be applicable under the No-Action Alternative, and for this reason, potential effects to identified sites of cultural interest would be mitigated. Therefore, the NRC staff concludes that impacts to historic and cultural resources at the Gas Hills site from the No-Action Alternative would be SMALL and not significant.

5 CUMULATIVE IMPACTS

5.8 Historical and Cultural Resources

Cumulative impacts to historic, cultural, and paleontological resources would result from the combined effects of regional energy development, construction, and other man-made processes as well as atmospheric changes, erosion, and other natural processes over time. Increased populations as a result of local, energy-development workforce expansion increases the potential for indirect impacts of unauthorized and illegal artifact collection, vandalism, and excavation.

Hundreds of archaeological sites are discovered and recorded each year as the result of cultural-resource investigations associated with energy-development projects. As the demand for Federally-owned minerals increases, there would be an expansion of development activities in areas where pristine cultural resources are located. One of the greatest potential cumulative impacts to cultural resources would be from development activities occurring on private or State lands where no Federal jurisdiction applies protecting historic and cultural properties.

Cumulative impacts to cultural resources include effects on Native American burials and ceremonial use sites. Native American and some early pioneer Euroamerican human remains

are not concentrated in designated “cemeteries” but are, rather, dispersed across the landscape. The cumulative effect of regional energy development could cause more unmarked human burials to be disturbed or destroyed. In addition, the spiritual practices of many modern Native Americans include use of high vantage points that offer a large and natural pristine viewshed. Several large, visually prominent Traditional Cultural Properties have been documented in the region of the Smith Ranch Project, including Devil's Tower National Monument (Bear Lodge), the Pumpkin Buttes, Bear Butte, and portions of the Black Hills. As energy development increases, unobstructed viewsheds would diminish, impacting the ongoing cultural use of those locations.

Cameco commits to stop work and notify the NRC, the WY SHPO, and other appropriate agencies if previously unidentified sites are encountered during any phase of the project. As stated in Chapter 4, the NRC staff concludes that for all Smith Ranch Project sites, historical and cultural resources would not be adversely affected by the undertaking (i.e. the Proposed Action).

Based on this information, the NRC staff concludes that the Proposed Action’s impacts to historical and cultural resources of the project would have a SMALL incremental effect on the SMALL cumulative impacts resulting from other past, present, and [reasonable foreseeable future actions].

7 AGENCIES AND PERSONS CONSULTED

7.2 Wyoming State and Historic Preservation Office (WY SHPO)

By letter dated April 13, 2015, the NRC staff contacted the Wyoming SHPO and requested review of the staff’s proposed direct and indirect Area of Potential Effect (APE) for the Smith Ranch Project (NRC, 2015b). The WY SHPO responded on June 4, 2015, with comments on the proposed direct and indirect APE (SHPO, 2015b). The NRC staff revised the direct and indirect APE and resubmitted it to the SHPO on August 18, 2015 (NRC, 2015a). On September 8, 2015, the WY SHPO concurred with the direct and indirect APEs (SHPO, 2015a). Further discussion of cultural resources can be found in EA Sections 3.2.8, 3.3.8, 3.4.8, 4.2.8, 4.3.8, and 4.4.8.

7.3 Native American Tribes

By letters dated December 20, 2012, the NRC initiated consultation under Section 106 of the NHPA with 27 Native American tribes (NRC, 2012a, 2012b). Due to delays in the project, the NRC reinitiated Section 106 consultation with the same 27 Tribes by letter dated May 13, 2016, updating the Tribes on progress on the NRC’s review and on the WY SHPO’s concurrence on the direct and indirect APEs (NRC, 2016d). In February 2018, the NRC staff held a webinar (NRC, 2018a, 2018b), providing to interested Tribes the background information on historic and cultural surveys performed at the Smith Ranch site and North Butte remote satellite site. The webinar also provided the Tribes with maps and supporting discussion on the WY SHPO-

concurrent direct and indirect APEs. On August 9, 2018, the NRC staff provided the 27 Tribes with the historic and cultural discussions from the draft EA for review and comment.

7.4 Public Participation

On August 9, 2018, the NRC staff made excerpts from the draft EA concerning historic and cultural resources available on the Project web page at <https://www.nrc.gov/materials/uranium-recovery/license-apps/smith-ranch.html>. The NRC staff provided the excerpts for public consideration and comment consistent with 36 CFR § 800.4(d)(1), seeking public comments by September 7, 2018.

REFERENCES

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BLM (U.S. Bureau of Land Management, U.S. Department of Interior), 2013. Final Environmental Impact Statement for the Gas Hills In-Situ Recovery Uranium Project. Lander, WY: BLM Lander Field Office, Wind River/Bighorn Basin District. October 2013.

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NRC, 2015a. Letter to Mary Hopkins: Revision to Proposed Direct and Indirect Areas of Potential Effect for the Smith Ranch Project Proposed License Renewal. ADAMS Package Accession No. ML15205A309. August 15, 2015.

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