From: Rhiannon Scanlon
To: Scott Carey
Cc: Gregory Copeland; Jessica Brooks
Subject: RE: SLUPAC Meeting and Requested Info
Date: Monday, August 7, 2023 3:55:21 PM
Attachments: image008.png
image001.png
20230727-5134_230727_WPPH_April 28 2023_FERC AIR Responses_FINAL.pdf
20230727-5122_230727_WPPH_May 25 2023_FERC AIR Responses_FINAL.pdf
20230612-5177_230612_WPPH_Responses_Deficiencies_Final-.pdf

Hi Scott,

Thank you so much for the opportunity to present. We received good feedback and look forward to providing an update as the project progresses. The final license application filed with FERC is also available on our website (https://www.whitepinepumpedstorage.com/final-license-application).

The FERC e-library can be difficult to navigate, so I have tried to summarize the relevant documents below. I'd be happy to jump on a call with you or any board members who have questions. All records from FERC or filed with FERC related to our project are available here: https://elibrary.ferc.gov/eLibrary/docketsheet?docket_number=p-14851.

On February 27, 2023, rPlus Hydro, LLLP, on behalf of White Pine Waterpower, LLC ("WPW"), applied for an original license for the White Pine Pumped Storage Project with the Federal Energy Regulatory Commission ("FERC").

FERC issued a letter of Deficiency of License Application and Additional Information Request dated April 28, 2023. This is a standard part of the licensing process. Responses to the deficiencies were due in 45 days, and responses to the additional information requests were due in 90 days. On June 12, 2023, WPW filed a letter with FERC responding to the deficiencies. Then on July 27th, WPW filed a letter responding to the additional information requests. Links for FERC letters and our responses are linked below. I've also attached our responses only to this email.

In separate letters, FERC also requested additional information on May 25, 2023 (responses due on July 27th), and again on July 13, 2023 (responses due August 25th). Links for both letters from FERC are also listed below:

1. FERC – Deficiency and Additional Information Request Letter
Accession No.: 20230428-3050
Filed By: FERC Office of Energy Projects
Signed By: Timothy Konnert, West Branch Chief, Division of Hydropower Licensing
Filing Type: FERC Correspondence With Applicant
Filing Desc: Letter informing White Pine Waterpower, LLC that its license application is deficient and requesting additional information to be filed within 45 days re the White Pine Pumped Storage Project under P-14851.
Filed Date: 04/28/2023
https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20230428-3050

2. WPW - Response to 15 Deficiencies
Accession No.: 20230612-5177, 20230612-5178
Filed By: rPlus Hydro, LLLP on behalf of WPW
Signed By: Luigi Resta, President of rPlus Hydro, LLLP
Filing Type: Applicant Correspondence
Filing Desc: Information re Application for License Deficiencies for the White Pine Pumped Storage Project under P-14851.
Filed Date: 6/12/2023
https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20230612-5177
https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20230612-5178

3. FERC – Additional Information Request – May 25, 2023
Accession No.: 20230525-3059
Filed By: FERC Office of Energy Projects
Signed By: Timothy Konnert, West Branch Chief, Division of Hydropower Licensing
Filing Type: FERC Correspondence With Applicant
Filing Desc: requesting additional information to be filed by July 27, 2023, regarding the application for a new license for the White Pine Pumped Storage Project under P-14851.
Filed Date: 5/25/2023
https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20230525-3059

4. FERC – Additional Information Request – July 13, 2023
Accession No.: 20230713-3051
Filed By: FERC Office of Energy Projects
Signed By: Timothy Konnert, West Branch Chief, Division of Hydropower Licensing
Filing Type: FERC Correspondence With Applicant
Filing Desc: requesting additional information to be filed within 45 days regarding the license application re the White Pine Pumped Storage Project under P-14851.
Filed Date: 7/13/2023
https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20230713-3051

5. WPW - Response to Additional Information Request Dated April 28, 2023
Accession No.: 20230727-5134
Filed By: rPlus Hydro, LLLP on behalf of WPW
Signed By: Luigi Resta, President of rPlus Hydro, LLLP
Filing Type: Applicant Correspondence
Filing Desc: rPlus Hydro, LLLP submits Response to FERC's April 28, 2023, letter re License Application Deficiencies for the White Pine Pumped Storage Project under P-14851.
Filed Date: 7/27/2023
https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20230727-5134

6. WPW - Response to Additional Information Request Dated May 25, 2023
Accession No.: 20230727-5122
Filed By: rPlus Hydro, LLLP on behalf of WPW
Signed By: Luigi Resta, President of rPlus Hydro, LLLP
Filing Type: Applicant Correspondence
Filing Desc: rPlus Hydro, LLLP submits Response to FERC's May 25, 2023, Request for Additional Information re License Application for the White Pine Pumped Storage Project under P-14851.
Filed Date: 7/27/2023
https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20230727-5122

rPlus Hydro is committed to FERC's licensing process and looks forward to continued consultation with SLUPAC regarding the White Pine Pumped Storage Project. If you have any questions regarding the Final License Application or the review and comment process, please let me or Greg Copeland(cc'd) know.

Respectfully,
Rhiannon

Rhiannon Scanlon | Development Associate
rPlus Hydro, LLLP | 808.333.2118
rPlus Hydro
More than current.

From: Scott Carey <scarey@lands.nv.gov>
Sent: Monday, August 7, 2023 1:52 PM
To: Rhiannon Scanlon <rscanlon@rplusenergies.com>; Gregory Copeland <gcopeland@rplusenergies.com>
Subject: SLUPAC Meeting and Requested Info

rPlus Hydro, LLLP
201 S Main St, Suite 2100
Salt Lake City, UT 84111

June 12, 2023

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

Via Electronic Filing

Re: White Pine Waterpower, LLC Response to License Application Deficiencies; White Pine Pumped Storage Project (FERC Project No. 14851-003).

Dear Secretary Bose:

On April 28, 2023, FERC submitted a letter to White Pine Waterpower, LLC outlining fifteen (15) deficiencies pertaining to its license application for the White Pine Pumped Storage Project.

Please find attached the following responses and corrections to those deficiencies.

If you have any further questions please contact Greg Copeland, Program Manager for rPlus Hydro, LLLP, at (801) 759-2223.

Sincerely,

Luigi Resta
President
rPlus Hydro, LLLP

Cc: Tim Konnert, FERC

White Pine Waterpower, LLC FERC Project No. 14851-003

Deficiencies Responses

FERC Deficiency No. 1:

Section 4.32(a)(2)(i) of the Commission's regulations requires that an applicant identify (providing names and mailing addresses) every county in which any part of the project, and any federal facilities that would be used by the project, would be located. The FLA states that no federal facilities would be used by the project. However, this appears to be incorrect because the proposed project would almost entirely be located within Bureau of Land Management (BLM) -administered land. Therefore, please correct the application in accordance with the Commission's regulations to (a) identify that the project would use BLM-administered land and (b) provide a name and mailing address for the administrator of this BLM land.

Response:

The project will not utilize any government dams or any other federal facilities as those terms are used in the Federal Power Act and Commission regulations. As reflected in Exhibits A and G and throughout the FLA, the project will occupy BLM administered federal land, as that term is used in the Federal Power Act and the Commission's regulations. The name and mailing address for the administrator of the BLM land that the project will occupy is:

Jared Bybee
Field Manager
Bristlecone Field Office
Bureau of Land Management, Ely District

702 North Industrial Way Office
Ely, NV 89301
(775) 289-1800
jbybee@blm.gov

FERC Deficiency No. 2:

Section 4.32(a)(2)(iii) of the Commission's regulations requires that an applicant identify (providing names and mailing addresses) every irrigation district, drainage district, or similar special purpose political subdivision, (A) in which any part of the project, and any Federal facilities that would be used by the project, would be located, and (B) that owns, operates, maintains, or uses any project facilities or any Federal facilities that would be used by the project. Although comments were previously filed in response to the draft license application by the McGill Ruth Consolidated Sewer and Water District (the District),1 that indicate the District has water supply sources near the location of the proposed project area, the FLA fails to identify this entity and any other irrigation district, drainage district, or similar special purpose political subdivision. Therefore, please revise the FLA to include a contact name and mailing address for the McGill Ruth Consolidated Sewer and Water District and any other irrigation district, drainage district, or similar special purpose political subdivision (A) in which any part of the project, and any Federal facilities that would be used by the project, would be located, and (B) that owns, operates, maintains, or uses any project facilities or any Federal facilities that would be used by the project.

Response:

No part of the project will be located in or will use any facilities or lands owned, operated, or maintained by any irrigation district, drainage district, or similar special purpose political subdivision. In addition, the project will not utilize any government dams or any other federal facilities as those terms are used in the Federal Power Act and Commission regulations. However, the McGill Ruth Consolidated Sewer and Water District (McGill Ruth District) has expressed an interest in the project, even though no part of the project will be located in or will use any facilities or lands owned, operated, or maintained by the McGill Ruth District. As such, a contact name and mailing address for the McGill Ruth District is as follows:

McGill Ruth Consolidated Sewer and Water District
Kurt Carson
Kcarson@mcgillruthwater.com
29 Fourth Street
P.O. Box 1376
McGill, NV 89318

FERC Deficiency No. 3:

Section 4.32(a)(3)(i) of the Commission's regulations requires that an applicant state that the applicant has made, either at the time of or before filing the application, a good faith effort to give notification by certified mail of the filing of the application to: (A) Every property owner of record of any interest in the property within the bounds of the project, or in the case of the project without a specific boundary, each such owner of property which would underlie or be adjacent to any project works including any impoundments; and (B) The entities identified in paragraph (a)(2) of this section, as well as any other Federal, state, municipal or other local government agencies that there is reason to believe would likely be interested in or affected by such application. The FLA fails to state that White Pine has made, either at the time of or before filing the application, a good faith effort to give notification by certified mail of the filing of the application to every property owner of record of any interest in the property within the bounds of the project, or in the case of the project without a specific boundary, each such owner of property which would underlie or be adjacent to any project works including any impoundments. Therefore, please give notification by certified mail of the filing of the application to every property owner of record of any interest in the property within the bounds of the project, or in the case of the project without a specific boundary, each such owner of property which would underlie or be adjacent to any project works including any impoundments and revise the FLA to state that a good faith effort was made to give notification by certified mail of the filing of the application to those parties. Additionally, please file proof of the certified mailings to each of the parties.

Response:

The applicant made a good faith effort, at the time of the filing of the application, to provide notification by certified mail of the filing of the application to all property owners of record within the bounds of the project. Existing landowners or their designated agents were sent notification of the filing of the application and a copy of Exhibit G by certified mail by February 28, 2023. Proof of compliance is provided in Attachment A.

The applicant notes that one notification letter and copy of Exhibit G that was mailed by certified mail to a private landowner was returned to applicant's office undelivered. The applicant made additional efforts to inform that private landowner by email and by phone. Proof of the additional outreach is provided in Attachment A.

The project boundary is defined in the application, and the maps included in Exhibit G identify the project boundary. The applicant made a good faith effort to notify by certified mail the existing landowners within the bounds of the project. The applicant did not send notification to landowners adjacent to the project boundary at the time of filing of the application.

Nonetheless, the applicant has identified eight additional landowners who have lands adjacent to the defined project boundary. For completeness, on May 26, 2023, the applicant sent notification via certified mail to these eight additional landowners of the filing of the application and a copy of Exhibit G. Proof of notification of these additional landowners is provided in Attachment A. Not all certified mail Domestic Return Receipts have been received at the time of this response filing.

FERC Deficiency No. 4:

Section 4.38(f)(2) of the Commission's regulations requires that an application must include any letters from the public containing comments and recommendations. However, the FLA fails to document in Exhibit E, Appendix A, *Consultation Record*, numerous comments filed with the Commission in May and June 2022 by individuals in response to the DLA. Therefore, please correct the FLA in accordance with the Commission's regulations, to include all letters from the public containing comments and recommendations.

Response:

The applicant has added individual letters filed with FERC in May and June 2022 to the Consultation Record. The revised Consultation Record is attached to this filing as Attachment B. For clarity, all pages added to the Consultation Record have been annotated with a red border.

FERC Deficiency No. 5:

Section 4.38(f)(5) of the Commission's regulations requires that an application provide evidence of all attempts to consult with a resource agency or Indian tribe, copies of related documents showing the attempts, and documents showing the conclusion of the second stage of consultation. Although Exhibit E, Appendix A, Consultation Record includes a list of consultation efforts and documentary evidence of many of those efforts, evidence for numerous listed efforts is not provided in Appendix A. Therefore, please correct the FLA in accordance with the Commission's regulations, to include documentary evidence of the consultations for which no evidence is provided; if the consultation type is "For the Record" or "Meeting" please provide all notes for this consultation.

Response:

The applicant has revised the Consultation Record as requested and it is attached to this filing as Attachment B. Entries with a FERC accession number listed are not included as documentary evidence as these filings are publicly available on FERC's e-Library system. For clarity, all pages added to the Consultation Record have been annotated with a red border.

FERC Deficiency No. 6:

Section 4.38(f)(6) of the Commission's regulations requires that an application provide an explanation of how and why the project would, would not, or should not, comply with any relevant comprehensive plan as defined in Section 2.19 of this chapter and a description of any relevant resource agency or Indian tribe determination regarding the consistency of the project with any such comprehensive plan. Section 2.2.4, Summary of Proposed Environmental Measures, states that White Pine understands that an exception or variance of certain requirements in the BLM Ely District Resource Management Plan would be required to facilitate construction of the project. Additionally, Section 5.3 Consistency with Comprehensive Plans, states that the project, as currently designed, is inconsistent with two of the plans – Bureau of Land Management. 2015. Record of Decision and Approved Resource Management Plan Amendments for the Great Basin Region, Including the Greater Sage-Grouse Sub-Regions of Idaho and Southwestern Montana, Nevada and Northeastern California, Oregon, and Utah. Washington, D.C. September 2015, and Bureau of Land Management. 2019. Nevada and Northeastern California Greater Sage-grouse Record of Decision and Approved Resource Management Plan Amendment. March 2019. Section 5.3 lists eleven other comprehensive plans that are, or could be, applicable to the project. However, the FLA provides no explanation to describe how and why the project would, would not, or should not, comply with any of the listed resource management plans. Additionally, the FLA does not appear to include descriptions of relevant resource agency or Indian tribe determinations regarding the consistency of the project with any of the listed comprehensive plans. Therefore, please correct the FLA in accordance with the Commission's regulations, for all resource management plans relevant to the project.

Response:

In the application, the applicant reviewed the 16 federal and state comprehensive plans listed in FERC's List of Comprehensive Plans for Nevada. The applicant determined that nine of the plans were potentially applicable to the project and initially ruled out the other seven. Upon additional analysis the applicant has determined that of those nine comprehensive plans only one directly guides the use of the project lands: BLM 2015 Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment (ARMPA).

Table 6-2 below explains how and why the other identified comprehensive plans that were reviewed were determined to not be applicable to the project.

Separately, the BLM Ely District Resource Management Plan (BLM Ely District RMP), as amended (2008) incorporated several comprehensive plans including the Egan Resource Area Management Plan (1987). While the BLM Ely District RMP is not included in the list of the 16 federal and state comprehensive plans identified in FERC's List of Comprehensive Plans for Nevada, the BLM Ely District RMP has also been identified as an applicable comprehensive plan. Furthermore, the BLM Ely District RMP includes a renewable energy goal to provide opportunities for development of renewable energy sources such as wind, solar, biomass, and other alternative energy sources while minimizing adverse impacts to other resources." The project complies with this renewable energy goal as it will provide an opportunity for significant energy storage capability for these alternative energy sources.

Table 6-1 summarizes how and why the project would comply with the ARMPA and the BLM Ely District RMP and explains the process to address issues of non-compliance. The applicant has consulted with the BLM, NDOW, and Tribes as listed in the consultation record with respect to the project and its consistency

with the relevant comprehensive plans. For the project to proceed, the BLM will need to issue a right of way (ROW) grant on BLM administered federal lands for project use. The project's compliance with relevant comprehensive plans is part of the BLM ROW authorization process that will follow the FERC NEPA review.

Table 6-1: Summary of Consistency with Comprehensive Plans

Comprehensive Management Plan	FLA Reference Section	Resource	Management Plan Limitation	Why Deviation is Required	Path Forward
BLM Ely District Record of Decision and Approved Resource Management Plan, as amended. 2008 Introduced in Exhibit E Section 1.2.2	Exhibit E Section 3.7.1.9	Sage Grouse	No surface activity would be allowed within two miles of a sage grouse lek from March 1 through May 15 (June 15) No surface activity would be allowed within winter range for sage grouse from November 1 through March 31. NOTE: The BLM 2015 Nevada and Northeastern California Greater Sage-Grouse ARMPA supersedes these 2008 limitations	Portions of the project footprint are within winter and summer range and cannot be constructed without use of this land. Construction would need to proceed year-round to efficiently develop the project	The applicant is coordinating with the BLM to form a technical working group that will include NDOW and other stakeholders, to develop mitigation strategies that would in part provide a conservation gain to GRSG whereupon the BLM could grant an exception [1]
	Exhibit E Section 3.7.1.6	Elk/mule deer/pronghorn crucial summer range Seasonal Limitations	No surface activity would be allowed within big game calving/fawning/kidding/lambing grounds from April 15 through June 30	Portions of the project are located within the elk/mule deer/pronghorn crucial summer range and cannot be constructed without use of this land. Construction would need to proceed year-round to efficiently develop the project	The applicant is coordinating with the BLM to form a technical working group to develop mitigation strategies for ungulates (in addition to the GRSG)[1]. The applicant will request an exception for this seasonal limitation from the BLM

Comprehensive Management Plan	FLA Reference Section	Resource	Management Plan Limitation	Why Deviation is Required	Path Forward
	Exhibit E Section 3.7.1.6	Elk/mule deer/pronghorn crucial winter range Limitations	No surface activity would be allowed within big game crucial winter range from November 1 through March 31	Portions of the project are located within the elk/mule deer/pronghorn crucial winter range and cannot be constructed without use of this land. Construction would need to proceed year-round to develop the project	The applicant is coordinating with the BLM to form a technical working group to develop mitigation strategies for ungulates (in addition to the GRSG)[1]. The applicant will request an exception for this seasonal limitation from the BLM
	Exhibit E Section 3.7.1.7	Active raptor nest sites	No surface activity will be allowed from May 1 through July 15 within 0.5 mile of a raptor nest site that has been active within the past 5 years. Note that FLA Table 3.7-10 lists a March 1 – July 31 raptor limitation. May 1 – July 15 is a correction to the FLA	Construction would need to proceed year-round to develop the project	The applicant will conduct pre-construction surveys for raptors and migratory bird nests. Construction activities that can be delayed until the young have fledged will be scheduled as such. In areas where the construction activities cannot be temporarily halted, the applicant will coordinate with BLM and NDOW to develop appropriate mitigation and request an exception for this seasonal limitation from the BLM

Comprehensive Management Plan	FLA Reference Section	Resource	Management Plan Limitation	Why Deviation is Required	Path Forward
BLM 2015 Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment (ARMPA) Introduced in Exhibit E Section 1.2.2	Exhibit E Section 3.7.1.9	Sage Grouse Priority Habitat Management Area (PHMA)	PHMAs are subject to no surface occupancies (NSOs), with no waivers or modifications. Exceptions would be granted under two circumstances: if the proposed action would not have direct, indirect, or cumulative effects on GRSG or its habitat; or if the action is proposed to be undertaken as an alternative to a similar action occurring on a nearby parcel, and it would provide a clear conservation gain to GRSG. 2015 ARMPA Section 1.4 Table 1-4	Both temporary and permanent disturbance are within PHMA and the project cannot be constructed without use of this land	The applicant is coordinating with the BLM to form a technical working group to develop mitigation strategies that would provide a conservation gain to GRSG whereupon the BLM could grant an exception [1]
	Exhibit E Section 3.7.1.9	Sage Grouse General Habitat Management Area (GHMA)	Restrictions on development in GHMAs are intended to allow disturbance but minimize adverse effects of disturbance with restrictions. Disturbance is subject to a controlled surface use and timing limitation stipulation and subject to mitigation, with the objective of first avoiding and minimizing potential impacts on GRSG or its habitat and then compensating for unavoidable impacts on GRSG or its habitat	Both temporary and permanent disturbance are within GHMA and the project cannot be constructed without use of this land	The applicant is coordinating with the BLM to form a technical working group to develop mitigation strategies that would provide a conservation gain to GRSG whereupon the BLM could grant an exception [1]

Comprehensive Management Plan	FLA Reference Section	Resource	Management Plan Limitation	Why Deviation is Required	Path Forward
	Exhibit E Section 3.7.1.9	PHMA, GHMA Seasonal Timing Limitations	Greater Sage-grouse breeding habitat within 4 miles of active/pending leks: March 1 – June 30 Greater Sage-grouse brood-rearing habitat: May 15 – September 15 Greater Sage-grouse winter habitat: November 1 – February 28	Construction would need to proceed year-round to develop the project. Note that without relief from seasonal limitations there is only a 6-week open period to construct (September 15 – November 1)	The applicant is coordinating with the BLM to form a technical working group to develop mitigation strategies that would provide a conservation gain to GRSG whereupon the BLM and NDOW could grant an exception [1]
BLM Nevada and Northeastern California Greater Sage-grouse Record of Decision and ARMPA Amendment March 2019	In October 2019, an injunction was granted to prevent the BLM from implementing the 2019 ARMPA and as a result the BLM reverted to the 2015 ARMPA guidance.				

[1] In mid-2022, the applicant requested the BLM convene a multi-stakeholder technical working group (TWG) to consider various minimization and mitigation measures to address concerns with Greater Sage Grouse (GrSG) habitat within the project area boundary. These measures would then support a potential site-specific amendment to the GrSG - Approved Resource Management Plan Amendment (ARMPA). The BLM indicated in response that pursuit of a site-specific amendment to the GrSG ARMPA would likely conflict with the national policy review of a GrSG Resource Management Plan Amendment that is currently underway.

Subsequent consultation with BLM led the applicant to submit in early 2023 a request to BLM – Bristlecone Field Office, Ely District for BLM to convene a GrSG TWG to facilitate discussion and assist in defining acceptable and achievable mitigation measures to help frame a project-specific exception to the current GrSG ARMPA that will result in clear net conservation gain for GrSG population and habitat.

Further discussions with BLM have resulted in broadening the scope of the TWG to discuss and consider mitigation measures for both GrSG and Ungulates. The BLM invited via letter for several federal, state, and local agencies to participate in a TWG and numerous responses were received. Seven individuals over four organizations (NDOW, BLM, WPC, and NV-SETT) have formed the TWG, and a kick-off meeting is currently being scheduled for June 2023. The applicant will actively collaborate with the TWG on comprehensive mitigation plans that will be incorporated into the environmental review process for the BLM and inform the project-specific exception to the comprehensive plans to facilitate construction and operation of the project.

The project is not subject to the Nevada Statewide Comprehensive Outdoor Recreation Plan, the Humboldt National Forest Land and Resource Management Plan, or the Toiyabe National Forest Land and Resource Management Plan, as the principal project features are located entirely on land managed by the BLM Ely District Office. The transmission line right-of-way is approximately 25 miles and will cross both public and private lands consisting primarily of BLM land and 13 parcels of private land. The line traverses near USFS lands and through lands subject to White Pine County planning. However, the transmission line will be constructed within an existing designated energy corridor (Corridor 110-114) established under Section 368(a) of the Energy Policy Act of 2005, and parallel to an existing NV Energy transmission line. Section 368 corridors are thoughtfully sited by the DOE and other cooperating agencies. to provide maximum utility and minimum impact on the environment and community. Compliance with applicable federal and local management plans were considered during the Section 368 corridor siting and planning processes.

Greater Sage-grouse are managed under the BLM 2015 Nevada and Northeastern California Greater Sage-Grouse ARMPA and not under the USFWS Greater Sage-grouse Conservation Objectives. The storage component of the project area also does not contain recreational fisheries and is not subject to the USFWS recreational fisheries policy or the USFWS North American waterfowl management plan.

The applicant reviewed three plans that were suggested by stakeholders: a) White Pine County Public Lands Policy Plan (October 2018), b) Approval of Resolution 2020-051 Adopting White Pine County Water Resource Plan Element to the White Pine County Master Plan (2019), c) White Pine County Open Space Plan (September 2005). The applicant further analyzed and determined that these suggested plans do not meet FERC's definition of "comprehensive plan" per 18 CFR 2.19. Furthermore, it has been determined that the White Pine County plans do not have jurisdiction over the federal lands administered by the BLM Ely District office, however, they can be utilized as an advisory tool.

Table 6-2: Summary of Not Applicable Comprehensive Plans

Comprehensive Plan	Applicability (Y/N)	Justification	Compliance
BLM Egan RAMP (1987)	N	The BLM Ely District RMP (2008) consolidated the Egan RMAP and now supersedes this plan. The BLM Ely District RMP is an applicable comprehensive plan and is included in Table 6-1.	N/A
BLM Lahontan Resource Area Management Plan (1986)	N	The project footprint is not within the area covered by this BLM RMP.	N/A
BLM Walker Resource Area Management Plan (1986)	N	The project footprint is not within the area covered by this BLM RMP.	N/A
BLM Shoshone Resource Area Management Plan (1986)	N	The project footprint is not within the area covered by this BLM RMP.	N/A
BLM Esmeralda - Southern Nye Resource Area Management Plan (1987)	N	The project footprint is not within the area covered by this BLM RMP.	N/A
BLM Elko Resource Area Management Plan (1987)	N	The project footprint is not within the area covered by this BLM RMP.	N/A
Department of Conservation and Natural Resources. Nevada SCORP. 2022-2026. *The FLA referred to the 2008 SCORP, however after further review the applicant determined the 2022 SCORP is not relevant.	N	The SCORP evaluates the supply and demand of outdoor recreation resources and facilities across all jurisdictions, including lands managed by BLM, and provides recommendations for distribution of Land and Water Conservation Fund (LWCF) monies. The SCORP provides goals, strategic objectives, and recommendations, and does not provide prescriptive land management practices.	N/A
Forest Service. 1986. HNFLRMP. Department of Agriculture, Elko, Nevada.	N	The project footprint does not overlap with lands managed by the Forest Service.	N/A
Forest Service. 1986. TNFLRMP. Department of Agriculture, Sparks, Nevada.	N	The project footprint does not overlap with lands managed by the Forest Service.	N/A
NPS. 1993. The Nationwide Rivers Inventory. DOI, Washington, D.C. 1993.	N	The project footprint does not overlap with lands managed by NPS.	N/A
USFWS Service. 2013. GrSG (Centrocercus urophasianus) Conservation Objectives: Final Report. Denver, Colorado.	N	Greater Sage-grouse are managed under the BLM 2015 Nevada and Northeastern California GSG ARMPA. This comprehensive plan is included in Table 6-1.	N/A
USFWS. Undated. Fisheries USA: the recreational fisheries policy of the USFWS. Washington, D.C.	N	This storage portion of the project also does not include waters within the Nationwide Rivers Inventory.	N/A

USFWS and Canadian Wildlife Service. 1986. North American waterfowl management plan. DOI. Environment Canada. *The FLA referred to the 1986 NAWMA Plan, however after further review the applicant determined the 2018 NAWMA is not relevant.	N		N/A

FERC Deficiency No. 7:

Section 4.38(f)(8) of the Commission's regulations requires that an application provide a list containing the name and address of every federal, state, and interstate resource agency and Indian tribe with which the applicant consulted pursuant to paragraph (a)(1) of this section. The FLA does not appear to include this list; therefore, please correct the FLA in accordance with the Commission's regulations to include a list containing the name and address of every federal, state, and interstate resource agency and Indian tribe with which the applicant consulted pursuant to paragraph (a)(1) of this section.

Response:

The applicant clarifies that the distribution list filed with the cover letter of the application includes the name and address of every federal, state, and interstate resource agency and Indian tribe with which the applicant consulted. The applicant has attached this list, with minor modifications, to this filing as Attachment C. Additional consultation information was also included in Appendix A of the FLA.

FERC Deficiency No. 8:

Section 4.41(f)(5)(iv) of the Commission's regulations requires the FLA to include on-site manpower requirements and payroll during and after project construction, including a projection of total on-site employment and construction payroll provided by month. However, the FLA does not appear to include any of this information; therefore, please correct the FLA in accordance with the Commission's regulations to provide the on-site manpower requirements and payroll during and after project construction, including a projection of total on-site employment and construction payroll provided by month.

Response:

The applicant anticipates on-site manpower to consist of a total of 4,963 job-years for the duration of the 7 years of construction (see Table 9 of Appendix I of Exhibit E of the FLA).

Post-construction, the applicant anticipates 38 full time employees (see Table 14 of Appendix I of Exhibit E of the FLA).

The applicant anticipates a total payroll of $303,600,000 of the years of construction (see Table 9 of Appendix I of Exhibit E of the FLA).

Post-construction, the applicant anticipates station staffing to consist of 38 employees and an associated annual payroll of approximately $7,6000,000, or $633,333 per month (see Table 14 of Appendix I of Exhibit E of the FLA).

Projections of total on-site employment and construction payroll per month, adjusted for work scope activities per year of construction, are provided in Tables 8-1 and 8-2; respectively. Calculations of total on-site employment and payroll during construction assume an average annual salary of $61,173 per construction worker per year in 2022 dollars. The on-site construction staff projections included in Tables 8-1 and 8-2 are based on the applicant's industry knowledge of previously completed pumped storage project construction experience. The estimates provided are subject to change based on Engineering, Procurement, and Construction (EPC) contract specific costs and contracting strategies associated with the project.

Table 8-1: Estimated On-Site Manpower Per Month, Per Year of Construction

Month	Estimated Monthly On-Site Manpower per Year of Project Construction						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
	-2025	*-2026*	*-2027*	*-2028*	*-2029*	*-2030*	*-2031*
January	122	502	553	1045	1322	1104	670
February	196	502	572	770	1280	1035	670
March	241	502	885	1070	1280	1035	414
April	256	563	808	965	1280	1007	390
May	243	553	818	680	1287	993	390
June	258	553	751	875	1330	993	390
July	267	553	744	875	1224	993	26
August	225	507	845	1160	1203	993	26
September	236	458	757	991	1287	993	0
October	265	447	655	1123	1161	993	0
November	308	406	757	1135	1119	924	0
December	358	406	783	1227	1119	855	0
Average Annual Jobs per Year	**248**	**496**	**744**	**993**	**1241**	**993**	**248**

Table 8-2: Estimated Construction Payroll Per Month, Per Year of Construction

Month	Estimated Construction Payroll Per Month Per Year of Project Construction						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
	-2025	*-2026*	*-2027*	*-2028*	*-2029*	*-2030*	*-2031*
January	$624,499	$2,559,196	$2,819,194	$5,327,410	$6,739,556	$5,626,753	$3,415,660
February	$1,001,035	$2,559,196	$2,916,056	$3,925,460	$6,525,440	$5,273,979	$3,415,660
March	$1,230,630	$2,559,196	$4,511,730	$5,454,860	$6,525,440	$5,273,979	$2,110,572
April	$1,304,100	$2,870,174	$4,119,184	$4,919,570	$6,525,440	$5,132,869	$1,988,220
May	$1,239,814	$2,819,194	$4,170,164	$3,466,640	$6,561,126	$5,062,314	$1,988,220
June	$1,313,284	$2,819,194	$3,828,598	$4,460,750	$6,780,340	$5,062,314	$1,988,220
July	$1,359,203	$2,819,194	$3,792,912	$4,460,750	$6,239,952	$5,062,314	$132,548
August	$1,147,976	$2,584,686	$4,307,810	$5,913,680	$6,132,894	$5,062,314	$132,548
September	$1,203,079	$2,334,884	$3,859,186	$5,052,118	$6,561,126	$5,062,314	$0
October	$1,350,020	$2,278,806	$3,339,190	$5,725,054	$5,918,778	$5,062,314	$0
November	$1,570,431	$2,069,788	$3,859,186	$5,786,230	$5,704,662	$4,709,540	$0
December	$1,827,577	$2,069,788	$3,991,734	$6,255,246	$5,704,662	$4,356,765	$0
Annual Total	**$ 15,171,648**	**$ 30,343,296**	**$ 45,514,944**	**$ 60,747,768**	**$ 75,919,416**	**$ 60,747,768**	**$15,171,648**

FERC Deficiency No. 9:

Sections 4.41(f)(5)(v)(A) – 4.41(f)(5)(v)(C) of the Commission's regulations requires the FLA to include the number of construction personnel who currently reside within the project's affected area, would commute daily to the construction site from places outside of the project area, and would relocate on a temporary basis within the project area. Although the FLA indicates the number of non-resident construction workers expected during the construction period, it fails to indicate the number of construction workers who currently reside in the affected area, would commute daily, and would relocate temporarily. Therefore, please correct the FLA in accordance with the Commission's regulations to include the number of construction workers who currently reside in the project area, would commute daily, and would relocate temporarily.

Response:

The construction of the project will require skilled and non-skilled craft personnel to install the specialized equipment and complete the project facilities. The engineering, procurement, and construction management (EPCM) contractor (or contractors) selected to perform the final engineering design and construction management for the project will be encouraged to hire as many local construction contractors and personnel as possible. One of the contractor selection criteria will be the commitment by prospective EPCM contractors to hire a percentage of the construction workforce from the local area.

The applicant defines the local construction workforce as residing in the City of Ely, or the Townships of McGill and Ruth. Local construction employment opportunities within the City of Ely are 4.7 percent (184 workers) (U.S. Census Bureau, Undated(a)), and within McGill is 7.6 percent (87 workers) (U.S. Census Bureau, Undated (b)). There is no construction workforce in Ruth. It is unknown how many of the U.S. Census reported construction workforce will pursue short-term construction opportunities at the project versus maintaining other full-time employment in the area.

The daily commuting distance is defined as approximately 50 miles from the project. Construction workers within a 50 miles radius will largely reside in White Pine County and commute to the project daily. The construction employment within White Pine County is approximately 6 percent (545 workers) (U.S. Census Bureau, Undated(c)). Like the local construction workforce, it is unknown how many of the U.S. Census reported construction workforce within the defined commuting distance will pursue short term construction opportunities at the project versus maintaining other full-time employment in the area.

The applicant estimates that more than 900 on-site workers annually (up to a projected peak of 1,241 workers), residing more than 50 miles away from the project, will relocate on a temporary basis to reside near the project. It is unknown what percentage of local and commutable construction workforce will accept short-term, temporary construction opportunities at the project. At the time of the analysis there were approximately 1,000 vacant housing units in White Pine County. This is potentially sufficient to accommodate most of the non-resident workers during the construction phase of the project. However, the condition, size, pricing, and market availability of the housing needed at the start of each phase of construction are not known at this time. The applicant anticipates that the EPCM contractor selected for a large infrastructure construction project such as the White Pine Pumped Storage project would work with the local communities to update or expand existing RV parks or other temporary housing infrastructure for their non-resident workers.

Citations

U.S. Census Bureau. Undated(a). Ely City, Nevada. Online [URL]: https://data.census.gov/profile/Ely_city;_Nevada?g=160XX00US3223500. Accessed: May 2023.

U.S. Census Bureau. Undated(b). McGill CCD, Nevada. Online [URL]: https://data.census.gov/profile/McGill_CCD;_White_Pine_County;_Nevada?g=060XX00US3203394560. Accessed: May 2023.

U.S. Census Bureau. Undated(c). White Pine County, Nevada. Online [URL]: https://data.census.gov/profile/White_Pine_County...?g=050XX00US32033. Accessed: May 2023.

FERC Deficiency No. 10:

Section 4.41(f)(5)(viii) of the Commission's regulations requires the FLA to include a fiscal impact analysis evaluating the incremental local government expenditures in relation to the incremental local government revenues that would result from the construction of the proposed project; incremental expenditures may include, but are not limited to, school operating costs, road maintenance and repair, public safety, and public utility costs. The FLA does not appear to include this type of analysis; therefore, please correct the FLA in accordance with the Commission's regulations to include a fiscal impact analysis evaluating the incremental local government expenditures in relation to the incremental local government revenues that would result from the construction of the proposed project.

Response:

A fiscal impact analysis was conducted as part of the 2022 Socioeconomic Study that evaluated local government revenues and projected government expenditures that would result from construction of the proposed project (included in the FLA as Appendix I to Exhibit E). Government expenditures resulting from the proposed project are anticipated to be minimal, as discussed in Section 3.0. The towns in the project vicinity (Ely, McGill, and Ruth) have been developed as mining communities and over the years have experienced a boom-and-bust pattern of development related to the business cycle of mineral extraction. Based on publicly available information, there is sufficient existing infrastructure near the project, such as schools, public safety, utilities, hospitals, and housing that has the capacity to support the project. Therefore, it is anticipated that no additional government expenditures resulting from construction of the project would be needed for these elements.

Section 2.4.1.2 discusses the estimated government tax revenue from project construction expenditures by level of government (i.e., local, state, federal) and geography (i.e., White Pine County and Nevada State). Across Nevada, the project is expected to generate approximately $164.3 million in various tax revenues to local, state, and federal governments. Tax revenues generated in White Pine County are estimated at $66.4 million (to all levels of government) over the entire construction period.

The applicant anticipates that non-resident workers will not typically bring family members to the area for the construction period, thus not requiring additional demand for local education services or an increase in school operating costs. Resident workers with families will already be part of the existing school system and will not contribute to additional operating costs.

The applicant anticipates an increase in local traffic due to the construction workforce and the amount of equipment and material deliveries for the project. Subsequently local roads will need increased maintenance and repairs during project construction, with potential replacement post-construction. The applicant will work with local transportation agencies to coordinate any road repairs or maintenance activities. It is anticipated that this will be further detailed in a Traffic Management Plan to be developed by the EPCM contractor for the project, as described in Table 2.2-3 of Exhibit E.

As of a 2019 health care assessment there were 14 licensed physicians in White Pine County. The William Bee Ririe Hospital in Ely is looking to expand its telehealth services to provide care for additional patients. White Pine County's emergency services (medical and fire protection) appear to have the capacity to serve existing County needs. The applicant also anticipates that the selected EPCM contractor will have on-site health and safety facilities and it is expected that project construction would not put an additional strain

on these services. The applicant does not anticipate a significant amount of local government expenditure related to health care, public education, or emergency services.

At the time of the analysis there were approximately 1,000 vacant housing units in White Pine County. The applicant believes this is sufficient to accommodate most of the non-resident workers during the construction phase of the project. However, the condition, size, pricing, and market availability of the housing needed at the start of each phase of construction are not known at this time. The applicant anticipates that non-resident workers will not typically bring family members to the area for the construction period. Many construction trades will not be required for the entire duration of construction; therefore, most non-resident workers are expected to reside in temporary housing units such as hotels, existing RV parks, or temporary RV parks established for project construction. Within a daily commuting distance of 50 miles of the project, there are 10 RV parks/campgrounds. Based on publicly available information, there are 23 lodging establishments near the project. The applicant does not anticipate a significant amount of local government expenditure related to housing and associated public utility costs.

Job generation during post-construction project operations is estimated at 38 direct jobs which is much smaller in magnitude than jobs needed for project construction. Many of these jobs may be filled locally resulting in limited, if any, noticeable population impacts. The applicant does not anticipate any incremental local government expenditures during project operation. Operations of the project are estimated to generate in White Pine County $7.6 million labor income, $21.4 million value added, and $38 million of output (see Table 14 of Appendix I of Exhibit E of the FLA).

FERC Deficiency No. 11:

Section 4.41(f)(7)(i)(C) of the Commission's regulations require that a report on recreation provide a description of any areas within or in the vicinity of the proposed project boundary that are included in, or have been designated for study for inclusion in, a wilderness area designated under the Wilderness Act (see 16 U.S.C. 1132). Section 3.8.2 Direct and Indirect Environmental Effects – Recreation, states there are no designated Wilderness Areas within 10 miles of the project. However, this appears to be incorrect because the proposed project upper reservoir would be approximately 4 miles from the High Schells Wilderness and the proposed project transmission line would be approximately 1.2 miles from the Bristlecone Wilderness, at its closest point where the transmission line right-of-way (ROW) would be located just south of the Hercules Gap. Therefore, please correct the FLA in accordance with the Commission's regulations to provide a description of any areas within or in the vicinity of the proposed project boundary that are included in, or have been designated for study for inclusion in, a wilderness area designated under the Wilderness Act.

Response:

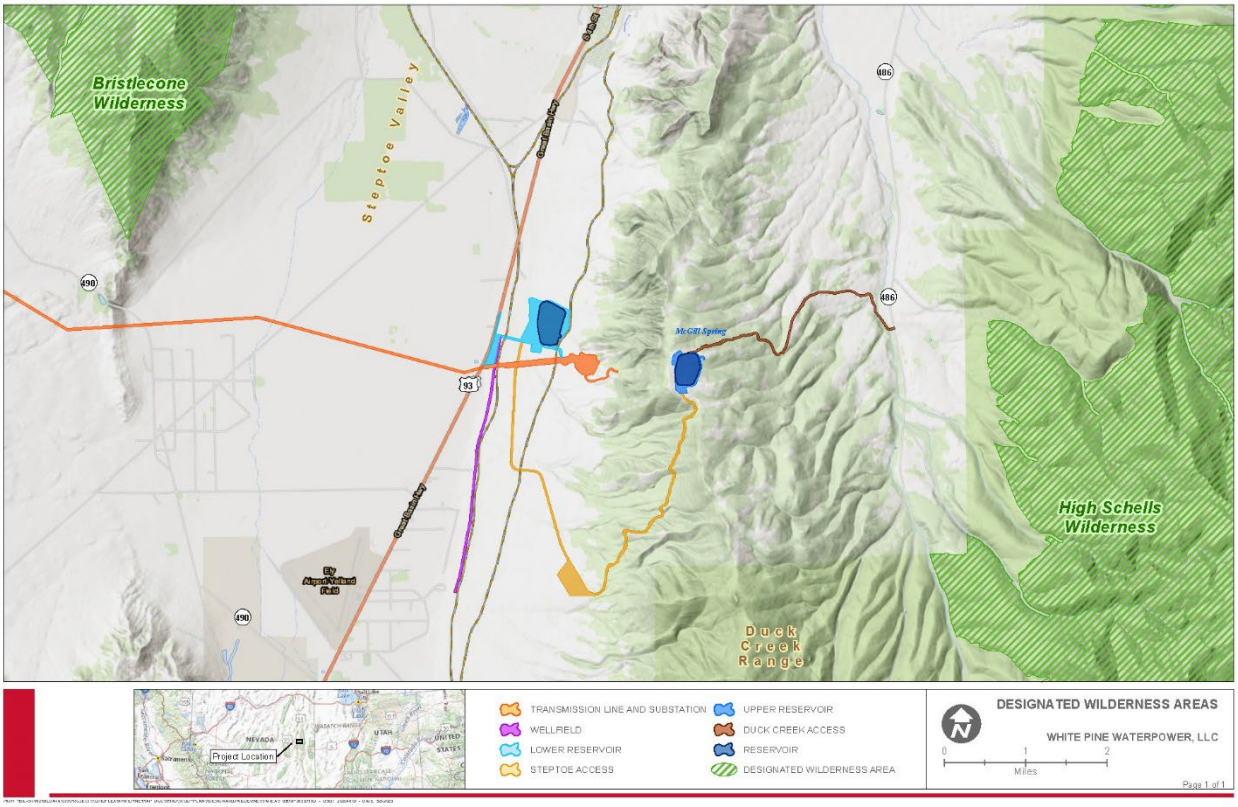
The High Schells Wilderness was designated as a wilderness area under the Wilderness Act in 2006 and consists of 121,497 acres in White Pine County, 10 miles northeast of Ely. The eastern portion has canyons that lead down into Spring Valley, a vertical mile below. The east-side canyons are deeply incised and heavily wooded, with riparian thickets along stream banks. Wheeler Park and the South Snake Range, a mountain island surrounded by desert valleys, are to the southeast. Bristlecone Pines and Limber Pines are present in the higher elevation forests. Popular recreation activities include hiking, horseback riding, backcountry skiing, fishing, big game and upland game bird hunting (USFS, Undated). The High Schells Wilderness is discussed in Section 3.8.1.5 of Exhibit E of the FLA as a part of the Humboldt-Toiyabe National Forest. It is approximately 4 miles east of the project's proposed Upper Reservoir and east of White Pine County Road 486 as shown on the figure below. The Recreation Study Report (Appendix F of Exhibit E of the FLA) also describes the Berry Creek Campground, which supports recreation access to the High Schells Wilderness.

The Bristlecone Wilderness was designated as a wilderness area under the Wilderness Act in 2006 and consists of 14,095 acres in White Pine County near Ely. The Bristlecone Wilderness contains diverse landforms and vegetation types, including sage, grass, and juniper at lower elevations, mixed with aspen stands in the middle elevations, and bristlecone pine and fir stands mixed with grasses and forbs at the upper elevations. It ranges in elevation from 7,400 feet to 9,800 feet in the central Egan Range. Hiking to the summit of Heusser Mountain, the prominent landmark of the Bristlecone Wilderness, is a current recreational activity in the Bristlecone Wilderness. Other recreational opportunities include hunting, camping, scenic viewing and photography (BLM, 2014). The Bristlecone Wilderness is approximately 1.2 miles north of the proposed project transmission line. The project's transmission lines are proposed to be located adjacent to an existing transmission line and within an existing, permitted Section 368 energy corridor already designated to support connectivity to multiple energy generation sources.

Potential project related visual impacts to the Bristlecone Wilderness were evaluated as part of the applicant's environmental analysis. As described in Section 3.11.2.3 of Exhibit E of the FLA, key observation point (KOP) 2 (County Road 28) was selected to be representative of views from the Bristlecone Wilderness. From this mid-elevation position across the Steptoe Valley (to the east, southeast),

unobstructed middle-ground views of the project vicinity, Schell Creek Range, and agricultural land within the valley are present. The view represented by this KOP is typical of this desert region.

The High Schells Wilderness and the Bristlecone Wilderness are shown on the figure below in relation to the project[1].



Citations

Bureau of Land Management (BLM). 2014. Bristlecone and Goshute Canyon Wilderness Preliminary Wilderness Management Plan. BLM Ely District Office. *DOI-BLM-NV-L000-2014-0001-EA*.

U.S. Forest Service (USFS). Undated. High Schells Wilderness. Online [URL]: https://www.fs.usda.gov/detailfull/htnf/home/?cid=stelprdb5238646. Accessed: June 2023.

[1] The applicant created this figure in response to FERC Deficiency No. 11. It has not been included in previous FERC filings.

FERC Deficiency No. 12:

Section 4.41(h)(1) of the Commission's regulation requires that Exhibit G maps show the location of all project works and principle features. Although Exhibit G, Maps G5 and G6 appear to show that the project boundary encompasses the project's cable, main access, and tailrace tunnels, neither is identified in the maps. Additionally: (a) Map G5 appears to show the switchyard access road, but it is not identified; (b) Map G5 does not appear to show the lower reservoir perimeter road and lower reservoir laydown areas; (c) Map G6 does not appear to show the upper reservoir perimeter road and upper reservoir laydown areas; (d) Map G5 does not appear to show the wellfield conveyance access road; and (e) Maps G1 through G5 do not appear to identify existing access roads and tracks proposed to be utilized by the project and do not appear to identify proposed locations of new access roads and tracks that would provide access to the proposed transmission line ROW. Further, Exhibit G maps do not appear to identify the location of the proposed temporary explosives storage area and the existing roads proposed to be utilized to access the storage area. Therefore, the FLA does not conform to 18 CFR 4.41(h)(1) of the Commission's regulations. Please correct Maps G5 and G6 to identify the project facilities. To aide staff's review of Exhibit G, please modify the exhibit so that the alignments of proposed project facilities and the proposed project boundary are identified using appropriate colored lines (e.g., dashed, red line for the project boundary; solid, green line for any proposed new access road; bold, orange line for any existing access roads proposed for use by the project.

Response:

The applicant has updated the requested maps to show the location of all project works and principal features.

All principle underground works within the project boundary are now shown and identified including the cable, main access and tailrace tunnels. To facilitate additional labels and facility linework, the applicant has increased the scale and number of maps to allow for additional detail.

Specific FERC requests have been addressed as follows:

a. The switchyard access road is shown and labeled as the "Western Access Road" (See Attachment D - Map G10).
b. The lower reservoir perimeter road is shown and labeled (See Attachment D – Map G10). As noted in the FERC letter on May 25, 2023 the lower reservoir laydown area is not intended to be utilized permanently and is not shown in these updates.
c. The upper reservoir perimeter road is shown and labeled (See Attachment D - Map G10). As noted in the FERC letter on May 25, 2023 the upper reservoir laydown area is not intended to be utilized permanently and is not shown in these updates.
d. The wellfield conveyance road is shown and labeled (See Attachment D - Map G9 and G12)
e. Updated Maps G1 through G9 now show all roads and existing two-track trails that the project proposes to utilize to provide access to the transmission line ROW.

As noted in the FERC letter on May 25, 2023 the applicant confirms that the proposed temporary explosives storage area and existing roads proposed to be utilized to access the storage area are for temporary use during project construction and are not shown in updated Attachment D - Map G10.

To aid FERC staff's review, the applicant has colored the alignments of the proposed facilities and the proposed project boundary. The following colors have been utilized:

- Project Boundary: Red / Dashed
- New Access Roads: Green / Solid
- Existing Access Roads Utilized by project: Orange / Solid (not used as all permanent access roads are new construction)

FERC Deficiency No. 13:

Section 4.41(h)(2) of the Commission's regulations requires that the project boundary enclose all project features. Because Exhibit G does not appear to show all proposed project features, including the soil disposal area and the features listed above, enclosed by the project boundary, please correct Exhibit G maps to enclose all proposed project facilities and features within the proposed project boundary.

Response:

The applicant confirms that the project boundary encloses all permanent project features. However, as discussed in FERC letter dated May 25, 2023, there are laydown and staging areas that are temporary in nature, used only during project construction, and will be restored and reclaimed after project construction is complete. These areas are not included within the project boundary or identified within the updated Exhibit G Maps.

FERC Deficiency No. 14:

Section 4.41(h)(4) of the Commission's regulations requires that the maps identify by legal subdivision (i) lands owned in fee by the applicant and lands that the applicant plans to acquire in fee and (ii) lands over which the applicant has acquired or plans to acquire rights to occupancy and use other than fee title, including rights acquired or to be acquired by easement or lease. Exhibit G maps identify non-federal lands that would be encompassed by the project boundary. However, the maps don't indicate: (a) which lands are currently owned in fee by the applicant; (b) which lands the applicant plans to acquire in fee; and (c) the lands over which the applicant has acquired or plans to acquire rights to occupancy and use other than fee title, including rights acquired or to be acquired by easement of lease. Therefore, please correct Exhibit G to identify these types of lands.

Response:

Exhibit G Maps are updated to reflect lands the applicant plans to purchase or acquire rights to occupy. Please see Attachment D.

Land Parcel rights are identified with hatching as follows:

- Lands that do not intersect the project are not hatched.
- Federal lands intersected by the project boundary are all Bureau of Land Management and have a diagonal line hatch.
- Non-Federal Lands that the applicant plans to acquire in fee have a vertical line hatch.
- Non-Federal Lands that the applicant plans to acquire rights other than fee title have a horizontal line hatch.

For the majority of Non-Federal lands, a decision on fee or other rights has not been finalized and the parcels have both vertical and horizontal hatching. No lands are currently owned in fee by the applicant. Non-Federal parcels and the applicant's intent for acquisition in fee or intent to aquire rights other than fee, are listed below in Table 14-1

Table 14-1: Applicant intent for Non-Federal Land Rights

Parcel	Map (original Exhibit G)	Attachment D Map Number	Lands currently owned in fee by the applicant	Lands the applicant plans to acquire in fee	Lands over which the applicant has acquired or plans to acquire rights to occupancy and use other than fee title, including rights acquired or to be acquired by easement of lease
005-620-17	G4, G3	G7		x	x
005-610-27	G4	G7		x	x
010-800-04	G4	G8		x	x
010-880-05	**G4**	G8		**x**	
010-880-06	G4	G8		x	x
010-270-09	G4	G8		x	x
010-800-01	G4	G8		x	x
010-300-14	G6	G11		x	x
010-300-13	G6	G11		x	x
010-350-12	G6	G11		x	x

FERC Deficiency No. 15:

Section 4.61(a)(2) of the Commission's regulations requires that Exhibit G drawings must have identifying title blocks and bear the following certification: "This drawing is a part of the application for license made by the undersigned this day of _____, 20__." Please revise the drawings to include this information.

Response:

FERC confirmed on January 18, 2023 that CFR Section 4.61 applies to projects with a total installed generating capacity of 5 MW or less. The project has a capacity of 1,000 MW, as such CFR 4.61 does not apply.

Luigi Resta, President
rPlus Hydro, LLLP
201 S Main St, Suite 2100
Salt Lake City, UT 84111
(801) 456-1575

July 27, 2023

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

Via Electronic Filing

Re: White Pine Waterpower, LLC Response to License Application Request for Additional Information; White Pine Pumped Storage Project (FERC Project No. 14851-003).

Dear Secretary Bose:

On May 25, 2023, FERC submitted a letter to White Pine Waterpower, LLC ("WPW") outlining 2 Additional Information Requests (AIR) pertaining to its license application for the White Pine Pumped Storage Project.

Please find attached the following responses to those AIRs. WPW is not providing a revised Final License Application (FLA) or revised Exhibits at this time. WPW may, in the future, provide a revised FLA and Exhibits once all deficiencies and additional information requests are addressed.

If you have any further questions please contact Greg Copeland, Program Manager for rPlus Hydro, LLLP, at (801) 759-2223.

Sincerely,

Luigi Resta
President
rPlus Hydro, LLLP

Cc: Tim Konnert, FERC

White Pine Waterpower, LLC FERC Project No. 14851-003
May 25, 2023 Additional Information Request Responses

FERC-A2-1 Exhibit A

Section 3.1 Western Access Road and Exhibit E, Section 2.2.1.12 Access Roads appear to indicate that the Western Access Road would provide construction and operational access to laydown and staging areas. While project construction activities would be temporary and would terminate with the completion of construction of project facilities, project operational activities would be ongoing for the duration of any project license. Considering that the FLA states that the Western Access Road would provide operational access, please clarify whether laydown and staging areas used during construction would also be used during project operations. If the laydown and staging areas would be temporary, and only for use during project construction, please clarify whether these areas would be restored after project construction is complete.

We recognize that in our previous request for additional information, issued on April 28, 2023, we requested corrections to Exhibit G Maps G5 and G6 to identify the location of lower reservoir laydown areas and upper reservoir laydown areas. However, if the laydown areas would be for temporary use during project construction, and not for potential continued use during project operations, the laydown areas would not need to be identified in Exhibit G.

Response

The laydown and staging areas included in the project footprint, but not the project boundary, will be temporary and only for use during project construction. These areas will be restored after project construction.

FERC-A2-2 Exhibit A

Section 3.0 Project Access Roads mentions that a temporary explosives storage facility would be located along an existing unpaved access track, to the east of the main access tunnel portal. However, no details about the temporary explosives storage facility, including the physical composition, dimensions, and general configuration of the facility are provided. In your response, please provide as many details as possible about the temporary explosives storage facility, including the materials used to construct it, dimensions, and if the facility would be above or below ground.

We recognize that in our previous request for additional information, issued on April 28, 2023, we requested corrections to Exhibit G Maps G5 and G6 to identify the location of the proposed temporary explosives storage area and the existing roads proposed to be utilized to access the storage area. However, if the explosives storage area and the existing roads would only be for temporary use during project construction, and not for potential continued use during project operations, the explosives storage area and the existing roads would not need to be identified in Exhibit G.

Response

The project will use and store explosives as part of its construction activity. The primary use for these explosives will be underground during construction of the powerhouse and supporting tunnels.

The Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) has jurisdiction over commercial explosives. An ATF permit is required to ship, transport, or receive commercial explosives. Additionally, the ATF protects the public from unsafe or unsecure storage of explosive materials and regularly inspects the explosives storage magazines and records of licensees and permittees to ensure compliance with federal regulations.

The facility used to store explosives during construction will be specified by the contractor prior to construction. The explosives storage facility will comprise a licensed explosives storage magazine(s) compliant with ATF Federal explosives regulations at 27 CFR, Part 555, Subpart K. A typical image of a magazine is provided below (See Figure A2-2-1). The applicant, with its building contractor, will determine at a later stage in the project the exact dimensions, configuration and number of explosives storge magazine(s) that will be required. In addition to the magazine security required by federal regulations the area will be graded and secured by fencing and gated access during construction.

Figure A2-2-1: Typical Explosive Storage Magazine

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(801) 456-1575

July 27, 2023

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

Via Electronic Filing

Re: White Pine Waterpower, LLC Response to License Application Additional Information Request; White Pine Pumped Storage Project (FERC Project No. 14851-003).

Dear Secretary Bose:

On April 28, 2023, FERC submitted a letter to White Pine Waterpower, LLC ("WPW") outlining 103 Additional Information Requests (AIR) pertaining to its license application for the White Pine Pumped Storage Project.

Please find attached the following responses to those AIRs. WPW is not providing a revised Final License Application (FLA) or revised Exhibits at this time. WPW may in the future, provide a revised FLA and Exhibits once all deficiencies and additional information requests are addressed.

If you have any further questions please contact Greg Copeland, Program Manager for rPlus Hydro, LLLP, at (801) 759-2223.

Sincerely,

Luigi Resta
President
rPlus Hydro, LLLP

Cc: Tim Konnert, FERC

White Pine Waterpower, LLC FERC Project No. 14851-003
April 28, 2023 Additional Information Request Responses

FERC-A1-1 General Comments

The consultation record is incomplete. For instance, the record is missing some agency comments and correspondence that were provided to the applicant or to the project record, but do not appear to have been filed to eLibrary or included in Appendix A, Consultation Record of the FLA (e.g., BLM email dated December 15, 2020, noting a need for an EA due to the roads; meeting notes from the November 15, 2022 meeting of the Natural Resource Advisory Committee of White Pine County attended by Greg Copeland of rPlus Hydro, LLLP; BLM email dated November 18, 2022, indicating BLM cannot currently support a site-specific amendment to the Record of Decision and Approved Resource Management Plan Amendments for the Great Basin Region, Including the Greater Sage-Grouse Sub-Regions of Idaho and Southwestern Montana, Nevada and Northeastern California, Oregon, and Utah. Washington, D.C. September 2015 and that other options should be evaluated; Park Service and Nevada Northern Railway (NNR) January 20, 2023 correspondence indicated "For the Record"; etc.). A copy of all correspondence provided by agencies to the applicant should be included in the consultation record. Please revise Appendix A accordingly so that staff has an accurate context for the agency's concerns summarized in the table in Appendix A. Additionally, if agency comments were provided to the applicant and referenced in Appendix L, Response to Comments on the Draft License Application, but were not filed to eLibrary or were not included in Appendix A, Consultation Record, please revise Appendix A accordingly so that staff has an accurate context for the agency's concerns summarized in the comment/response table in Appendix L.

Response

As part of the response to FERC's deficiency issued on April 28, 2023, the applicant revised the consultation record to include missing copies of correspondence documented in the consultation log. This consultation record was filed with FERC on June 12, 2023, and is available on FERC's e-library. For FERC's ease of reviewing, the applicant is refiling a full version of the consultation record. This is included as Attachments 1-1,1-2,1-3, and 1-4.

Regarding the examples of missing correspondence listed above, the applicant notes the following:

- The applicant added the BLM email dated December 15, 2020, to the consultation record.
- Meeting notes from the November 15, 2022, meeting of the Natural Resource Advisory Committee of White Pine County have been added to consultation log. In addition, the applicant has included the meeting agenda in the consultation record.
- The applicant added the BLM letter dated November 18, 2022, to the consultation record. Note that the applicant revised the consultation log to reflect this correspondence as a letter rather than an email.
- The applicant included the NPS and NNR email dated January 20, 2023, in the consultation record.

Comments provided to the applicant and referenced in Appendix L, *Response to Comments on the Draft License Application*, are included in Appendix A (Consultation Record) of the Final License Application.

FERC-A1-2 General Comments

The FLA states that the project is located outside of the coastal zone and that consistency with the Coastal Zone Management Act (CZMA) is not applicable. However, no documentation is provided to support this statement. Please file documentation from the State of Nevada confirming that a CZMA consistency determination is not needed for the project.

Response

As provided in Attachment 2-1, 2-2, and 2-3, the applicant sent a letter to the Nevada Department of Environmental Protection (NVDEP) at the address listed below via certified mail on June 27, 2023, requesting confirmation that the State of Nevada does not have a coastal zone management program and the project does not require a Coastal Zone Management Area Consistency Determination. On July 16, 2023, the applicant called the NVDEP and emailed Dave Simpson requesting response to the Coastal Zone Management Consistency Determination letter. The applicant received a response, on July 17, 2023, from the NVDEP confirming that the State of Nevada does not have a coastline or a coastal zone management program.

Nevada Division of Environmental Protection
901 S. Steward Street, Suite 4001
Carson City, Nevada 89701

FERC-A1-3 General Comments

The FLA states that the project will not involve discharge into navigable waters and therefore a 401 Water Quality Certification (WQC) will not be required. On March 15, 2023, rPlus Hydro, LLLP filed a copy of correspondence from the Nevada Division of Environmental Protection (NDEP) regarding 401 WQC requirements, in which NDEP indicates that a 401 WQC is not likely to be required for the project but that it recommends the project applicant consult with the U.S. Army Corps of Engineers to determine whether waters of the U.S. (WOTUS) are present within the proposed project area to determine if a Section 404 permit for the project will be required. Please consult with the U.S. Army Corps of Engineers to acquire an Approved Jurisdictional Determination and a determination letter that indicates whether a Section 404 permit would be required, and file both in the revised FLA.

Response

The applicant is consulting with the U.S. Army Corps of Engineers (USACE) regarding an Approved Jurisdictional Determination for applicability of 404 permitting for the Project. At this time, the USACE has communicated to the applicant that it has put a hold on any jurisdictional determinations as a result of the recent Supreme Court ruling on May 25, 2023, in *Sackett v. EPA*. Agencies are developing a rule to amend the final "Revised Definition of 'Waters of the United States'" rule, consistent with the US Supreme Court's May 25, 2023, decision. The agencies intend to issue a final rule by September 1, 2023. At which point, the applicant will continue to pursue an Approved Jurisdictional Determination with USACE to confirm that a Section 404 permit will not be required.

Please see link below to USACE's website for further information:

https://www.usace.army.mil/Media/Announcements/Article/3440421/27-june-2023-update-supreme-court-ruling-in-sackett-v-environmental-protection/

FERC-A1-4 General Comments

Many map figures throughout Exhibit E show a "project footprint" and the proposed location of above-ground project facilities, but do not show the proposed project boundary and proposed location of the underground project facilities, which would be encompassed by the project boundary. Section 4.41(h)(2) of the Commission's regulations indicate that project boundaries enclose the project works that are to be licensed and include land necessary for operation and maintenance of the project and for other project purposes. Please modify and re-file all map figures that do not already show the proposed project boundary and the location of underground project facilities encompassed by the project boundary. If the "project footprint" is dissimilar from the proposed project boundary, please explain what the difference is and differentiate both on the map figures using two different colored lines. Please correct the third footnote to Table 3.2-1 Geographic Scope by Resource for Cumulative Effects Associated with the White Pine Pumped Storage Project, to indicate that the project boundary is the permanent operation boundary, including underground works.

Response

The applicant is providing revised Exhibit E figures in Attachment 4-1, with two differentiations: i) indicated between the project footprint, and project boundary, and ii) underground project facilities included within the project boundary. As noted in Exhibit E, Section 1 of the FLA and consistent with Section 4.41(h)(2) of the Commission's regulations, the project boundary incorporates all lands required for project operations and maintenance. The project footprint includes both the project boundary and temporarily disturbed areas associated with project construction. Additionally, the applicant provided below a revised Table 3.2-1 with an updated second footnote and a corrected third footnote indicating that underground works are included in the project boundary.

Revised Table 3.2-1. Geographic Scope by Resource for Cumulative Effects Associated with the White Pine Pumped Storage Project

Resource	Geographic Scope	Justification
Geologic and Soil Resources	Project Footprint*	Effects on soils and surficial geology generally will be localized and confined to the area of direct disturbance associated with the Project.
Water Resources	HUC-12 watersheds in which the Project is located	Watersheds are natural, well-defined boundaries for surface water flow, and commonly contribute to the recharge of groundwater resources. Effects on water resources could extend throughout a HUC-12 watershed.
Fish and Aquatic Resources	HUC-12 watersheds in which the Project is located	Consideration of effects within a HUC-12 watershed sufficiently accounts for effects on fish and aquatic resources that could be directly affected by construction activities and for indirect effects such as changes in habitat availability and displacement of transient species.
Botanical Resources	Project Footprint	Similar to soils, effects on vegetation (including special status species) generally will be confined to the area directly affected by construction activities. Exceptions are noted.
Wildlife Resources	HUC-12 watersheds in which the Project is located	Consideration of effects within a HUC-12 watershed sufficiently accounts for effects on wildlife (including special status species) that could be directly affected by construction activities and for indirect effects such as changes in habitat availability and displacement of transient species. Potential for exceptions based on cumulative effects are noted.
Recreation	Within 1 mile of Project Footprint	Potential effects on public recreation will generally be restricted to the area within and up to 1 mile from the construction workspaces.
Land Use	Within 1 mile of Project Footprint	Absent special circumstances, effects on general land uses could occur within and up to 1 mile from the construction workspaces.
Cultural Resources	Area of Potential Effect (APE)**	Cultural resources could be affected by disturbance within the Project Footprint and Project O&M activities, and other project effects could cause changes in the character or use of historic properties in areas outside the Project Footprint (see Section 3.10.1.2).
Aesthetic Resources	Area where the Project would be visible	Assessing the effect based on the viewshed allows for consideration of other features that could have an effect on visual resources.

Resource	Geographic Scope	Justification
Socioeconomic Resources	White Pine County, NV	Most socioeconomic effects will occur in the county in which the Project will be located and where most workers are expected to reside during construction and operation of the Project (i.e., White Pine County). White Pine County will experience the greatest effects associated with employment, housing, public services, transportation, traffic, property values, economy, and taxes.
Environmental Justice	The area encompassed within a 5-mile buffer of the proposed Project Boundary***	FERC specified the 5-mile buffer of the proposed Project Boundary as the geographic scope of analysis for environmental justice in its comments on the DLA. The geographic scope of potential effects for environmental justice generally captures the potential effect areas for resources that are linked to environmental justice impacts such as noise, aesthetics, traffic, and water resources.

* The Project Footprint encompasses the area needed for construction workspace and includes the footprint of the permanent facilities.

** The APE for the Project had not yet been determined at the time of FLA filing. In the April 28, 2023, Deficiency of License Application and Additional Information Request issuance, FERC staff deemed the proposed Project Footprint as the APE for direct, project-related adverse effects, and a one-mile buffer beyond the proposed Project Footprint as the APE for all potential indirect project-related effects.

*** The Project Boundary is the permanent operational boundary, including underground works.

FERC-A1-5 Initial Statement and Exhibit A

Section 1.3, Existing Facilities and Infrastructure, states that White Pine proposes to consult with the NNR about an additional track crossing on the surface to facilitate heavy vehicle access for project construction. However, the FLA does not describe where existing track crossings are located and what, if any, improvements would be necessary to facilitate project construction-related traffic at these crossings. Please describe, in detail, the improvements that would be necessary to facilitate project construction-related traffic at existing crossings.

Response

The project will establish a new single crossing of the inactive Mainline and two new crossings of the HiLine. These locations are marked on Exhibit F submitted with the FLA February 27, 2023 (See Exhibit F Design Drawing No. F-104).

In accordance with US Department of Transportation (USDOT)/Federal Railroad Administration (FRA) regulations and guidelines, these new crossings would include, as a minimum, the following improvements to facilitate project construction and operations traffic at all crossings (See Exhibit F Design Drawing No. F-802):

1. Grade crossing signals on each approach including flashing red-light gate,
2. Graded approaches to ensure level approaches to the track and track surface panels, and
3. Railroad pavement marking symbols.

FERC-A1-6 Initial Statement and Exhibit A

Section 1.3, Existing Facilities and Infrastructure, states that the currently inactive NNR Mainline could be reactivated in the coming years but does not describe the rail use that would or could occur on this line. Please clarify whether the rail traffic on this line would only be for NNR-run trains or if other passenger or freight rail operate on this line.

Response

The Mainline track adjacent to the Project is inactive and in disrepair. The NNR has stated that it has received funding and intends to rehabilitate and reopen the Mainline in the future. Following this, the NNR has indicated that it intends to transfer some of its current rail excursion rides from other routes that are distant from the project boundary, to the Mainline. Additionally, in March 2023, the NNR publicly stated that it has participated in multiple studies to develop the railroad, and the Mainline, for commercial traffic and that it is working with the City of Ely to apply for a Consolidated Rail Infrastructure and Safety Improvements Program grant in December of 2023. Other than these statements, the applicant has not been provided by the NNR and is not aware of the NNR's specific plans, intended uses, or schedule for the inactive Mainline. The applicant is not aware of any publicly available sources that would provide additional information regarding the NNR's intended future use for the inactive Mainline, its construction schedule, what type of rail traffic will be operating on it and how often, or who will operate it, should the reactivation occur.

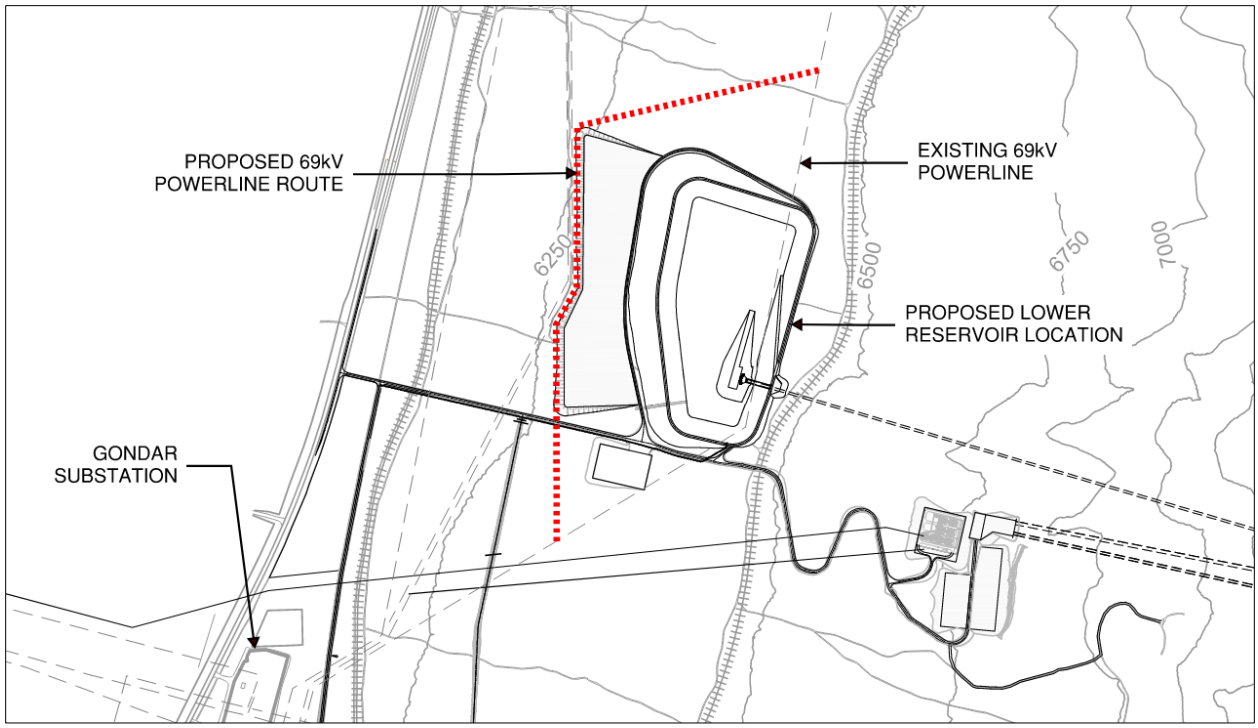
FERC-A1-7 Initial Statement and Exhibit A

Section 1.3, Existing Facilities and Infrastructure, indicates that existing power lines will be required to be rerouted and upgraded because of proposed project facilities and that details of the reroutes and upgrades will be developed with the utility owners during the FLA. For Commission staff to effectively analyze project effects on resources, details of the reroutes and upgrades must be provided. Please file these details in the revised FLA.

Response

The proposed route for the relocation of the existing 69 kV transmission line is west of the lower reservoir as shown in Figure 7-1. The new route will require approximately 15 new structures of similar height, span width, and configuration (monopole construction) as the existing 69 kV line and will be subject to further consultation with the BLM and with Mt Wheeler Power, Inc. The proposed route will relocate the existing 69 kV line further away from the NNR HiLine, align it adjacent to an existing distribution line corridor and reduce the visual disturbance in the immediate vicinity for riders on the NNR HiLine excursion trains.

Figure 7-1: Proposed route for relocation of the 69kV existing power line



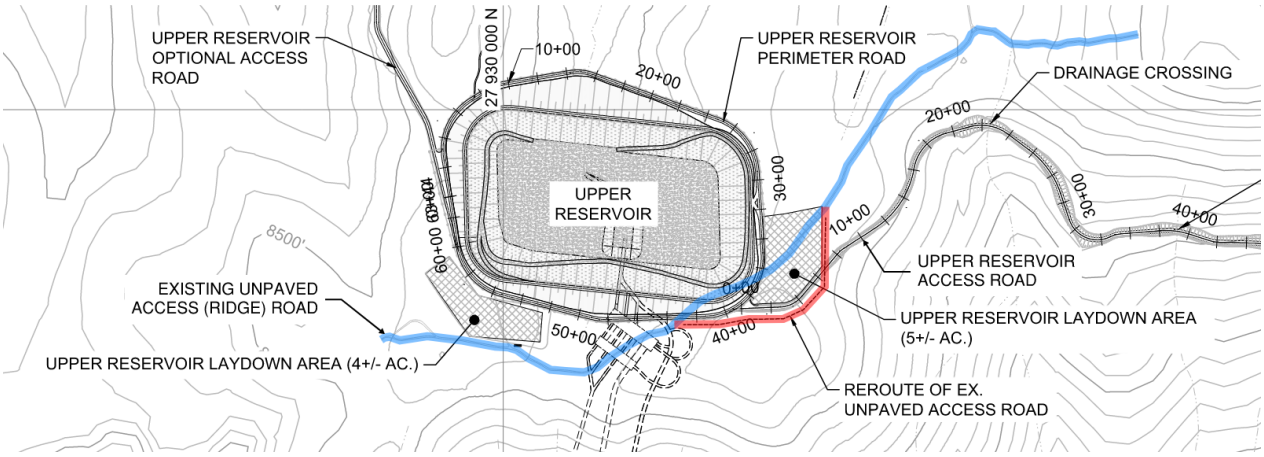
FERC-A1-8 Initial Statement and Exhibit A

Section 1.3, Existing Facilities and Infrastructure, states that no provisions have been made to reroute any unofficial unpaved roads or tracks, except for the ridge road that will be rerouted to bypass construction and permanent facilities as shown on Figure 1.0-1. However, Figure 1.0-1 does not appear to identify the ridge road and it does not indicate the current location or proposed relocation of the road. Please modify Figure 1.0-1 and all other applicable maps to identify current location and proposed relocation of the ridge road. Also, please describe in detail the characteristics of the ridge road including, but not limited to: (a) its dimensions; (b) the road surface and other materials it is constructed of; (c) the landowner(s) of the land on which the road is located; and (d) who or what entity currently maintains the road.

Response

Figure 1.0-1 in Exhibit A is provided to illustrate the permanent facilities needed for operation. The ridge road is an existing unpaved road and is not used for operation, therefore it is not included in Figure 1.0-1. The length of the ridge road re-routing is approximately 1,600 ft and would not be clear at the scale of Figure 1.0-1. However, the re-routing of the ridge road is shown in Exhibit F (See Exhibit F, Design Drawings, F-803) and reproduced below in Figure 8-1. All other existing roads are shown in Exhibit F (See Exhibit F, Design Drawings, F-104).

Figure 8-1: Existing Ridge Road (Blue) and Rerouting (Red) as shown in Exhibit F-803



The rerouted ridge road will be equivalent to the characteristics of the existing ridge road (see Figure 8.2) as follows:

a. The existing ridge road is an unpaved track approximately 8ft wide with surface characteristics suitable for only 4WD or off-road vehicles. The existing ridge road is entirely on BLM land and is not actively maintained.
b. The rerouted ridge road will similarly be a single-lane unpaved track with surface characteristics suitable for only 4WD or off-road vehicles and will be constructed with minimal grading of the existing ground. The alignment of the rerouted ridge road will follow the existing general topography.
c. The section of the ridge road that will be rerouted is on BLM land and will not be maintained.

Figure 8.2: Existing Ridge Road at the approximate location of the re-routing

FERC-A1-9 Initial Statement and Exhibit A

Section 1.3, Existing Facilities and Infrastructure, states that NV Energy will design and construct a new bay at the Robinson Summit Substation. However, it is unclear exactly where the new bay would be located. Please revise the FLA to indicate if this new bay would be constructed within the existing footprint of the Robinson Summit Substation, and if not, where it would be constructed in relation to the substation. Please also indicate who would own and maintain the new bay.

Response

In accordance with the Large Generator Interconnection Agreement, dated 2/13/2022, between the applicant and Nevada Energy, Inc. (NVE), the applicant will fund and NVE will construct the new bay within the footprint of the existing Robinson Summit Substation. The new bay will connect in the center of the North 345 kV Bus, just to the East of the existing 345 kV Bays. The proposed location is shown on the Transmission Plan and Profile drawings in Exhibit F (See Exhibit F, Drawing F-705). The transmission provider, NV Energy, will own and maintain the new bay and interconnection facilities.

FERC-A1-10 Initial Statement and Exhibit A

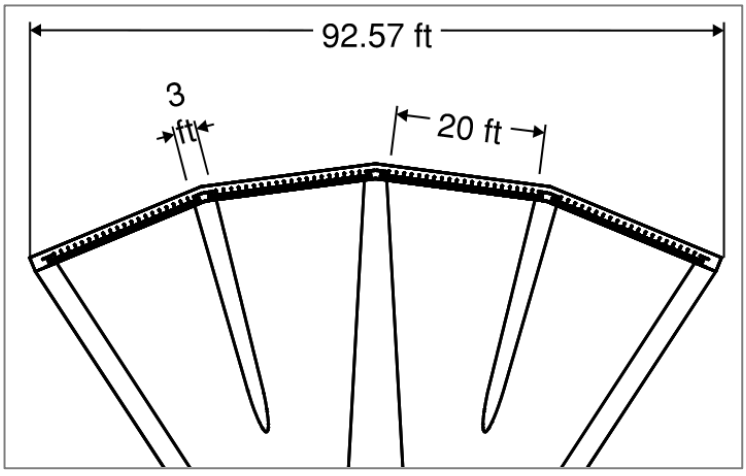
Section 2.4.2, Lower Reservoir Inlet/Outlet Structure, states that the lower reservoir intake/outlet structure is approximately 92.5 feet wide and the structure subdivides the flow between four rectangular openings, each with dimensions of 26 feet by 20 feet. However, it is not clear which dimension, 26 feet or 20 feet, is the width of each rectangular opening. Assuming the width of each rectangular opening is 26 feet wide, then the total width of all four rectangular openings is 104-feet-wide, whereas if the width of each rectangular opening is 20 feet wide, then the total width of all four rectangular openings is 80 feet wide; neither of which is equivalent to 92.5 feet. Please revise the FLA to (a) identify the width of each of the four rectangular openings and (b) clarify the apparent discrepancy that the total width of all four rectangular openings does not equal 92.5 feet.

Response

The applicant is providing the following additional information to clarify any discrepancy on the dimensions of the Lower Reservoir Inlet/Outlet Structure. The Lower Reservoir Inlet/Outlet structure divides the flow between four equal rectangular openings. The dimensions provided are internal hydraulic dimensions that do not include the substantial concrete dividing or external walls. Additionally, the openings are splayed radially to improve hydraulics so will have a wider screen area than the overall width of the structure. This is illustrated in Exhibit F (see Exhibit F, Design Drawings F-306) and below in Figure 10-1.

a) Dimensions of rectangular openings
   i) Width of the rectangular openings (inside dimension) is 20 ft. The width of four openings is 80 ft.
   ii) Height of the rectangular openings (inside dimension) is 26 ft.
   iii) Width of the internal walls is 3 ft each. Three internal walls and two external add to 15 ft.
   iv) Total width of these openings in a straight line would be 80 ft plus 15 ft or a total of 95 ft.
b) However, the four intakes are not parallel but splayed 15 degrees each so the total width of the structure is 92.6 ft - slightly below the expected 95 ft.

Figure 10-1: Intake opening plan dimensions.



FERC-A1-11 Initial Statement and Exhibit A

Exhibit A, Table 2.1-6. Pump-Turbine and Generators indicates that the rated power of each turbine would be 340 megawatts. However, Exhibit A, section 2.8.1 Pump-Turbines, indicates the rated power of each pump turbine would be 333 megawatts. Please revise the FLA to explain this discrepancy and provide a correction if necessary.

Response

In Exhibit A, Table 2.1-6 refers to Turbine (shaft) Power. The turbine is rated to deliver 340MW of shaft (mechanical) power and assuming that the generator is 98% efficient, this translates to 333MW electrical output at the generator terminals. For the generator itself, for a power factor of 0.95 the megavolt-ampere (MVA) generator capacity is then 333/0.95 = 350 MVA.

Section 2.8.1 discusses the Pump-Turbines, and the applicant has edited this section to remove the reference to rated output to avoid confusion:

"The three ~~333-MW (rated output power at rated power factor)~~ variable speed reversible Francis-type pump-turbines are tentatively proposed to provide a total of 1,000 MW of generating power and pumping load. The rated head for each unit (in generating mode) is approximately 2,034 feet, resulting in approximately 2,143 cubic feet per second (cfs) flow at full generating power and 1,593 cfs at full pumping power. Pump-turbine performance and dimensions are based on information supplied by reputable manufacturers (i.e., Voith, Andritz, and GE). The pump-turbine centerline will be set at El. 6,043 ft, which is 312 feet below the minimum operating level of the lower reservoir. The maximum spiral case width is 32 feet, 6 inches and the runner diameter is 13 feet, 6 inches".

FERC-A1-12 Initial Statement and Exhibit A

Section 2.10.1 Underground Cables, states that nine high-voltage 345-kilovolt generator-motor conductor cables, three medium-voltage underground power cables, and one underground fiber-optic cable will be conveyed from the unit transformers in the transformer cavern through to the cable tunnel portal where the cables will then be buried in a duct bank between the portal and the outdoor switchyard where they will terminate. Although the FLA provides a description for the types of cables, it does not provide the lengths of each type of cable nor does it provide the voltage capacity of the three medium-voltage cables. Please revise the FLA to provide the voltage capacity of the three medium-voltage cables and the lengths of each type of cable that would be installed in the cable tunnel and the lengths of each type of cable that would be installed in the duct bank.

Please revise the FLA to specify if cables of one type would be varying lengths (i.e., if one 345-kilovolt cable would be a different length than the other 345-kilovolt cables) and provide those lengths.

Response

The voltage capacity of the medium voltage cables is 34.5 kV. The lengths of each type of cable and their voltage capacity are summarized in Table 12-1 below.

The cables travel down the length of the cable tunnel mounted to the tunnel wall then transition into an underground bus duct near the tunnel portal. The same cables are pulled from the Powerhouse to the switching station without a change in cable type.

Table 12-1: Underground Cable Summary

Cable	Voltage	Circuits	No. Cables	Cable Length	Total Length
High Voltage	345 kV	3	9	5,250 ft	47,250 ft
Medium Voltage	34.5 kV	1	3	5,750 ft	17,250 ft
Fiber Optic	-	-	1	6,000 ft	6,000 ft

FERC-A1-13 Initial Statement and Exhibit A

Exhibit A, Table 2.1-9 Power and Transmission, indicates that transmission line structures would typically be 125-feet-tall. However, Exhibit A, section 2.10.2 High Voltage Transmission Line, indicates that transmission line structures would be up to 150-feet-tall. Please revise the FLA to address this apparent discrepancy.

Response

The average height of the transmission structures is 125 feet, however, where necessary to accommodate changes in terrain, the tallest structure is 150 feet above grade. These structures will be similar in design and height to the existing Nevada Energy structures of the Robinson Summit to Gondor 345 kV Transmission Line they parallel. A corrected Table 2.1-9 is shown below:

Table 13-1: Transmission Structure Characteristics

Characteristic	Detail
345-kV Switchyard	345-kV collection bus with three 345-kV collection breakers and one 345-kV line breaker
Transmission Line	25 miles of 345-kV lines
Transmission Line Structures	114 structures, ranging from 125 ft to 150 ft tall.

FERC-A1-14 Initial Statement and Exhibit A

Section 2.10.2 High Voltage Transmission Line, states that "an additional high-speed communications path, if required, [would] be provided by [optical ground wire] on a separate line... installed as under-build, or a separate underground fiber-optic cable, or a combination of these to create the path". Please revise the FLA to describe the following:

(1) how and when the use of an additional high-speed communications path would be determined;

(2) whether the optical ground wire would be co-located on the planned new transmission line structures or would be installed on its own structures;

(3) how the determination would be made to use a separate underground fiber-optic cable or combination of the two; and,

(4) how, if determined it was needed, the separate underground fiber-optic cable would be installed and if it would be installed entirely within the proposed 160- to- 250-foot-wide transmission line ROW.

Response

The final routes and installation of the first and second fiber-optic cables will be determined during later design phases. The currently proposed routes are described as follows:

1. Two geographically diverse and redundant high speed communication paths for protection purposes are required in accordance with the Large Generator Interconnection Agreement (LGIA), dated 2/13/2022 between the applicant and Nevada Energy, Inc.
2. An Optical Ground Wire, OPGW, will be installed on the new Generation Transmission Line structures as the primary means of communications.
3. The applicant will provide secondary means of communications by adding new fiber optic communications cables to the new distribution line providing station power to the Generation facility, and then utilizing joint use communication conductors on existing transmission lines or as a new overhead or underground fiber optic line, as necessary, to connect with the Robinson Summit Substation.

FERC-A1-15 Initial Statement and Exhibit A

Section 2.10.3, Low-Voltage Distribution Line, makes three references to a "switching station", however, the remainder of Exhibit A does not reference a "switching station" when discussing electric power transmission. Please revise the FLA to address this discrepancy and revise subsection 2.10.3 if necessary to comport with the language used throughout the rest of Exhibit A.

Response

The applicant intended the terms 'switching station' and 'switchyard' to refer to the same project facility referenced in Exhibit A, Section 2.10.1 Underground Cables, and Section 2.10.2 High Voltage Transmission. The applicant has removed the use of the term "switching station" from Exhibit A, Section 2.10.3 and replaced it with 'switchyard' as shown below.

> ***"Exhibit A, 2.10.3 Low-Voltage Distribution Line***
>
> *In order to provide back up control power to the switchyard and the powerhouse, a 24.9 kV distribution line will be constructed from the switchyard to the nearest existing distribution line. Upgrades to the existing distribution line may be required if it is inadequate for the additional loads. A direct source of power may be available by distribution line from the Gonder Substation.*
>
> *A transformer will be installed at the switchyard to transform the power from local distribution standard levels to 35 kV for the powerhouse requirement. Power will be delivered from the switchyard to the powerhouse by an underground power distribution line."*

FERC-A1-16 Initial Statement and Exhibit A

Exhibit A, Table 2.1-7 Access Tunnels states the main access tunnel would be 5,108 feet long. However, Exhibit A, section 2.11, Access and Cable Tunnels, states the main access tunnel would be 4,290 feet long. Please revise the FLA to address this discrepancy and revise subsection 2.10.3 if necessary.

Response

The Main Access Tunnel (MAT) extends from the portal entrance to the powerhouse cavern providing access to the tailrace tunnel and transformer cavern along its length. The total length of the main access tunnel is 5,108 ft.

- The length of the main access tunnel from the portal entrance to the point the tailrace access tunnel connects is 4,290 ft.
- The length from the tailrace access tunnel to the transformer cavern the 701 feet.
- The portion of the tunnel connecting the transformer and powerhouse cavern is 117 feet.

Exhibit A, Section 2.11 first paragraph is revised as follows:

> *"The primary access to the powerhouse and transformer caverns will be from the main access portal via the 5,108-ft-long, shotcrete-lined main access tunnel, which will also serve as the primary route to transport the largest pieces of equipment (transformers) down into the transformer and powerhouse cavern."*

FERC-A1-17 Initial Statement and Exhibit A

Section 2.11, Access and Cable Tunnels, states that several construction-access tunnels would be built to support construction of the proposed underground facilities and that some of the tunnels would be retained to provide access and emergency egress during project operation. However, the FLA does not specify the number of tunnels or other information regarding the tunnels. Therefore, please provide the following information:

(a) the total number of construction-access tunnels proposed to be constructed;

(b) the number of tunnels proposed to be retained for future access to underground project facilities;

(c) the number of tunnels proposed to be plugged along with descriptions of how and when the tunnels would be plugged (e.g., materials); and

(d) the approximate dimensions, lining, and appurtenant features of all proposed construction-access tunnels.

Response

Information including plan alignments and cross section details on these tunnels is included in Exhibit F and is referenced in the responses below.

(a) A total of six construction-access tunnels are proposed to be constructed (See Exhibit F drawing F-605).

(b) Four construction-access tunnels are proposed to be retained for future access to underground project facilities for periodic inspections and maintenance.

(c) Two construction-access tunnels (the tailrace and headrace access tunnel) are proposed to be plugged by a 30 ft concrete plug with secondary void grouting where they provided access for waterway construction. Grout curtains in these areas may be required depending on the specific geological conditions encountered. Details of these plugs and grouting requirements will be addressed during final detailed design (See Exhibit F drawing F-605)

(d) Construction access tunnels are either 16 ft or 24 ft internal diameter and are unlined (no secondary lining). However, the anticipated rock support for these tunnels will include a 6-inch fibre reinforced shotcrete and 2-inch plain shotcrete full perimeter primary lining and a 1 ft 2 in thick cast in place reinforced slab (See Exhibit F drawing F-606)

FERC-A1-18 Initial Statement and Exhibit A

Section 3.0 Project Access Roads, states that the locations of access roads, as currently proposed, could be changed at any time while the Commission staff reviews the application. For staff to effectively analyze potential project effects to environmental resources caused by construction and/or use of any proposed access roads, and appropriately condition any potential license that might be issued for the project, the final proposed locations of all current and potential/alternative access roads must be provided.

Response

The applicant confirms that the access roads shown in Exhibit F (See Exhibit F, Design Drawings F-104) are in their final proposed locations including the upper reservoir access road and the upper reservoir optional access road.

FERC-A1-19 Initial Statement and Exhibit A

Section 3.1 Western Access Road, states that construction and operational access to the main access portal will be provided from US-93 via the 1.7-mile-long permanent, paved, dual-lane western access road. Exhibit G appears to show the following related to the proposed western access road: (a) the project boundary encompassing less than 1 mile of the existing US-93 and (b) the project boundary encompassing about 1 mile of unknown, existing roadway that leads from US-93 towards the proposed lower reservoir location; for a total of about 2 miles of roadway. Although aerial imagery indicates US-93 is paved it does not show that the unknown roadway is paved, rather it appears to be an unimproved, unpaved track. Please revise the FLA to clarify this apparent discrepancy.

Response

The Western Access Road referred to Section 3.1 will be a newly constructed, paved, dual-lane access road. Regarding the following areas of Exhibit G:

a) The portion of the boundary that encompasses a section of the existing US-93 covers limited widening of this road to support an intersection with the new Western Access Road.
b) The project boundary leading from US-93 to the lower reservoir covers approximately 1 mile of the new western access road as noted. The remainder of this access road continues to the east to provide access to the tunnel portals and is included in the project boundary.

Exhibit G Maps have been re-issued at a larger scale with the Western Access Road now clearly shown (See Attachment 19-1, Exhibit G, Map G9 and G10)

FERC-A1-20 Initial Statement and Exhibit A

Section 3.2, Upper Reservoir Access Road, states that access to the proposed upper reservoir, and associated other proposed project facilities, will be by the 7-mile-long, permanent, paved, dual-lane upper reservoir access road. This appears to indicate that a road currently exists that would be used as the project's upper reservoir access road; however, it is unclear if a road currently exists. Please revise the FLA to clarify if a road currently exists that would be used as the upper reservoir access road or if no road currently exists and the upper reservoir access road would need to be constructed.

Response

The 7-mile-long, permanent, paved, dual-lane upper reservoir access road referred to in Section 3.2 does not currently exist. This road will be a new construction. The upper reservoir optional access road also does not currently exist and would need to be constructed.

Both the upper reservoir access road and the upper reservoir optional access road Aare encompassed by the project boundary shown in Exhibit G (See Attachment 19-1, Exhibit G, Map G10, G11, and G13).

Revised Section 3.2 text has been provided below to clarify the intent:

> *"Access to the upper reservoir perimeter and crest roads, the upper reservoir laydown and staging areas, and the upper reservoir well will be by a proposed new 7-mile-long, permanent, paved, dual-lane upper reservoir access road traversing the Steptoe Valley from a tie-in along the western access road at Station 16+00, about 0.3 mile from US93.*
>
> *The proposed new upper reservoir access road will also cross the active HiLine track of the Nevada Northern Railway further to the south.*
>
> *An alternative access to the upper reservoir from the Duck Creek side, referred to as the upper reservoir optional access road is proposed as a new 3.5-mile, improved, gravel, single-lane access road for optional and/or emergency use that will traverse the Duck Creek range and would cross the Duck Creek from a tie-in along the White Pine County Road 29 (NV-486)."*

FERC-A1-21 Initial Statement and Exhibit A

Section 3.2, Upper Reservoir Access Road, states that a proposed alternative access to the upper reservoir, referred to as the upper reservoir optional access road, is still under consideration. Please revise the FLA to describe how and when the need for this proposed alternative access road would be determined.

Response

Revised Section 3.2 text has been provided to clarify the intent:

> *"Access to the upper reservoir perimeter and crest roads, the upper reservoir laydown and staging areas, and the upper reservoir well will be by a proposed new 7-mile-long, permanent, paved, dual-lane upper reservoir access road traversing the Steptoe Valley from a tie-in along the western access road at Station 16+00, about 0.3 mile from US93.*
>
> *The proposed new upper reservoir access road will also cross the active HiLine track of the Nevada Northern Railway further to the south.*
>
> *An alternative access to the upper reservoir from the Duck Creek side, referred to as the upper reservoir optional access road is proposed as a new 3.5-mile, improved, gravel, single-lane access road for optional and/or emergency use that will traverse the Duck Creek range and would cross the Duck Creek from a tie-in along the White Pine County Road 29 (NV-486)."*

FERC-A1-22 Initial Statement and Exhibit A

Section 3.3, Wellfield Conveyance Access Road, states that the 3.2-mile wellfield conveyance access road will provide permanent access to the groundwater wells. This appears to indicate that a road currently exists that would be used as the project's wellfield conveyance access road; however, it is unclear if a road currently exists. Please revise the FLA to clarify if a road currently exists that would be used as the wellfield conveyance access road or if no road currently exists and the wellfield conveyance access road would need to be constructed. Additionally, Table 2.1-8 does not include details of this access road and Exhibit G, Map G5 does not appear to show this access road. Please revise Table 2.1-8 to include details of this access road and modify Exhibit G, Map G5, and any other maps throughout the FLA on which this road should appear, to show this access road.

Response

The proposed 3.2-mile wellfield conveyance access road does not currently exist and will need to be constructed.

Table 2.1-8 is revised below to include this Wellfield Conveyance Access Road.

The applicant has reissued Exhibit G Maps at a larger scale with the Wellfield Conveyance Access Road now clearly shown (See Attachment 19-1, Exhibit G, Map G9 and G12).

Revised Table 2.1-8: Access Roads

Characteristic	Length	No. of lanes / Pavement Width
Western Access Road	9,008 ft	2 lanes/ 30 ft
Wellfield Conveyance Access Road	37,190 ft	1 lane / 20 ft
Lower Reservoir Perimeter Road	4,872 ft	1 lane / 20 ft
Switchyard Access Road	572 ft	1 lane / 20 ft
Upper Reservoir Access Road	37,300 ft	2 lanes/ 24 ft
Upper Reservoir Perimeter Road	6,200 ft	1 lane / 20 ft
Upper Reservoir Optional Access Road	18,867 ft	2 lanes / 24 ft

FERC-A1-23 Initial Statement and Exhibit A

Section 3.5, Other Access Roads, indicates that an access plan, for accessing sections of the proposed transmission line ROW, would be developed with contractors and in consultation with affected landowners. However, without this plan, staff would be unable to determine possible environmental impacts from access to the transmission line ROW. Please clarify how the plan will be developed in consultation with affected landowners and when the plan will be filed with the Commission.

Additionally, considering the other proposed project access roads that would be used to access all other project facilities aside from the transmission line ROW, and the proposed use of existing roads to access other project facilities, please clarify if the access plan will be developed in consultation with affected landowners through whose land these other proposed access roads and existing roads are located and state when such consultation would occur. Please consult with BLM and other landowners that may be affected by this plan in preparing the response and provide a record of the consultation.

Response

Most of the proposed transmission line ROW is immediately adjacent to an existing Nevada Energy, Inc. (NVE), transmission line ROW that includes both public and private lands. Access to the proposed transmission line ROW for construction and operational service will be via existing NVE transmission line maintenance roads. The applicant has previously surveyed the proposed transmission line ROW for environmental and cultural impacts and has included the public lands associated with the proposed transmission line ROW in its application for BLM Right-of-Way Grant and Land Use Permit (SF-299). The applicant has identified the access roads within the ROW on the updated Exhibit G Maps (Attachment 19-1, Exhibit G, Maps G1 through G9).

The applicant will develop, in conjunction with its building contractor, the referenced access plan during the project's final detailed design The means and methods for the construction of the proposed transmission line will also be determined at that time. The applicant has consulted with and will continue to consult with private landowners and BLM on land easements and/or ROW agreements for the yet to be finalized access roads that will be determined as a result of the final detailed design process.

For all other facilities, the applicant will construct new access roads as laid out in the updated Exhibit G Maps and encompassed by the project boundary.

FERC-A1-24 Initial Statement and Exhibit A

Section 4.1, Spoil Disposal, states that additional areas adjacent to the proposed spoil disposal location have been identified for additional soil disposal if the spoil area requirements grow through the development of project. However, the section does not identify and describe what additional areas could be used for additional spoil disposal. Please revise the FLA to identify and describe what additional areas could be used for additional spoil disposal and identify the current landowner(s) of the additional spoil disposal areas.

Response

The applicant has identified two primary areas for additional spoil disposal should it be required during the development of the project. The applicant has included both areas within the project footprint in addition to all areas that would be disturbed during construction. Both primary areas for additional spoil disposal are on BLM administered public lands and, if needed, will be contoured after construction is complete to approximate the surrounding topography, covered with topsoil, and reclaimed with native vegetation to restore the appearance of the surrounding desert landscape.

1. Lower Reservoir Additional Spoil Disposal Area – This area is located to the south of the proposed lower reservoir spoil disposal site bounded by the Western Access Road to the south.
2. Upper Reservoir Access Road Additional Spoil Disposal Area – This area is located downslope and adjacent to the upper reservoir access road at its southern most extent. The disposal area is approximately 1,000 ft by 2,000 ft and shown in Exhibit E, Figure 2.3-2.

FERC-A1-25 Exhibit C

Table 1.0-1 Project Milestones indicates that the anticipated date the Commission may issue any license for the project would be in February 2025. However, the table also indicates a proposal to begin construction of some project facilities (e.g., access roads, conveyance system and wells) in August 2024, several months before any license may be issued. Please note that any construction of project facilities is not authorized until Commission staff have analyzed the proposal and made recommendations to the Commission on whether to authorize the proposed project, and if authorized, what measures to include as conditions of the license. Therefore, please revise the schedule accordingly in Table 1.0-1 and elsewhere in the FLA as needed.

Response

The applicant will begin no work on site before the following approvals are granted:

1. Commission authorization of the proposed project including measures required as conditions of the license.
2. BLM issuance of a Right of Way Grant and Land Use Permit authorizing work on BLM-administered federal lands
3. Table 1.0-1 Project Milestones assumes the Commission may issue a license for the project in February 2025. Row four of the same table lists Notice To Proceed (NTP) with Early Works (Access road, wellfield and water conveyance, laydown area, utility lines relocation etc.) but this marks the end of the project's procurement phase. Table 1.0-1 row eight then shows construction work beginning on 14-Mar-2025 only once these milestones are achieved and any further Commission conditions met. This timing is further illustrated on page one of the Gantt Chart schedule attached to Exhibit C.

As a result, the applicant has not changed Table 1.0-1 as construction of project facilities are currently scheduled only after Commission authorization.

FERC-A1-26 Exhibit E Need for Pumped Storage Hydropower

Section 1.1.2 Need for Pumped Storage Hydropower, states that White Pine County would lose thousands of construction and operation employment jobs, associated indirect income and spending over the potential life of the project if the project is not licensed, and an opportunity to use industrial water rights originally granted for energy project development, and that White Pine County and the State of Nevada would lose property tax income. These statements are inaccurate because the project does not currently exist for White Pine County to lose these stated benefits and for the State of Nevada to lose property tax income. Rather, White Pine County and the State of Nevada might not gain the stated benefits. Please revise the section to appropriately indicate that White Pine County and the State of Nevada might not gain the benefits that are stated for each.

Response

Please see revised text to replace the 3rd bullet point for Exhibit E, Section 1.1.2:

> *"White Pine County would not gain property tax revenues in the amount of hundreds of millions of dollars over the life of the Project, along with thousands of employment job-years in construction and operation and associated indirect income and spending. The State of Nevada would also not gain significant property tax income that is specifically dedicated to the advancement of renewable energy development in the State."*

FERC-A1-27 Exhibit E Consultation

Section 1.3 Consultation states that: (a) White Pine understands that the NNR HiLine train excursions operate three days per week, between mid-May to mid-September; (b) there are at least two specialty train excursions on the HiLine during the period mid-May to mid-September; and (c) the NNR has other excursions that operate annually, departing from the same NNR depot, but do not use the HiLine and therefore don't intersect with the project. However, this section does not mention the Haunted Ghost Train, Santa's Reindeer Flyer, and the Fire and Ice Fireworks Train, or other excursions on which, previously indicated in this section, the Park Service recommends surveys be administered. Please revise the FLA to provide a full 2023 schedule of all HiLine excursions, including regular and specialty excursions throughout the year, including during the mid-May to mid-September timeframe during which White Pine proposes to conduct the NNR Visitor Use Assessment Survey and the mid-September to mid-May timeframe that is not proposed to be studied.

Response

A full 2023 schedule of train excursions as the applicant understands it is listed in Attachment 27-1. These excursions include:

- regular and specialty excursions throughout the year;
- trains during the mid-May to mid-September timeframe during which the applicant proposes to conduct the NNR Visitor Use Assessment Survey;
- the mid-September to mid-May timeframe that is not proposed to be studied.

This 2023 schedule of train excursions is based on both the NNR website and a printed train schedule calendar available in the NNR Gift Shop, also included in Attachment 27-2. Infrequently, the NNR will add a train ride to the schedule on short notice which may not be reflected in Attachment 27-1.

During May to September, there are between four (4) and five (5) HiLine excursion trains per week (average of 17.6 per month). During October to April, there are an average of 1.1 HiLine trains per month. Specifically, only 8.3% of all HiLine excursion train rides occur between October and April.

The NNR also hosts a program called "Be the Engineer" on both its diesel and stream trains. Participants receive instruction by one of the NNR's certified engineers and are allowed to operate the engine under the direct supervision of the NNR engineer. "Be the Engineer" is a private train excursion that does not, to applicant's knowledge, operate on the HiLine route. The applicant has no information about when these train excursions occur and as such, these have not been included in the list.

FERC-A1-28 Exhibit E Consultation

Figure 1.3-1 Locations and Angles of Photo simulations is illegible. Please edit the figure to clarify the image and refile the image.

Because the above information is specifically related to the NNR Visitor Use Survey and recreation resources, and not specifically to consultation, please appropriately revise Section 3.8 Recreation of the FLA to include all additional information requested above.

Response

The applicant has refiled Figure 1.3-1. Please see Attachment 28-1 and 28-2. Attachment 28-1 is the Key Observation Point (KOP) map filed with the FLA on February 27, 2023. Attachment 28-2 is the KOP map with camera angles adjusted for true North.

FERC-A1-29 Exhibit E Incomplete Studies

Incomplete Studies Section 1.0, Introduction states that additional study efforts are planned by White Pine to complete surveys for the cultural and terrestrial resource studies (e.g., Greater Sage-Grouse Lek and Habitat Study) as well as supplemental study efforts regarding recreation, visual and aesthetic resources, and socioeconomics (e.g., NNR Visitor Use Assessment Study, Visual and Aesthetic Resources Study, Socioeconomic Study) resulting from stakeholder input on the DLA; Table 2.2-3 Environmental Measures Proposed by WPW also indicates that additional study efforts are planned (e.g., noise modeling). Additionally, Section 3.6 Botanical Resources, indicates that after field surveys for several terrestrial resource studies were completed in July 2022, the "project footprint" was modified. As a result, White Pine states it has scheduled additional, though unspecified, field studies in areas that were not previously surveyed. The FLA also states that results of these studies will be provided to FERC as they are completed. However, it is unclear which specific study elements are incomplete and when the results would be filed, as well as why the study results were not completed before the FLA was filed for staff's review. Because the ongoing studies will collect information on environmental resources that would be potentially affected by the project, the results are needed to inform staff's environmental analyses and scoping process for the project as required by the National Environmental Policy Act (NEPA). This information must be filed with the Commission before we can initiate scoping and prepare the NEPA document. Therefore, please describe the specific provisions of any study plans that are not complete and provide a schedule for completing any remaining data collection, analyses, and report preparation, including when the information will be filed with the Commission.

Response

The applicant performed the applicable studies in 2021. After completion of these studies, the applicant modified, in 2022, the design of the upper reservoir access road, laydown areas and transmission line resulting in the need for additional studies on the additional adjacent areas. The additional adjacent areas total approximately 288-acres, and the applicant will complete the studies as shown in the table below. The applicant will conduct these studies within the applicable seasonal restrictions and expects to commence these studies in September 2023. The applicant will complete these studies in July 2024. The additional adjacent areas that applicant will have similar or the same habitat characteristics and wildlife use as the areas that applicant previously surveyed. Approximately 81-acres of land are directly adjacent to existing areas that were previously studied and approximately 207-acres of land are located within the same types of ecosystems and near areas that have previously been studied.

Several other studies are included as part of the National Park Service Study Dispute. The applicant is conducting these studies in consultation with the National Park Service and the Northern Nevada Railroad. These studies are in progress and the applicant will file the supplemental studies as they are completed.

The applicant has provided Attachment 29-1 and 29-2, Maps of additional study areas.

Table 29-1: Planned Studies and Timeline

Study	Reason for Additional Study	Timeline for completing data collection, analyses, and report preparation
Cultural Resources	Expanded Study Area	Report completion by July 2024
Recreation Study (NNR Visitor Use Assessment Study)	National Park Service Study Dispute	Report completion by November 2023
Visual and Aesthetic Resources	National Park Service Study Dispute	Report completed July 2023
Socioeconomic Study	National Park Service Study Dispute	Report completion by November 2023
Botanical Study	Expanded Study Area	Report completion by July 2024
Additional Noise Modelling	PM&E Measure Development	Model completion by July 2024
Floodplain Study	Expanded Study Area	Report completion by December 2023
Aquatic Resources Delineation	Expanded Study Area	Report completion by July 2024

FERC-A1-30 Exhibit E Project Facilities

The application does not fully describe all proposed, temporary project facilities. For example, Section 3.7.2.1 Terrestrial Wildlife and Habitat states that concrete batch plants would likely be erected to produce concrete for the project and no further description is provided. However, Section 2.2.1 Project Facilities does not describe any proposed concrete batch plants. Section 4.41(f)(3)(iv) of the Commission's regulations requires the following material and information regarding any mitigation measures or facilities, identified under clause (iii), proposed for implementation and construction:

a) *Functional design drawings;*

b) *A description of proposed operation and maintenance procedures for any proposed measures or facilities;*

c) *An implementation, construction, and operation schedule for any proposed measures or facilities;*

d) *An estimate of the costs of construction, operation, and maintenance of any proposed facilities or implementation of any measures;*

e) *A statement of the sources and amount of financing for mitigation measures or facilities; and*

f) *A map or drawing showing, by using shading, crosshatching, or other symbols, the identity the location of any proposed measures or facilities.*

For staff to have a complete and comprehensive understanding of the proposed project and proposed construction activities, please ensure that all proposed temporary and permanent project facilities, including temporary facilities installed to support construction of the project, are adequately described in Section 2.2.1 Project Facilities.

Response

A description of the proposed temporary infrastructure including concrete batch plants is provided in Exhibit F Preliminary Supporting Design Report Section 2.3.2 Temporary Construction Facilities. For ease of reference the applicant has cited this below.

The applicant understood the purpose of Exhibit A to describe the principal project features, hence the description below that was included in Exhibit F Preliminary Supporting Design Report Section 2.3.2 of temporary construction facilities was not included in Exhibit A.

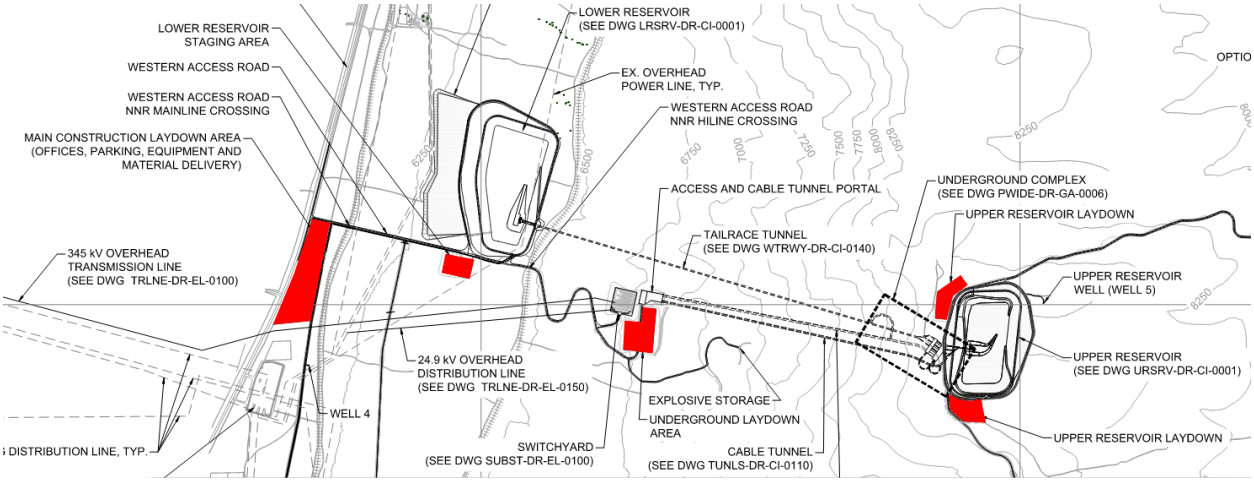
> *"To support the construction of the project, several laydown and staging areas are required as shown on the access road, laydowns and wellfield conveyance drawings in Exhibit F. These areas will allow for the establishment of temporary facilities including offices, change houses for the construction crews, light vehicle and construction equipment parking, warehousing and storage areas, workshops, a material testing laboratory, concrete batch plant, spoil handling and processing equipment and construction wastewater treatment facilities.*
>
> *Temporary explosives storage will be sited away from the main construction facilities with secured access in accordance with regulatory requirements.*

Temporary construction water supply will be from the wellfield. The Contractor would propose connections to this and stage his own pumps and pipework for distribution.

Temporary construction power would be via diesel generators located at the switchyard until the Station service power transmission line is installed. Contractor would establish their temporary electrical houses and distribution to support the works. Power for construction at the upper reservoir area will be by a dedicated diesel generator farm."

The applicant has highlighted the laydown areas in red in Figure 30-1 below. Figure 30-1 is an extract of Exhibit F drawing F-104.

Figure 30-1: Laydowns



The temporary construction infrastructure will be located within the laydown and staging areas included in the Exhibit F drawings.

The applicant is providing further information related to the temporary construction facilities and specifically related to concrete supply (batch plant) establishment.

Security and Access

Barricades will be established at key points along existing unpaved access roads as shown on the drawings in Exhibit F. Chain link fencing will be erected around all laydown sites for security. A boom gate will be provided across the Western Access Road just off the intersection of SR-93 to control access into the project area.

Several access roads that run along both the active and inactive Nevada Northern railway lines will be maintained through the road crossings. Additional fencing and/or signage to prevent access into the work areas will be erected for security and public safety.

Temporary Site Facilities

The applicant, and its building contractor, will establish the following temporary facilities on site at designated laydown and staging areas.

- Office trailers for both Contractors, Owners team
- Lunch / kitchen trailers

- Warehouses and heated storage facilities to store all incoming materials, equipment and tools. OEM equipment will be warehoused locally.
- Ablution blocks and a change trailer (to allow workers the ability to change out their work clothes, wash and shower and change into clean clothes, etc.)
- Medical/First Aid facilities
- Explosive's storage facilities
- Batch plant to produce all shotcrete, concrete and grout for the project
- Quality Control Laboratory to perform all materials testing
- Workshops to maintain all equipment and perform any preassembly welding and fabrication

Construction Staging Laydown Areas

The applicant has designed laydown and staging areas to the lower and upper reservoirs, the main access tunnel portal, as well as near the SR-93 site entrance as shown on the access drawings in Exhibit F.

The location and size of the laydown areas consider the following

- Proximity to major work areas and adjacent to access roads
- Minimizing environmental impact and where possible located outside of active wildlife habitat
- Optimizing the cut fill balance to not generate any additional spoil material
- Restoration of the laydown areas post construction includes contouring the laydown areas to approximate the surrounding topography, covering with topsoil, and reclaiming the laydown areas with native vegetation to restore the appearance of the surrounding desert landscape.
- Accommodate various construction facilities required at each laydown area
- Provide space for construction-related equipment parking, vehicle access within the laydown area, water tanks to store water, equipment storage, bulk material conditioning, and aggregate bins.

These laydown and staging areas will be temporary, with gravel or asphalt surfaces, and therefore will require temporary dust control mitigation measures. These laydown areas will be fenced off for security purposes.

Temporary Construction Wastewater

The applicant will establish construction wastewater treatment facilities at the Lower Reservoir and Underground Laydown areas. The applicant will use/reuse treated water for construction purposes such as tunneling and batch plant operation and material conditioning, as irrigation for reclamation areas, or for dust control mitigation measures.

The applicant will pump sanitary waste into tankers and haul off site.

Temporary Construction Power

Diesel generators will provide temporary construction power at the upper reservoir site, including power for the offices, warehouses, workshops, and headrace shaft.

The applicant will make connections to the local grid lines at 24.5KV or 29.4 KV to provide 3 phase power to the following:

- Main Staging Area (warehouses, workshops, batch plant, offices and testing laboratories, temporary, kitchen trailers)

- Lower Reservoir Laydown (workshops, offices, tailrace tunnel equipment, tailrace tunnel ventilation, tailrace tunnel services, heaters, and the wastewater treatment plant)
- Power for the wells along the well field will be provided from the main staging area along a buried line adjacent to the well field conveyance pipeline
- Power for the main underground works (drilling equipment, shotcrete machines, pumps, ventilation fans, tunnel services, heaters) and the facilities (warehouses, offices, workshops, heated storage staged at the underground laydown area) will be provided through early establishment of the 24.5KV overhead service power line that will later connect to the switchyard and provide station service power.

Temporary Construction Water Supply

The applicant will provide construction water supply through early establishment of the upper reservoir well and lower site well field and conveyance line. The applicant will use water tanks and pumps to distribute water throughout the project.

Concrete Supply

The applicant will establish early in the project's construction a batch plant capable of supplying all concrete, shotcrete, and grout.

The applicant will transport cement, fly ash, accelerators, fibres and additive's from suppliers by truck that will be stored on site at a location close to the batch plant.

The applicant will import aggregate and store it in dedicated aggregate bins close to the batch plant. The applicant will use, when possible, processed and washed excavated material as aggregate for concrete. The processing will take place close by the permanent spoil disposal area and from where aggregate will be taken from designated stockpiles to feed the aggregate bins. The applicant will test and determine the suitability of excavated aggregate for use in the concrete.

Adequate laydown areas for storage of delivered materials such as silos and pigs for cement and fly ash, aggregate bins and heated dry storage for accelerators, additives and fibres that are sensitive to temperature and moisture are required for the delivery of these items.

Total anticipated volume of concrete: 90,000 m^3 (including 20,000 m^3 of backfill concrete with lower cement content).

With reference to section 4.41(f)(3)(iii) of the Commission's regulations, following selection of the Engineering, Procurement, and Construction (EPC) contractor and during the final design phase, the applicant and its EPC contractor will develop and provide to FERC the details regarding the following temporary construction facilities and measures. The applicant and its EPC contractor will also then provide to FERC the material and information requested in section 4.41(f)(3)(iv) of the Commission's regulations for any mitigation measures or facilities, identified under clause (iii), that are proposed for implementation and construction.

- Construction wastewater treatment facility
- Explosives management storage facility
- Acid rock drainage and management measures
- Fugitive dust control management measures

- Stormwater Pollution Prevention Plan
- Spill Prevention, Control, and Countermeasure Plan
    - Hazardous materials management
    - Construction waste management

FERC-A1-31 Exhibit E Proposed Environmental Measures

In Section 2.2.4 Summary of Proposed Environmental Measures, Table 2.2-3 lists 27 proposed environmental measures, about half of which are resource management plans that would consist of multiple provisions and measures. The table includes general descriptions of the goals and objectives of the proposed plans (e.g., Outdoor Lighting Plan) as well as some rudimentary examples of measures under consideration and indicates that studies (e.g., noise modeling) would be undertaken to inform development of measures. Otherwise, the FLA indicates that plans and measures are still being developed and specific measures have yet to be identified; hat some plans would be developed at some future, unspecified date prior to construction; or that other measures may be proposed based on continued consultation with resource agencies. Further, no additional information on the proposed measures is provided in the resource sections that follow in Section 3.0 Environmental Analysis. This level of uncertainty and detail is not sufficient. For staff to adequately evaluate any proposed measures and prepare our NEPA analysis, and to weigh the benefits of the proposed measures along with their costs (economic, generation, and other competing uses) to compare with any alternative measures that may be recommended by stakeholders substantially more information must be provided in the revised FLA. Indicating that some measures may or may not be developed at an unspecified future date does not conform with the application content requirements in section 4.38 of the Commission's regulations.

For example, the proposal to construct the 25-mile-long transmission line with consideration of design guidelines recommended by the Avian Power Line Interaction Committee (APLIC) in order to minimize avian electrocution and collision hazards. The proposed Raptor-Safe Transmission Line Structure Plan, the Raptor and Bat Protection Plan, and the Greater Sage-Grouse Mitigation Plan provide general examples of avian-safe devices and designs, including markers, diverters, perch guards, line spacing, insulative covers, etc. that are under consideration. However, no information is provided on what specific measures are proposed, including the where, how many, when, why, and how any potential measures would be implemented. Additionally, no supporting analysis is provided on how the measures would minimize effects of the proposed project on environmental resources. Accordingly, we are also unable to understand how costs are assigned for the proposed measures in Table 4.3-1. For example, under the Habitat Restoration, Reclamation, and Enhancement Plan (PME #9) the FLA lists a capital cost of $100,000 and an annual cost of $20,000. However, we cannot determine if this cost estimate is reasonable because we do not understand what would be implemented for a capital cost of $100,000 and an annual cost of $20,000. This amount seems low considering the number of acres that would be disturbed and would presumably be revegetated. For each measure listed in Table 4.3-1, please describe, at least at the conceptual level, what would be done, and the basis of the estimated cost included in the table. Therefore, for staff to process the application more specific information is needed for all the proposed measures in listed in Table 2.2-3. Additionally, please review the Guidance on Environmental Measures in License Applications available on the Commission's website2 and revise the FLA to clearly describe and specify all proposed measures and facilities, including: relevant goals and objectives; the what, where, how many, when, why, and how any measures would be implemented; the project-related effects the measures address and their benefits to specific resources; relevant conceptual drawings and maps; consultation with resource agencies leading to the measures (summarize and attach correspondence); and costs (capital and annual). Sufficient detail should be included for staff to understand and evaluate the specific provisions of each measure with reference to the related impact and where relevant: the conditions under which implementation would occur (e.g., continuously or in the event of contingencies) with reference to project design and/or operating procedures; any technical aspects for implementation; an implementation schedule that includes the

timing, frequency, and duration; procedures providing information on the progress and results of mitigation and monitoring measures; any necessary monitoring including the linkages between impacts, measurement indicators, detection limits (where appropriate), and defined thresholds/triggers that would signal the need for corrective actions; and reporting protocols. This information is needed for staff to evaluate the proposed measures in our NEPA analyses as well as to draft potential license conditions with sufficient detail for clear implementation and enforcement of the measure's provisions and parameters. In the sections that follow, staff also outline information needs specific to individual proposed plans and measures.

Response

As requested by FERC's April 28, 2023 Deficiency of License Application and Additional Information Request (AIR) letter, and pursuant to Title 18 Code of Federal Regulations (CFR) § 5.18(b)(5)(ii)(C) and FERC's Guidance on Environmental Measures in License Applications (FERC 2020), the applicant has merged the contents of Final License Application (FLA) Table 2.2-3 (Summary of Proposed Environmental Measures) and Table 4.3-1 (Cost of Environmental Mitigation and Enhancement Measures Considered in Assessing the Environmental Effects of Continuing to Operate the WPW Project) into a *Revised Table 4.3-1* (Attachment 31-1) to include:

- Supplemental information regarding each of its 27 proposed protection, mitigation, and enhancement (PM&E) measures;
- A conceptual level description of the PM&E measure;
- What the PM&E measure is intended to mitigate for based on potential environmental effects outlined in the FLA
- A basis for the estimated capital and annual costs, when such costs required further explanation (previously included in Table 4.3-1 of the FLA);
- A list of coordinating entities that will be engaged for consultation by PM&E measure; and
- A proposed consultation plan with relevant agencies.

The intent of the *Revised Table 4.3-1* is to replace Table 2.2-3 and Table 4.3-1 in their entirety. As such, the applicant is providing replacement pages of the FLA from pages 350 through 392, which are now renumbered as pages 350 through 401.

Pursuant to the Federal Land Policy and Management Act, the applicant anticipates that early development and finalization of certain management plans, proposed as PM&E measures, may be necessary to obtain a Right-of-Way (ROW) Grant Authorization and Record of Decision from the U.S. Bureau of Land Management (BLM). Those plans are identified within the *Revised Table 4.3-1* (Attachment 31-1), and the applicant will continue consultation with relevant agencies to develop these management plans prior to FERC's issuance of an original license for the project. As these management plans are developed early, the applicant will submit a draft to relevant agencies for a 30-day comment period. Following agency review and comment, meeting summaries and associated consultation will be included as an appendix to each final resource management plan and filed with FERC for approval.

The applicant participates in a monthly Technical Working Group (TWG), which the BLM established to allow coordination, facilitate discussion, and assist in reaching consensus on appropriate PM&E and resource management measures related to wildlife. The initial TWG meeting was hosted on June 29, 2023, and included staff from the following agencies: BLM, Nevada Department of Wildlife (NDOW), Nevada

SETT, and White Pine County. The next TWG meeting will be hosted on August 31, 2023. Both the U.S. Fish and Wildlife Service (USFWS) and the U.S. Forest Service (USFS) were invited to the TWG but declined to participate. TWG discussions are intended to guide the development of wildlife-related management plans proposed in the applicant's PM&Es. Pre-license consultation unrelated to wildlife will be conducted on an as-needed basis with relevant agencies or stakeholders.

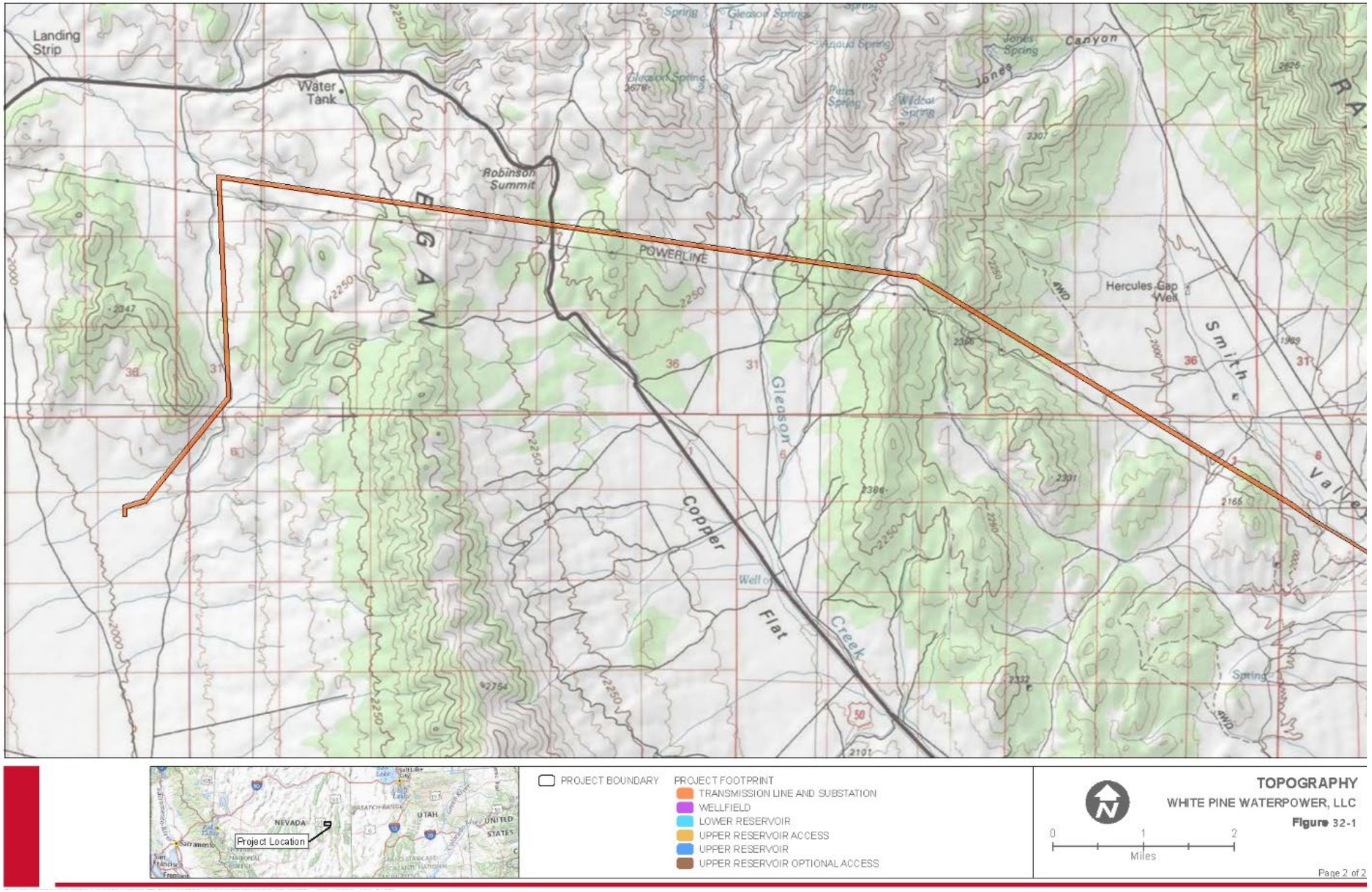
FERC-A1-32 Exhibit E General Description of the River Basin

Figure 3.1-3 Topography of the Project Vicinity shows the topography within the vicinity of the "project footprint", which includes the reservoirs, some project access roads, the underground facilities, and portion of the transmission line mostly east of Hercules Gap. However, there is no similar map that shows the topography in the vicinity of the proposed project transmission line to the west of Hercules Gap. Please provide a map(s), like Figure 3.1-3 that show the topography in the vicinity of the proposed project transmission line to the west of Hercules Gap.

Response

Figure 32-1 below is the requested figure, like Figure 3.1-3, but showing topography along the proposed project transmission West of Hercules gap. Exhibit F also provides an additional resource regarding topography.

Figure 32-1: Topographic Map West of Hercules Gap



FERC-A1-33 Exhibit E General Description of the River Basin

Section 3.1.3.1 Major Land Uses and Ownership states that the total acreage within the "project footprint", which includes permanent and temporary disturbance areas, would be 1,338 acres. However, Exhibit A, Table 1.4-1 Summary of Lands within the Project Boundary, states that a total of 1,143.21 acres of land would be located within the project boundary. Please revise the FLA to address the nearly 200-acre difference and provide the correct acreage that is located within the project boundary; if the response would cause other parts of the FLA to be corrected, please provide the location within the FLA of each of these corrections. Additionally, it is unclear whether all permanent and temporary disturbance areas would occur within the project boundary or if certain of those disturbance areas would occur outside the project boundary, but within the "project footprint". Please revise the FLA to clarify (a) what, if any, difference there is between the "project footprint" and the project boundary and (b) if certain of those permanent and temporary disturbance areas would be located outside the project boundary, but within the "project footprint".

Response

The difference between these two values relates to the difference between "Project Footprint" and "Project Boundary". The "Project Footprint" is 1,338 acres total, and the "Project Boundary" is 1,143.21 acres. The difference between the two is approximately 200 acres, which is the area of land that would be temporarily disturbed during construction and included in the "Project Footprint" but not in the "Project Boundary" as described further below.

The "Project Boundary" incorporates all lands required for the project's operations and maintenance (See Exhibit E, Section 1.2 Footnote 1). "Project Footprint" incorporates the "Project Boundary" in addition to all areas that would be disturbed during Construction (See Exhibit E, Section 1.0 of the FLA). The "Project Boundary" includes only operational areas and areas used for maintenance, while "Project Footprint" includes both the "Project Boundary" and the temporarily disturbed areas.

Additional clarification around "Project Footprint" and "Project Boundary" can be found in the following sections of the FLA:

- Exhibit E Section 1.0 Introduction states, '*the Project Footprint incorporates the Project Boundary in addition to all areas that would be disturbed during construction*'.
- Exhibit E Section 1.2, Footnote [1] states, '*WPW initially drew a Conceptual Project Boundary for the Pre-Application Document in 2020. It was revised as Project design advanced for the resource studies conducted in 2021. WPW has continued to refine the Project Boundary and in this FLA presents the revised Project Boundary (incorporating all lands required for Project operations and maintenance) as well as the Project Footprint (incorporating the Project Boundary in addition to all areas that would be disturbed during construction)*'.
- Exhibit E, Section 3.1.3.1 Major Land Uses and Ownership, states '*The Project Footprint encompasses all lands potentially needed for Project construction, operation, and maintenance and is shown in Figure 2.3-2. The total acreage within the Project Footprint, which includes permanent and temporary disturbance areas, is 1,338 acres. Within the Project Footprint is the FERC Project Boundary (Project Boundary) which includes only those lands required for Project operation and maintenance, such as all Project facilities and access roads. The Project Boundary is presented in Exhibit G Maps G-01 to G-04 of this FLA*'.

FERC-A1-34 Exhibit E General Description of the River Basin

Section 3.1.3.1 Major Land Uses and Ownership states that approximately 1,281 acres of land administered by the BLM and approximately 57 acres of privately-owned land are located within the "project footprint". However, Exhibit A, Table 1.4-1 Summary of Lands within the Project Boundary, states that 1,095.76 acres of land administered by the BLM and approximately 47.45 acres of privately-owned land are located within the project boundary. Please revise the FLA to address this discrepancy and provide the correct acreage for each of these landowners.

Response

The difference between these two values relates to the difference between "Project Footprint" and "Project Boundary". The area of the "Project Footprint" which is administered by the BLM is 1,281 acres, and the area of the "Project Footprint" that is privately-owned is 57 acres (1,338 total acres). The area of the "Project Boundary" which is administered by BLM is 1,095.76, and the area of the "Project Boundary" that is privately owned is 47.45 acres (1,143.21 total acres). The difference between the two values is the temporarily disturbed areas, which are included in the "Project Footprint" but not in the "Project Boundary" as described further below.

The "Project Boundary" incorporates all lands required for the project's operations and maintenance (See Exhibit E, Section 1.2 Footnote 1). "Project Footprint" incorporates the "Project Boundary" in addition to all areas that would be disturbed during construction (See Exhibit E, Section 1.0 of the FLA). The "Project Boundary" includes only operational areas and areas used for maintenance, while "Project Footprint" includes both the "Project Boundary" and the temporarily disturbed areas.

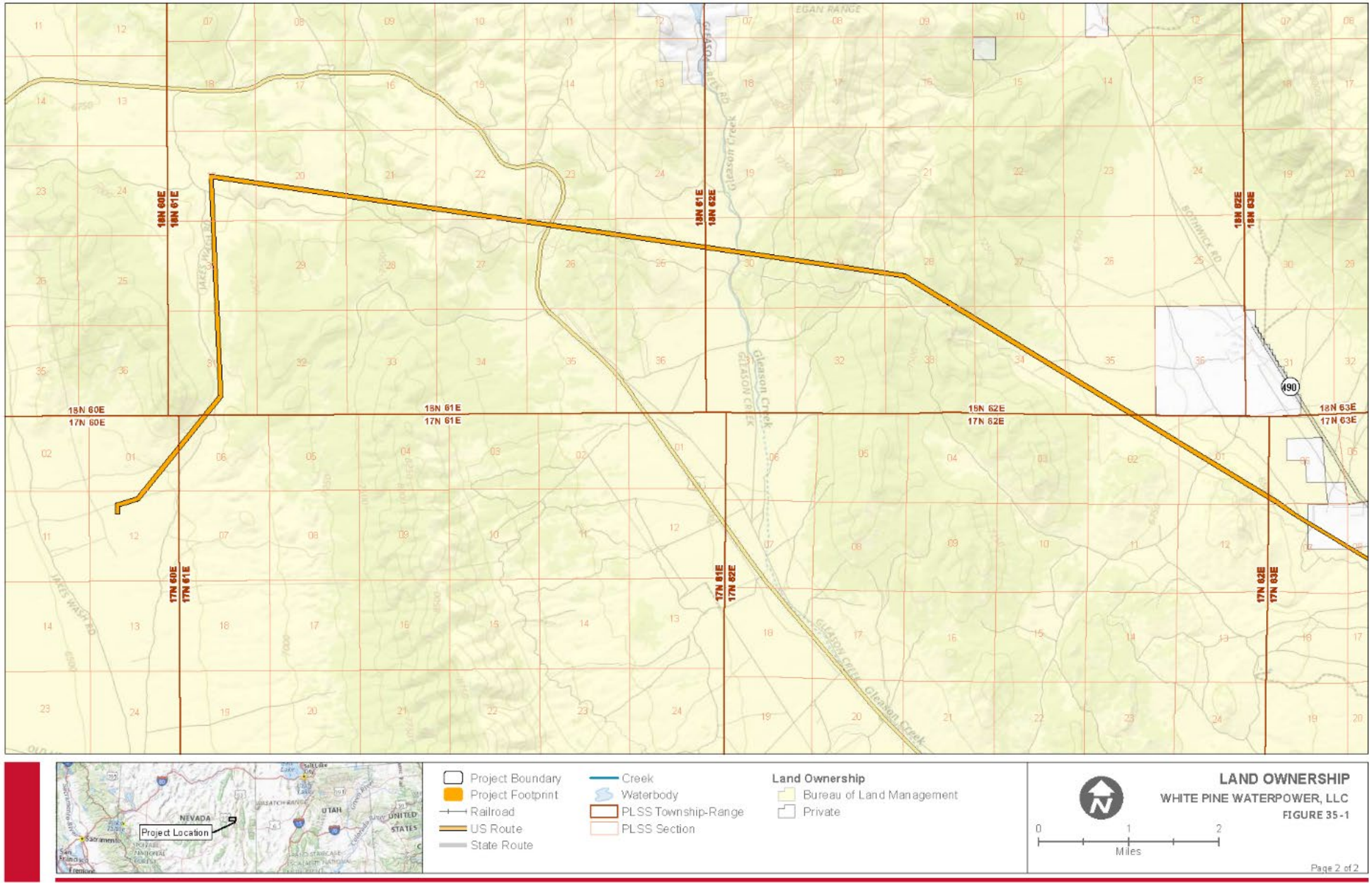
FERC-A1-35 Exhibit E General Description of the River Basin

Figure 3.1-4 Land Ownership in the Project Vicinity shows the land ownership within the vicinity of the "project footprint", which includes the reservoirs, some project access roads, the underground facilities, and portion of the transmission line mostly east of Hercules Gap. However, there is no similar map that shows the land ownership in the vicinity of the proposed project transmission line to the west of Hercules Gap. Please provide a map(s), like Figure 3.1-4 that show the land ownership in the vicinity of the proposed project transmission line to the west of Hercules Gap.

Response

Figure 35-1 below is the requested figure similar to Figure 3.1-4 that shows land ownership along the proposed project transmission West of Hercules Gap. Attachment 19-1 Exhibit G Maps provides an additional resource, with maps G1 through G4 displaying land ownership West of Hercules Gap.

Figure 35-1: Landownership West of Hercules Gap



FERC-A1-36 Exhibit E Environmental Effects Analysis

A footnote to Table 3.2-1 Geographic Scope by Resource for Cumulative Effects Associated with the White Pine Pumped Storage Project states that the "project footprint" encompasses the area needed for project construction and that it includes the footprint of the permanent project facilities. This appears to mean that the (a) "project footprint" would encompass the project boundary (i.e., footprint of the permanent project facilities) and (b) project-related construction activities would occur outside of the project boundary. Please revise the FLA to confirm whether project-related construction activities are proposed to take place outside of the proposed project boundary.

Response

The applicant will conduct project-related construction activities outside of the proposed project boundary, and within the project footprint. The applicant clarifies the footnote in Table 3.2-1 to read:

> *"The Project Footprint encompasses the area needed for construction workspace and includes the Project Boundary."*

The "Project Boundary" incorporates all lands required for the project's operations and maintenance (See Exhibit E, Section 1.2 Footnote 1). "Project Footprint" incorporates the "Project Boundary" in addition to all areas that would be disturbed during Construction (See Exhibit E, Section 1.0 of the FLA). The "Project Boundary" includes only operational areas and areas used for maintenance, while "Project Footprint" includes both the "Project Boundary" and the temporarily disturbed areas.

FERC-A1-37 Exhibit E Environmental Effects Analysis

Although Section 3.2.2.2 Reasonably Foreseeable Future Actions references several potential, non-project projects and actions, it does not include any reasonably foreseeable future actions related to the White Pine project, such as the proposed annual groundwater pumping to supply the project with make-up water. Please revise this section to include a description of this proposed project action, and any other potential future project-related action, that could cumulatively affect environmental resources.

Response

The applicant has revised the second paragraph of Section 3.2.2.2 Reasonably Foreseeable Future Actions, as follows:

"Reasonably foreseeable future actions relevant to the cumulative effects analysis include: (1) potential solar and wind energy projects in the Steptoe Valley along the transmission line toward Robinson Summit substation; (2) expanded operations of the NNR; (3) additional transmission lines in the Section 368 energy corridors; (4) actions funded by the Southern Nevada Public Lands Management Act (SNPLMA) grants; (5) BLM actions; ~~and~~ (6) Nevada Department of Transportation (NVDOT) projects; and (7) Project use of groundwater resources. The analysis also considers population and development trends in White County. In many cases, specific projects have not yet been proposed, nor are specific locations known, and therefore the cumulative effects analysis for those future actions is largely qualitative. "

The applicant has added the following to the end of Section 3.2.2.2. Reasonably Foreseeable Future Actions, as follows:

> *"Construction and operation of the project will use groundwater resources. During the initial reservoir fill stage of construction, groundwater pumping will result in approximately 10 feet of drawdown at one domestic well east of PW-3 and may (depending on aquifer transmissivity) cause 10 feet of drawdown at four other wells used for domestic and irrigation purposes. During operation, on average, approximately 560 AF will be needed each year to make up for losses due to seepage, leakage, and evaporation. Continued use of groundwater resources each year to make up for losses due to seepage, leakage, and evaporation is a reasonably foreseeable future action. . ."*

The applicant has revised Table 3.2-2. Reasonably Foreseeable Future Actions, as follows:

Table 3.2-2. Reasonably Foreseeable Future Actions

Project or Action	Location	Approximate Distance from Project Footprint	Description	Potential Resources Cumulatively Affected
Potential Solar and Wind Energy Projects	Steptoe Valley	Unknown (not anticipated to overlap with Project Footprint)	A recent voter-approved Nevada constitutional requirement for 50 percent renewable energy sourcing by 2030 and a law requiring 100 percent carbon-free resources by 2050 will likely result in solar and wind energy development in Steptoe Valley along the transmission line toward Robinson Summit substation (Alonzo 2020).	Water Resources Fish and Aquatic Resources Wildlife Resources Recreation Resources Land Use Aesthetic Resources Socioeconomic Resources Environmental Justice
Expanded Operations of NNR	Steptoe Valley	Overlaps with Project Footprint	White Pine County, in conjunction with the NNR Foundation, is planning to restore operation approximately 16 miles of railroad track from Ely to McGill, and make improvements to the depot and trails systems within the railroad right-of-way in White Pine County (White Pine County 2021).	Geologic and Soil Resources Water Resources Fish and Aquatic Resources Botanical Resources Wildlife Resources Recreation Resources Land Use Aesthetic Resources Socioeconomic Resources Environmental Justice
Additional Transmission Lines or Pipelines in Section 368 Energy Corridors	Section 368 Energy Corridor located within White Pine County	Unknown	A Section 368-designated energy corridor exists within the Project Footprint and is designed to support connectivity to multiple energy generation sources*. Specific projects are described in the next two rows.	Geologic and Soil Resources Water Resources Fish and Aquatic Resources Botanical Resources Wildlife Resources Recreation Resources Land Use Aesthetic Resources Socioeconomic Resources

Project or Action	Location	Approximate Distance from Project Footprint	Description	Potential Resources Cumulatively Affected
				Environmental Justice
Greenlink North Transmission Line (part of Section 368 Energy Corridor)	White Pine County	Overlaps with Project Footprint at Robinson Summit Substation	A 525 kV transmission line approved to facilitate transmission of renewable resources. The line starts at the Robinson Summit substation and heads west to the Yerington substation (NV Energy 2022).	Geologic and Soil Resources Water Resources Fish and Aquatic Resources Botanical Resources Wildlife Resources Recreation Resources Land Use Aesthetic Resources Socioeconomic Resources Environmental Justice
Cross-Tie Transmission Project (part of Section 368 Energy Corridor)	White Pine County	Overlaps with Project Footprint at Gonder Substation and parallels the Project	A proposed 500 kV transmission line that will connect the Gonder substation and the Clover substation in Utah, and strongly link the Nevada and Utah systems (BLM 2022b).	Geologic and Soil Resources Water Resources Fish and Aquatic Resources Botanical Resources Wildlife Resources Recreation Resources Land Use Aesthetic Resources Socioeconomic Resources Environmental Justice
Southwest Intertie Project-North (SWIP-North) Line (part of Section 368 Energy Corridor)	White Pine County, Elko County	Overlaps with Project Footprint at Robinson-Summit Substation, and perpendicular to the Project	A 500 kV transmission line that is almost fully permitted, the SWIP-North Line will connect the Robinson Summit substation to the Pacific Northwest market (LS Power 2016).	Geologic and Soil Resources Water Resources Fish and Aquatic Resources Botanical Resources Wildlife Resources Recreation Resources Land Use

Project or Action	Location	Approximate Distance from Project Footprint	Description	Potential Resources Cumulatively Affected
				Aesthetic Resources Socioeconomic Resources Environmental Justice
Actions Funded by SNPLMA Grants	Greater Las Vegas Valley	Unknown	A total of 92 SNPLMA grants have been awarded in White Pine County since the act was passed in 1998. Grants are typically issued to enhance environmental values. Additional projects to restore habitat, reduce risk of wildfire, and conserve natural resources in White Pine County are expected to receive funding under SNPLMA over the next 30 to 50 years.	Water Resources Fish and Aquatic Resources Wildlife Resources Recreation Resources Land Use Aesthetic Resources Socioeconomic Resources Environmental Justice
Garnet Hill Recreation Area Management Plan (part of actions funded by SNPLMA Grants)	White Pine County	South of transmission line (Egan Crest Trail System 0.1 mile; Garnet Hill Recreation Area 5 miles)	The BLM Bristlecone Field Office is proposing improvements to the Garnet Hill Recreation Area and the Egan Crest trail systems including upgrading roads, adding campgrounds, enlarging trailheads, and constructing trail systems. The improvements are funded as part of Round 18 of SNPLMA (BLM 2022e).	Water Resources Fish and Aquatic Resources Wildlife Resources Recreation Resources Land Use Aesthetic Resources Socioeconomic Resources Environmental Justice
Smith Valley Mastication and Hand Thinning	Bristlecone BLM Field Office	Perpendicular to Project transmission line, north and south (0 miles)	A proposal to remove stage I, II and III pinyon and Utah Juniper within the Smith Valley to make habitat more suitable for Greater Sage-grouse and mule deer (DOI 2022, BLM 2022f).	Geologic and Soil Resources Water Resources Fish and Aquatic Resources Botanical Resources Wildlife Resources Recreation Resources Land Use Aesthetic Resources Socioeconomic Resources

Project or Action	Location	Approximate Distance from Project Footprint	Description	Potential Resources Cumulatively Affected
				Environmental Justice
NVDOT Statewide Transportation Improvement Program projects within White Pine County	White Pine County	Unknown (not anticipated to overlap Project Footprint)	Nevada Department of Transportation has three projects within a 5-mile buffer of the Project: an Americans with Disabilities Act of 1990 (ADA) project along the main street in McGill, drainage improvement in the city of Ely, and paving a stretch of multi-use track near the NNR museum in Ely (Nevada DOT 2021).	Water Resources Fish and Aquatic Resources Wildlife Resources Recreation Resources Land Use Aesthetic Resources Land Use Socioeconomic Resources Environmental Justice
Recreation Trail Building School Grant	State of Nevada	Approximately 6 miles south of Project Footprint	The U.S. Economic Development Administration is providing a $160,000 grant to the Great Basin Institute to build a professional trail building school, located in Ely, Nevada (Robertson 2021).	Wildlife Resources Recreation Resources Land Use Socioeconomic Resources
Increasing Population and Development	White Pine County	Unknown	The population of White Pine County has mildly fluctuated at around 10,000 people, and declined slightly from 1990 to 2020. However, given the large population increase in the state overall, this cumulative effects analysis conservatively assumes that population and development will increase in White Pine County over the temporal scope of the analysis.	Geologic and Soil Resources Water Resources Fish and Aquatic Resources Botanical Resources Wildlife Resources Recreation Resources Land Use Aesthetic Resources Socioeconomic Resources Environmental Justice
Project use of groundwater resources	*White Pine County*	*Approximately 6 miles south of Project Footprint*	*The Project will utilize groundwater for initial fill and annual make-up of losses of water from seepage, leakage, and evaporation. WPW estimates that, on*	*Geologic and Soil Resources* *Water Resources* *Fish and Aquatic Resources*

Project or Action	Location	Approximate Distance from Project Footprint	Description	Potential Resources Cumulatively Affected
			average, approximately 560 AF will be needed each year to make up for losses to seepage, leakage, and evaporation.	*Botanical Resources* *Wildlife Resources* *Recreation Resources* *Land Use* *Socioeconomic Resources*

*A programmatic EIS was prepared to analyze the environmental impacts of designating and developing energy corridors on federal lands pursuant to Section 368 of the Energy Policy Act of 2005 (US DOE and BLM 2008). Energy corridors have been located to avoid, where possible, conflicting land uses and important resources (BLM 2021b).

FERC-A1-38 Exhibit E Soils

Table 3.3.-1 Soil Types Mapped in the Project Footprint indicates the acreages of areas of different farmlands as classified by the Natural Resources Conservation Service that would be located within the "project footprint". However, the table does not indicate the acreages of those farmlands that would be located within the project boundary. Please revise Table 3.3-1 to indicate the acreages of the farmlands that would be located within the project boundary and file a map showing the location of the different farmlands with respect to the proposed project boundary.

Response

The applicant has revised table 3.3-1 to include the acreages of the farmlands that will be located within the project boundary. The applicant has also prepared maps, included as Attachment 38-1, showing the location of the different farmlands with respect to the proposed project boundary.

Revised Table 3.3-1. Soil Types Mapped in the Project Footprint and Project Boundary

Map Unit Symbol	Map Unit Name	Farmland Classification	Project Footprint Acreage	Project Footprint Percentage	Project Boundary Acreage	Project Boundary Percentage
53	Zola loam 0 to 2 percent slopes	Prime farmland if irrigated	328.74	24.57%	290.58	25.40%
100	Anawalt-Vanwyper-Alyan association	Not prime farmland	115.34	8.62%	115.34	10.08%
108	Anawalt-Oreneva complex	Not prime farmland	21.26	1.59%	21.26	1.86%
109	Hyzen-Cavehill association	Not prime farmland	2.76	0.21%	23.53	2.06%
111	Aycab-Alta-Tosp association	Not prime farmland	26.42	1.97%	26.42	2.31%
189	Cleavage-Softscrabble-Sumine complex	Not prime farmland	16.98	1.27%	16.98	1.48%
201	Davey loamy fine sand 2 to 8 percent slopes 1/	Farmland of statewide importance	1.44	0.11%	0.98	0.09%
226	Enko-Rad association	Farmland of statewide importance	132.77	9.92%	113.27	9.90%
233	Dun Glen very fine sandy loam 0 to 2 percent slopes 1 /	Prime farmland if irrigated and reclaimed of excess salts and sodium	5.82	0.43%	5.82	0.51%
282	Bloor-Enko association	Not prime farmland	3.15	0.24%	3.15	0.28%
286	Chiara-Jenor association	Not prime farmland	61.78	4.62%	29.89	2.61%
297	Creemon-Orovada-Tulase association	Not prime farmland	10.74	0.80%	6.7	0.59%

Map Unit Symbol	Map Unit Name	Farmland Classification	Project Footprint Acreage	Project Footprint Percentage	Project Boundary Acreage	Project Boundary Percentage
351	Cowbell-Brownsbowl association	Not prime farmland	1.94	0.14%	1.94	0.17%
455	Macnot very gravelly ashy fine sandy loam 2 to 8 percent slopes	Not prime farmland	4.09	0.31%	2.97	0.26%
481	Ninemile-Westbutte-Softscrabble association	Not prime farmland	14.08	1.05%	14.08	1.23%
531	Raglan-Isolde association	Not prime farmland	1.14	0.09%	1.14	0.10%
567	Softscrabble-Dosie-Hutchley association	Not prime farmland	0.85	0.06%	0.85	0.07%
690	Sodhouse-Golconda association	Not prime farmland	9.32	0.70%	5.77	0.50%
710	Xipe silt loam 1/	Not prime farmland	6.37	0.48%	6.37	0.56%
752	Snapp-Orovada association	Not prime farmland	39.61	2.96%	39.61	3.46%
760	Piline complex	Not prime farmland	50.14	3.75%	50.14	4.38%
763	Segura-Douhide-McIvey association	Not prime farmland	42.07	3.14%	42.07	3.68%
800	Udelope-Bregar-Rock outcrop association	Not prime farmland	76.36	5.71%	16.17	1.41%
801	Udelope-Hackwood-Tusel association	Not prime farmland	0.21	0.02%	0.14	0.01%
810[1]	Batan-Goldrun association	Not prime farmland	134.40	10.31%	84.59	7.39%
911	Barnard-Devada association	Not prime farmland	6.74	0.50%	6.74	0.59%
977	Zimbob-Pookaloo association	Not prime farmland	4.46	0.33%	4.46	0.39%
991	Hyzen-Cavehill-Tecomar association	Not prime farmland	54.71	4.09%	54.71	4.78%
1230	Raglan-Mazuma association	Prime farmland if irrigated and reclaimed of excess salts and sodium	16.84	1.26%	10.87	0.95%

Map Unit Symbol	Map Unit Name	Farmland Classification	Project Footprint Acreage	Project Footprint Percentage	Project Boundary Acreage	Project Boundary Percentage
1392	Ninemile-Newlands association	Not prime farmland	15.19	1.14%	15.19	1.33%
1451	Atlow-Reluctan-Trunk association	Not prime farmland	58.44	4.37%	58.44	5.11%
1520	Croesus-Rock outcrop complex, 50 to 75 percent slopes	Not prime farmland	31.46	2.35%	31.46	2.75%
3262	Grandeposit-Majorsplace-Grube association	Not prime farmland	42.35	2.90%	42.35	3.70%

[1] Underground works are subsurface features that are included within the project boundary. Lands above these features would not be disturbed.

FERC-A1-39 Exhibit E Water Resources

The level of detail provided in this section is not sufficient for staff to prepare its environmental analysis and to weigh the benefits of the proposed measures along with their costs (economic, generation, and other competing uses) and any alternative recommended measures.

Therefore, please review the Guidance on Environmental Measures in License Applications available on the Commission's website and revise the FLA to clearly describe all proposed measures, including the goals and objectives; where, when, and how they would be implemented; the project-related effects the measures address and its benefits to specific resources; relevant conceptual drawings and maps; any consultation with resource agencies leading to the measures; and costs (capital and annual).

In Exhibit E– Section 3.4.1, Water Resources, indicates that no surface water would be affected, but five new groundwater wells would be drilled for the initial fill and periodic refill. Exhibit B– Section 4.2, Initial Fill, states this would use 5,000 acre-feet (AF), filled over 12 to 18 months, equal to the sum of active storage (4,082 AF); dead storage for the upper and lower reservoirs (176 AF and 159 AF, respectively); volume of the conveyance system (120 AF); and estimated net losses (approximately 240 to 560 AF) due to precipitation, evaporation, and leakage over the filling period. This would be completed under White Pine County's permitted water rights of 20,000 AF per year.

The estimate provided in Exhibit B – Section 4.3, Make-up Water, for annual losses of water in the system ranges from 140 AF to a maximum of 720 AF, with a conservative average of 360 AF lost per year and 560 AF needed per year for refill. The FLA notes that the State Engineer approved the change application to move the points of diversion and places of use for the new water rights permit, but it remains unclear if the water rights are currently being used for withdrawals from the groundwater aquifer. Please provide more information on current usage by the County and supply more details on the timeline for future hydrogeological studies referenced in Exhibit B – Section 3.3, Initial Fill and Make-up Water Sourcing and Delivery Alternatives. Additional information is needed regarding the application to the Bureau of Land Management for the proposed hydrogeological study in the vicinity of the project, and if there is a potential for subsidence as the result of proposed project operations. Finally, while it is noted by the Nevada Department of Environmental Quality that a 401 certification is likely not required, please include in the revised FLA a determination from the U.S. Army Corps of Engineers that documents if the project would impact Waters of the United States (WOTUS).

Response

Groundwater for the project will be produced via a wellfield array consisting of four (4) production wells and a 3.8-mile buried pipeline conveyance delivering water to the project's lower storage reservoir. The groundwater production wellfield is designed to supply water for the initial lower reservoir fill at a rate of 3,000 gpm as well as provide make up water to the lower reservoir on a periodic basis at a much lower rate of up to 750 gpm. The production wells are located and designed to target water producing Quaternary alluvial fill gravels located on the eastern side of Steptoe Valley. Each production well is designed as a high-capacity industrial well producing a maximum of 1,000 gpm per well. The system maximum design production rate is 4,000 gpm including a 25% redundant production capability of 1,000 gpm. Water produced by the wellfield will be discharged from individual wells to a pipeline system initially sized at 8-inch diameter then increasing in diameter as additional well production is added and line capacity requirements increase nearer the lower reservoir.

The water rights are not currently being used for withdrawals from the groundwater aquifer by either the applicant or White Pine County.

The hydrogeologic testing program will include the drilling and construction of two hydrogeologic evaluation (HE) holes (completed as test wells) and three (3) alluvial monitoring wells needed to test and monitor groundwater chemistry as well as track groundwater response to pumping. These wells will provide data on local aquifer stratigraphy, groundwater elevation and water chemistry needed to support the design of the water supply wellfield as well as provide design data on water quality for design of the wider pump storage facility. The hydrogeologic testing is subject to greater sage grouse seasonal restrictions and, as such, can only be conducted between September 15 and October 31 in any given year, unless a waiver is granted by NDOW. In the absence of a waiver approval, the testing will be conducted in 2024.

An SF-299 application for a land use permit from BLM has been submitted. BLM requested additional information which is being prepared for submittal. The BLM has indicated that the application will likely be eligible for a categorical exclusion. Depending on workload, BLM approval is expected within three months. Geotechnical exploration in the vicinity of the hydrogeologic test wells and the planned production wells indicate that there is no expectation of subsidence.

The objectives of the HE borehole / test well investigation includes:

- Aquifer testing, hydrogeologic characterization and productivity assessment of the local alluvial aquifer that will be the primary source of water for the project. The HE boreholes will be completed as small diameter test wells in both locations near MW-1 and MW-2.
- Evaluate and characterize hydrogeologic conditions to support the final design of the production wells and preliminary pump selection.
- Conversion to a standpipe piezometer to support baseline NEPA data collection. Following testing the HE boreholes will be instrumented with vibrating wire piezometers (VWP) and data loggers to track and record background static water levels through time.

The objectives of the monitoring well drilling includes:

- Establishing baseline groundwater levels and water quality along the eastern alluvial apron of Steptoe Valley.
- Provide alluvial investigation sites to characterize groundwater elevations and alluvial stratigraphy,
- Function as piezometric monitoring points during the alluvial well pumping tests to estimate aquifer properties from responses during aquifer testing.
- Establish long-term groundwater monitoring at the site of the project wellfield.

The applicant will file with FERC the SF-299 approval with its associated planned of development (POD).

The applicant is consulting with the U.S. Army Corps of Engineers (USACE) regarding an Approved Jurisdictional Determination for applicability of 404 permitting for the Project. At this time, the USACE has communicated to the applicant that it has put a hold on any jurisdictional determinations as a result of the recent Supreme Court ruling on May 25, 2023, in *Sackett v. EPA*. Agencies are developing a rule to amend the final "Revised Definition of 'Waters of the United States'" rule, consistent with the US Supreme Court's May 25, 2023, decision. The agencies intend to issue a final rule by September 1, 2023. At which

point, the applicant will continue to pursue an Approved Jurisdictional Determination with USACE to confirm that a Section 404 permit will not be required.

Please see link below to USACE's website for further information:

https://www.usace.army.mil/Media/Announcements/Article/3440421/27-june-2023-update-supreme-court-ruling-in-sackett-v-environmental-protection/

FERC-A1-40 Exhibit E Terrestrial Resources

The application defines the "project footprint" as the "area needed for construction workspace and includes the footprint of the permanent facilities". Section 3.1.3.1 Major Land Uses and Ownership states that 1,338 acres would be permanently or temporarily disturbed by construction of the proposed project (i.e., the project footprint). Section 3.6.2.1 Project Effects on Terrestrial Habitats (Table 3.6-4) breaks down the acreage of each vegetation community type that would be permanently lost due to construction of the proposed upper and lower project reservoirs, which is 154.5 acres in total. However, the application does not similarly break down the remaining 1,183.5 acres within the project footprint that would be permanently lost due to construction of proposed project facilities or that would be temporarily affected by proposed construction activities.

Therefore, please estimate the number of acres of each vegetation community type described in the application that would either be permanently lost or temporarily impacted by proposed project facilities and construction activities (as in Table 3.6-4) including, but not limited to, new access roads and detours, existing roads proposed to be widened, ROWs for the transmission line and conveyance facilities, concrete batch plants, staging and laydown areas, temporary structures (e.g., personnel trailers), quarries, hazardous waste and stockpile sites, demolition areas and other temporary sites to be used during proposed construction, etc. Also, please provide maps displaying where any proposed temporary facilities and construction activities would be located. The maps should also include vegetation community types as well as any other relevant wildlife habitat, wetlands, landscape features, etc. This information is necessary for staff to adequately describe and assess the significance of any potential adverse effects, which includes the location and extent of potential disturbance to vegetation communities and their associated species, within the project-affected area/project footprint.

Response

The applicant estimates the number of acres of each vegetation community type described in the application that would either be permanently or temporarily impacted by proposed project facilities and related construction activities. A total of 1,144 acres will be permanently impacted within the project boundary. An additional 194 acres will be temporarily impacted within the project footprint. As a correction to the FLA, the proposed upper and lower reservoir structure facilities are designed to occupy 154 acres, but the project boundary around these facilities, which will accommodate project operations, totals about 200 acres.

A revised Table 3.6-4 is provided below. A new set of maps that display vegetation communities along with temporary disturbance areas and permanent features is included as Attachment 40-1. The applicant has conservatively assumed that all of the area within the project footprint will be impacted.

Revised Table 3.6-4: Vegetation Communities within the vicinity of the Project

Project Area	Landfire Vegetation Type	Acres within Project Boundary	Acres within Project Footprint	Acres within Project Footprint and outside Project Boundary
Transmission Line and Substation	AG - Agriculture	4.68	4.68	0.00
	BIG - Inter-Mountain Basins Big Sagebrush Shrubland	10.46	10.46	0.00
	BIGDIST - Inter-Mountain Basins Big Sagebrush Shrubland - Disturbed	0.69	0.69	0.00
	DEV - Developed, Medium - High Intensity	3.12	3.12	0.00
	DIST - Disturbed, Non-Specific	0.32	0.32	0.00
	MIXSCRUB - Inter-Mountain Basins Mixed Desert Scrub	7.11	7.11	0.00
	NNG - Invasive Annual Grassland	1.41	1.41	0.00
	No Data	1.84	1.84	0.00
	PJC - Great Basin Pinyon-Juniper Woodland - Closed	279.35	280.07	0.72
	PJO - Great Basin Pinyon-Juniper Woodland - Open	118.59	121.84	3.25
	PJV - Great Basin Pinyon-Juniper Woodland - Very Open	25.69	25.69	0.00
	RAIL - Railroad	0.53	0.53	0.00
	ROAD - Hardscape Road	1.26	1.26	0.00
	ROCK - Inter-Mountain Basins Cliff and Canyon	1.02	1.02	0.00
	SALT - Saltlover Field	0.03	0.03	0.00
	SAV - Great Basin Xeric Mixed Sagebrush Shrubland - Juniper Savannah	28.93	32.80	3.87
	SERV - Great Basin Xeric Mixed Sagebrush Shrubland - Serviceberry Shrubland	25.50	25.50	0.00

Project Area	Landfire Vegetation Type	Acres within Project Boundary	Acres within Project Footprint	Acres within Project Footprint and outside Project Boundary
	XER - Great Basin Xeric Mixed Sagebrush Shrubland	182.59	185.90	3.31
	XERBIG - Great Basin Xeric Mixed Sagebrush Shrubland - Big Sagebrush Shrubland	41.79	41.79	0.00
	XERDIST - Great Basin Xeric Mixed Sagebrush Shrubland – Disturbed	0.72	0.72	0.00
	Totals	**735.64**	**746.78**	**11.14**
Wellfield	NNG - Invasive Annual Grassland	0.16	0.19	0.03
	No Data*	0.98	2.57	1.59
	XER - Great Basin Xeric Mixed Sagebrush Shrubland	34.09	50.38	16.29
	XERDIST - Great Basin Xeric Mixed Sagebrush Shrubland - Disturbed	0.00	0.01	0.01
	Totals	**35.23**	**53.15**	**17.92**
Lower Reservoir	GRASS - Inter-Mountain Basins Semi-Desert Grassland	2.43	2.43	0.00
	MIXSCRUB - Inter-Mountain Basins Mixed Desert Scrub	0.19	0.36	0.17
	MIXSCRUB - Inter-Mountain Basins Mixed Desert Scrub	0.00	0.00	0.00
	NNG - Invasive Annual Grassland	2.83	4.61	1.78
	NNG - Invasive Annual Grassland	0.00	0.00	0.00
	No Data*	0.00	19.59	19.59
	RAIL - Railroad	0.14	0.22	0.08
	ROAD - Hardscape Road	0.19	1.67	1.48
	SAV - Great Basin Xeric Mixed Sagebrush Shrubland - Juniper Savannah	0.04	0.05	0.01

Project Area	Landfire Vegetation Type	Acres within Project Boundary	Acres within Project Footprint	Acres within Project Footprint and outside Project Boundary
	STEP - Inter-Mountain Basins Montane Sagebrush Steppe	75.87	84.28	8.41
	XER - Great Basin Xeric Mixed Sagebrush Shrubland	43.80	94.05	50.25
	XERDIST - Great Basin Xeric Mixed Sagebrush Shrubland - Disturbed	1.64	2.97	1.33
	Totals	**127.14**	**210.24**	**83.81**
Underground Works**	No Data*	48.27	0.00	0.00
	PJO - Great Basin Pinyon-Juniper Woodland - Open	0.13	0.00	0.00
	STEP - Inter-Mountain Basins Montane Sagebrush Steppe	0.35	0.00	0.00
	XER - Great Basin Xeric Mixed Sagebrush Shrubland	0.00	0.00	0.00
	Totals	**48.75**	**0.00**	**0.00**
Upper Reservoir Access	CERCO - Inter-Mountain Basins Curl-Leaf Mountain Mahogany Woodland	0.33	0.49	0.16
	No Data*	77.13	163.56	86.43
	PJO - Great Basin Pinyon-Juniper Woodland - Open	0.23	0.32	0.09
	STEP - Inter-Mountain Basins Montane Sagebrush Steppe	1.91	1.91	0.00
	XER - Great Basin Xeric Mixed Sagebrush Shrubland	5.10	10.31	5.21
	Totals	**84.70**	**176.10**	**91.40**
Upper Reservoir	CERCO - Inter-Mountain Basins Curl-Leaf Mountain Mahogany Woodland	1.86	2.25	0.39
	CHAP - Great Basin Semi-Desert Chaparral	1.97	1.97	0.00
	PJO - Great Basin Pinyon-Juniper Woodland - Open	0.10	0.83	0.73

Project Area	Landfire Vegetation Type	Acres within Project Boundary	Acres within Project Footprint	Acres within Project Footprint and outside Project Boundary
	STEP - Inter-Mountain Basins Montane Sagebrush Steppe	69.03	85.36	16.33
	Totals	**72.96**	**90.91**	**17.95**
Upper Reservoir Optional Access	CERCO - Inter-Mountain Basins Curl-Leaf Mountain Mahogany Woodland	1.17	1.75	0.58
	CHAP - Great Basin Semi-Desert Chaparral	5.02	7.57	2.55
	No Data	22.55	34.88	12.33
	PJC - Great Basin Pinyon-Juniper Woodland - Closed	1.59	2.57	0.98
	PJO - Great Basin Pinyon-Juniper Woodland - Open	3.92	5.81	1.89
	Rip - Inter-Mountain Basins Montane Riparian System	0.75	1.51	0.76
	ROAD - Hardscape Road	0.10	0.24	0.14
	STEP - Inter-Mountain Basins Montane Sagebrush Steppe	1.09	1.35	0.26
	XER - Great Basin Xeric Mixed Sagebrush Shrubland	3.41	5.14	1.73
	Totals	**39.61**	**60.81**	**21.20**
Grand Total		**1,144.03**	**1,337.99**	**243.42**

* No Data indicates areas that have not been surveyed for vegetation communities

** Underground works are subsurface features that are included within the project boundary. Vegetation communities above these features would not be disturbed.

Source: LANDFIRE Landscape Fire and Resource Management Planning Tools, U.S. Department of Agriculture Forest Service and U.S. Department of the Interior, 2023.

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Section 3.6.2.1 Project Effects on Terrestrial Habitats states that project operation and maintenance activities would likely continue to affect vegetation, but at a lower intensity than during construction of the project, and that these activities would likely include periodic vegetation management along the proposed transmission line ROW and access roads, as well as around project facilities to provide access for maintenance and repairs. Please describe any proposed vegetation management activities related to project operation and maintenance activities around any facilities, access roads, and the rights-of-ways associated with the transmission line and water conveyance structures (e.g., penstock), including methods (e.g., mechanical, chemical), specific herbicides, approximate dates when proposed activities would occur, and vegetation cover types or specific plant species that would be potentially affected and/or targeted for control.

Response

The applicant will develop a Noxious Weed Management Plan (NWMP) for construction, operation, and maintenance of the project. The applicant will prepare the NWMP in coordination with BLM and NDOW and submit it to BLM for review and approval. The applicant will request a 30-day review by BLM and NDOW for comment and recommendations before filing the NWMP with FERC.

The NWMP will include measures to reduce the spread or introduction of noxious weed and invasive plant species. The NWMP will incorporate restrictions and guidelines for application of pesticides, including herbicides, and avoidance of known sensitive plant species. The applicant will comply with BLM requirements regarding herbicide use on BLM lands. At a minimum, NWMP measures will include the following:

- Control introduction and spread of noxious weeds and invasive plants in the project footprint by cleaning vehicles and equipment prior to movement into the project footprint and/or prior to movement to a new location within the project footprint, in order to minimize the potential for transporting seeds.
- Worker awareness and responsibility training for control of noxious weeds and invasive plants. Training will include field identification of weeds; reproductive biology of weeds; ecological and economic impact of weeds; invasive plant prevention Best Management Practices (BMPs); inspection and cleaning protocols for vehicles, equipment, tools, and gear; and how to report occurrences for invasive or noxious plants.
- Inspection procedures and protocols for construction materials and equipment used in the project footprint.
- Work with land managers to develop and implement a plan to assess, treat, and monitor noxious weeds and invasive plants within the project footprint and in the adjacent landscape where they are present.
- Work with the local weed and pest district to implement long-term plans for successful restoration and reclamation of disturbed sites.

The NWMP goals and objectives will include the following:

- Implement early detection and rapid response (EDRR) protocols through regular monitoring;
- Define containment strategies;
- Control movement of invasive and noxious plant material and seeds;
- Encourage the reduction of soil and vegetation disturbance; and

- Maintain desired plant communities.

BMPs to be implemented during construction, operation, and maintenance include the following:

- To prevent noxious weeds from spreading into the project footprint, prior to commencing ground-disturbing activities, and during such activities, a certified biologist will survey the respective areas of the project footprint and any associated access roads for populations of noxious weeds. All populations of noxious weeds within 50 feet of the permitted ROW, roads, or access zones will be flagged and treated prior to the start of ground-disturbing activities.
- During the course of construction, at least once every growing season, noxious weed surveys will be conducted for new noxious weed populations. Pedestrian transects (where permissible) will be completed of all incoming vector access points including ROWs, roads, and ground disturbances. The infestations will be mapped, and then flagged, to eliminate foot or vehicular traffic from spreading the population. The population will be treated/controlled at the earliest possible time. The utmost priority will be placed on controlling and eliminating EDRR species. Any detections of noxious weeds will be reported to the appropriate agency.
- Monitoring of existing and previously treated infestations will take place throughout the construction phase of the project to determine if the populations are still extant, the efficacy of the previous treatments, and if control measures should be altered.
- After construction is complete, the applicant will inspect all sites where prior treatments occurred to determine if additional treatments are required. Follow-up treatments will be completed if necessary. Post-construction noxious weed monitoring will occur during the growing season within one year after construction is completed, and on an ongoing basis annually.

Botanical resources related to the project were presented within Exhibit E, Section 3.6 of the FLA, as well within the following appendices:

- Aquatic Resources Delineation Study Report (HDR 2023a);
- 2022 Rare, Threatened, and Endangered Wildlife Species Assessment Study Report (HDR 2022); and
- Special-Status Plants and Noxious Weeds Study Report (HDR 2023b).

The State of Nevada Department of Agriculture (NDA) has listed 54 weeds as noxious, which are categorized into three classes:

- **Category A Weeds** are weeds that are generally not found or that are limited in distribution throughout the state.
- **Category B Weeds** are weeds that are generally established in scattered populations throughout the state.
- **Category C Weeds** are weeds that are generally established and generally widespread in many counties in the state.

In addition, NDA now prioritizes and tracks Early Detection and Rapid Response (EDRR) species. These are Category A and B species that pose the most significant threat to Nevada's rangeland, wildland, and agricultural areas if they were to be introduced, established, or spread. The EDRR list is currently composed of 39 species.

A list of noxious weed species of particular concern to the BLM (Bristlecone Field Office) and the State of Nevada will be provided in the final NWMP.

List of Noxious Weed Species of Concern:

Common Name	Scientific Name	Rating
Black henbane	*Hysocyamus niger*	B
Carolina horse nettle	*Solanum carolinense*	B
Dalmation toadflax	*Linaria dalmatica*	B
Spotted knapweed	*Centaurea biebersteinii*	B
Diffuse knapweed	*Centaurea diffusa*	B
Giant reed	*Arundo donax*	B
Mayweed chamomile	*Anthemis cotula*	B
Perennial sowthistle	*Sonchus arvensis*	B
Medusahead rye	*Taeniatherum caput-medusae*	B
Sahara mustard	*Brassica tournefortii*	B
Silverleaf nightshade	*Solanum elaeagnifolium*	B
Canada thistle	*Cirsium arvense*	C
Hoary cress	*Cardaria draba*	C
Musk thistle	*Carduus nutans*	C
Scotch thistle	*Onopordum acanthium*	C
Russian knapweed	*Acroptilon repens*	C
Salt cedar	*Tamarix spp.*	C
Poison hemlock	*Conium maculatum*	C
Whitetop	*Lepidium draba*	C

The *Special-Status Plants and Noxious Weeds Study Report*, identified a total of three noxious species that are present within the botanical study area of the project footprint:

- Canada Thistle (*Cirsium arvense*) is a Category C rated noxious weed and was observed along Duck Creek and at one spot along an access road of the proposed upper reservoir. In the study area, Canada thistle generally grows in moderately disturbed habitats either along a road or watercourse. The total estimated population for Canada thistle in the study area is 90 individuals (HDR 2023b).
- Musk Thistle (*Carduus nutans*) is a Category C rated noxious weed and was observed at three locations along Duck Creek. In the study area, musk thistle grows along the Duck Creek stream margins in areas with a relatively open canopy. The total observed population for musk thistle in the study area is 13 individuals (HDR 2023b).
- Whitetop (*Lepidium draba*) is a Category C rated noxious weed and was observed at McGill Spring adjacent to an access road of the proposed upper reservoir. In the study area, whitetop grows at the crest of the depression leading into McGill Spring. The total estimated population for whitetop in the study area is 50 individuals (HDR 2023b).

  Cheatgrass (*Bromus tectorum*) was also observed within the botanical study area. Cheatgrass is not rated as a noxious weed by the NDA (Nevada Department of Agriculture 2021). Cheatgrass is

widespread throughout the majority of the botanical study area and was only noticeably absent from the Smith Valley and Steptoe Valley portions of the proposed transmission corridor. Areas of relatively high concentration of cheatgrass were found in the northern half of the upper reservoir vicinity, the western half of the proposed lower reservoir vicinity, and a portion of the proposed transmission corridor approximately three miles from the Robinson Summit Substation. Areas of very high concentration of cheatgrass, sufficient to make the vegetation type of the area be an invasive annual grassland, are found in the northwestern portion of the proposed lower reservoir vicinity. These areas of invasive annual grassland are mapped in the *2022 Rare, Threatened, and Endangered Wildlife Species Assessment Study Report.* The total estimated population of cheatgrass in the botanical study area is over 100,000 individuals (HDR 2023b).

Treatment Methods:

The applicant will include the requirements for herbicide treatments in the NWMP and will implement noxious weed control measures that will be in accordance with existing regulations and jurisdictional land management agency agreements. Before construction, only herbicides that are approved by the State of Nevada and the BLM will be applied to any identified weed infestations on public lands to reduce the spread or proliferation of weeds. Post-construction control measures may include one or more of the following methods:

- Mechanical methods rely on equipment used to mow or disc weed populations. If such a method is used, subsequent seeding will be conducted to re-establish a desirable vegetative cover that will stabilize the soils and slow the potential re-invasion of noxious weeds. Seed selection will be based on site-specific conditions, the appropriate seed mix identified for those conditions, and will be approved by the BLM for application on public lands.
- Disking or other mechanical treatments that would disturb the soil surface within native habitats will be avoided.
- Herbicide application is an effective means of reducing the size of noxious weed populations and any application to any identified weed infestation on public lands will be approved by the State of Nevada and the BLM. Only a State of Nevada licensed contractor, who is also approved by the BLM, will perform herbicide applications. All herbicide applications must follow United States Environmental Protection Agency label instructions.
- Treatment methods will be based on species-specific and area-specific conditions (e.g., proximity to agricultural areas, time of year, soil conditions, etc.) and will be coordinated with the local regulatory offices. A Pesticide Applicator Record (PAR) will be prepared for any herbicide treatments.
- If areas are not seeded until the following spring because of weather or scheduling constraints, all annuals and undesirable vegetation that have become established will be treated before seeding.

The invasive plant species found in and adjacent to the project footprint are known to occur throughout the western United States and are spread by various land uses. The combination of past and present land use activities in the vicinity of the project has contributed to and likely will continue to facilitate the creation of disturbed and weedy habitats. It is well known that many types of land uses contribute to the invasion and spread of non-native invasive species including ground-disturbing activities as well as activities that promote the dispersal of weed seed. Roads, agriculture, farming/ranching, recreation, and residential and commercial developments all can contribute to the spread of invasive botanical species.

The applicant will minimize and control the spread of invasive botanical species that could result from construction and operation of the project through development of a Noxious Weed Management Plan. Given adequate and appropriate weed management and site restoration activities, the project should have minimal negative effects on plant communities and could provide a net benefit by reducing weed infestations in the project footprint and vicinity. Thus, the project is not expected to have significant impacts to the landscape from the spread of noxious weed species.

Citations:

Bureau of Land Management (BLM). 2009. 2017. Updated Bureau of Land Management (BLM). Sensitive Species List for Nevada. Reno, Nevada. Accessed March 17, 2021. https://www.blm.gov/policy/nv-im-2018-003

Nevada Department of Agriculture. 2021. "Nevada Noxious Weed List." Last updated February 2, 2021. http://agri.nv.gov/Plant/Noxious_Weeds/Noxious_Weed_List/. Sparks, Nevada.

Nevada Department of Agriculture. 2022. "Weed Management Cost Share Request for Proposals: Attachment B Nevada Early Detection and Rapid Response Species. Sparks, Nevada.

Special-Status Plants and Noxious Weeds Study Report. 2023b. Prepared by HDR Engineering, Inc for White Pine Waterpower, LLC.

FERC-A1-42 (a) Exhibit E Terrestrial Resources

As discussed above under item # 31, more specific information is needed for staff to understand the proposed resource management plans, including their respective goals, objectives, provisions and measures, methods, reporting, and implementation schedules. Also, please indicate, where relevant, the resource- and/or site-specific impacts that any proposed measures would mitigate. Please address the following information needs listed below. (a) Erosion and Sediment Control Plan – describe in detail the proposed methodologies and protocols to minimize effects of windblown and fugitive dust generated from proposed construction activities, equipment, and vehicles on air quality, vegetation, and wildlife in the project area (e.g., application of water or dust-control chemicals). The plan should also include a discussion of any potential impacts and measures to mitigate effects associated with proposed measures to minimize fugitive dust (e.g., environmental effects of dust-control chemicals).

Response

FERC requested more specific information on the proposed Erosion and Sediment Control Plan (ESCP), including goals, specific measures, methodologies, and proposed implementation schedule. The applicant is developing an ESCP that will address this specific information, as outlined below.

The applicant proposes that within one year of license issuance, or at least 90 days prior to the start of any ground-disturbing activity, whichever comes first, the applicant will file for FERC approval of an ESCP to minimize potential adverse impacts of erosion, and other pollutants. The ESCP will be designed such that the final approved ESCP can be tailored for future actions requiring Temporary ESCPs, such as construction projects that could arise during the life of the project after initial construction.

The ESCP will include, at a minimum:

- A narrative description and a map (where applicable) showing the project work areas;
- Supervision, inspection and responsibilities of the Environmental Inspector responsible for implementing the ESCP;
- Environmental training details for all contractors that will be on-site during construction;
- Details on how to control sediment and other pollutants on the construction site by using control practices throughout the duration of the construction project and providing future stabilization of the site, including techniques for reservoir and underground facilities (piping and pumps), typical ROW requirements, and access roads;
- Standard erosion and sediment control Best Management Practices (BMP) (see below), including measures such as construction site disturbance minimization and boundary marking, sediment ponds, sediment trapping pads and booms, silt fences, straw waddles, and temporary matting;
- Sequencing, inspection, and maintenance procedures for BMPs will be included in the project specific Temporary ESCPs as they are developed for future use in post-license issuance construction and maintenance projects;
- A site inspection form which tracks structure types, inspection details, treatment details, slope stability observations, seepage observations, surface soil erosion observations, details on proximity to water, photos, comparison to previous inspections, and risk assessments;
- Actions to address earthworks in soils that are highly erodible; and
- Post-construction activities, including monitoring for uplands and waterbodies.

As noted above, the following is a list of potential BMPs that will be included in the final ESCP, as recommended by the State of Nevada, to specify erosion control measures to help minimize potential adverse impacts:

- Stabilizing truck exit areas for washing the wheels of all trucks that enter paved roadways from the construction site and dirt roads leading from the construction site;
- Installing tracking pads at construction exits to prevent dirt from being tracked onto roadways;
- Applying water or dust reducing agents to all exposed surfaces on project lands, as needed, during dry weather, including, but not limited to soil piles, graded areas, unpaved parking areas, staging areas, and project access roads, or, in cases where project access roads would remain in place for an extended duration, covering the routes with gravel to avoid re-suspension of dust;
- Covering and maintaining at least two feet of free board space on haul trucks transporting soil, sand, or other loose material at the project;
- Paving all project roadways, driveways, sidewalks, and parking lots as soon as possible and laying building pads as soon as possible after grading unless seeding or soil binders are used;
- Incorporating dust control measures (e.g., dust collectors and covers limiting pathways for dust) into the temporary concrete batch plant, if used at the construction site; and
- Establishing inspection and maintenance programs and signage to minimize idling time of construction equipment on project lands.

The applicant will prepare the ESCP after consultation with the Nevada Division of Environmental Protection (NDEP) and the BLM. The ESCP will include documentation of consultation, copies of comments and recommendations on the completed ESCP after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the ESCP. The applicant will allow a minimum of 30 days for all relevant state, federal, and local agencies to comment and make recommendations before filing the ESCP with FERC. If the applicant does not adopt a recommendation, the filing will include the applicant's reasons, based on project-specific information.

FERC-A1-42 (b) Exhibit E Terrestrial Resources

(b) Noxious Weed Management Plan – describe in detail the proposed methodologies and protocols for controlling any non-native, invasive plants that could be introduced and spread by construction, operation, and maintenance of the proposed project, including control measures (e.g., mechanical and/or herbicide use); measures to minimize transport and introduction of invasive plant propagules on project equipment and vehicles, and in materials (e.g., fill); monitoring and success criteria to evaluate the implementation of measures to meet the plan's stated goals and objectives; protection of any special-status species that could be affected as a result of plan implementation; any proposed monitoring and control measures during operation of the project; agency consultation; etc.

Response

FERC requested more specific information on the proposed Noxious Weeds Management Plan (NWMP), including goals, specific measures, methodologies, and proposed implementation schedule. The applicant is developing an NWMP that will address this specific information, as outlined below.

The applicant proposes that within one year of license issuance, or at least 90 days prior to the start of any ground-disturbing activity, whichever comes first, the applicant will file for FERC approval a NWMP to reduce the spread or introduction of noxious weed and invasive plant species during construction and operation and maintenance of the project. At a minimum, the plan will include measures to:

- Prevent introduction and establishment by cleaning vehicles and equipment prior to movement to a new location in order to minimize the potential for transporting seeds;
- Work with land managers to develop and implement a plan to assess, treat, and monitor noxious weeds and invasive plants at the project and in the adjacent landscape where they are present; and
- Work with the local weed and pest district to implement long-term plans for successful restoration of disturbed sites.

NWMP goals and objectives include the following:

- Stop movement of invasive and noxious plant material and seeds;
- Where feasible, reduce soil and vegetation disturbance;
- Maintain desired plant communities; and
- Practice early detection and rapid response (EDRR) through regular monitoring.

Common BMPs to be implemented during the construction and operation and management phases include the following:

- The applicant will keep their project area free of state-listed noxious weeds. The applicant shall perform annual monitoring for invasive and noxious weed species. Any detections of noxious weeds will be reported to the appropriate agency.
- To reduce the accidental spread of noxious weeds, the applicant and any contractors shall avoid or minimize all types of travel through state-listed, noxious weed-infested areas that can be carried to the project area. Project-related equipment will be cleaned of all mud, dirt, and plant parts before moving into relatively weed-free areas or out of relatively weed-infested areas. Project workers shall inspect, remove, and dispose of weed seed and plant parts found on their clothing and personal equipment, bag the plant products, and dispose of them in a dumpster.

- The applicant will review the annual weed inventory prior to any ground disturbing activities; limit the size of any vegetation and/or ground disturbance to the absolute minimum necessary to perform the activity safely and as designed; begin activities in weed free areas whenever feasible before operating in weed-infested areas; locate equipment storage, machines, and vehicle parking or any other area needed for the temporary placement of people, machinery, and supplies in areas that are relatively weed free; and avoid or minimize all types of travel through weed-infested areas or restrict major activities to periods of time when the spread of seed or plant parts are least likely.
- Use of pesticides and herbicides shall comply with all applicable Federal and State laws. Pesticides and herbicides shall be used only in accordance with their registered uses within limitations imposed by the appropriate agency. Prior to the use of the pesticides, the applicant shall obtain from the BLM or other appropriate agency, written approval of a Pesticide Use Plan, showing the type and quantity of material to be used, pest(s) to be controlled, method of application, locations of storage and disposal of containers, and any other information deemed necessary by the BLM or other appropriate agency.
- Implementation of a pre-work training program (see PM&E 7: Biological Resources Protection Training Program) on invasive plants and prevention BMPs to staff and contractors. Training will include: field identification of weeds; reproductive biology of weeds; ecological and economic impact of weeds; invasive plant prevention BMPs; inspection and cleaning protocols for vehicles, equipment, tools, and gear; and how to report occurrences for invasive or noxious plants.

The applicant will prepare the NWMP after consultation with BLM. The NWMP will include documentation of consultation, copies of comments and recommendations on the completed NWMP after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the NWMP. The applicant will allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the NWMP with FERC. If the applicant does not adopt a recommendation, the filing will include the applicant's reasons, based on project-specific information.

FERC-A1-42 (c) Exhibit E Terrestrial Resources

(c) Habitat Restoration, Reclamation, and Enhancement Plan – describe in detail the proposed methodologies and protocols for restoration and revegetation efforts including methods to salvage protected cacti species prior to construction; identification of appropriate native plant species for revegetation including consideration of site-specific conditions; planting designs, locations, and methods including maintenance of revegetated areas; regrading of disturbed ground (e.g., temporary access roads); control of invasive plant species that could affect revegetation efforts; monitoring and success criteria to evaluate the implementation of measures to meet the plan's stated goals and objectives; estimate the acres for each habitat type that is anticipated would need restoration; etc.

Response

Pursuant to the Federal Land Policy and Management Act, the applicant anticipates that early development and finalization of a Habitat Revegetation, Restoration, and Enhancement Plan (HRREP) to clearly identify measures for the management, avoidance, and mitigation of potential habitat and associated vegetation losses during construction and operation and maintenance of the project will be necessary to obtain a ROWGrant Authorization and Record of Decision from BLM. Accordingly, the applicant will initiate early consultation with relevant agencies to develop the HRREP prior to FERC's issuance of a license for the project.

The applicant anticipates that a NEPA-ready Habitat Revegetation, Restoration, and Enhancement Plan (HRREP) would be drafted prior to commencement of the NEPA process, such that the expected outcomes of restoration and specific mitigation measures could be integrated into the impacts analysis. Typically, restoration plans are developed prior to FERC's environmental assessment to provide a framework of proposed reclamation activities. The HRREP would primarily be focused on impacts from construction and ongoing post-construction restoration. As the project moves closer to construction, a more detailed (i.e., NTP-ready) HRREP would be developed with sufficient detail for construction contractors to implement the required revegetation and restoration actions and appropriate mitigation measures.

At a minimum, the HRREP would include the following:

- Specific restoration and habitat mitigation requirements for greater sage-grouse and other special status wildlife species that may require special restoration considerations;
- Estimate of acreage for each habitat type needing restoration in various soil types and vegetation communities;
- Clear articulation of goals and objectives for habitat revegetation, restoration, and enhancement that will be implemented post-construction;
- Description of revegetation efforts to prevent soil erosion and the spread of weeds, maintain or restore existing native plant communities and wildlife habitat, and integrate site features with the surrounding environment;
- Identification of specific measures to restore vegetation disturbed by project-related construction activities, including proposed methodologies/protocols for implementation, seed mix and/or plant species specifications (which would consider soil types, local vegetation communities, and environmental conditions), regrading of disturbed ground (e.g., temporary access roads), site preparation approach (e.g., topsoil handling, recontouring, soil analysis and amendments, seedbed preparation), planting designs and locations, and ongoing maintenance methods for revegetated areas;

- Identification of appropriate native plant species for revegetation, including consideration of site-specific conditions;
- Identification of methods to salvage protected cacti before ground disturbance in compliance with Nevada regulations;
- Specification of methods for control of invasive plant species that could affect revegetation efforts;
- Identification of site-specific restoration, reclamation, and enhancement measures should future temporary ground disturbance be needed;
- Clear articulation of monitoring and success criteria to evaluate the implementation of measures that will meet the HRREP's stated goals and objectives;
- Definition of monitoring requirements and methods (e.g., monitoring approach, determination of control plot for monitoring, and time frames and milestones, data, and reporting);
- Description of an adaptive management approach to address issues that arise if initial restoration or revegetation efforts do not meet success criteria;
- Clear development of an estimate of costs associated with the restoration methods, ongoing maintenance, and final restoration, which will be adapted from standard reclamation cost estimate procedures, as provided by the appropriate agency.

The applicant will prepare the HRREP after consultation with the BLM Ely District's Bristlecone Field Office of the BLM (following the Ely District BLM RMP/ROD), NDOW, Nevada SETT, and other required agencies. The HRREP will include documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the HRREP. The applicant will allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the HRREP with FERC. If the applicant does not adopt a recommendation, the filing will include the applicant's reasons, based on project-specific information.

FERC-A1-42 (d) Exhibit E Terrestrial Resources

(d) Noise Mitigation Strategies – Table 2.2-3 states that noise modeling results will inform the development of additional mitigation strategies, if needed, to reduce potential effects of project-related noise at sage-grouse leks. The FLA describes several proposed construction activities that would generate levels of noise that are significantly above ambient conditions (e.g., blasting). Accordingly, it is unclear why measures to minimize the impacts of noise on wildlife species, including the greater sage-grouse, have not already been developed in consultation with the relevant resource agencies. Therefore, please proceed to consult with the resource agencies to develop appropriate measures to minimize and mitigate the potential effects of noise on wildlife species. Also, please clarify if proposed noise mitigation for the greater sage-grouse would be included as part Greater Sage-Grouse Mitigation Plan or as part of a separate plan.

Response

As discussed in the Greater Sage-Grouse Lek and Habitat Study Report (2023) (Appendix D of the FLA), a previous noise modeling study was conducted within ¼ mile from eight lek sites to compare pre-project noise levels to anticipated noise levels during construction and operation and maintenance of the proposed project. Noise monitoring systems were deployed May 4, 2021 and collected on May 18, 2021. The construction noise modeling results show that construction noise is expected to exceed the limits at almost all leks, both with the upper and lower reservoir activities combined and individually; however, noise levels during operation are expected to be within the allowable L50 limits at each lek.

Since a few project features have been changed since the noise modeling was conducted in 2021 (i.e. upper reservoir access road, the alignment, layout, and design of the upper reservoir, etc.), the applicant will conduct an additional noise modeling study in 2024 to further aid in efforts to minimize the effects of noise related to construction and operation and maintenance of the proposed project, notably effects to greater sage-grouse, by identifying current noise levels at the site and evaluating the changes to those levels as a result of the proposed project.

Predicted construction-generated noise levels at nearby receptors will be calculated using the Federal Highway Administration Roadway Construction Noise Model (RCNM). The RCNM is FHWA's national model for the prediction of construction noise. This software is based on actual sound-level measurements from various equipment types taken during the Central Artery/Tunnel project conducted in Boston, Massachusetts, during the early 1990s. The maximum noise levels presented at a specified distance from the source are based on a roster of likely construction equipment operating. Although the project is not a road construction project, the RCNM includes the same types of equipment that would be used in the construction of the project.

Noise impacts will be estimated for the operations on the project site. Activities that would generate noise levels are mechanical sound from pumps, water conveyance, turbines, transformers, and road access. Noise impact assessment for the operational phase will be based on engineering calculations for the pieces of noise-generating equipment at the proposed site using SoundPLAN Essential Version 5.1. The model incorporates a three-dimensional geometric model of the study area developed from digital terrain information, available GIS information, grading data, and aerial photography. SoundPLAN Essential v5.1 incorporates more than 25 noise modeling standards and provides a set of model solutions/standards for outdoor noise modeling that include the International Organization for Standardization (ISO) 9613-2 general environmental noise model (point and line area sources). The noise study will include a noise

isopleth receptor map of the analysis area. The significance of noise-related impacts will be determined in comparison to applicable local, state, and/or federal noise standards.

The final noise study report will include documentation of consultation, copies of comments and recommendations on the completed report after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the final noise study report. The applicant will allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the final noise study report with FERC.

FERC-A1-42 (e) Exhibit E Terrestrial Resources

(e) Pre-Construction Surveys – Table 2.2-3 states that based on survey results, White Pine would consult with applicable regulating agencies to identify reasonable avoidance and mitigation measures to reduce effects to nesting raptors and other migratory bird species nesting in the project area. Staff cannot evaluate measures that may be developed at some future, unspecified date. Therefore, staff require more information to evaluate this plan in the NEPA analysis. Please consult with FWS, NDOW, and BLM to development avoidance and mitigation measures for nesting birds to describe in the revised FLA. Refer to FWS' Avian Protection Plan (APP) Guidelines available on its website for additional guidance.

Response

FERC requested more specific information on the proposed plan to address avoidance and mitigation measures that may be developed for nesting birds. The applicant intends to conduct consultation with the USFWS, NDOW, Nevada SETT, and the BLM to determine the appropriate timing and level of effort for pre-construction surveys.

The applicant proposes that within one year of license issuance, or at least 90 days prior to the start of any ground-disturbing activity, whichever comes first, the applicant will complete pre-construction botanical surveys, wildlife surveys, and habitat assessments, as determined through consultation with relevant agencies. Surveys will be conducted by trained biologists in areas that will be disturbed by the proposed project. Specific pre-construction activities may include, but are not limited to, surveys for the following:

- Raptors and raptor nests within the project vicinity;
- Nesting migratory birds;
- Protected wildlife and plant species; and
- Lek counts for greater sage-grouse leks within 3.1-miles of project components, as coordinated with the NDOW.

Based on the findings of the surveys, the applicant will consult with applicable regulating agencies for the pre-construction survey requirements. Based on the findings of the surveys, the applicant will consult with applicable regulating agencies to identify reasonable avoidance or mitigation measures (AMMs) to reduce adverse impacts. The applicant will use the best available resources, science, and AMMs protect sensitive biological resources, including the USFWS Avian Protection Plan (APP) Guidelines and BLM Ely RMP, and BLM Nevada's Statewide Wildlife Survey Protocols.

Upon completion of the surveys, the applicant will prepare a study report and provide it to relevant agencies for comment review. The final report will include documentation of consultation, copies of comments and recommendations on the completed report after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the final report. The applicant will allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the final report with FERC.

FERC-A1-42 (f) Exhibit E Terrestrial Resources

(f) Raptor and Bat Protection Plan – Table 2.2-3 states that White Pine would develop the plan in consultation with FWS and NDOW prior to the onset of ground disturbance at the start of construction activities. Staff require more information to evaluate this plan in the NEPA analysis. Therefore, please consult with FWS and NDOW now to complete the development of this plan to describe in the revise FLA. Also, the plan includes a provision for protective spatial buffers around active raptor nests, which seems duplicative with the proposed measures for pre-construction surveys. To avoid confusion when staff evaluate proposed measures to potentially recommend as conditions of any license that could be issued for the proposed project, including project costs, please clarify and ensure proposed plans and measure are organized appropriately to avoid overlap and redundancy in measures.

Response

FERC requested more specific information on the proposed Raptor and Bat Protection Plan (RBPP), including goals, specific measures, methodologies, and proposed implementation schedule. The applicant is developing an RBPP that will address this specific information, as outlined below.

The applicant proposes that within one year of license issuance, or at least 90 days prior to the start of any ground-disturbing activity, whichever comes first, the applicant will file for FERC approval a RBPP to protect avian species from collision or electrocution as a result of landing or perching on transmission lines. At a minimum, the RBPP will include:

- Nesting bird and raptor survey protocols (see PM&E 12) to be implemented Within two weeks of the commencement of construction activities. The pre-construction survey area will include the Project Area and a 0.25-mile to 0.5mile buffer around project features. Previous surveys have resulted in no identified nesting locations. Based on the results of pre-construction surveys, the applicant will develop appropriate seasonal or spatial buffers, if necessary, in consultation with Nevada Department of Fish and Wildlife (NDOW), the U.S. Bureau of Land Management (BLM), and the USFWS Region 8 that incorporate the applicant's goal of certain construction activities (tunneling, concrete batch plant operation, construction of reservoirs, etc.) being conducted on a 365/24/7 schedule that is not limited by wildlife restrictions, to the extent possible.
- Mitigation measures and BMPs to minimize impacts to raptor and bat species (i.e., description of where to install visibility enhancement devices to reduce risk of collision on new or existing lines; description of where to install perch guards between closely spaced conductors above arms and conductors to keep raptors from contacting energized parts; description of where flight diverters will be most effective; a description of regular maintenance of the transmission line and retrofitting the lines as applicable; a description of safe alternative locations for perching and nesting);
- Raptor-safe guidelines for all new electrical construction (see PM&E 10): Detailed avian collision and electrocution monitoring plan, that describes methods, implementation schedule, quantifiable thresholds for determining when corrective measures would need to be implemented to address high-collision and electrocution areas along the transmission line or at the reservoir fences, and procedures for documenting and reporting bird fatalities and injuries to NDOW, BLM, and the USFWS;
- A provision for filing with the Commission a report by March 31 of each year that includes: the results of any surveys or monitoring, any occurrence of project-related avian injuries/mortalities,

estimated fatality rates, and any recommendations for corrective measures, if necessary. The licensee must allow a minimum of 30 days for the resource agencies to comment on the report before filing it with FERC;

- Employee training to ensure plan compliance, pursuant to PM&E 7;
- Reporting system for avian and bat injuries and fatalities;
- Adaptive monitoring and management plan.

The plan will address how the applicant considered the Avian Power Line Interaction Committee's (APLIC) guidelines: Suggested Practices for Avian Protection on Power Lines, The State of the Art in 2006 [APLIC 2006] and Reducing Avian Collisions with Power Lines: The State of the Art in 2012 [APLIC 2012]) to protect avian species from collision or electrocution as a result of landing or perching on transmission lines.

The applicant will consult with BLM and NDOW regarding the RBPP. The RBPP will include documentation of consultation, copies of comments and recommendations on the completed RBPP after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the RBPP. The applicant will allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the RBPP with FERC. If the applicant does not adopt a recommendation, the filing will include the applicant's reasons, based on project-specific information.

FERC-A1-42 (g) Exhibit E Terrestrial Resources

(g) Reservoir Wildlife Exclusion – the presence of artificial water sources, particularly in arid regions, is likely to attract wildlife seeking water to drink. Also, some wildlife species may still be able to gain access to the reservoirs due to their smaller size or their ability to burrow under (e.g., pygmy rabbit) or climb over the proposed 10-foot-high game fencing. Section 2.2.1 Project Facilities states that the proposed upper and lower reservoirs would be designed with an impermeable liner to reduce water losses from seepage. We note that the materials for such liners are often relatively smooth and potentially afford little traction for wildlife that may enter the reservoir, which could cause wildlife to become trapped and drown. Therefore, please describe in more detail the design of the proposed reservoirs, including the steepness of the shoreline, additional materials or structures around the reservoir perimeter that could be used by stranded wildlife to exit the water, and what the proposed monitoring of the reservoirs would entail.

Response

FERC requested more specific information on the proposed measures regarding wildlife exclusions to the reservoir to mitigate for potential game species that may be attracted to the artificial water source given the arid habitat of the proposed project location.

The applicant proposes that within one year of license issuance, or at least 90 days prior to the start of any ground-disturbing activity, whichever comes first, the applicant will coordinate with the wildlife-focused TWG to develop measures to prevent cattle, wild ungulates, and other medium- to large-sized animals from accessing the reservoirs. At a minimum, reservoir wildlife exclusions measures will include:

- Installation of a 10-foot-tall game fence and gate(s) at the toe of the embankment of each reservoir;
- Installation of a geomembrane inside each reservoir;
- Installation of a one-way exit gate to facilitate a safe exit in the event that wildlife was to enter the fenced-off area; and
- Regular maintenance on the materials and structures around the reservoir perimeter; and
- Routine monitoring to ensure the fencing has not failed.
- Installation of motion detectors inside reservoir perimeter fencing.

Specific measures will be determined in coordination with the wildlife-focused TWG and included in final construction design. Measures implemented at the project for reservoir wildlife exclusion will be included in the Public Safety Plan to be filed with FERC, as proposed under PM&E 22.

FERC-A1-42 (h) Exhibit E Terrestrial Resources

(h) Pygmy Rabbit Management – Section 3.7.2.3 Rare, Threatened, and Endangered Wildlife Species states that direct mortality of the pygmy rabbit, a BLM sensitive species, could occur through destruction of occupied burrows during vegetation clearing, excavation, and grading, or by collision with vehicles on project roads. The FLA proposes to avoid active pygmy rabbit habitat during proposed construction, when feasible, and if habitat cannot be avoided, BLM would be consulted to coordinate the develop of appropriate mitigation measures. Because suitable habitat for the pygmy rabbit occurs throughout the project area, please consult with BLM now to develop appropriate measures to minimize impacts to this sensitive species and describe the measures in the revised FLA. Also, please describe the methodology for identifying and avoiding active habitat during construction.

Response

The pygmy rabbit is classified as a NDOW "Species of Special Concern" and a BLM sensitive species. Field studies conducted within the project study area have not identified pygmy rabbit individuals or evidence of pygmy rabbit habitat use to date, but the project study area is in the known range of the species and suitable habitat is present (HDR 2022b). Direct mortality can occur by destruction of occupied burrows during vegetation clearing, excavation, and grading, or by collision with vehicles on roads to and from the project.

As discussed under PM&E 12, within one year of license issuance, or at least 90 days prior to the start of any ground-disturbing activity, whichever comes first, the applicant will complete pre-construction wildlife surveys and habitat assessments for pygmy rabbits, as determined through consultation with relevant agencies. Surveys will be conducted by trained biologists in areas that will be disturbed by the proposed project.

During construction of the project, active pygmy rabbit habitat use will be avoided when feasible. Avoidance and minimization measures during construction will be coordinated with the BLM and NDOW, and may include:

- Incorporating into the construction ROW the use of existing roads as to reduce the amount of new surface disturbance required for the ROW area;
- Making micro-adjustments to the proposed project construction footprint to reduce the incursion into suitable habitat for pygmy rabbits (e.g., routes could be shifted slightly to avoid an important feature such as an active burrow);
- Upgrades to existing roads will be limited to situations where the road would not be otherwise passable by construction equipment;
- Avoid cutting vegetation in areas of suitable pygmy rabbit habitat, and re-seed as part of restoration post-construction;
- To the maximum extent possible, restore the vegetation in the project footprint to achieve similar composition, diversity, and cover to that of the surrounding desert landscape;
- As described in the NWMP, implement a comprehensive invasive species plant control program to prevent the introduction of noxious and invasive plants in areas disturbed by project construction; and
- Implement dust control measures as outlined in the ESCP, to limit release of dust from access roads and other project areas.

If active pygmy rabbit habitat use cannot be avoided, BLM and NDOW will be contacted, and appropriate mitigation measures will be developed.

FERC-A1-43 Exhibit E Terrestrial Resources

To mitigate the effects of the proposed project on wildlife, the FLA proposes to implement Wildlife Seasonal Restrictions (PM&E #18) in consultation with BLM Nevada Department of Wildlife (NDOW) to plan for construction windows that provide for wildlife protection and allow for feasible project construction timelines. However, the application indicates that year-round construction would be necessary. Yet, BLM's timing restrictions for protecting various wildlife species, outlined in Table 3.7-10 Current BLM Seasonal Timing Restrictions Applicable to the Project Footprint, seem to preclude developing effective construction windows that would allow for year-round construction. Additionally, in Appendix L Response Comment Matrix, the response to comments by White Pine County indicates that an exception or variance from the BLM and NDOW would be requested to allow for continued construction activity in the area of the proposed upper and lower reservoirs. The response also states that if construction activities are necessary during seasonal timing restrictions you may consult with BLM and NDOW to develop additional mitigation or request that some construction activities be permitted during seasonal restrictions dates. However, the application does not specify with any certainty what seasonal timing restrictions and additional mitigation, if any, are proposed. Therefore, please consult with BLM, NDOW, and FWS now to at least define a conceptual construction schedule that addresses the agencies' concerns and any additional proposed measures to mitigate potential adverse effects to wildlife. If you disagree with any agency recommendations explain why and provide alternative measures with an explanation as to why they would be more appropriate.

Response

The applicant currently participates in a monthly TWG meeting, which was established by the BLM to allow coordination with participating agencies to guide the development of wildlife-related management and mitigation plans proposed in the applicant's PM&E measures, such as the development of wildlife seasonal restrictions during construction. The initial TWG meeting was hosted on June 29, 2023, and included staff from the following agencies: BLM, NDOW, Nevada SETT, and White Pine County. The next TWG meeting is scheduled for July31, 2023. Both the U.S. Fish and Wildlife Service (USFWS) and the USFS were invited to the TWG but have declined to participate.

The applicant will continue to consult with the already-formed wildlife-focused TWG (e.g., BLM, NDOW, Nevada SETT, White Pine County, and other relevant agencies) to develop a conceptual construction schedule and/or additional proposed measures to mitigate potential adverse effects to wildlife. Through the consultation process, the applicant will define the length of time and time of year that impacts are expected to occur, including consideration of any proposed unavoidable seasonal wildlife restrictions.

A draft construction schedule, proposed unavoidable seasonal wildlife restrictions, and/or other mitigation measures will be provided to the TWG for review and comment. The applicant will allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the proposal with FERC. If the applicant does not adopt a recommendation, the filing will include the applicant's reasons, based on project-specific information.

FERC-A1-44(i) Exhibit E Terrestrial Resources

Section 3.7.2 Direct and Indirect Environmental Effects – Wildlife Resources does not adequately describe the potential effects of construction and operation of the proposed project for some wildlife species because the application does not fully quantify the effects on existing wildlife habitat. To adequately prepare our NEPA analysis, staff must be able to describe potential adverse effects of the proposed project on wildlife and assess the significance of those effects. Therefore, please provide the following information on the species listed below. (i) Table 3.7-11 Big Game Habitat Within the Project Footprint estimates that amount of suitable habitat for elk, mule deer, and pronghorn antelope in the project footprint, but the quantity of habitat that may be permanently lost and temporarily impacted by the project is not estimated. Please provide a table that includes this spatial habitat information (in acres) for each ungulate species by habitat type (e.g., winter range, summer range, etc.).

Response

Table 3.7-11 below estimates the quantity of temporary and permanent disturbance impacts to big game species' spatial habitat (in acres) for each ungulate species by habitat type (e.g., winter range, summer range, etc.) based on an analysis of the proposed Project Boundary GIS data proposed in the applicant's FLA.

Table 3.7-11. Acreage of Big Game Habitat Within the Project Footprint

Species	Crucial Winter Range	Winter Range	Crucial Summer Range	Summer Range	Year-Round	Total Acreages of Habitat
Elk						
Temporary	0	0	47.77	0	87.28	135.05
Permanent	0	0	150.22	172.86	605.7	928.78
					Total:	1,063.83
Mule Deer						
Temporary	55.29	58.15	1.95	0	0	115.39
Permanent	394.35	40.06	4.43	0	226.71	665.55
					Total:	780.94
Pronghorn						
Temporary	0	0	0	0	0	0
Permanent	0	0	0	0	243.84	243.84
					Total:	243.84

Data source: NDOW Data Portal – Big Game Distributions.

Reference: Nevada Department of Wildlife (NDOW). 2017. Occupied Pronghorn Distribution. [Online] URL: https://gis-ndow.opendata.arcgis.com/datasets/NDOW::ndow-big-game-distributions/about?layer=5. Accessed July 24, 2023

Nevada Department of Wildlife (NDOW). 2017. Occupied Elk Distribution. [Online] URL: https://gis-ndow.opendata.arcgis.com/datasets/NDOW::ndow-big-game-distributions/about?layer=2. Accessed July 24, 2023

Nevada Department of Wildlife (NDOW). 2017. Occupied Elk Distribution. [Online] URL: https://gis-ndow.opendata.arcgis.com/datasets/NDOW::ndow-big-game-distributions/about?layer=4. Accessed July 24, 2023

FERC-A1-44(j) Exhibit E Terrestrial Resources

(j) For the greater sage-grouse, please estimate the acreage of each BLM-designated Habitat Management Area and Seasonal Habitat Type (e.g., Priority Habitat Management Area, Nesting/Breeding, etc.) that would be temporarily affected by or permanently lost due to construction of the proposed project and provide the basis for these acreages.

Response

Table 3.7-2 below estimates the quantity of BLM-designated Habitat Management Area and Seasonal Habitat Type (e.g., Priority Habitat Management Area, Nesting/Breeding, etc.) that would be temporarily affected by or permanently lost due to construction of the proposed project based on an analysis of the Project Boundary GIS data proposed in the applicant's FLA.

Table 3.7-2. Acreage of Greater Sage-Grouse Habitat Within the Project Footprint

Impacts	**PHMA** (Breeding, nesting, wintering, and brood rearing habitat)	**OHMA** (low to moderate quality habitat)	**GHMA** (Seasonal or year-round habitat)	**Non-Habitat**
Temporary	34.37	18.63	184.83	4.09
Permanent	165.95	140.36	478.45	358.65
Total:	200.32	158.99	663.28	362.74

Data source: BLM. May 25, 2023. BLM NV CA ARMPA GRSG Habitat 2015. https://gbp-blm-egis.hub.arcgis.com/datasets/BLM-EGIS::blm-nv-ca-armpa-grsg-habitat-2015/explore?filters=eyJHUlNHX0NhdGVnIjpbIk9ITUEiLCJQSE1BIiwiR0hNQSJdfQ%3D%3D&location=40.085162%2C-116.315271%2C9.00. Accessed July 21, 2023.

Greater sage-grouse habitat in Nevada was delineated by the USGS for BLM in the 2015 Nevada and Northeastern California Greater Sage-Grouse Record of Decision and Approved Resource Management Plan Amendment Greater Sage-Grouse Habitat Mapping (ARMPA Greater Sage-Grouse [GRSG] Habitat Mapping) (BLM 2015) and updated in 2019 and 2022 into habitat management categories to help apply management guidelines designed to protect and/or manage greater sage-grouse habitat. These habitat management categories are referred to as Priority Habitat Management Area (PHMA), General Habitat Management Area (GHMA), and Other Habitat Management Area (OHMA). In ARMPA GRSG Habitat Mapping, the management categories are defined as follows:

- PHMA: BLM-administered lands identified as having the highest value to maintaining sustainable sage-grouse populations. Areas of PHMA largely coincide with areas identified as priority areas for conservation in the USFWS's Conservation Objectives Team report. These areas include breeding, late brood-rearing, and winter concentration areas and migration or connectivity corridors. Seasonal habitat for greater sage-grouse is part of the development process for identifying Priority Habitat Management Areas (PHMAs). Therefore, acres in PHMA reflect impacts to important seasonal ranges for greater sage-grouse, including nesting and brood-rearing areas.

- GHMA: BLM-administered lands where some special management will apply to sustain sage-grouse populations; these are areas of occupied seasonal or year-round habitat outside of PHMA.
- OHMA: BLM-administered lands identified as having low to moderate suitability for greater sage-grouse in areas of estimated low space use and which are less frequently used by greater sage-grouse.

FERC-A1-44(k) Exhibit E Terrestrial Resources

(k) For temporary impacts on the species' habitat types listed in (a) and (b), describe the length of time and time of year that impacts are expected to occur, including consideration of any proposed seasonal wildlife restrictions.

Response

The applicant currently participates in a monthly TWG meeting, which was established by the BLM to allow coordination with participating agencies to guide the development of wildlife-related management and mitigation plans proposed in the applicant's PM&E 17 (greater sage-grouse), PM&E 18 (general wildlife seasonal restrictions), and PM&E 20 (big game), such as the development of wildlife seasonal restrictions during construction. The initial TWG meeting was hosted on June 29, 2023, and included staff from the following agencies: BLM, NDOW, Nevada SETT, and White Pine County. Both the U.S. Fish and Wildlife Service (USFWS) and the USFS were invited to the TWG but have declined to participate.

As discussed in PM&E 18, based on the results of pre-construction surveys (PM&E 10), the applicant will continue to consult with the already-formed wildlife-focused TWG (e.g., BLM, NDOW, Nevada SETT, White Pine County, and other relevant agencies) to develop a conceptual construction schedule and/or additional proposed measures to mitigate potential adverse effects to wildlife that incorporate the applicant's goal of certain construction activities (tunneling, concrete batch plant operation, construction of reservoirs, etc.) being conducted on a 365/24/7 schedule that is not limited by wildlife restrictions, to the extent possible. Through the consultation process, the applicant will define the length of time and time of year that impacts are expected to occur, including consideration of any proposed unavoidable seasonal wildlife restrictions.

A draft construction schedule, proposed unavoidable seasonal wildlife restrictions, and/or other mitigation measures will be provided to the TWG for review and comment. The applicant will allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the proposal with FERC. If the applicant does not adopt a recommendation, the filing will include the applicant's reasons, based on project-specific information.

FERC-A1-45 Exhibit E Terrestrial Resources

Appendix L Response Comment Matrix states that on November 18, 2022, BLM indicated to White Pine that it cannot currently support a site-specific amendment to BLM's 2015 Nevada and Northeastern California Greater Sage-Grouse Record of Decision and Approved Resource Management Plan Amendment (ARMPA) for Greater Sage-grouse and that other options should be evaluated. Therefore, WPW is coordinating with BLM and NDOW to form a technical working group to develop a path forward and potential mitigation plans, likely in the form of a Resource Management Plan (RMP) exception or variance to allow for project construction. However, Section 3.7 Wildlife Resources of the FLA does not: (1) discuss why BLM cannot support an amendment, (2) summarize ongoing consultation on the grouse with BLM, or (3) provide a schedule outlining future consultation and development of plan(s) with BLM and NDOW. Please provide this information in the revised FLA.

Response

On February 10, 2023, the applicant sent a letter to the BLM requesting the establishment of a TWG to discuss various issues related to wildlife, including: a project-specific exception to the Greater Sage-Grouse (GrSG) Approved Resource Management Plan Amendment (ARMPA), as parts of the proposed project are located within GrSG Priority Habitat Management Areas (PHMA), General Habitat Management Areas (GHMA), and Other Habitat Management Areas (OHMA). The project's construction activities will extend into seasonal limitations relating to GrSG; there will also be both temporary and permanent disturbance within PHMA and GHMA habitats. In the request to create a TWG, the applicant suggested the following stakeholders: Nevada Department of Wildlife (NDOW), US Fish and Wildlife Service (USFWS), Nevada SETT, White Pine County, and other interested parties.

The applicant also requested that the group facilitate discussion and assist in defining acceptable and achievable mitigation measures that will help frame a project-specific exception to the current GrSG ARMPA. These mitigation measures will be incorporated into the environmental review process for both the BLM and the FERC. The TWG will also allow coordination and input relating to any proposed mitigation measures between the applicant, BLM, and other agencies.

In response, BLM provided a letter to the applicant, NDOW, Nevada SETT, White Pine County, USFWS, and the USFS, inviting them to participate in the TWG and requesting a response by May 5, 2023. The stated goal of the TWG is to review the White Pine Pumped Storage proposal, analyze its potential impacts to wildlife, and identify opportunities for mitigation. The initial TWG meeting was hosted on June 29, 2023, and included staff from the following agencies: BLM, NDOW, Nevada SETT, and White Pine County. Both the USFWS and USFS were invited to the TWG but declined to participate. TWG discussions are intended to guide the development of wildlife-related management plans proposed in the applicant's PM&Es and are currently scheduled to continue through December 2023. Following FERC's issuance of an original license for the proposed project, TWG meeting summaries and associated consultation will be included as an appendix to each relevant final resource management plan.

FERC-A1-46 Exhibit E Terrestrial Resources

Section 2.2.4 Summary of Proposed Environmental Measures states that a Greater Sage-Grouse Mitigation Plan is still being developed in consultation with BLM and NDOW and that the plan will be completed before initiating ground-disturbance activities associated with construction of the proposed project. However, the plan does not include enough information to evaluate for the NEPA analysis. Please clarify if this plan is separate from the RMP discussed in item #46 above, as it is unclear what specific plans and measures are being developed for the greater sage-grouse and if any of them are duplicative. As discussed under item #30 above, proposed resource management plans must have sufficient detail to evaluate in our environmental analysis in order to weigh their benefits along with their costs, and to compare with any alternative measures recommended by stakeholders. Therefore, please consult with BLM and NDOW now to finish developing the plan for inclusion in the revised FLA.

Response

Comment BLM-3 from Appendix L (Response Comment Matrix) of Exhibit E of the Final License Application states the following:

> *"In a letter dated November 18, 2022, BLM indicated to WPW that they cannot currently support a site-specific amendment to the Approved Resource Management Plan Amendment (ARMPA) for Greater Sage-grouse and that other options should be evaluated. Therefore, WPW is coordinating with BLM and NDOW to form a technical working group to develop a path forward and potential mitigation plans, likely in the form of a Resource Management Plan (RMP) exception or variance to allow for Project construction. WPW looks forward to continued consultation with the BLM regarding Project permitting, renewable energy goals, and a potential exception or variance to the Ely District RMP."*

Within that comment, the "Resource Management Plan" that is noted refers to the BLM's Ely District Resource Management Plan, for which the applicant may potentially require a site-specific exception or waiver for the proposed project. This is an existing BLM management plan and separate from the Greater Sage-Grouse Mitigation Plan proposed by the applicant under PM&E 17 to minimize and mitigate adverse impacts to Greater Sage-Grouse as a result of the proposed project.

FERC-A1-47 Exhibit E Terrestrial Resources Project Power Lines

"To transmit electricity from the proposed project to the grid, the FLA proposes to construct an approximately 25-mile-long, 345-kV project transmission line. Additionally, to provide back up control power to the proposed switchyard and the powerhouse, the FLA proposes to construct a 24.9-kV distribution line from the switching station to the nearest acceptable existing distribution line and that upgrades to the existing distribution line may be required. However, the length and specific route of the proposed 24.9-kv distribution line are not included in the FLA as it indicates the final design is still undecided. As discussed above, more information is needed on the proposed measures (Raptor-Safe Transmission Line Structure Plan PM&E #10, Raptor and Bat Protection Plan PM&E #14, Greater Sage-Grouse Mitigation Plan PM&E #17). Therefore, please provide the information for the items below.

(l) Describe the final plan for the proposed 24.9-kV distribution line including its length, route, phase-to-phase spacing, avian-safe structures, and any necessary modifications.

(m) Describe in detail the any avian-safe designs for the proposed transmission and distribution lines that the FLA proposes to construct/modify and any additional devices (e.g., markers, perch deterrents) you propose to install, including the number of devices with relevant specifications (e.g., dimensions, spacing, etc.) and their locations.

(n) The use of shield wires, guy lines, and appurtenant project structures associated with the power lines that could affect wildlife and their habitat.

(o) Describe and provide maps of the proposed transmission and distribution lines that display the features listed below that occur within at least a 500-foot buffer surrounding the respective rights-of-way of the two power lines:

> *i. the location and/or spans where any avian-safe structures would be installed;*
>
> *ii. shield wires, guy lines, access roads, and other appurtenant project structures;*
>
> *iii. relevant wildlife habitat/vegetation cover types (including sage-grouse habitat types and leks) and wetlands, topography, and other landscape features that have the potential to increase the risk of bird interactions (e.g., ridgelines, water bodies, cliff faces, etc.); and*
>
> *iv. an analysis of potential, species- and location-specific impacts to birds and other wildlife associated with the proposed power lines should also be provided and that include justifications supporting proposed measures, construction designs, devices, and related measures that would be implemented to minimize effects.*

(p) Describe the routine maintenance and retrofitting you anticipate as well as any monitoring protocols to assess: the condition and effectiveness of avian-safe devices and structures and bird interactions including nests on electrical structures, bird-caused outages, and injured and dead birds found along power line corridors, which may necessitate re-evaluation and follow-up actions (e.g., repair and retrofitting equipment, consultation with resource agency, etc.), as necessary."

Response

The applicant is providing the following information on the requested items:

l) 24.9 kV Distribution Line

The final proposed route of the 24.9kV distribution line, including plan and profile, is shown in the Exhibit F Design Drawings (See Exhibit F, Drawing No. F-717) There are no identified Greater Sage Grouse Leks within the stipulated buffer, as such there is no need for avian safe structures, and they are not included in the drawings provided.

m) Avian-safe designs and Devices.

The transmission and distribution lines will abide by Avian Power Line Interaction Committee, APLIC, "Suggested Practices for Avian Protection of Power Lines" and "Reducing Avian Collisions with Power Lines". Required horizontal (60"+) and vertical (40"+) spacing will be used to mitigate for potential avian electrocutions.

Distribution lines constructed, or a portion of lines modified, for this project will maintain the recommended spacing per APLIC. Additionally, for distribution lines that will traverse setback buffer areas from known Greater Sage Grouse lek locations, anti-perch devices will be installed on the crossbars and the top of the poles to mitigate the use of the poles as predator perches.

A new 25.9 kV distribution line is proposed to provide power to the hydrogeneration facility and switchyard. This line is just under a mile in length and will require 20 distribution structures. An additional 0.5 miles of existing distribution lines will be required to connect to the Mt. Wheeler Power, Inc. - Gondor Substation. The new line and any structures which will be modified or replaced in the existing lines will be constructed or modified per the APLIC requirements for distribution lines noted above.

The applicant will construct the new 345 kV Transmission line in accordance with APLIC separation guidelines. Additionally, there are three areas where raptors may use the transmission lines as a perch to prey upon the Greater Sage Grouse: Structures 101 through 106 in the east (6 Structures), structures 115 through 147 in the center (32 Structures), and structures 169 through 196 in the west (27 Structures). For these structures the anti-perch devices shall be placed on the horizontal crossmembers and the pole caps will be conical rather than flat to discourage raptor perching.

In areas where the transmission line will be outside of the setback buffers from known Greater Sage Grouse lek locations, perch diverters will be installed above each phase of the transmission line to mitigate electrocutions. Space at the end of the cross arms or next to the supporting poles will be clear of obstruction to allow for bird perching in safer locations. Bird diverters will also be placed on the overhead static wire or optical ground wire in selected locations to make the lines more visible to migratory birds.

n) Shield wires, guy lines, access roads, and appurtenant project structures that could affect wildlife and their habitat

The shield wires for the transmission line are described above. Guy lines will extend away from structures where angles are being turned or are terminal dead ends, by approximately 115 ft. Cross plate, grouted, or appropriate anchors will be installed to support the guys. Bird diverters will also be placed on guy lines to make the lines more visible to ground nesting bird species.

The distribution line does not have shield wires. Guy wires for the new distribution line will be required at both ends of the distribution line. Guy wires will extend away from the poles approximately 75 ft. Cross

plate, grouted, or appropriate anchors will be installed to support the guys. Bird diverters will also be placed on distribution line guy wires to make the lines more visible to ground nesting bird species.

Access roads will be developed using the existing Nevada Energy 345 kV transmission line maintenance access routes, as much as possible. Short tap access routes between the new and existing transmission lines may be required.

o) Description and map of features that occur within a 500-foot buffer to the ROWs of the two power lines

Mapping is provided for the features associated with the ROWs of the two power lines in Exhibit E of the FLA: Figure 3.7-1. Mapping of NDOW Habitat Designations for Elk; Figure 3.7-2. Mapping of NDOW Habitat Designations for Mule Deer; Figure 3.7-3. Mapping of NDOW Habitat Designations for Pronghorn; and, Figure 3.9-1 Land Use within Project Vicinity. Also, attached to Exhibit E of the FLA: Appendix B: Aquatic Resources Delineation Study Report; Appendix C: Special-Status Plants and Noxious Weeds Study Report; Appendix D: Greater Sage-Grouse Lek and Habitat Study Report; and, Appendix E: 2021 Rare, Threatened, and Endangered Wildlife Species Assessment Study Report. These reports describe the requested environmental features. Analysis buffers vary depending on resource. Study plans were approved by the appropriate agencies prior to conducting the studies and the analyses.

Design of the transmission line and structure placement will be finalized during the final design phase. Micro-siting and specific design considerations such as the placement of avian-safe structure installations, shield wires, guy lines, access roads, and other appurtenant project structures will be determined during this final design process.

i. For transmission and distribution lines that will traverse the 3.1-mile setback buffer areas from known Greater Sage Grouse lek locations, avian-safe structures will be installed. There are three areas where raptors may use the transmission lines as a perch to prey upon the Greater Sage Grouse: Structures 101 through 106 in the east (6 Structures), structures 115 through 147 in the center (32 Structures), and structures 169 through 196 in the west (27 Structures). For these structures the anti-perch devices shall be placed on the horizontal crossmembers and the pole caps will be conical rather than flat to discourage raptor perching.
ii. For transmission and distribution lines that will traverse the 3.1-mile setback buffer areas from known Greater Sage Grouse lek locations, bird diverters will be placed on the overhead static wire or optical ground wire to make the lines more visible to migratory birds, and bird diverters will be placed on guy wires to make them more visible to ground nesting bird species.
iii. Relevant wildlife habitat/vegetation cover types are located within the FLA as described above. The FLA also includes a discussion of potential impacts in Exhibit E of the FLA, Subsections 3.3 through 3.13.
iv. The applicant discusses in Table 2.2.3, minimization measures it will conceptually implement to ameliorate impacts on species- and location-specific impacts to birds and other wildlife associated with the proposed power lines including justifications supporting proposed measures, construction designs, devices, and other related measures. The applicant is currently consulting with a Technical Working Group and through agency coordination specific Greater Sage Grouse mitigation plans and other species mitigation measures will be developed.

p) Routine maintenance, retrofitting and monitoring protocols

The applicant will conduct required annual inspections of the transmission and distribution lines. If deviations are noted they will be scheduled for maintenance or replacement as necessary.

The applicant will conduct a visual inspection of avian-safe devices and structures every 5 years along with normal annual transmission line maintenance inspections. Additional maintenance and retrofitting, and monitoring protocols to assess the condition and effectiveness of avian-safe devices and structures and bird interactions, including nests on electrical structures, bird-caused outages, and injured and dead birds found along power line corridors, which may necessitate re-evaluation and follow-up actions, will be included as inspection criteria during the normal annual transmission line maintenance inspections and within mitigation plans currently under development with appropriate agencies.

FERC-A1-48 Exhibit E Terrestrial Resources

To be effective, avian-safe structures and devices should be maintained over the license term. For the Raptor-Safe Transmission Line Structure Plan (PME #10), in Table 4.3-1 Cost of Environmental Measures provides a capital cost of $1,750,000, but no annual maintenance cost. However, the description states that regular maintenance of the line is included as part of the measure; therefore, annual maintenance costs should also be specified here. Please provide an estimated cost for annual maintenance activities or indicate if the maintenance costs are factored elsewhere.

Response

The applicant will conduct a visual inspection of avian-safe devices and structures every 5 years along with normal annual transmission line maintenance inspections. The applicant has determined that there are no additional maintenance costs associated with these inspections and of the avian-safe structures and devices. Any repairs or replacement costs for avian-safe devices are included in the regular and expected transmission line maintenance costs.

FERC-A1-49 Exhibit E Terrestrial Resources

Exhibit E - Terrestrial Resources - Both the Raptor and Bat Protection Plan (PM&E #14) and Greater Sage-Grouse Mitigation Plan (PM&E #17) list measures related to the design of the proposed power lines, including raptor-safe guidelines for all new electrical construction and minimizing spacing between existing and proposed transmission lines. However, it is unclear if these proposed measures are also included as part of the Raptor-Safe Transmission Line Structure Plan (PME #10), and in Table 4.3-1, under which proposed plan(s) their associated capital and annual costs are accounted. Please clarify this information in the revised FLA.

Response

The proposed measures related to design of the power lines, to include raptor-safe guidelines and sage grouse considerations, are proposed for each PM&E (#10, #14, and #17). The applicant included the capital and annual costs only under PM&E #10 as these costs are associated with the actual construction and maintenance of the transmission lines.

FERC-A1-50 Exhibit E Project Power Lines

Sections 3.9.1.2 and 3.9.2.3 state that over 100 acres of the proposed transmission line corridor are in 100-year or 500-year floodplains and that it is anticipated that the location of transmission line foundations and structures would have to be adjusted during the final design to avoid or minimize temporary and permanent impacts on floodplains. The proposed environmental measure, Transmission Line Design (PME #24) states that if proposed transmission line structures and access roads could not be located outside of floodplains, BLM would be consulted to identify measures to minimize adverse impacts to water features. Because adjustments would likely be needed, it is unclear why necessary measures have not already been developed and described in the FLA. Staff cannot evaluate unknown measures that could be developed in future consultation. Therefore, please consult with BLM now to develop final contingency measures for when such adjustments are needed in to minimize potential effects on water features and vegetation resulting from construction, repairs, and maintenance of the proposed transmission and distribution lines, including the access roads/trails and the transmission line ROW (e.g., vegetation management).

Response

In December 2021, the applicant submitted an application for a ROW grant and land use permit to the BLM for placement of the majority of the project's proposed transmission line within the existing BLM Section 368(a) designated energy #110-114 corridor (Section 368 Energy Corridor). The proposed transmission line corridor would be primarily (70%) located within the designated Section 368 Energy Corridor, with the remainder routed through private property (8%) and BLM-managed land (22%) within the Legacy Locally Designated Corridor. By placing the transmission line within the energy corridor, which already contains a separate transmission line, impacts to the surrounding environmental resources may be reduced and future management and mitigation efforts consolidated with the existing infrastructure.

As noted above, the currently proposed transmission line and access road are positioned within the existing BLM Section 368(a) designated energy #110-114 corridor (Section 368 Energy Corridor), which crosses the Steptoe Creek floodplain. The overhead transmission line would be constructed to connect the project switchyard to Nevada Energy's Robinson Summit Substation located 17 miles northwest. The corridor designation has been identified as the preferred location for the development of energy transport projects to avoid significant known resource and environmental conflicts and is therefore already approved as an appropriate route for multiple energy generation sources. The ROW width will be approximately 160 feet wide, with H-frame transmission structures spaced approximately 1,000 feet apart. Based on preliminary designs, floodplain sections may potentially accommodate 16 H-frame structures (see Exhibit G, Sheet G-5 of the FLA). The floodplain contains few delineated ephemeral features that were determined to have no downstream connectivity to other Waters of the United States (see Appendix B: Aquatic Resources Delineation Report of the FLA), making them potentially non-federally jurisdictional. The exact placement of H-frame structures has not been identified yet, which allows for maximum avoidance and minimization of impacts within the floodplain. Where feasible, transmission line widths will be designed to span floodplain features.

Based on the 2023 Aquatic Resources Delineation Report (Appendix B of the FLA), it is assumed that construction of the access road along the proposed transmission line will result in minimal impacts to state-regulated aquatic resources and potentially regulated federal aquatic resources. As a result, temporary work areas would be minimized to avoid additional temporary impacts to regulated resources

to the maximum extent practicable. Impacts to aquatic resources and habitat may require permits and employment of avoidance and minimization measures such as:

- BMPs to control water and sediment during construction;
- Pre-construction biological resource and plant surveys;
- Staking and flagging; and
- Potential seasonal avoidance measures.

Throughout the final design phase, BLM, USACE, and FEMA will be consulted, as appropriate, to ensure the proposed transmission H-frame structures, placement, extents, and associated access road comply with the permitted corridor requirements and that all necessary USACE or FEMA permits are obtained.

FERC-A1-51 Exhibit E Recreation Resources

Table 3.8-1, Outdoor Recreation Facilities within Approximately 10 miles of the Proposed Project Location, lists existing, non-project recreational facilities within about 10 miles of the proposed project location and provides a brief description of the facilities, their ownership, and their estimated use. However, the estimated use provided for some of the facilities gives no quantitative data on use but states "unknown", "light", "medium", and "heavy" use. So that staff can properly analyze recreation use within the project area and potential project effects on that use, please revise the table to provide quantitative use data for the facilities where quantitative data on use is not provided. Additionally, although the table indicates the listed facilities are within about 10 miles of the proposed project location, the table does not provide the distance of each facility to the proposed project site. Please revise the table to provide the distance from each existing, non-project recreational facility to the proposed project location.

Response

To support the development of the Recreation Resources Study Report, the applicant conducted a desktop review of publicly available recreation and visitor use information on all referenced locations in Table 3.8-1 of Exhibit E of the FLA. Additionally, in 2021, the applicant contacted the various land management agencies for each facility to inquire about additional data on recreation usage estimates (see Appendix A of Exhibit E of the FLA). The applicable managing agency provided the qualitative estimates to the applicant that were provided in Table 3.8-1. The following existing, non-project recreational facilities within about 10 miles of the proposed project location did not have quantitative recreation data publicly available:

- Berry Creek Campground;
- Timber Creek Campground and Picnic Site;
- Steptoe Valley WMA;
- Bird Creek Campground;
- East Creek Campground;
- Ward Mountain Campground and Picnic Site (Ward Mountain South);
- Bassett Lake;
- White Pine County Fairgrounds;
- White Pine Golf Course;
- Ely KOA Journey Campground; and
- Egan Crest Trail System.

The applicant has conducted a supplemental desktop review of publicly available recreation data for these sites since the filing of the FLA and did not find quantitative or qualitative estimates of recreation usage. Subsequently, the applicant contacted each managing agency of the aforementioned recreation facilities in June 2023. At the time of this submittal, the applicant has only heard back from the BLM who provided quantitative usage estimates for the Egan Crest Trail System, and from the White Pine Golf Course who provided quantitative usage estimates for the site.

To assist the Commission in its review, the applicant has provided additional detail about each of these recreation sites below.

Berry Creek Campground

Berry Creek Campground is a dispersed campground with picnic tables and campfire rings and limited amenities. The U.S. Forest Service (USFS) classifies usage at the site as "light" (USFS Undated(a)). There are no reservations or fees associated with the Berry Creek Campground, further limiting the ability to monitor recreational usage. The USFS was unable to provide quantitative recreation use levels as part of the Recreation Resources Study Report, DLA, FLA, or this response to this additional information request (AIR).

Timber Creek Campground and Picnic Site

Timber Creek Campground consists of 11 campsites, including five group sites and six RV sites. The USFS classifies usage at the site as "heavy" (USFS Undated(b)). While reservations and fees are required, there is no publicly available data for annual or monthly visitors to the campground. The USFS was unable to provide quantitative recreation use levels as part of the Recreation Resources Study Report, DLA, FLA, or this response to this AIR.

Steptoe Valley WMA

The Steptoe Valley Wildlife Management Area (WMA) does not have any entry restrictions and allows the use of vessels between 11:00 AM and sunset. Camping and campfires are not permitted. Hunting is allowed every day for wildlife species upon which there is an established open season (NDOW 2022). After having conversations with NDOW staff, who manage this WMA, they noted that the site has "considerable public usage", but were unable to provide a discrete number at the time of the FLA. The NDOW was unable to provide quantitative recreation use levels as part of the Recreation Resources Study Report, DLA, FLA, or this response to this AIR.

Bird Creek Campground

The Bird Creek Campground consists of nine campsites, including two double sites and one group site. The USFS classifies usage at the site as "medium" (USFS Undated(c)). While reservations and fees are required, there is no publicly available data for annual or monthly visitors to the campground. The USFS was unable to provide quantitative recreation use levels as part of the Recreation Resources Study Report, DLA, FLA, or this response to this AIR.

East Creek Campground

The East Creek Campground consists of seven campsites, including one tent only camping site and six RV sites. The USFS classifies usage at the site as "medium" (USFS Undated(d)). While fees are required, there is no publicly available data for annual or monthly visitors to the campground. Reservations are not required for East Creek Campground. The USFS was unable to provide quantitative recreation use levels as part of the Recreation Resources Study Report, DLA, FLA, or this response to this AIR.

Ward Mountain Campground and Picnic Site (Ward Mountain South)

The Ward Mountain Campground consists of 33 campsites, including nine back-in and three pull-thru RV sites. The USFS classifies usage at the site as "heavy" (USFS Undated(e)). While reservations and fees are required, there is no publicly available data for annual or monthly visitors to the campground. The USFS was unable to provide quantitative recreation use levels as part of the Recreation Resources Study Report, DLA, FLA, or this response to this AIR.

Bassett Lake

The NDOW was unable to provide quantitative recreation use levels as part of the Recreation Resources Study Report, DLA, FLA, or this response to this AIR.

White Pine County Fairgrounds

White Pine County was unable to provide quantitative recreation use levels as part of the Recreation Resources Study Report, DLA, FLA, or this response to this AIR.

White Pine Golf Course

White Pine County manages the White Pine Golf Course. On June 27, 2023, the applicant contacted Randy Long with the White Pine Golf Course to inquire again about estimated recreation use levels at the site. Mr. Long reported on June 28, 2023 that the golf course is open from March to October and averages approximately 9,000 rounds per year. The applicant has updated Table 3.8-1 to include this estimate.

Ely KOA Journey Campground

The Ely KOA Journey Campground was unable to provide quantitative recreation use levels as part of the Recreation Resources Study Report, DLA, FLA, or this response to this AIR.

Egan Crest Trail System

The BLM manages the Egan Crest Trail System. On June 27, 2023, the applicant spoke with John Miller of the BLM Bristlecone Field Office, Ely District to inquire again about estimated recreation use levels at the site. Mr. Miller reported approximately 1,200 visitors annually. The applicant has updated Table 3.8-1 to include this estimate.

The applicant has revised Table 3.8-1 to include the distance from each existing, non-project recreational facility to the proposed project location. The applicant has also updated the estimated usage levels for the Egan Crest Trail System.

Table 3.8-1: Outdoor Recreation Facilities within Approximately 10 miles of the Proposed Project Location

Recreation Facility	Facility Summary	Owner/Operator	Estimated Usage	Distance from FERC Project Boundary (miles)	Distance from Project Footprint (miles)
Berry Creek Campground	Located on the North Fork Berry Creek in the High Schells Wilderness at approximately 8,200 feet elevation. This dispersed campground has no fee and provides minimal amenities, but provides access to opportunities for hiking, biking, horseback riding, fishing, and winter activities.	USFS (Ely Ranger District)	Light	3.71	3.71
Timber Creek Campground and Picnic Site	Developed campground located in a forested setting of Engelmann spruce, aspen, and white fir trees providing partial shade throughout the campground and attractive fall foliage. Timber Creek, a perennial stream, flows through the facility and provides visitors with rainbow and brook trout fishing opportunities. In addition, the High Shells Wilderness, with several peaks over 11,000 feet in elevation, can be accessed approximately 0.5 mile from the campground. Access is also available to the Ranger off-highway vehicle (OHV) trail for horseback riding, OHV riding, mountain biking, hiking, and winter activities.	USFS (Ely Ranger District)	Heavy	5.99	5.98
Steptoe Valley WMA	Numerous surface water bodies, including Steptoe Creek, several small ponds, and Comins Lake are available for fishing in the WMA. There is an abundance of habitat types in the WMA, including wet meadows, riparian corridors, sagebrush, and pinyon-juniper uplands, providing habitat for a variety of wildlife species. Common wildlife species in the WMA include mule deer, pronghorn, sage-grouse, ducks, and other non-game species. Elk tags are intensely sought after for the Steptoe Valley WMA. Visitors may hunt, boat, fish, hike, or view wildlife at this facility.	NDOW	Considerable public usage	3.82	3.82

Recreation Facility	Facility Summary	Owner/Operator	Estimated Usage	Distance from FERC Project Boundary (miles)	Distance from Project Footprint (miles)
Bird Creek Campground	Located in Duck Creek Basin, high in the Schell Creek Range at approximately 8,200 feet elevation. Bird Creek, a perennial stream, flows through the campground and the area is slightly forested with juniper, pinyon pine, and alder trees providing limited shade. Ranger Trail is accessible from the campground, providing opportunities for OHV use, mountain biking, and hiking. Visitors may also fish in Bird Creek.	USFS (Ely Ranger District)	Medium	8.55	8.55
East Creek Campground	Dispersed campground located in the Schell Creek Range at approximately 6,750 feet elevation. The area is forested with alder, pinyon, and juniper. East Creek, a perennial stream, flows through the picnic area, providing habitat for birds during the spring and summer months. Most of the campsites are located along the creek. Available activities include mountain biking, camping, day hiking, backpacking, and OHV road/trail riding.	USFS (Ely Ranger District)	Medium	10.54	10.54
Cave Lake State Park	There are two campgrounds located within the park: Elk Flat Campground and Lake View Campground. Each campground contains one day-use group site and one group camping site. There are also two picnic areas along the shore of Cave Lake with restrooms, tables, grills, and water. Cave Lake is popular for fishing all year round and is stocked with rainbow and brown trout. Four developed hiking trails are also located in the park. Activities available in the park include camping, hunting, hiking, wildlife viewing, mountain biking, fishing, swimming, boating, and winter activities.	NDSP	Approx. 60,000 camper nights per year; Day use max. capacity of 1,600 people exceeded on a regular basis	10.26	10.26

Recreation Facility	Facility Summary	Owner/Operator	Estimated Usage	Distance from FERC Project Boundary (miles)	Distance from Project Footprint (miles)
Ward Mountain Campground and Picnic Site (Ward Mountain South)	Located near Ward Mountain below the summit, but high above the desert floor at approximately 7,400 feet elevation. The facility has access to 10 miles of USFS trails with the main trailhead for Ward Mountain (elevation 10,800-foot summit) located at the east side of the campground. Activities available at the campground and picnic site include mountain biking, road cycling, camping, day hiking, backpacking, OHV road/trail hiking, horseback riding, and winter activities.	USFS (Ely Ranger District)	Heavy	9.84	9.84
Ward Mountain Recreation Area (Ward Mountain North)	Recreation area with BLM-administered trails including four trail loops of 10 total miles that meander through sagebrush and pinyon-juniper forests. There is also an 18-hole disc golf course located adjacent to Ward Mountain Recreation Area at 7,400 feet elevation. There are no fees to use the Ward Mountain Recreation Area and it is open year-round. Accessible pit toilet restrooms are provided, as well as picnic tables, shade structures, and trash cans at the trailhead. However, no potable water is available.	BLM	Approx. 1,500 visitors per year	9.31	9.31
Nevada Northern Railway Museum and Depot	Working historic passenger railroad that offers train rides as well as a variety of themed train rides or other events. The trains are over 110 years old and provide visitors with mountain scenery and historical narration. Regular trains rides run several times per week for 90 minutes from April through October with special trains running other times of year. The NNR is open year-round and daily except for select holidays as posted on its website. Special themed trains for 2021 include the Night Sky – Star Train, Sunset Stars and Champagne tour, the Roarin' 20's tour, the Geology Train, Haunted Ghost Train, and Santa's Reindeer Flyer tour. The Night Sky – Star Train and the Sunset Stars and Champagne tours operate on the NNR HiLine, which runs in close proximity to the Project.	NNR	During 2021, the NNR was open at 50 percent capacity due to the COVID-19 pandemic; Special theme trains often sell out in advance.	4.09	4.08

Recreation Facility	Facility Summary	Owner/Operator	Estimated Usage	Distance from FERC Project Boundary (miles)	Distance from Project Footprint (miles)
Nevada Game Management Units 111, 121, and 131	All three management units are managed for elk, mule deer, and pronghorn. Primitive camping is allowed on public lands of NDOW Game Management Units. Unit 111 is popular for hunting elk and mule deer and terrain ranges from gently to extremely difficult to traverse. Unit 121 lies on BLM land with terrain ranging from gentle hills to steep canyons. Unit 131 contains large flat valleys and steep mountains and is most popular for mule deer hunting.	NDOW	2020 season estimate: Unit 111 – 1,301 hunters; Unit 121 – 791 hunters; Unit 131 – 803 hunters	0.00	0.00
Bassett Lake	Primarily used for fishing and boating, with no developed facilities and no camping allowed. Two unimproved boat launches are located on each side of the lake. Largemouth bass are popular game fish in Bassett Lake. Fishing is typically best during early spring to early summer. During summer, biting insects and a thick algal mat may render the lake unfishable. Additionally, shoreline fishing can be difficult so fishing via boat is recommended.	NDOW	Unknown	8.34	8.34

Recreation Facility	Facility Summary	Owner/Operator	Estimated Usage	Distance from FERC Project Boundary (miles)	Distance from Project Footprint (miles)
Ely Community Parks	Community parks owned and maintained by White Pine County located in Ely include Camp Success, County Park/ Courthouse Park, Little League Field, Marich Field, and Steptoe Park. Camp Success is located in a remote setting and includes a lodge with restrooms and showers and a propane refrigerator as well as a grill, fire pit, RV parking, and tents. County Park/Courthouse Park contains a duck pond, park benches, picnic tables, shade trees, and a war memorial. The Little League Field and Marich Field each contain three baseball fields. Steptoe Park includes a walking trail, barbeque area, pavilion, picnic tables, playground, soccer field, restrooms, and shade trees.	White Pine County	Camp Success appears to have received regular usage during the 2021 season; Approx. 20 youth teams use the Little League Field; other parks unknown	4.12	4.12
McGill Community Parks	Community parks owned and maintained by White Pine County in McGill include the McGill Pool Park, McGill Baseball Field, and Avenue K Park. The pool is fed from a nearby warm spring and is surrounded by a sand beach. The park located next to the pool offers a barbeque area, picnic tables, volleyball court, concessions stand, shade trees, and restrooms. The McGill Baseball Field is an outdoor field typically used by youth leagues and is open year-round. Avenue K Park contains playground equipment, grassy fields, and walking paths and is open year-round.	White Pine County	McGill Pool Park receives approx. 90 swimmers per day; other parks unknown	3.34	3.33

Recreation Facility	Facility Summary	Owner/Operator	Estimated Usage	Distance from FERC Project Boundary (miles)	Distance from Project Footprint (miles)
Shooting Ranges	Three shooting ranges are located in White Pine County in the vicinity of the Project. The White Pine Long Distance Range is open to the public and provides a range of 100 – 1,000 yards for shooting and archery. The Steptoe Valley Trap, Skeet, and Target (SVTST) Range was opened to maintain a place to provide U.S. citizens who are legally allowed to possess a firearm with a place to learn and implement the safe and efficient use of firearms for home and personal protection, hunting, competitive shooting, and shooting recreation. The McGill Archery Barn is open to members and includes a 20-yard indoor archery range.	White Pine Long Distance Range – White Pine County; SVTST Range – SVTST Club; McGill Archery Barn – owned by White Pine County and managed by the Bristlecone Bowman Club	White Pine Long Distance Range – 25-30 visitors per day; other ranges unknown	Steptoe Valley Shooting Range: 0.00 White Pine Shooting Range: 1.69	Steptoe Valley Shooting Range: 0.00 White Pine Shooting Range: 1.67
White Pine County Fairgrounds	The White Pine County Fairgrounds offers short-term and long-term animal boarding and pen rentals as well as rental opportunities for special events. There are several arenas, concession stands, bar areas, and barbeque pits available for special events. The annual County Fair is also held here, which includes horse racing, live music, barbeque, crafts, vendors, 4-H shows and exhibits, livestock auctions, rodeo, and more.	White Pine County	Unknown	2.95	2.95
White Pine Golf Course	The White Pine Golf Course is a 6,843-yard course with a par of 72. The first nine holes of the course are along the NNR. The golf course contains restored red barns and scenic mountain views and offers a full-service pro shop, club house, and driving range. Events are also held here throughout the playing season. The golf course is open from March through November.	White Pine County	Open March – October with an estimated 9,000 rounds per year	3.24	3.24

Recreation Facility	Facility Summary	Owner/Operator	Estimated Usage	Distance from FERC Project Boundary (miles)	Distance from Project Footprint (miles)
Ely KOA Journey Campground	The Ely KOA Journey Campground provides RV, tent, cabin, and teepee camping sites. Potable water, restrooms with showers, propane, trash services, and a 'kamping kitchen' are provided at the campground. The campground also features a basketball court, volleyball court, playground, horseshoe pits, movie cabin, two dog parks, and a horse corral. There is access to OHV trails directly from the campground.	Kampgrounds of America (KOA)	Unknown	6.33	6.32
Garnet Hill Recreation Area	The top elevation of Garnet Hill is 7,300 feet and was designated a public recreation area in 1970 for public enjoyment, rock hounding, and scientific study. Garnet Hill is famous for its dark-colored garnets found in flow-banded rhyolitic volcanic rock. Visitors may find ruby red, semi-precious gems in the rocky volcanic outcrops or just by searching the ground. A hiking and OHV trail provides access to the top of Garnet Hill and there is limited camping space at the top of the hill with picnic tables, barbeque area, and restrooms.	BLM	Approx. 3,200 visitors per year	4.16	4.16
Egan Crest Trail System	The Egan Crest Trail System provides recreationists with 24 miles of trails with a variety of terrain from rolling sagebrush flats to the higher elevations in pinyon and juniper forests. The trails consist of single-track and signed two-track roads and are open to hiking, mountain biking, equestrian, motorcycles, and ATVs. The trail system includes two trail loops and two connector trails. Other amenities include picnic tables and shade structures at the trailhead.	BLM	Approx. 1,200 visitors per year	0.10	0.10

Citations

Nevada Department of Wildlife (NDOW). 2022. Steptoe Valley Wildlife Management Area. Online [URL]: https://storymaps.arcgis.com/stories/9cddee91cb7f4679847ddbf6c920d3ab. Accessed: June 2023.

U.S. Forest Service. Undated(a). Berry Creek Dispersed Campground. Online [URL]: https://www.fs.usda.gov/recarea/htnf/recreation/camping-cabins/recarea/?recid=83380&actid=34. Accessed: June 2023.

U.S Forest Service. Undated(b). Timber Creek Campground. Online [URL]: https://www.fs.usda.gov/recarea/htnf/recarea/?recid=65534. Accessed: June 2023.

U.S. Forest Service. Undated(c). Bird Creek Campground. Online [URL]: https://www.fs.usda.gov/recarea/htnf/recarea/?recid=65184. Accessed: June 2023.

U.S. Forest Service. Undated(d). East Creek Campground. Online [URL]: https://www.fs.usda.gov/recarea/htnf/recreation/camping-cabins/recarea/?recid=65228&actid=29. Accessed: June 2023.

U.S. Forest Service. Undated (e). Ward Mountain Campground. Online [URL]: https://www.fs.usda.gov/recarea/htnf/recreation/camping-cabins/recarea/?recid=65536&actid=29. Accessed: June 2023.

FERC-A1-52 Exhibit E Recreation Resources

Section 3.8.1.4 Specially Designated Recreation Areas, National Trails System and Wilderness Areas, states that no portion of the project boundary is located within any designated Wilderness Areas. Although this appears to be correct, as stated above the proposed project upper reservoir would be approximately 4 miles from the High Schells Wilderness and the proposed project transmission line would be approximately 1.2 miles from the Bristlecone Wilderness, at its closest point to the transmission line ROW. Please revise the FLA to indicate the proposed project's proximity to the High Schells Wilderness and Bristlecone Wilderness, and provide details about the wilderness areas, including details on recreation facilities, such as trails, that might be present within each.

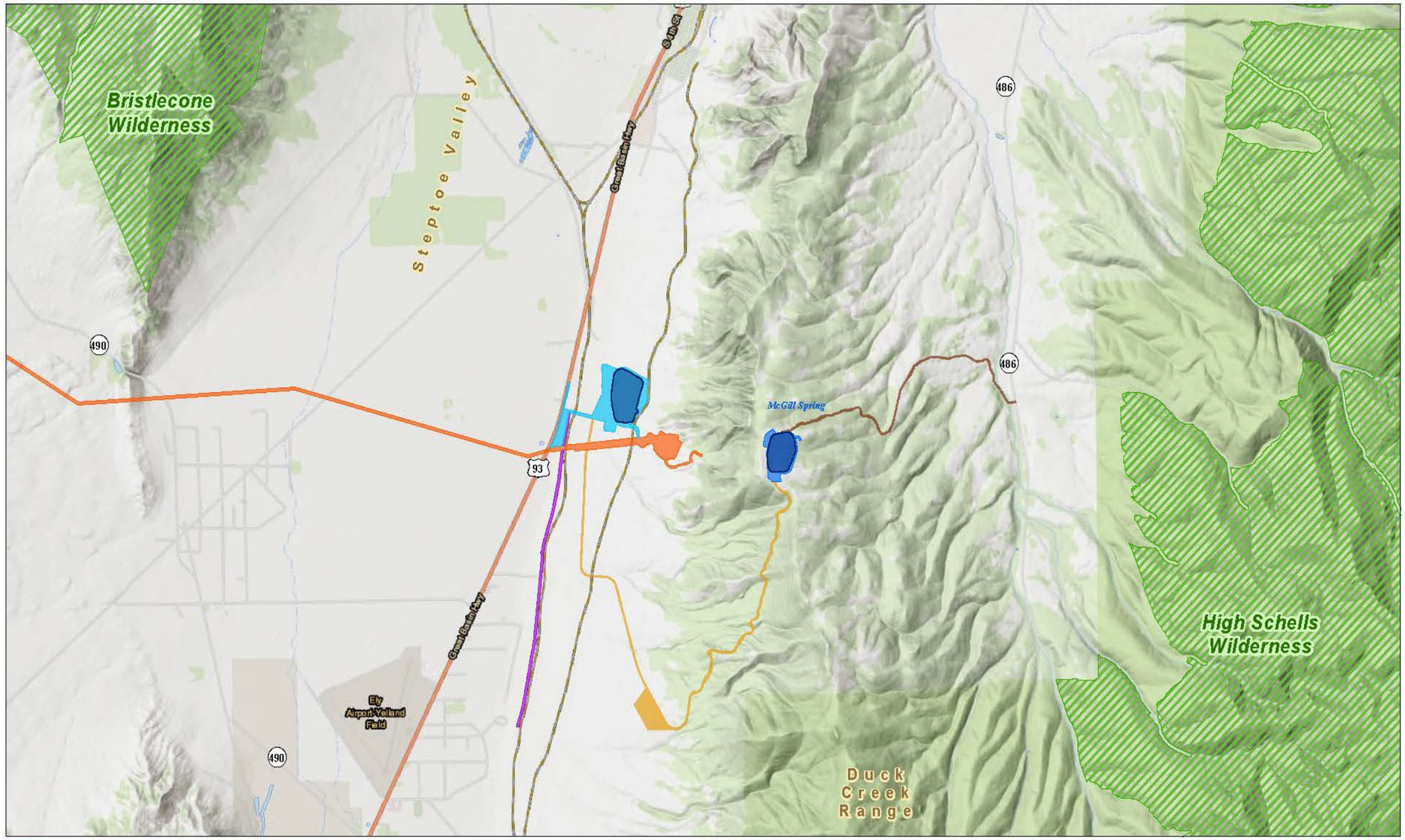
Response

The applicant has added the following text to Exhibit E, Section 3.8.1.4 Specially Designated Recreation Areas, National Trails System and Wilderness Areas:

> *"The proposed project upper reservoir will be approximately 4 miles from the High Schells Wilderness and the proposed project transmission line will be approximately 1.2 miles from the Bristlecone Wilderness at its closest point to the transmission line right of way (ROW). Therefore, no portion of the project boundary is located within any designated Wilderness Areas. The High Schells Wilderness and the Bristlecone Wilderness are shown in relation to the project on Figure 52-1 (also filed with response to FERC Deficiency No. 11).*
>
> *The Wilderness Act in 2006 designated the High Schells Wilderness as a wilderness area consisting of 121,497 acres in White Pine County, 10 miles northeast of Ely. The eastern portion has canyons that lead down into Spring Valley, a vertical mile below. The east-side canyons are deeply incised and heavily wooded, with riparian thickets along stream banks. Wheeler Park and the South Snake Range, a mountain island surrounded by desert valleys, are to the southeast. Bristlecone Pines and equally impressive Limber Pines are present in the higher elevation forests. Popular recreation activities include hiking, horseback riding, backcountry skiing, fishing, big game and upland game bird hunting (USFS, Undated).*
>
> *The Wilderness Act in 2006 designated the Bristlecone Wilderness as a wilderness area consisting of 14,095 acres in White Pine County near Ely. The Bristlecone Wilderness contains diverse landforms and vegetation types, including sage, grass and juniper at lower elevations, mixed with aspen stands in the middle elevations, and bristlecone pine and fir stands mixed with grasses and forbs at the upper elevations. It ranges in elevation from 7,400 feet to 9,800 feet in the central Egan Range. Hiking to the summit of Heusser Mountain, the prominent landmark of the Bristlecone Wilderness, is a current recreational activity in the Bristlecone Wilderness. Visitors may also enjoy several primitive recreational opportunities, such as hunting, camping, scenic viewing and photography (BLM, 2014).*
>
> *Two cherry-stem routes provide public access to Bristlecone Wilderness. Cherry-stem routes are dead-end routes where the boundary of the wilderness extends up one side of the route, around its terminus, and down the other site. Dispersed camping is permitted in the Bristlecone Wilderness but is not heavily used and visitation is not monitored. Hunting and trapping are allowed, but they are not a common activity. In the 2014 Bristlecone and Goshute Canyon Wilderness Preliminary*

Wilderness Management Plan, BLM describes that annual visitation is difficult to quantify, but visitor encounters are infrequent (BLM, 2014).”

Figure 52-1: High Schells Wilderness and the Bristlecone Wilderness Proximity to the Project



Citations

Bureau of Land Management (BLM). 2014. Bristlecone and Goshute Canyon Wilderness Preliminary Wilderness Management Plan. BLM Ely District Office. *DOI-BLM-NV-L000-2014-0001-EA*.

U.S. Forest Service (USFS). Undated. High Schells Wilderness. Online [URL]: https://www.fs.usda.gov/detailfull/htnf/home/?cid=stelprdb5238646. Accessed: June 2023.

FERC-A1-53 Exhibit E Recreation Resources

Section 3.8.4.2 Applicant Recommendations, states that White Pine proposes to manage lands over which it has control in the project boundary for appropriate public access. However, the FLA does not explain how this would occur or for what purpose public access would occur within the project boundary. Please revise the FLA to provide details about how White Pine would manage lands within the project boundary for public access and what types of public access are anticipated.

Response

Exhibit E, Section 3.8.1.2 of the FLA indicates that "It is the policy of White Pine County to provide citizens of the county access to public lands for recreational use and economic activity, as well as protect the environment and natural resources within the county for future generations (White Pine County 2018). White Pine County supports the concept of "Multiple Use Management", which includes recreation along with a balanced and diverse use of natural resources for other purposes. White Pine County recreational policies include conservation and protection of recreational and open space resources, and the promotion of sustainable recreation use. The County also encourages the use of dispersed recreation and the additional development of recreation facilities on appropriate public lands."

Nonetheless, NDOW has expressed concerns that wildlife could be impacted given that project access roads can provide new and additional public access to public lands in the general project area. Currently the public has recreational access to existing roads on public lands administered by the BLM. Further, the applicant will construct and maintain the upper reservoir access road during construction and operation.

At least 90 days prior to the start of any ground-disturbing activity the applicant will coordinate access and security plans with the BLM, NDOW, and White Pine County. The applicant will also file a Public Safety Plan with FERC's Division of Dam Safety and Inspections (D2SI). The plan will include a description of all safety devices and signage needed to warn the public of project-related hazards or to otherwise protect the public in the use of project lands based on FERC's Guidelines for Public Safety at Hydropower Projects. The applicant anticipates that recreational public access could include a) off-road vehicle use, b) access to hunting areas, c) wildlife viewing, d) hiking, e) trail running, f) mountain-bike` use, g) horseback riding, and h) camping.

The applicant has revised Section 3.8.4.2 Applicant Recommendations, as follows:

> ***"Public Access:** WPW proposes to manage lands over which it has control in the Project Boundary for appropriate public access due to potential security and safety concerns, as follows:*
>
> - *During construction, install signage and barriers along existing, unpaved access routes to prevent unauthorized access into the construction work zones as shown on drawings in Exhibit F (to be removed after construction is complete).*
> - *During construction, install fencing around all laydown sites for security. A boom gate will be provided across the new Western Access Road just off the intersection of SR-93 to control access into the project construction area (to be removed after construction is complete).*
> - *During construction and operation, install 10-foot-tall game fencing, signage, and other safety and security design features around the outside edge of the upper and lower reservoir perimeter roads, switchyard, and main access portal for site security, public safety, and wildlife protection (permanent installation).*

- *During construction and operation, install barriers, signage, and gates at each end of the upper reservoir access road to limit public access during wildlife seasonal habitat restrictions, as determined by the BLM, NDOW, and White Pine County (removal to be determined by BLM/NDOW/White Pine County).*
- *During construction, install a display map near the boom gate across the Western Access Road just off SR-93 that shows the location of all public safety measures implemented at the project (to be removed after construction is complete).”*

FERC-A1-54 Exhibit E Recreation Resources

Section 3.8.4.2 Applicant Recommendations, states that White Pine proposes to coordinate with NNR throughout the project construction to minimize potential effects to NNR operations. However, the FLA does not explain how this coordination would occur. For staff to analyze potential project effects in our NEPA analysis and evaluate the proposal to coordinate with NNR, along with any recommended measures, this information is needed. Therefore, please provide details about how coordination with NNR would occur.

Response

The applicant has consulted and continues to consult with the NNR on issues relating to the project. These consultations have occurred in-person, via video conference, telephonic, and through party representatives. Most recently, the applicant has successfully worked with the NNR on implementing a visitor use and experience survey at the NNR Depot in Ely, NV. The applicant has requested regular and periodic meetings with NNR to discuss and resolve concerns and provide project updates. The applicant will continue consulting regularly with the NNR through the FERC licensing process and during construction and operation of the project.

The applicant will consult and coordinate with the NNR on the following areas before and during construction and operation:

- Easement and/or right-of-way agreements for crossing NNR deeded property along the Mainline corridor. These agreements will include terms for a) constructing the Western Access Road improvements and the proposed railroad crossing, b) right-of-way (ROW) and crossing conditions for the buried well-field supply line, and c) transmission line easement and ROW crossings for both the project transmission line and the distribution line for station service electrical supply.
- The placement and timing of construction of the proposed two rail crossings on the NNR HiLine rail line. The HiLine route occupies a non-exclusive ROW on public lands that has been granted by the BLM.
- Section 106 consultation for the segments of the NNR Mainline and HiLine that are eligible for national historic listing – initiated and on-going.
- Finalizing the Supplemental Recreational Survey and Supplemental NNR Socioeconomic Impact Study – to be completed by November 2023.
- Consult with the NNR on potential mitigation measures that the applicant may implement during project construction and operation to mitigate or minimize/alleviate potential safety or recreation/visual concerns.

FERC-A1-55 Exhibit E Recreation Resources

Section 3.8.4.2 Applicant Recommendations, states that the Recreation Resources Study was adequate for the Commission to conduct its NEPA review. However, this statement is inaccurate. The Commission has not determined that the proposed Recreation Resources Study is adequate, and it has not yet begun its NEPA review (which begins once the Commission issues a Notice of Ready for Environmental Analysis). Please remove this statement from the FLA.

Response

The applicant has removed this statement from the FLA, as seen below in revised Section 3.8.4.2, paragraph 1:

> *"~~Although the Recreation Resources Study was adequate for FERC to conduct its NEPA review,~~ WPW has agreed to conduct supplemental efforts related to recreation resources based on NPS comments on the DLA. Section 1.3 describes WPW's consultation with NPS and NNR regarding proposed supplemental recreation resource study steps and remaining areas of disagreement with NPS."*

FERC-A1-56 Exhibit E Recreation Resources

Section 3.8.4.2 Applicant Recommendations, states that the supplemental Recreation Resources Study would include a survey period of sixteen survey days to be accomplished over an eighteen-week timeframe, and that four survey events are planned during this period. However, no explanation is provided regarding the methodology that would be used to choose the sixteen survey days or the four survey events. Please revise the FLA to explain the methodology that would be used to choose the sixteen survey days and four survey events.

Response

The applicant, the National Park Service, and the NNR agreed to the survey methodology and the fielding events for the visitor use and experience survey. The parties agreed to four survey fielding events between June and September 2023 during which the majority of all NNR excursions are scheduled. The dates of these fielding events target a variety of NNR excursions and riders, including multiple rides on the HiLine, across multiple months. The survey days are scheduled for Wednesday to Saturday, to capture HiLine train rides as HiLine train rides are most frequent on those days. The National Park Service has requested additional survey dates which the applicant has not adopted. Please see the applicant's letter to FERC dated July 19, 2023 for a more detailed description of the visitor use and experience survey and its methodology.

FERC-A1-57 Exhibit E Land Use Resources

Section 3.9.1 Affected Land Use Environment, states that the upper and lower reservoirs would be located mostly within an industrial area. Although the general area in the Steptoe Valley, where the Town of McGill and City of Ely are located and in which the lower reservoir would be located, currently has industrial uses, the area in which the upper reservoir would be located (identified as "37 – Duck Creek Bench", in Appendix H, Visual and Aesthetics Report, Appendix B. BLM Maps, Map 2-10a), is public land administered by the BLM and BLM classified this area as Scenic Quality B and Sensitivity Level – High. As such, there appears to be a discrepancy and incompatibility between the prescriptions of county land use management and BLM visual resource management for this land. Please revise the FLA to clarify this discrepancy, if possible, and describe what actions would be necessary to correct this incompatibility in order for the proposed upper reservoir and other related project facilities to be constructed on this land.

Response

The location of the proposed upper reservoir is located on BLM owned and managed lands, as shown in Figure 3.1-4 of Exhibit E of the FLA. To determine land use classifications within the project vicinity, the applicant used data acquired from the White Pine County Accessor Office as shown in Table 3.9-1 and Figure 3.9-1 of Exhibit E of the FLA. The White Pine County Accessor Office classifies land owned by the BLM, USFS, and private landowners. White Pine County has classified the land where the upper reservoir would be located as industrial. The land is managed by the BLM.

The upper reservoir area is within a VRM Class II area with a BLM management goal to retain the existing character of the landscape and to allow a low level of change that should not attract the attention of a casual observer. The applicant has designed the upper reservoir such that materials will blend in with the existing form, line, color, and texture of the existing landscape to the extent feasible. The ridgeline of the upper reservoir would be visible from four KOPs as documented in Exhibit E, Appendix H Visual and Aesthetic Resources Study Report. KOP 10 on Highway 486, at 2.5 miles east of the project, is the closest to the upper reservoir location. From KOP 10, the ridgeline of the upper reservoir would be visible as a straight line when compared with the rolling hills of the surrounding terrain. However, the tan color and smooth texture of the reservoir will blend in with the surrounding unvegetated ridgeline.

Section 3.9.2.1 of Exhibit E of the FLA includes text describing the industrial uses on BLM lands. To clarify, the applicant has added the following text in Section 3.9.2.1 of the FLA referencing industry use on BLM land to read:

"White Pine County Assessor Office has the responsibility and authority to revise land use classifications. The applicant will communicate with White Pine County Assessor to provide information to assist the Assessor Office with any classification conversions related to the project." **Citations**

Bureau of Land Management (BLM). 2008. Ely District Record of Decision and Approved Resource Management Plan.

FERC-A1-58 Exhibit E Land Use Resources

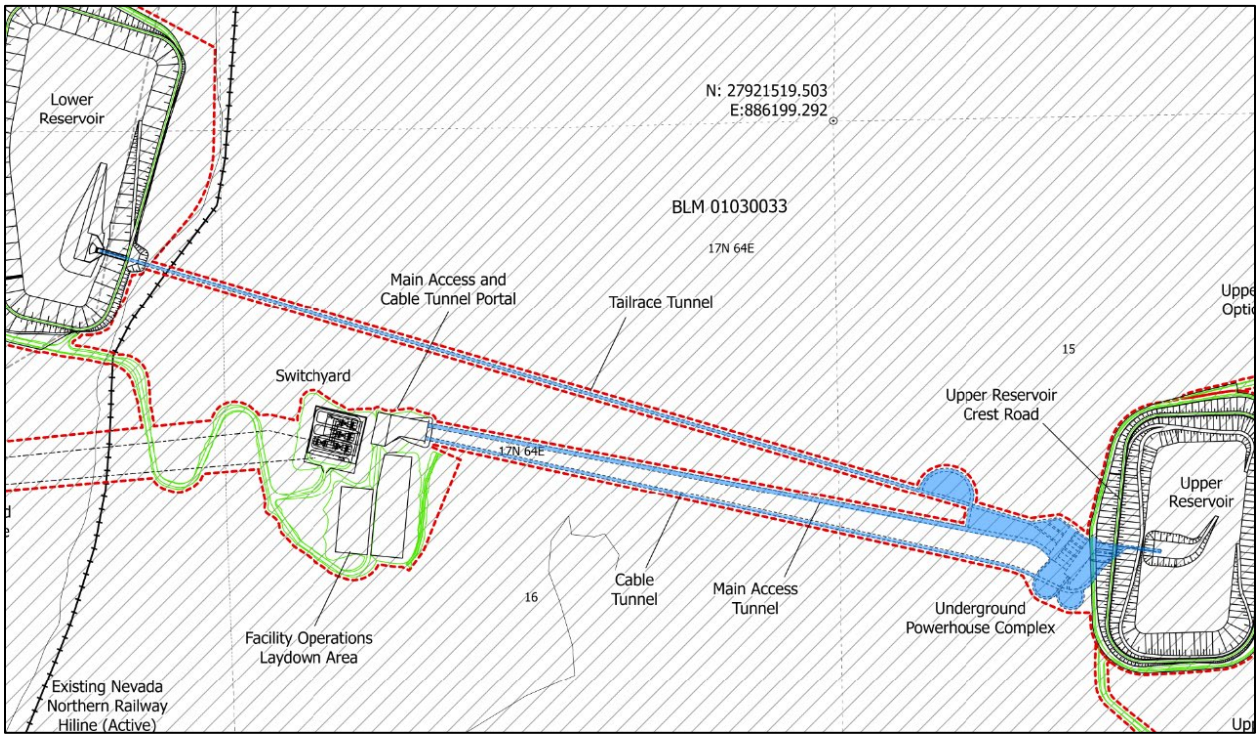
Section 3.9.1 Affected Land Use Environment, states that 1,281 acres of land, administered by the BLM, and 57 acres of private land are located within the "project footprint". However, the FLA does not specify the amount of BLM administered land or private land that would be encompassed within the proposed project boundary. Please revise the FLA to clarify the acreage of BLM and private land that would be encompassed by the project boundary. Additionally, because the project boundary does not appear to encompass subsurface project facilities, (i.e., powerhouse, tunnels, and related subsurface features) the acreage and the landownership of that subsurface land is unknown. Please revise the FLA to specify who or what entity is the landowner of the subsurface lands in which the underground facilities would be located and how many acres of subsurface lands would be occupied by the project.

Response

The amount of BLM administered land encompassed by the project boundary is 1,095.76 acres. The amount of private land is 47.45 acres within the project boundary. (See Exhibit A, Table 1.4.5).

The project boundary encompasses both surface and subsurface project facilities including the powerhouse, tunnels and related features. The acreage of the subsurface land occupied by these subsurface facilities is approximately 21 acres as shown in Figure 58-1. All subsurface lands are located on public lands administered by the BLM.

Figure 58-1: Area occupied by subsurface lands shaded in blue.



FERC-A1-59 Exhibit E Land Use Resources

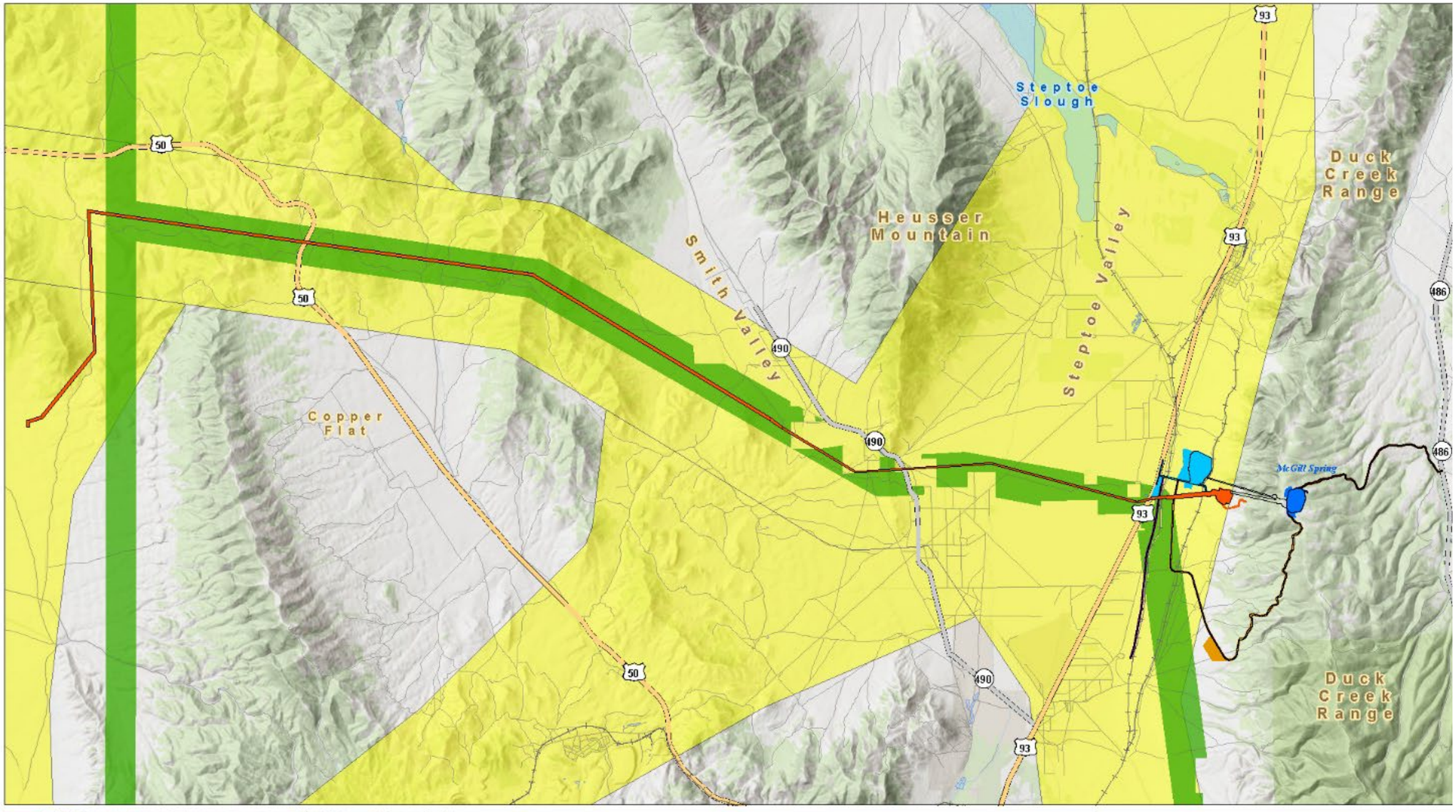
Section 3.9.1.1 Section 368-Designated Transmission Corridor, and 3.9.1.2 Floodplains and Wetlands state that the proposed transmission line would be completely within the Section 368-designated transmission corridor, but Section 3.9.2.2 Transmission Line Corridor states that it would be primarily within the Section 368-designated transmission corridor. Please revise the FLA to clarify this discrepancy and revise the FLA where necessary to appropriately indicate the location of the proposed transmission line within the Section 368-designated transmission corridor. Additionally, please file a map the clearly shows the Section 368-designated transmission corridor and the proposed ROW of the project transmission line.

Response

The proposed project transmission right-of-way (ROW) corridor is located primarily within the Section 368-designated transmission corridor as stated in Section 3.9.2.2 and as can be seen in Exhibit E, Figure 3.2-2, reproduced as Figure 59-1 below. The applicant has revised Exhibit E, Section 3.9.1.1 as follows:

> *"The proposed transmission corridor is primarily (70%) located within the designated Section 368 Energy Corridor. The remaining transmission corridor is routed through private property (8%) and BLM managed land (22%) within the Legacy Locally Designated corridor. The proposed transmission corridor is located entirely within the BLM's Legacy Locally Designated Corridor."*

Figure 59-1: Energy Corridor Maps



FERC-A1-60 Exhibit E Land Use Resources

Section 3.9.1.1 Section 368-Designated Transmission Corridor, states that the proposed project transmission line would be completely within the existing transmission ROW from the proposed project switchyard approximately 25 miles to the interconnection location. This statement is confusing because it appears to indicate that a ROW currently exists, running from the location of the proposed, non-existing project switchyard to the interconnection point. Please revise the FLA to clarify if there is an existing ROW in which the proposed transmission line would be located or if the ROW does not currently exist and is also proposed.

Response

The applicant will construct the transmission line entirely within a newly designated ROW proposed as part of the project. This transmission line ROW ("transmission corridor") would parallel existing transmission corridors as outlined in Section 3.9.2.2. The applicant has removed reference to the transmission corridor being located entirely within an existing ROW from the revised section 3.9.1.1 as presented in the response to FERC-A1-59. This revised Section 3.9.1.1 will read:

> *"The proposed transmission corridor is primarily (70%) located within the designated Section 368 Energy Corridor. The remaining transmission corridor is routed through private property (8%) and BLM managed land (22%) within the Legacy Locally Designated corridor. The proposed transmission corridor is located entirely within the BLM's Legacy Locally Designated Corridor."*

Exhibit E, Section 3.9.2.2 of the FLA characterizes the transmission corridor.

FERC-A1-61 Exhibit E Land Use Resources

Section 3.9.1.3 Grazing, states that all BLM land within the project boundary is managed as grazing allotments and Table 3.9-2 Grazing Allotments in the Project Footprint provides the percentage of land area in each affected grazing allotment that would be encompassed by the "project footprint". However, the table does not provide the percentage of land area in each affected grazing allotment that would be encompassed by the project boundary. Please revise Table 3.9-2 to show the percentage of land area in each affected grazing allotment encompassed by the project boundary and the number of acres the project boundary would encompass in each affected grazing allotment. Additionally, please file a map that shows the entire project boundary and each grazing allotment that would be affected by the project.

Response

Table 61-1 shows the percentage of land area in each affected grazing allotment encompassed by the project boundary and the number of acres the project boundary will encompass in each affected grazing allotment. The applicant has also included the percentage and acreage of each allotment occupied by the project footprint. The applicant has prepared Figure 61-11 showing the entire project boundary, footprint, and each grazing allotment that the project will affect.

Table 61-1. Grazing Allotments in the Project Footprint and Project Boundary

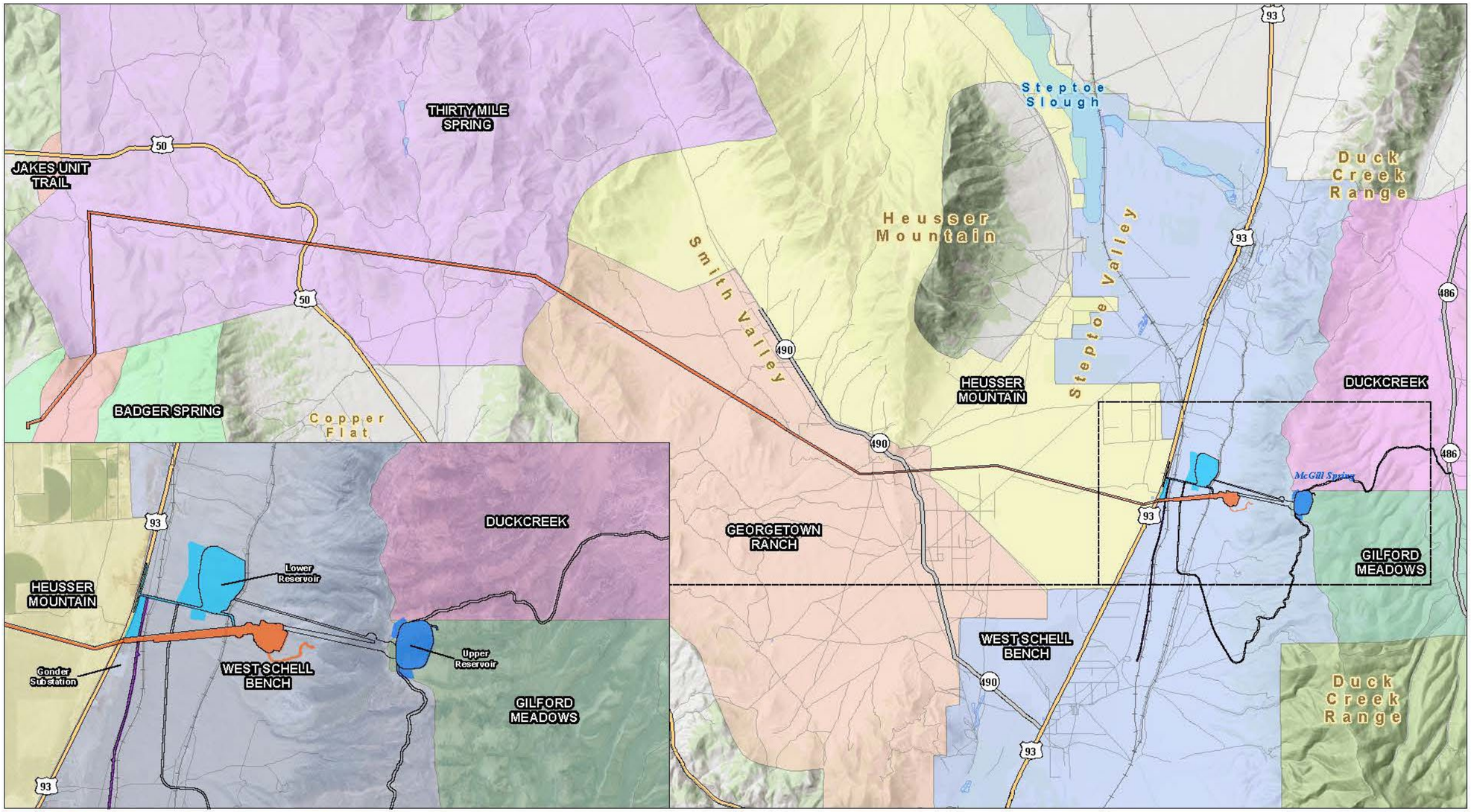
Grazing Allotment Name	Total Allotment Acreage	Percent of Allotment Occupied by Project Boundary	Acreage of Allotment within the Project Boundary	Percent of Allotment Occupied by Project Footprint	Acreage of Allotment within the Project Footprint
Wellfield					
West Schell Bench	50,601	<0.1 %	35.2	0.1 %	53.2
Lower Reservoir					
West Schell Bench	50,601	0.3 %	127.2	0.4 %	210.3
Underground Works*					
West Schell Bench	50,601	<0.1 %	42.8	0.0 %	0.0
Gilford Meadows	5,236	0.1 %	5.9	0.0 %	0.0
Upper Reservoir Access					
West Schell Bench	50,601	0.2 %	84.1	0.4 %	176.1
Gilford Meadows	5,236	<0.1 %	0.6	<0.1 %	0.6
Upper Reservoir					
West Schell Bench	50,601	N/A	N/A	<0.1 %	4.4
Gilford Meadows	5,236	1.4 %	73.0	1.6 %	86.1

[1]The applicant created this figure in response to FERC AIR No. 61. It has not been included in previous FERC filings.

Duck Creek	12,672	N/A	N/A	<0.1 %	0.4
Upper Reservoir Optional Access					
Gilford Meadows	5,236	<0.1 %	2.0	<0.1 %	2.8
Duck Creek	12,672	0.3 %	37.6	0.5 %	58.0
Transmission Line					
Badger Spring	33,765	0.2 %	54.6	0.2 %	54.6
Jakes Unit Trail	32,735	0.4 %	144.8	0.4 %	144.8
Thirty Mile Spring	188,866	0.2 %	323.7	0.2 %	323.7
Georgetown Ranch	29,455	0.7 %	191.5	0.7 %	191.5
Heusser Mountain	41,715	0.2 %	77.1	0.2 %	77.1
West Schell Bench	50,601	0.2 %	88.7	0.2 %	99.9

* Underground works are subsurface features that are included within the project boundary. Grazing allotments above these features would not be disturbed.

Figure 61-1. Grazing Allotments within the Project Boundary



PROJECT BOUNDARY
US ROUTE
STATE ROUTE
RAILROAD
WATERBODY

PROJECT FOOTPRINT
TRANSMISSION LINE AND SUBSTATION
WELLFIELD
LOWER RESERVOIR
UPPER RESERVOIR ACCESS
UPPER RESERVOIR
UPPER RESERVOIR OPTIONAL ACCESS

GRAZING ALLOTMENT
BADGER SPRING
DUCKCREEK
GEORGETOWN RANCH
GILFORD MEADOWS
HEUSSER MOUNTAIN
JAKES UNIT TRAIL
THIRTY MILE SPRING
WEST SCHELL BENCH

0 1 2
Miles

GRAZING ALLOTMENTS

WHITE PINE WATERPOWER, LLC

FERC-A1-62 Exhibit E Land Use Resources

Section 3.9.1.2 Agricultural Lands, states that approximately 66.8 acres of land within the proposed project boundary is classified by the County Assessor as farm or agricultural lands. Please file a map that shows the entire project boundary and the farms/agricultural lands that would be encompassed by the project boundary.

Response

Agricultural Lands, Exhibit E Section 3.9.1.4 states that approximately 66.8 acres of land within the proposed boundary is classified as farm or agriculture lands. Upon further review, the acreage of farmland within the project boundary is corrected to 31.1 acres and is presented in the revised land use Table 3.9.1 provided in the response to FERC-A1-64, Table 64-1: Revised Table 3.9.1. The *Figure 3.9-1 Land Use in the Project Vicinity* within Exhibit E shows the entire project boundary and the farm lands encompassed by the project boundary. Please see Attachment 4-1; the applicant updated Figure 3.9-1 as part of the response to FERC-A1-4.

FERC-A1-63 Exhibit E Land Use Resources

Section 3.9.2 Direct and Indirect Environmental Effects – Land Use, describes permanent land use impacts associated with the proposed project boundary and project facilities including the proposed reservoirs, transmission line and substation, wellfield, access roads, and water conveyance for make-up water. However, the section does not describe permanent land use impacts to subsurface lands associated with the proposed tunnels and the proposed powerhouse and transformer caverns. Please revise Section 3.9.2 to describe and quantify permanent land use impacts to subsurface lands that would occur because of construction of the proposed tunnels and the proposed powerhouse and transformer caverns.

Response

No effect on surface land use is anticipated during construction or long term due to the subsurface construction or operation of the proposed tunnels and the proposed powerhouse and transformer caverns outside of the areas identified for the access and cable tunnel portals.

The project boundary encompasses both surface and subsurface project facilities. The acreage of the subsurface land occupied by these subsurface facilities is approximately 21 acres as shown in Figure 58-1. The subsurface land occupied by the subsurface facilities will have limited impact to future mineral extraction in the immediate vicinity.

FERC-A1-64 Exhibit E Land Use Resources

Section 3.9.2 Direct and Indirect Environmental Effects – Land Use, states that land will be temporarily removed from its current use and converted to construction workspaces while project construction occurs. However, FLA does not specify the acreage of, and the current uses for, the amount of land to be temporarily impacted by this proposal. Additionally, Table 3.9-3 Permanent Land Use Impacts Associated with Project Boundary, indicates acreages of permanent impacts to land would result from siting the proposed upper and lower reservoirs, access roads, wellfield, water conveyance facilities for makeup water, substation, and transmission line. However, the table does not indicate the acreage of permanent impacts that would result from siting the proposed spoil disposal site and subsurface project facilities. Please revise the FLA to (a) specify the acreage of, and the current uses for, the amount of land to be temporarily impacted and (b) provide the acreage of permanent impacts that would result from siting the proposed spoil disposal site and subsurface project facilities.

Response

Table 64-1: Revised Table 3.9-3 below provides the acreages of land that will be temporarily impacted (in the project footprint) and permanently impacted (in the project boundary) along with the current land uses provided by the White Pine County Assessor Office2.

Table 64-1: Revised Table 3.9-3 Land Use Impacts

White Pine County Assessor Land Use Category	Permanent Impact Acres (Project Boundary)	Temporary Impact Acres (Project Footprint)	Temporary Only Impact Acres (Footprint – Boundary)
Transmission Line Corridor and Substation			
Farm	19.4	19.4	0
Industrial	85.8	97.0	11.2
Residential	53.5	53.5	0
Special	20.5	20.5	0
Utility	46.3	46.3	0
Vacant	510.1	510.1	0
Wellfield			
Vacant	22.3	33.9	11.6

[2] Although the White Pine County Accessor Office classifies land owned by the BLM, USFS, and private landowners, Section 102 of the Federal Land Policy and Management Act directs BLM to prepare land use plans that serve as the basis for all activities that occur on BLM-administered lands. The applicable land use plan in the vicinity of the project is the Ely District Record of Decision and Approved Resource Management Plan (BLM 2008), as amended.

White Pine County Assessor Land Use Category	Permanent Impact Acres (Project Boundary)	Temporary Impact Acres (Project Footprint)	Temporary Only Impact Acres (Footprint – Boundary)
Industrial	11.4	17.1	5.7
Special	1.5	2.1	0.6
Spoil Disposal Sites			
Industrial	0	38.4	38.4
Lower Reservoir			
Industrial	127.2	168.8	41.6
Special Use	0.0	2.9	2.9
Vacant	0.0	0.2	0.2
Subsurface Project Facilities*			
Industrial	48.7	0	0**
Upper Reservoir Access			
Industrial	84.7	176.1	91.4
Upper Reservoir			
Industrial	73.0	90.9	17.9
Upper Reservoir Optional Access			
Farm	11.7	18.5	6.8
Industrial	27.9	42.3	14.4
Total	**1,144**	**1,338**	**242.7**

* Subsurface project facilities are included within the project boundary. Land above these features would not be disturbed or temporarily impacted.

** Footprint is not subtracted from the boundary in this instance.

FERC-A1-65 Exhibit E Land Use Resources

Section 3.9.2.1 Reservoir and Conveyance Areas, Table 3.9-1 Land Use in the Project Footprint, and Figure 3.9-1 Land Use in the Project Vicinity, indicate that most of the land where the upper reservoir would be located is classified by the White Pine County Assessor's Office as industrial. However, this appears contradictory because the upper reservoir would be located within public land administered by the BLM and in an area classified by BLM as a Class II Visual Resource Management (VRM) Area (identified as "37 – Duck Creek Bench", in Appendix H, Visual and Aesthetics Report, Appendix B. BLM Maps, Map 2-10a), described in Table 3.11-1 BLM VRM Classes, which is managed to "retain the existing character of the landscape" and that "the level of change to the characteristic landscape should be low, that management activities can be seen but not immediately noticeable by casual observation, and that any changes must repeat (i.e., imitate) the basic forms, lines, colors and textures found in the predominant natural features of the characteristic landscape". Additionally, the FLA states in Section 3.9.2.1 that remaining lands will be converted to industrial land, but it does not specify which remaining lands would be converted and why they would be converted. Please revise the FLA to address this apparent land management discrepancy and clarify what remaining lands would be converted to industrial land and why, and if the project boundary would encompass any of these lands.

Response

The location of the proposed upper reservoir is located on BLM owned and managed lands, as shown in Figure 3.1-4 of Exhibit E of the FLA. To determine land use within the project vicinity, the applicant used data acquired from the White Pine County Accessor Office as shown in Table 3.9-1 and Figure 3.9-1 of Exhibit E of the FLA. The White Pine County Accessor Office classifies land owned by the BLM, USFS, and private landowners. White Pine County has classified the land where the upper reservoir will be located as industrial. The land is managed by the BLM. will

The upper reservoir area is within a VRM Class II area with a BLM management goal to retain the existing character of the landscape and to allow a low level of change that should not attract the attention of a casual observer. The upper reservoir will be designed such that materials will blend in with the existing form, line, color, and texture of the existing landscape to the extent feasible. The ridgeline of the upper reservoir would be visible from four KOPs as documented in Exhibit E, Appendix H Visual and Aesthetic Resources Study Report. KOP 10 on Highway 486, 2.5 miles east of the project, is the closest to the upper reservoir location. From KOP 10, the ridgeline of the upper reservoir would be visible as a straight line when compared with the rolling hills of the surrounding terrain. However, the tan color and smooth texture of the reservoir will blend in with the surrounding unvegetated ridgeline.

Section 3.9.2.1 of Exhibit E of the FLA includes text describing the industrial uses on BLM lands. To clarify, the applicant has revised the text referenced in Section 3.9.2.1 of the FLA referencing industry use on BLM land to read:

> *"White Pine County Assessor Office has the responsibility and authority to revise land use classifications. The applicant will communicate with White Pine County Assessor to provide information to assist the Assessor Office with any classification conversions related to the project."*

Citations

Bureau of Land Management (BLM). 2008. Ely District Record of Decision and Approved Resource Management Plan.

FERC-A1-66 Exhibit E Land Use Resources

Although maps in Appendix B, BLM Maps of Appendix H, Visual and Aesthetics Report are good to show the full extent of BLM visual resource assessments within the broad area of Nevada in which the project would be located, they do not very clearly show the BLM visual resource assessments within the immediate area of the proposed project. Please file four new maps, one each to show the BLM visual resource assessments as indicated in Map 2-10a, Map 3-2a, Map 4-1, and Map 5-1a, within a 1, 5, 10, and 15-mile buffer (i.e., like what is shown in Attachment 1, Map of Study Area) of the project boundary. Please include the full extent of the project boundary in each map.

Response

The applicant prepared four new figures (Figures 66-1 to 66-4) showing the BLM visual resource assessments as indicated in Map 2-10a, Map 3-2a, Map 4-1, and Map 5-1a (of Appendix B of Appendix H of Exhibit E of the FLA) within a 1, 5, 10, and 15-mile buffer. The full extent of the project boundary is shown on each figure.

Figure 66-1: BLM Scenic Quality Classifications

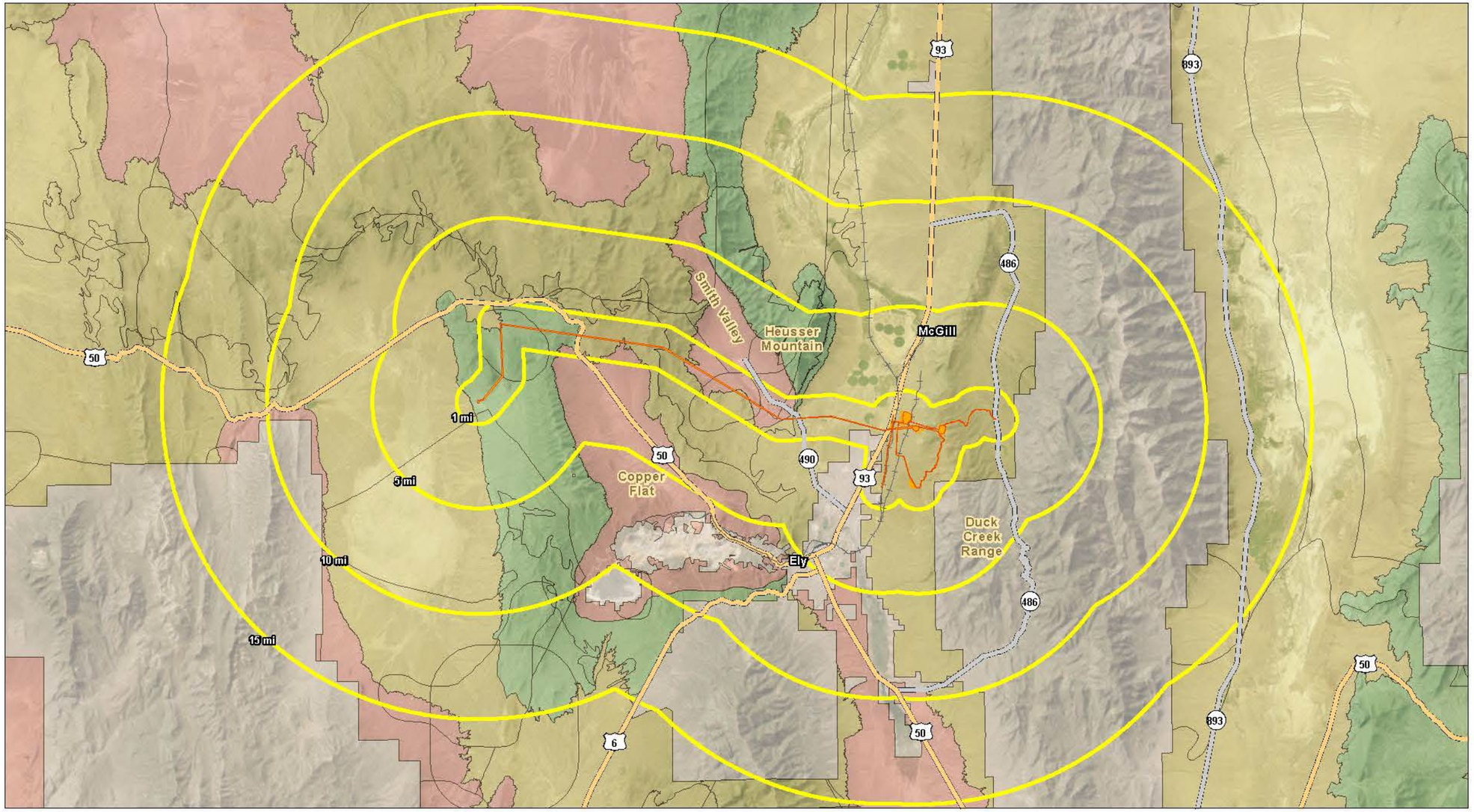


Figure 66-2: BLM Sensitivity Levels

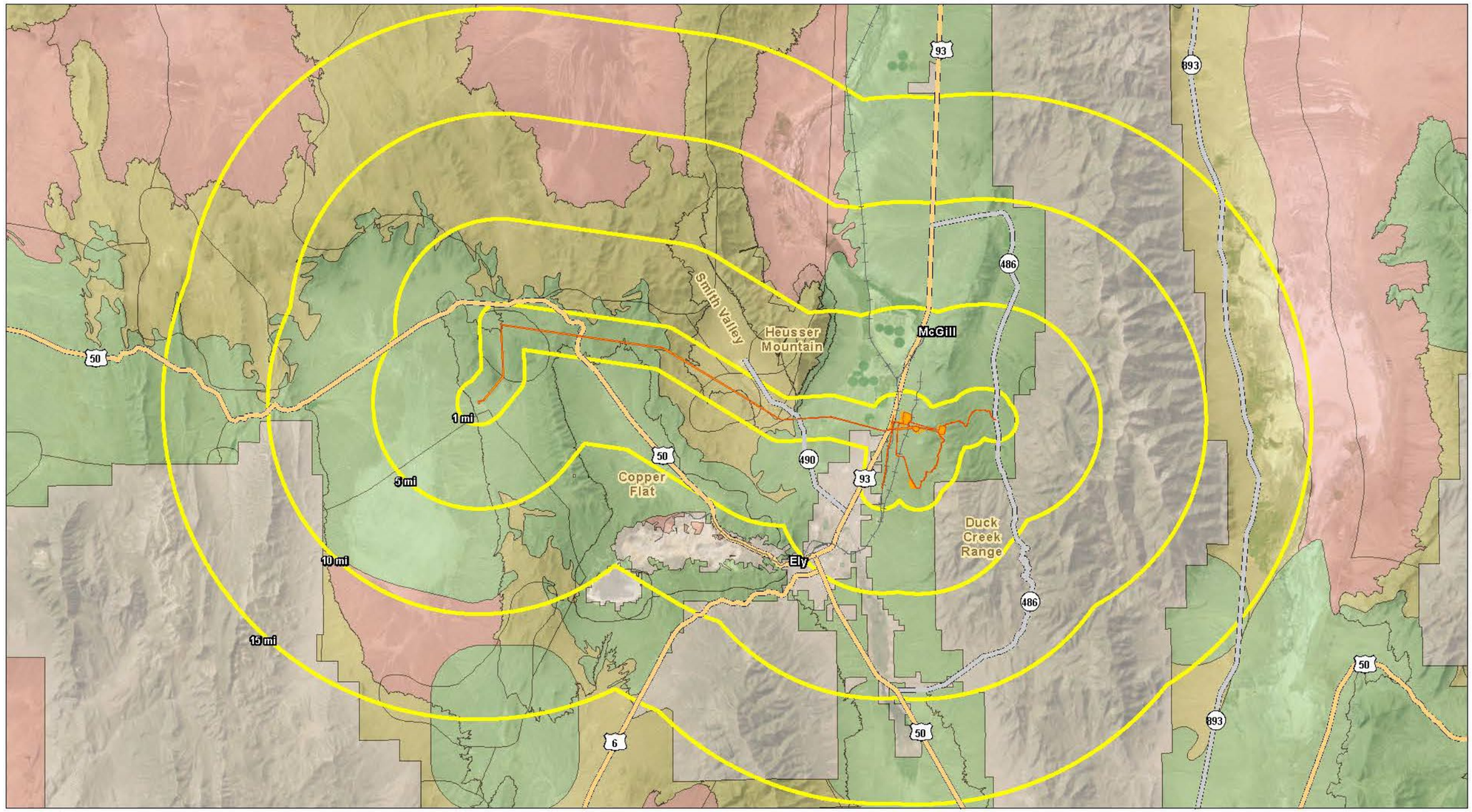


Figure 66-3: BLM Visual Resource Inventory Classes

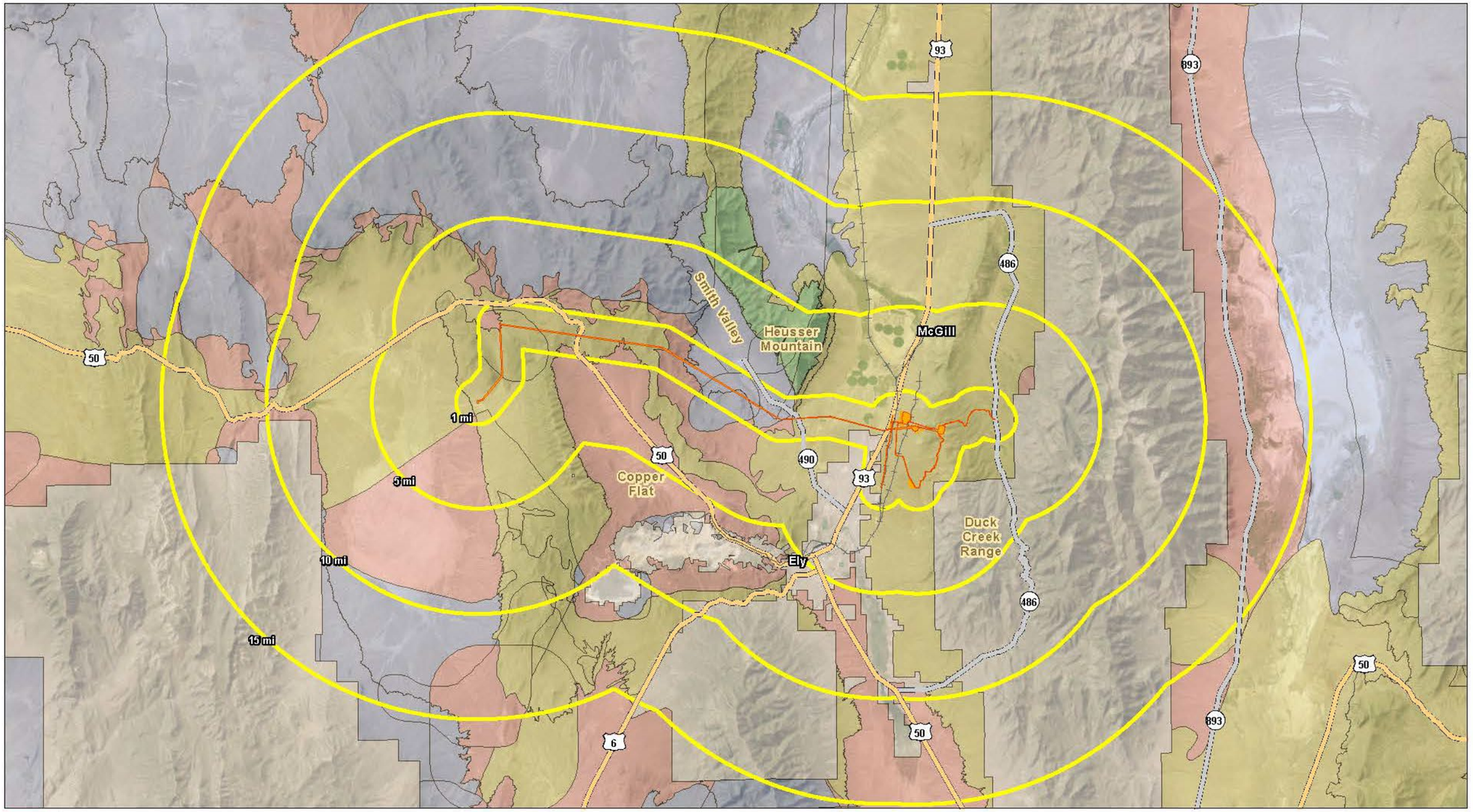
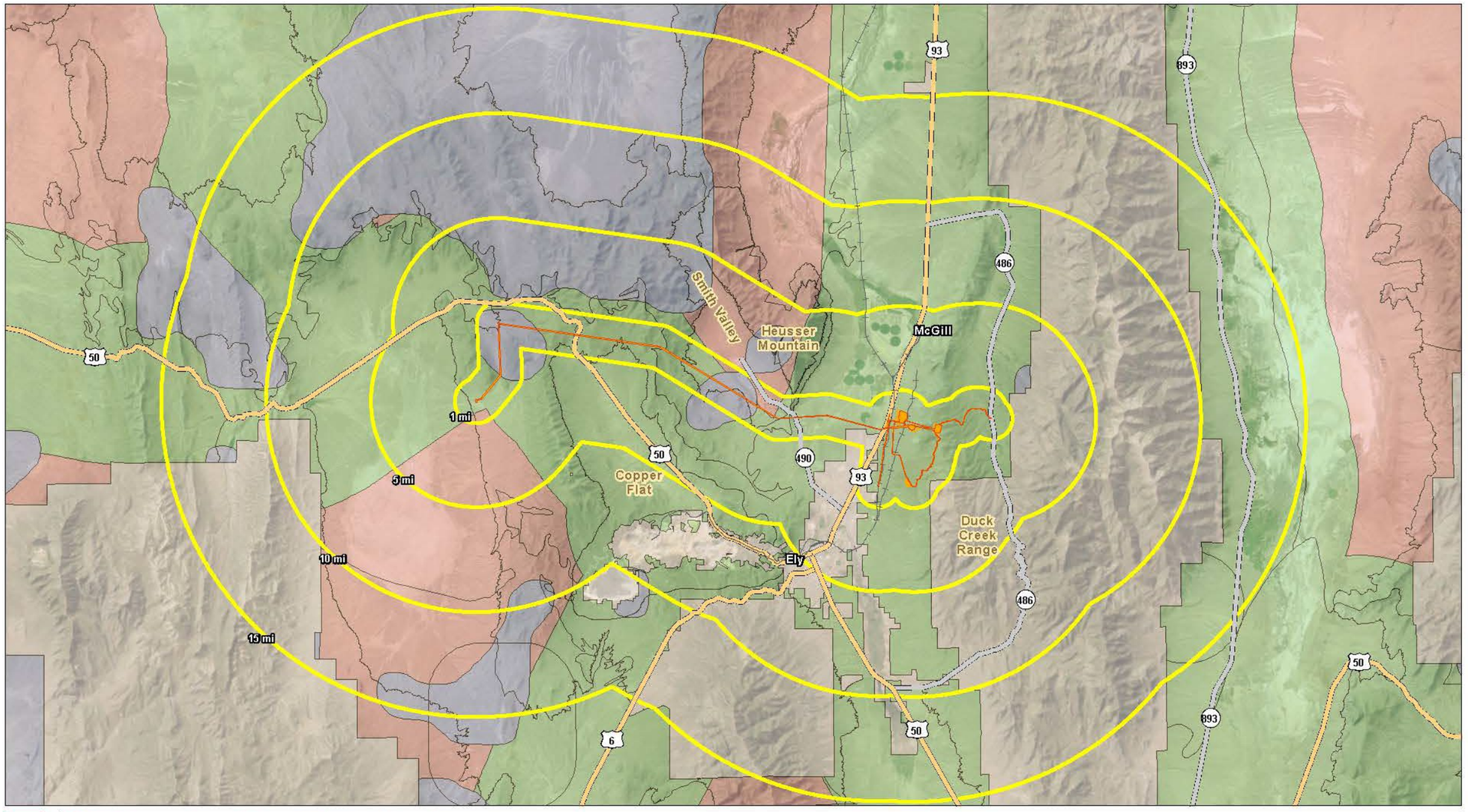


Figure 66-4: BLM Distance Zones



FERC-A1-67.1 Exhibit E Land Use Resources

Appendix L, Responses to DLA Comments, includes a response to BLM's comment (BLM-3) that indicates White Pine is continuing to coordinate with BLM and NDOW to form a technical working group with the goal of reaching consensus on potential mitigation plans, specifically in the form of a resource management plan exception or variance that would allow construction of the project on BLM lands. Because the mitigation plan or measures for this have not been filed, staff cannot properly analyze the effects of the measure or plan on resources for the purpose of NEPA analysis. Please file measures and/or plans in accordance with the instructions provided above under Proposed Environmental Measures.

Response

On February 10, 2023, the applicant submitted a request to BLM – Bristlecone Field Office, Ely District for BLM to convene a GrSG technical working group (TWG) to facilitate discussion and assist in defining acceptable and achievable mitigation measures. The purpose of these mitigation measures is to help frame a project-specific exception or waiver to the current 2015 GrSG ARMPA that will result in a net conservation gain for GrSG population and habitat; as certain areas of the project are located within GrSG Priority Habitat Management Areas (PHMA), General Habitat Management Areas (GHMA), and Other Habitat management Areas (OHMA). Further discussions with BLM have resulted in broadening the scope of the TWG to discuss and consider mitigation measures for both GrSG, ungulates, and other wildlife.

The BLM invited via letter several federal, state, and local agencies to participate in the TWG. Seven individuals from four organizations (NDOW, BLM, WPC, and NV-SETT) have formed the TWG along with the applicant. The first meeting of the TWG was held on June 27, 2023; the next meeting is scheduled for July 31, 2023. Goals established include defining a boundary for wildlife impacts (both direct and indirect) and developing a comprehensive mitigation plan that includes Nevada's Conservation Credit system. Meetings are set to occur monthly, with a target end date of December 2023.

The applicant anticipates that the TWG will have a NEPA-ready Greater Sage Grouse Mitigation Plan (GSGMP) drafted prior to commencement of the NEPA process, such that the expected outcomes of mitigation measures could be integrated into the impacts analysis. The GSGMP would primarily be focused on impacts from construction and ongoing post-construction operations and maintenance activities. Upon consensus by the TWG, the applicant will file the GSGMP with FERC prior to the commencement of the NEPA process.

FERC-A1-67.2 Exhibit E Land Use Resources

Appendix L, Responses to DLA Comments, in response to White Pine County's comment (WPC-56) that it understands potential limitations to public access to the immediate project area but that it does not support restrictions (even temporary in nature to recreation access to surrounding public lands, states that White Pine will restrict areas only as required for health and safety and that: (a) permanent fencing would be used only to restrict access to the reservoirs and switchyard; (b) additional access restrictions required during construction would be removed when no longer needed for safety reasons; and (c) permanent fencing would not restrict access to surrounding public lands. This appears to indicate that because of the project, certain public lands administered by the BLM would become off limits to the public (i.e., public access to the lands on which the reservoirs and switchyard would be located would be permanently prohibited). Please revise the FLA to explain how existing public access to those lands would be permanently prohibited, taking into consideration that a ROW does not cede ownership of real property from the current landowner (BLM) to the recipient of the ROW (White Pine), rather a ROW allows access to the land for an approved use. Also, please clarify if any other BLM lands, aside from those previously indicated for use for the project reservoirs and switchyard, would be used for project purposes and would be permanently off limits to public access.

Response

Exhibit E, Section 3.8.1.2 of the FLA indicates that "It is the policy of White Pine County to provide citizens of the county access to public lands for recreational use and economic activity, as well as protect the environment and natural resources within the county for future generations (White Pine County 2018). White Pine County supports the concept of "Multiple Use Management", which includes recreation along with a balanced and diverse use of natural resources for other purposes. White Pine County recreational policies include conservation and protection of recreational and open space resources, and the promotion of sustainable recreation use. The County also encourages the use of dispersed recreation and the additional development of recreation facilities on appropriate public lands."

Nonetheless, wildlife could be impacted given that project access roads will provide new and additional public access to public lands in the general project area. Currently the public has recreational access to existing roads on public lands administered by the BLM. The applicant will construct and maintain the upper reservoir access road during construction and operation.

At least 90 days prior to the start of any ground-disturbing activity the applicant will coordinate access and security plans with the BLM, NDOW, and White Pine County. The applicant will also file a Public Safety Plan with FERC's Division of Dam Safety and Inspections (D2SI). The plan will include a description of all safety devices and signage needed to warn the public of project-related hazards or to otherwise protect the public in the use of project lands based on FERC's Guidelines for Public Safety at Hydropower Projects. The applicant anticipates that recreational public access could include a) off-road vehicle use, b) access to hunting areas, c) wildlife viewing, d) hiking, e) trail running, f) mountain-bike use, g) horseback riding, and h) camping.

The applicant will install 10-foot-tall game fencing, signage, and other safety and security design features around the outside edge of the upper and lower reservoir perimeter roads, switchyard, and main access portal for site security, public safety, and wildlife protection. The applicant will install barriers, signage, and gates at each end of the upper reservoir access road to limit public access during wildlife seasonal habitat

restrictions, as determined by the BLM, NDOW, and White Pine County. No other BLM lands will be used for project purposes that would then be permanently off limits to public access.

The applicant has revised Section 3.8.4.2 Applicant Recommendations, as follows:

> ***"Public Access:** WPW proposes to manage lands over which it has control in the Project Boundary for appropriate public access due to potential security and safety concerns, as follows:*
>
> - *During construction, install signage and barriers along existing, unpaved access routes to prevent unauthorized access into the construction work zones as shown on drawings in Exhibit F (to be removed after construction is complete).*
> - *During construction, install fencing around all laydown sites for security. A boom gate will be provided across the new Western Access Road just off the intersection of SR-93 to control access into the project construction area (to be removed after construction is complete).*
> - *During construction and operation, install 10-foot-tall game fencing, signage, and other safety and security design features around the outside edge of the upper and lower reservoir perimeter roads, switchyard, and main access portal for site security, public safety, and wildlife protection (permanent installation).*
> - *During construction and operation, install barriers, signage, and gates at each end of the upper reservoir access road to limit public access during wildlife seasonal habitat restrictions, as determined by the BLM, NDOW, and White Pine County (removal to be determined by BLM/NDOW/White Pine County).*
> - *During construction, install a display map near the boom gate across the Western Access Road just off SR-93 that shows the location of all public safety measures implemented at the project (to be removed after construction is complete)."*

FERC-A1-68 through FERC-A1-85 *Cultural Resources*

Response:

The applicant has separately filed responses as privileged for AIRs 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, and 85 in Attachment 68-85.

FERC-A1-87 Exhibit E Aesthetic Resources

Appendix H, Visual and Aesthetics Report, Section 3.6 appears to indicate that KOPs were chosen because they are almost all on BLM land, "provide representative views of existing conditions and depict changes from the project", and stakeholder input was used. However, it is unclear why these KOPs are representative of where the greatest number of people could view the project area the most often (i.e., KOP 1 is 9 miles north of the project area, while McGill is about 4 miles away and within the viewshed visible area. Additionally, why were no KOPs established east of Route 486, within the viewshed visible area, in the Duck Creek Range or High Schells Wilderness? Please revise the FLA to address how the KOPs were determined but do not appear to fully represent likely locations where the greatest number of people could view the project area the most often and explain why no KOPs were established east of Route 486 in the Duck Creek Range or High Schells Wilderness.

Response

The applicant selected potential KOPs due their potential for high visual impact (e.g., recreation trail, road, other recreation areas) and representative views. These areas typically see the most use by visitors and recreators and therefore have the highest potential impact on viewers. The applicant also proposed KOPs based on their distance to the project facilities (foreground, middleground, or background), land ownership and associated visual resource management plans, public access, and amount of redundancy/overlap with other proposed KOPs.

To determine the final KOP locations for the study, the applicant first conducted a viewshed analysis in GIS based on the location and proposed height of project facilities within the study area (see Figure 2 of Appendix H, Exhibit E of the FLA). Any potential viewpoint within the study area that was part of the visible viewshed was eligible as a KOP location. The applicant then selected representative KOPs for inclusion in the draft *Visual and Aesthetic Resources Study Plan*.

Secondly, the applicant considered input from stakeholders. On May 26, 2021, the applicant distributed the proposed Visual and Aesthetic Resources Study Plan to stakeholders on the project's distribution list (see Appendix A, Exhibit E of the FLA). The distribution list included representatives from federal agencies such as the BLM, USFS, FERC, NPS; native American tribes; state agencies; county representatives; and local representatives. The selected KOPs were then included and analyzed in the DLA and appended Visual and Aesthetic Resources Study Report that was distributed to stakeholders for additional comments on February 17, 2022. Preliminary comments from the NPS and NNR in 2021 requested that views of passengers on the HiLine Branch be considered as part of the study. Based on input from other stakeholders, the applicant included the Schell Creek Range, Highway 93, Duck Creek Basin Loop (Success Loop), Success Summit, Camp Success, Timber Creek Campground, and Steptoe Valley as part of the KOP determination process. The KOPs analyzed in the 2021 Study Report are representative of views from locations identified by stakeholders and include views most likely to be affected by proposed project features present in the foreground/middleground.

The applicant selected KOP 1 due to its location at the intersection of two commonly traveled roads: Highway 93 and State Route 486. KOP 1 is located near a directional kiosk where many travelers stop and therefore have the potential to view project facilities for an extended period of time. While there are no KOPs located directly in McGill, there are many KOPs in and abutting the City of Ely which has approximately four times the amount of year-round residents as McGill. Due to the larger population size and nearby tourist attractions, including the NNR, the applicant chose representative KOP locations in and

near Ely, which has a higher potential visual impact than McGill. As described in the 2021 Study Plan, it was not feasible to conduct visual analysis from each viewpoint of the project. The applicant made an effort to focus on representative areas with the potential highest impact to viewers as a conservative approach. The greatest number of people who could view the project area would occur from travelers along SR 486, the City of Ely, and recreators using the NNR rail system; all of which have KOPs.

As evidenced in the viewshed analysis, project features will be visible mostly from locations in Steptoe Valley and westward. Only the upper reservoir dam will be visible from locations along Route 486 and eastward. The applicant did include potential KOP locations in the Duck Creek Range and High Schells Wilderness as part of the evaluation process. Since there is limited public access and public facilities within the Duck Creek Range and High Schells Wilderness, the potential impact on viewers in this area is low when compared to other areas within the viewshed. Only 7.4 percent of the High Schells Wilderness area falls within the visible viewshed and at much higher elevations than much of the viewshed, thus not making it a representative location of a key viewing area. Within the wilderness, the few areas within the visible viewshed occur greater than 5-miles away and it is likely that a KOP in this location would provide background views of project facilities only. Additionally, while the wilderness does offer recreation opportunities it is in a very remote area which further reduces the number of potential viewers impacted by the project.

Similarly, while part of the Duck Creek Range is within the visible viewshed, the largest visual impact to viewers within the Duck Creek Range would occur from traveling along SR486 or by the NNR rail system. Understanding that it would not be feasible or necessary to get KOP locations in every affected area, the applicant conservatively chose locations that would result in the greatest visual presence to viewers within the study area.

FERC-A1-88 Exhibit E Aesthetic Resources

The Humboldt-Toiyabe National Forest, including the High Schells Wilderness, administered by the United States Forest Service is located approximately 4 miles from the proposed location of the project upper reservoir with many locations within the forest from where the upper reservoir could be visible (see Figure 3.11-1 KOPs and Viewshed Analysis). However, it appears that no consultation with Forest Service was conducted regarding potential project effects on visual resources within the National Forest. Please clarify if consultation with Forest Service was conducted regarding potential project effects on visual resources within the National Forest, and if not, why a decision was made not to conduct consultation with Forest Service on potential project effects on visual resources within the National Forest when it is clear from viewshed analysis that views from Forest Service administered land could be affected by project construction and operation.

Response

Guidelines for the identification of visual resources on public land are contained in BLM Manual Handbook 8410-1, Visual Resource Inventory (BLM 1986). The BLM meets statutory requirements with their Visual Resource Management (VRM) program. The VRM classes are based on an inventory of three key elements: (1) scenic quality, (2) sensitivity level, and (3) distance zones.

Most lands within the Project Boundary are managed by BLM. Based on the Ely District RMP (BLM 2008b), the project boundary lies within Class II, Class III, and Class IV lands. The upper reservoir is in a Class II area. Both the lower reservoir and switchyard are in a Class III area. The transmission line crosses through Class II, Class III, and Class IV lands. There are no VRM Class I lands within the Project Boundary.

Landscapes are subdivided into three distance zones based on relative visibility from travel routes or from vistas. The observer's proximity to elements will affect perception of their spatial importance. Longer viewing distances tend to reduce the impression of spatial enclosure and dominance.

The three seen distance zones are defined as follows:

- Foreground-Middleground Zone: Areas less than 3-5 miles away from a travel route or viewpoint. From this distance, management activities might be viewed in detail. The outer boundary of this distance zone is defined as the point where the texture and form of individual plants are no longer apparent in the landscape.
- Background Zone: Areas beyond the 3–5-mile zone up to 15 miles away. This does not include areas in the background which are so far distant that the only thing discernible is the form or outline. To be included within this distance zone, vegetation should be visible at least as patterns of light and dark.
- Seldom Seen Zone: Areas that are not visible within the foreground-middleground and background zones and areas beyond the background zones.

The distance between the National Forest and the upper reservoir of the project would fall within the "Background Zone" of the identified distance zones.

The *Visual and Aesthetic Resources Study Report*, Exhibit E – Appendix H, describes the results of the visual and aesthetic resources study that was conducted in 2021. The study goal was to objectively assess the visual condition and impact of the project at various Key Observation Points.

Since there is limited public access and public facilities within the Duck Creek Range and High Schells Wilderness, the potential impact on viewers in this area is low when compared to other areas within the viewshed. Only 7.4 percent of the High Schells Wilderness area falls within the visible viewshed and at much higher elevations than much of the viewshed, thus not making it a representative location of a key viewing area. Within the wilderness, the few areas within the visible viewshed occur greater than 5-miles away and it is likely that a KOP in this location would provide background views of project facilities only. Additionally, while the wilderness does offer recreation opportunities it is in a very remote area which further reduces the number of potential viewers impacted by the project.

On May 26, 2021, the applicant distributed the proposed *Visual and Aesthetic Resources Study Plan* to stakeholders on the project's distribution list (see Appendix A, Exhibit E of the FLA). The distribution list included representatives from federal agencies such as the BLM, USFS, FERC, NPS; native American tribes; state agencies; county representatives; and local representatives. The applicant consulted with USFS representatives during the various studies that have been conducted, before and after the submittal of the Draft License Application (DLA), and after the submittal of the Final License Application (FLA). The applicant provided the USFS with notification and access to both the DLA and the FLA and specifically requested the USFS to provide comments on the documents, including the *Visual and Aesthetic Resources Study Report*. Most recently, the USFS was invited to participate in a Technical Working Group to determine appropriate and applicable wildlife mitigation measures for the project. USFS representatives declined to participate.

FERC-A1-89 Exhibit E Aesthetic Resources

Although stated several times in this section that nighttime construction activities may introduce temporary lighting in the project area, the FLA does not appear to provide details about nighttime lighting that would be in place at the project once it would be constructed. Additionally, although the FLA provides nighttime and dusk simulations from KOP 5 and KOP 7, respectively, it is not apparent during which phase of the project (construction or operation) each represents. Further, the FLA does not include nighttime simulations from all other KOPs.

Please revise the FLA to:

1. *describe the locations and types of permanent lighting that would be used at the project for project operation and*
2. *include nighttime simulations from each KOP showing the project's likely nighttime lighting during project construction and operation.*

Response

The project will have no no permanently lit areas following construction. Outdoor security lighting will be installed as part of the project at the switchyard and tunnel portal. This lighting will only be utilized infrequently when needed for safety and maintenance. All outdoor lighting will be switch or motion sensor controlled. Red railroad warning lights will also be used at the railroad crossings that will be installed.

As noted in Exhibit A, Section 4.2.1, operating exterior lighting will be minimal following construction. Area lighting for the Project's surface facilities will consist of lighting around the switchyard and main access tunnel portal and is proposed to incorporate both the International Dark Sky Association criteria and Occupational Safety and Health Administration outdoor workplace safety requirements. In addition, lighting may be provided to facilitate inspections of the reservoir dams in the unlikely event of an emergency. Lighting there would be used only during such occasions and would be controlled by switch.

In consultation with the NPS and NNR for the supplemental studies currently underway, consensus was reached that nighttime photo-simulations were not necessary (see Exhibit E, Appendix A Consultation Log). All parties agreed that nighttime photo-simulations would not show the project features.

FERC-A1-90 Exhibit E Aesthetic Resources

Figure 3.11-1 KOPs and Viewshed Analysis, indicates the existence of a KOP – Highline Excursion Turnaround, Approximate Location. However, it appears no current image or simulated image for this identified KOP is provided. Please provide a current image and a simulated image for this identified KOP. Additionally, although Figure 3.11-1 indicates land from which the project could be visible it does not identify specific land types or places such as private residential areas and public spaces (e.g., parks and wilderness areas) from which the project could be visible. Please revise Figure 3.11-1, or provide a new figure, to show and identify these types of lands and places from which the project could be visible.

Response

The applicant did not develop the KOP-Highline Excursion Turnaround for Exhibit E, Section 3.11 nor Exhibit E, Appendix H, Visual and Aesthetic Study Report. KOP 12, which the applicant developed as a part of the Supplemental Visual and Aesthetic Study Report, is representative of the views from the HiLine Excursion Turnaround point. Through consultation with NPS (see Exhibit E, Appendix A Consultation Log, pdf page 3182) a photo-simulation from KOP 12 was determined to be unnecessary. Consensus with NPS was reached to develop photo-simulations for KOP 4, 5, 15, 16, and 17. KOP 12 and 14 photo-simulations were not developed as a result.

The applicant modified Figure 3.11-1 to remove the text for the missing KOP and identify specific land type or places, such as private residential areas and public spaces. Please see Attachment 90-1, updated Figure 3.11-1.

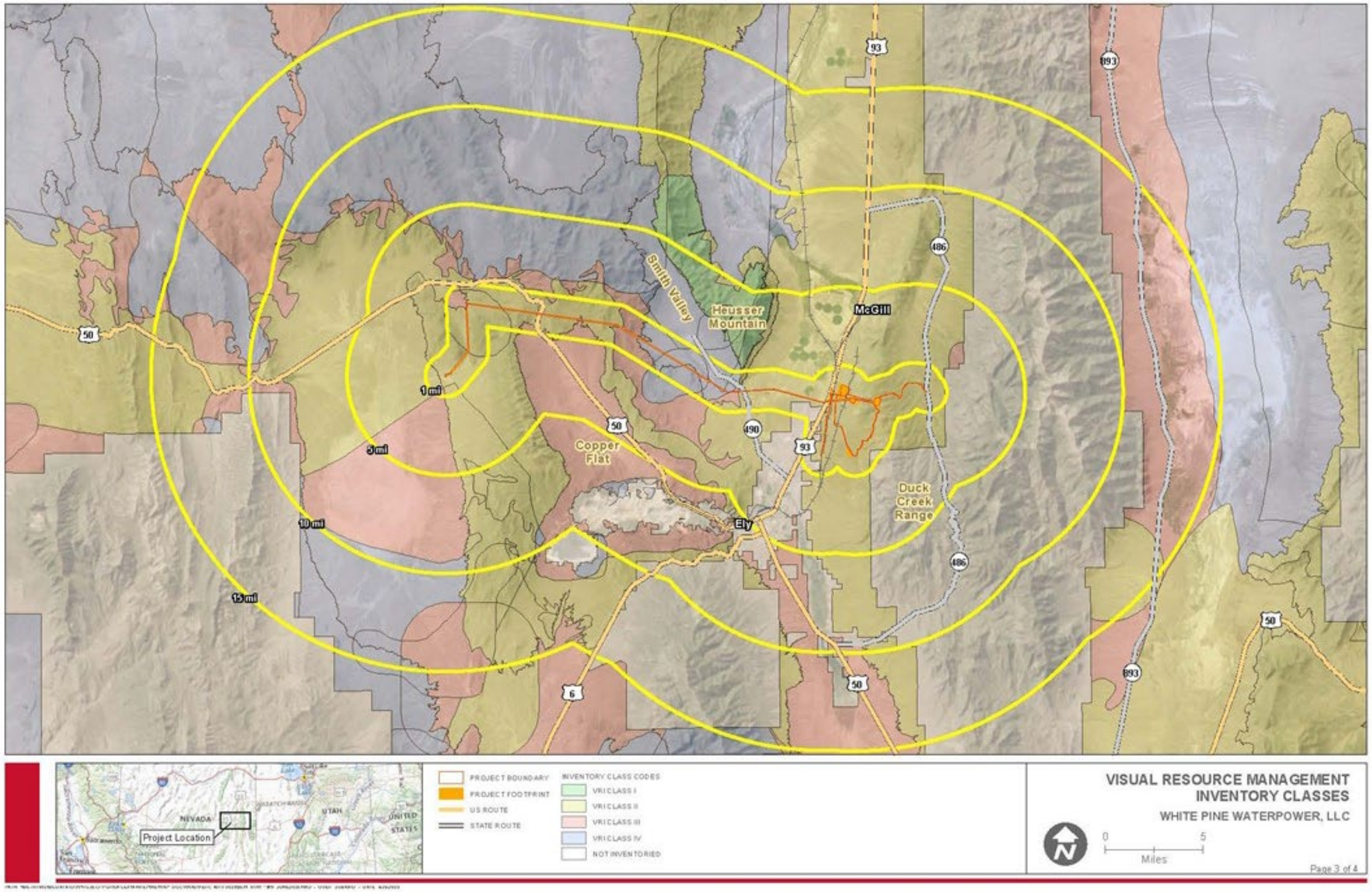
FERC-A1-91 Exhibit E Aesthetic Resources

Section 3.11.1 Affected Aesthetic Environment, states that most lands within the project boundary are managed by BLM and are located within the BLM VRM Class II, Class III, and Class IV lands. The section further explains that certain proposed project facilities would be located within certain VRM Class lands (e.g., the upper reservoir would be located in a Class II area). While these explanations are helpful it is difficult to understand spatially where proposed project facilities would be located related to VRM classified lands and where VRM classified lands are located in relation to each other. Please file a map showing (a) the VRM classifications of all lands on which project facilities would be located (please use a color to represent each VRM classified land) and (b) the proposed project boundary and all proposed project facilities within those lands.

Response

Figure 91-1 shows the BLM VRM classifications of all lands on which project facilities would be located (using a color to represent each VRM classified land, as specified in the figure legend) and the proposed project boundary and all proposed project facilities within those lands.

Figure 91-1: BLM Visual Resource Inventory Classes



FERC-A1-92 Exhibit E Aesthetic Resources

Although Section 3.11.1 Affected Aesthetic Environment, provides a brief description of the general aesthetic environment of the project area it does not provide sufficient detail about aesthetics of the actual lands on which the proposed project facilities would be located. Please revise the FLA to provide more details about the aesthetic character of all lands on which all proposed project facilities would be located.

Response

The proposed project will be located in White Pine County approximately 8 miles northeast of the City of Ely. The average temperatures range from between 39.0 degrees Fahrenheit in January to 86.9 degrees Fahrenheit in July. The average annual rainfall for the period of record (1892-2016) in the project vicinity is 8.86 inches, which is partially comprised of an average annual snowfall that is 22.10 inches (Western Regional Climate Center 2021).

Major water sources within the project vicinity are Steptoe Creek and Duck Creek. Duck Creek, approximately 2 miles northeast of the project boundary, is the closest body of free-flowing surface water to the project and much of the creek flow originates as spring snowmelt in the Schell Creek Mountain Range. The surrounding areas consist of flat valleys, rolling foothills, and pyramidal mountains allowing the user a wide and far range of views and are generally undisturbed except for minor infrastructure such as power lines, paved and dirt roads, ranch land, and the City of Ely and the Town of Ruth (BLM 2016). The project vicinity is characterized by a high desert landscape, with a visually interesting transition from the more developed valley floor (agriculture) to the surrounding mountain ranges, including the Egan and Schell Creek Mountain Ranges. The south end of the valley where the proposed project will be located contains the most development (BLM 2008).

Elevations in the project vicinity are widely variable. The approximate elevation of the proposed lower reservoir is 6,500 feet. The approximate elevation of the proposed upper reservoir is 8,500 feet. Terrain is rugged in the mountain ranges and relatively flat on the valley floor. Initial and secondary uplift of the region has created stream gradients such that the streams of the region have down cut into and dissected the existing landforms, creating dissected drainage patterns on the mountain slopes, which typically terminate in alluvial fans on the adjacent valley floors.

Within the immediate project area, the majority of land cover includes woodland, desert scrub, grasslands, and shrubland. The land is dominated by sagebrush scrub in the lower elevation areas generally below 6,800 feet and pinyon-juniper woodland in the higher elevation areas above 6,500 feet. A riparian woodland occurs to the east of the project footprint and occasional chaparral habitat types also occur in the project footprint. Seasonal cattle grazing occurs throughout the project area.

The sagebrush scrub in the project footprint is dominated by a mixture of little sagebrush (Artemisia arbuscula), black sagebrush (Artemisia nova), and mountain big sagebrush (Artemisia tridentata ssp. vaseyana) in the shrub community, along with scattered occurrences of broom snakeweed (Gutierrezia sarothrae), basin big sagebrush (Artemisia tridentata ssp. tridentata), matted wild buckwheat (Eriogonum caespitosum), and rubber rabbitbrush (Ericameria nauseosa). In some isolated areas, big sagebrush is the dominant species. A steppe form of this habitat also occurs with lesser cover of woody shrubs and greater cover of grasses such as thickspike wheatgrass (Elymus lanceolatus), Sandberg bluegrass (Poa secunda),

bluebunch wheatgrass (Pseudoroegneria spicata), Letterman's rice grass (Achnatherum lettermanii), and Indian rice grass (Achnatherum hymenoides).

The pinyon-juniper woodland is a mix of Utah juniper (Juniperus osteosperma) and single-leaf pinyon (Pinus monophylla) with variable dominance of both species in the tree community, along with some occurrences of the same species found in sagebrush scrub in the shrub community, most notably matted wild buckwheat. A juniper savannah-like habitat occurs around the proposed reservoir locations that is similar to the steppe form of sagebrush scrub but differs in having cover of mature Utah juniper trees. Bristlecone pine was not observed during field studies in the location of any proposed project facilities.

The most common herbaceous species observed in the location of the proposed project facilities are cheatgrass (Bromus tectorum), widewing spring parsley (Cymopterus purpurascens), thorny skeletonweed (Pleiacanthus spinosus), James' cryptantha (Cryptantha cinera var. abortiva), flat spine sheepbur (Lappula occidentalis), long spur lupine (Lupinus arbustus), northwestern Indian paintbrush (Castilleja angustifolia var. dubia), and Simpson's buckwheat (Eriogonum microthecum var. simpsonii).

The proposed upper reservoir will be approximately 4 miles from the High Schells Wilderness and the proposed transmission line will be approximately 1.2 miles from the Bristlecone Wilderness at its closest point to the transmission line right of way (ROW).

The Wilderness Act in 2006 designated the High Schells Wilderness as a wilderness area under the which consists of 121,497 acres in White Pine County, 10 miles northeast of Ely. The eastern portion has canyons that lead down into Spring Valley, a vertical mile below. The east-side canyons are deeply incised and heavily wooded, with riparian thickets along stream banks. Wheeler Park and the South Snake Range, a mountain island surrounded by desert valleys, are to the southeast. Bristlecone pines and equally impressive limber pines are present in the higher elevation forests. Popular recreation activities include hiking, horseback riding, backcountry skiing, fishing, big game and upland game bird hunting (USFS,Undated).

The Wilderness Act in 2006 designated the Bristlecone Wilderness as a wilderness area which consists of 14,095 acres in White Pine County near Ely. The Bristlecone Wilderness contains diverse landforms and vegetation types, including sage, grass and juniper at lower elevations, mixed with aspen stands in the middle elevations, and bristlecone pine and fir stands mixed with grasses and forbs at the upper elevations. It ranges in elevation from 7,400 feet to 9,800 feet in the central Egan Range. Hiking to the summit of Heusser Mountain, the prominent landmark of the Bristlecone Wilderness, is a recreational activity in the wilderness area. Visitors may also enjoy several primitive recreational opportunities, such as hunting, camping, scenic viewing, and photography (BLM, 2014). Highway 50, an east-west travel route and state-designated scenic byway (also known as "America's Loneliest Highway") and Highway 93, a north-south travel route, are to the west and east of general project area respectively. State Route 486 is a scenic north-south travel route in the eastern portion of the project footprint.

The BLM manages most lands within the project footprint and are subject to the BLM's Ely District Resource Management Plan (RMP) with goals to manage public lands and activities in a manner consistent with the BLM Ely District Office Visual Resource Inventory objectives. Public lands are rated as Class A (high scenic quality), Class B (typical or average scenic quality), or Class C (low scenic quality) based on the apparent scenic quality, and have several key factors: landform, vegetation, water, color, adjacent scenery, scarcity, and the presence or absence of existing cultural modifications.

The majority of project facilities are in areas classified as Class B while areas like the Bristlecone Wilderness are classified as Class A. The project transmission line lies largely within Class B but also crosses over Class A and Class C areas to the west of the project reservoirs. Lands potentially affected by Project construction, operation, and maintenance are largely undeveloped.

Citations

Bureau of Land Management (BLM). 2008. Final Environmental Impact Statement for the White Pine Energy Station Project. FES 08-38. Department of the Interior. Reno, NV.

Bureau of Land Management (BLM). 2014. Bristlecone and Goshute Canyon Wilderness Preliminary Wilderness Management Plan. BLM Ely District Office. DOI-BLM-NV-L000-2014-0001-EA.

Bureau of Land Management (BLM). 2016. Final Environmental Assessment – Robinson Mine Expansion Project. [Online] URL: https://eplanning.blm.gov/epl-front-office/projects/nepa/68666/94309/113835/Robinson_Final_EA_20161222_508.pdf (Accessed March 17, 2020).

Bureau of Land Management (BLM). Undated. Visual Resource Management. [Online] URL: https://www.blm.gov/programs/recreation/recreation-programs/visual-resource-management (Accessed March 17, 2020).

U.S. Forest Service (USFS). Undated. High Schells Wilderness. Online [URL]: https://www.fs.usda.gov/detailfull/htnf/home/?cid=stelprdb5238646. Accessed: June 2023.

Western Regional Climate Center. 2021. Climate Summary for the Period of Record (1892–2016) in McGill, Nevada (Station 264950). Accessed June 28, 2021. https://wrcc.dri.edu/summary/. Western Regional Climate Center, Reno, NV.

FERC-A1-93 Exhibit E Aesthetic Resources

Section 3.11.2.3 KOP 2: County Road 28, states that the KOP location in the foothills of the Egan Range was selected to be representative of views from the nearby BLM Bristlecone Wilderness. Whereas, KOP 2 appears to be located at about 6,200 feet elevation, the Bristlecone Wilderness (not shown in Figure 3.11-1 KOPs and Viewshed Analysis) encompasses the higher elevations of Heusser Mountain, from 7,000 feet to over 8,800 feet elevation, and does not extend down to the foothills. Therefore, views from KOP 2 cannot be representative of views from the Bristlecone Wilderness. Please revise the FLA to provide KOP both current views and simulated views towards the proposed project location from the Bristlecone Wilderness.

Response

KOP 2 has a higher recorded visitorship in the area around KOP 2tan witihn the Bristlecone Wilderness. The applicant selected KOP 2 over other potential KOPs within the Bristlecone Wilderness because of this higher potential for visual impact to these visitors. While approximately 71 percent of the Bristlecone Wilderness falls within the visible viewshed, views of project facilities from elevations greater than 7,000 feet are likely to be background views, having lower visual impact on viewers when compared to middle ground or foreground views. To be conservative, the applicant chose a location near the Bristlecone Wilderness that had representative middleground views of the project facilities (KOP 2). Additionally, the lands within the Bristlecone Wilderness have limited accessibility since mechanized and motorized vehicles are not allowed. As such, recreation activity is not actively monitored within the wilderness, the applicant selected KOP 2 as a representative location along County Road 28 which has a greater number of viewers than locations within the Bristlecone Wilderness, thus having a higher potential visual impact. Viewer groups from KOP 2 include recreationists traveling to and from the Bristlecone Wilderness, residents, workers, and other travelers.

The applicant circulated a study plan for the visual and aestheic report to stakeholders in 2021, and no stakeholder requested to include photo simulations from within the Bristlecone Wilderness. Additionally, the applicant included the study plan and methodology with the report submitted with the DLA in 2022, and no stakeholder requested to include photo simulations from within the Bristlecone Wilderness.

FERC-A1-94 Exhibit E Aesthetic Resources

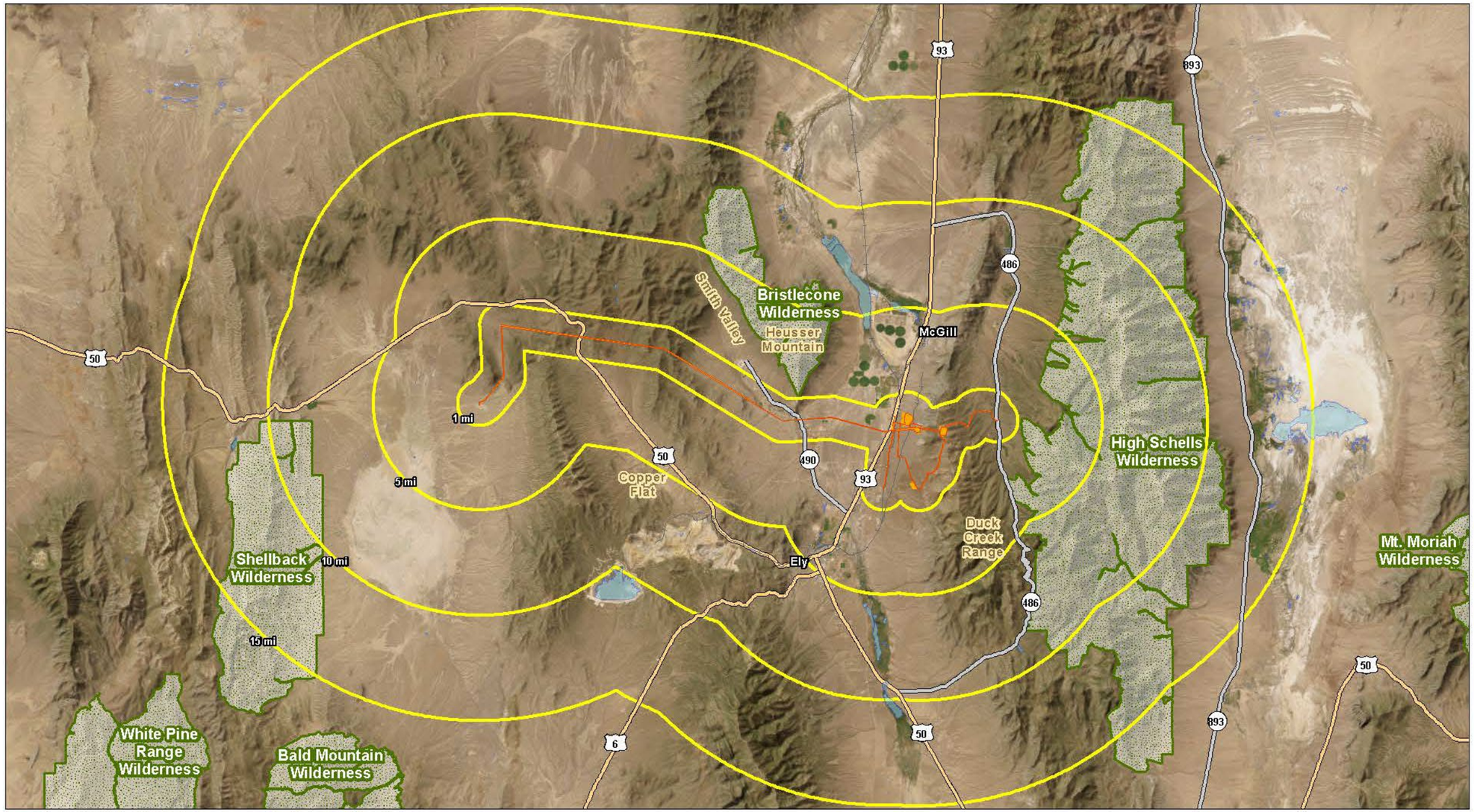
Appendix H Visual and Aesthetics Report, Attachment 1, Map of Study Area, appears to show State Route 893 but does not show State Route 486 which is currently used by visitors to access portions of the High Schells Wilderness and could be used by project construction vehicles to access the proposed upper reservoir access road to the east of the proposed upper reservoir. Please modify Attachment 1, Map of Study Area, to show State Route 486, the boundary of the High Schells Wilderness, and the boundary of any other wilderness area within the 15-mile study area buffer shown on the map.

Response

Appendix H Visual and Aesthetics Report, Attachment 1, Map of Study Area, is part of the 2021 Visual and Aesthetic Resources Study Plan that the applicant distributed to stakeholders on March 10, 2021. Appendix H Visual and Aesthetics Report, dated January 17, 2022, includes a revised map of the study area (Figure 1 on page 3) which shows State Route 486. The applicant has further revised Figure 1 of Appendix H of Exhibit E of the FLA (see Figure 94-1 below) to include the boundary of the High Schells Wilderness, Bristlecone Wilderness, and Shelback Wilderness. The revised Figure 1 is included below.

In addition, an alternative access to the upper reservoir from the Duck Creek side, referred to as the upper reservoir optional access road is proposed as a new 3.5-mile, improved, gravel, single-lane access road for optional and/or emergency use that will traverse the Duck Creek range from a tie-in along the White Pine County Road 29 (NV-486). As such, project construction vehicles will not be able to use or access the upper reservoir via the upper reservoir optional access road, to the east of the proposed upper reservoir.

Figure 94-1: Revised Figure 1 Aesthetic and Visual Resources Study Area with Wilderness Areas



FERC-A1-95 Exhibit E Aesthetic Resources

Appendix H Visual and Aesthetics Report, Section 2.3 Photosimulation, indicates images were created compositing a scaled, geo-referenced model of existing and proposed conditions with a photograph. However, it is unclear from this explanation and from the photosimulations that all proposed project facilities within specific viewsheds of each KOP are represented within the view shown in each photosimulation. All proposed permanent and temporary project facilities and features including, but not limited to, the wellfield, access roads, spoil disposal site, construction and staging areas (including any potential office/operations trailers), and explosives storage facilities, must be represented in each photosimulation in which they are located within the viewshed of the corresponding KOP. Additionally, while the descriptions provided in Section 4.1 Construction and Operational Impacts, of the locations of some project facilities within the KOP photosimulations are helpful, the image resolution of the photosimulations is not high enough for the viewer to properly see project facilities that are included in some images; specifically, in the images where the KOP is at a greater distance from the proposed project location (e.g., Figure 19). Therefore, please (a) modify the photosimulations to include all proposed project facilities and features that would be located within the viewshed of the corresponding KOP and increase the image resolution of the photosimulations where the KOP is at a greater distance from the proposed project location, then refile these photosimulations, and (b) file a duplicate of each photosimulation that identifies project facilities and features that appear in the image.

Response

The applicant generated photo simulations for the 2022 Visual and Aesthetic Report to represent the conditions following construction of the project prior to revegetation. The Supplemental Key Observation Points and Photo Simulations to the Visual and Aesthetic Resources Study Report, dated July 16, 2023 (Supplemental Visual and Aesthetic Report) includes photo simulations of the project facilities following construction and before revegetation. The photo simulations generated for the 2022 Visual and Aesthetic Report do not include spoils piles or laydown areas, however, the applicant included these features in the photo simulations for the Supplemental Visual and Aesthetic Report. Photo simulations do not include temporary features such as construction activities due to the temporary nature of the visual impact and level of variability on a day-to-day basis. Construction activities vary greatly throughout the day and phases of construction, photo simulations would not be able to capture a moment in time that would be considered representative. The applicant circulated a study plan to stakeholders in 2021, and no stakeholder requested to include construction activities in the photo simulations. Additionally, the applicant included the study plan and methodology with the report submitted with the DLA in 2022, and no stakeholder requested to include construction activities in the photo simulations. The visual impact of construction at each KOP is described in Section 4.1 of the 2022 Visual and Aesthetic Report.

In regards to image resolution and ability to see project facilities at greater distances, the applicant generated photo simulations to be representative of what would be visible in the picture at that distance. Manipulating the resolution of the photo-simulations to make the project facilities more visible would be a misrepresentation and inaccurate. Project facilities at a distance will have a lower resolution from a viewer's perspective.

Please see Attachment 95-1: KOP 1-10 Current and Photo-Simulations, which includes a side by side of the photos for current and simulated. Included after each photo simulation is list of the project facilities that are included in the photo simulation.

FERC-A1-96 Exhibit E Socioeconomic Resources

Section 3.12.2.2 Social Impacts Analysis, states that the project is expected to bring to the county more than 900 non-resident, construction-related workers during the construction period. However, it is not clear whether the more than 900 workers would relocate temporarily to the project area. Please revise the FLA to clarify whether this means that some or all of the 900 non-resident construction related workers would relocate temporarily to the project area for the duration of construction activities. If not all of the workers are expected to relocate temporarily, how many would relocate temporarily and how many would commute daily to the construction site from places outside of the project-affected area?

Response

The applicant does not yet know from where the various goods and services required during construction and operations would be sourced, from where the potential bidders for the work would come from, or which companies would be awarded the contracts. The applicant anticipates that the construction company (or companies) awarded this project will strive to hire as many local construction contractors as possible.

For conservative impact planning purposes as described below, the applicant estimates that up to 900 non-resident construction related workers would temporarily relocate to the project area for the duration of construction activities. The applicant conservatively assumed that all the 900 workers would relocate temporarily to the project area for the duration of construction activities in response to the different phases of the project when evaluating potential project related socioeconomic impacts. It is unknown what percentage of local and commutable construction workforce will accept short-term, temporary construction opportunities at the project.

Citations

U.S. Census Bureau. Undated. White Pine County, Nevada. Online [URL]: https://data.census.gov/profile/White_Pine_County...?g=050XX00US32033. Accessed: May 2023.

FERC-A1-97 Exhibit E Socioeconomic Resources

Section 3.12.2.2 Social Impacts Analysis, states that few if any displacements of residences or businesses would likely occur in order to construction and operate the project. This appears to indicate that displacements of residences and/or business could occur. Please describe the residences and/or businesses that could be displaced and the location(s) of each. Please also describe how White Pine would acquire these properties and what types of payments would be made to the affected land or business owner(s).

Response

The applicant does not anticipate any displacements of residences or businesses to occur in order to construct and operate the project. The text referenced in Exhibit E, Section 3.12.2.2 should read:

> *"The Project Footprint and adjacent lands are sparsely populated. Displacements of residences or businesses is not anticipated to occur as part of Project construction or operation."*

Therefore, a description of the residences and/or businesses that could be displaced and the location(s) of each is not applicable to the project. Because displacement of residents and businesses is not anticipated, the applicant does not plan to acquire any such property or businesses.

FERC-A1-98 Exhibit E Comprehensive Plans

Section 5.3 Consistency with Comprehensive Plans, states that White Pine is considering four additional plans recommended by stakeholders, including: (a) Bureau of Land Management. 2019. Nevada and Northeastern California Greater Sage-grouse Record of Decision and Approved Resource Management Plan Amendment. March 2019; (b) White Pine County. 2018. White Pine County Public Lands Policy Plan. Prepared by the White Pine County Public Land Users Advisory Committee. October 2018; (c) White Pine County. 2019. Approval of Resolution 2020-051 Adopting White Pine County Water Resource Plan Element to the White Pine County Master Plan; and (d) White Pine County. 2005. White Pine County Open Space Plan. September 2005. Ely, Nevada. Please file these plans with the Commission so that staff can properly review the plans and analyze potential project effects that could impact resources managed by these plans.

Response

In October 2019 a federal court granted an injunction to prevent the BLM from implementing the Nevada and Northeastern California Greater Sage-grouse Record of Decision and Approved Resource Management Plan Amendment. Because of this injunction, the BLM reverted to the 2015 guidance. Therefore, the following plan has been removed from consideration.:

- Bureau of Land Management. 2019. Nevada and Northeastern California Greater Sage-grouse Record of Decision and Approved Resource Management Plan Amendment. March 2019.

As requested, the following plans are attached as Attachments 98-1, 98-2, and 98-3:

- White Pine County. 2018. White Pine County Public Lands Policy Plan. Prepared by the White Pine County Public Land Users Advisory Committee. October 2018.
- White Pine County. 2019. Approval of Resolution 2020-051 Adopting White Pine County Water Resource Plan Element to the White Pine County Master Plan.
- White Pine County. 2005. White Pine County Open Space Plan. September 2005. Ely, Nevada.

FERC-A1-99 Exhibit E Comprehensive Plans

Section 5.3 Consistency with Comprehensive Plans, states that the project, as currently designed, is inconsistent with two of the plans: Bureau of Land Management. 2015. Record of Decision and Approved Resource Management Plan Amendments for the Great Basin Region, Including the Greater Sage-Grouse Sub-Regions of Idaho and Southwestern Montana, Nevada and Northeastern California, Oregon, and Utah. Washington, D.C. September 2015 and Bureau of Land Management. 2019. Nevada and Northeastern California Greater Sage-grouse Record of Decision and Approved Resource Management Plan Amendment. March 2019. However, the FLA does not appear to explain why the project is inconsistent with the plans. Please revise the FLA to explain why the project, as currently designed, is inconsistent with the two plans.

Response

In the application, the applicant reviewed the 16 federal and state comprehensive plans listed in FERC's List of Comprehensive Plans for Nevada. The applicant determined that nine of the plans were potentially applicable to the project and initially ruled out the other seven. Upon additional analysis the applicant has determined that of those nine comprehensive plans only one directly guides the use of the project lands: BLM 2015 Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment (2015 ARMPA). In October 2019, an injunction was granted to prevent the BLM from implementing the 2019 ARMPA and as a result the BLM reverted to the 2015 ARMPA guidance.

The BLM Ely District Resource Management Plan (BLM Ely District RMP), as amended (2008) incorporated several comprehensive plans including the Egan Resource Area Management Plan (1987). While the BLM Ely District RMP is not included in the list of the 16 federal and state comprehensive plans identified in FERC's List of Comprehensive Plans for Nevada, the RMP has also been identified as an applicable comprehensive plan.

Consequently, there are two guiding comprehensive plans. Table 99-1 summarizes issues of non-compliance with the 2015 ARMPA and the BLM Ely District RMP and explains the process to address issues of non-compliance.

Table 6-1: Summary of Consistency with Comprehensive Plans

Comprehensive Management Plan	FLA Reference Section	Resource	Management Plan Limitation	Why Deviation is Required	Path Forward
BLM Ely District Record of Decision and Approved Resource Management Plan, as amended. 2008 Introduced in Exhibit E Section 1.2.2	Exhibit E Section 3.7.1.9	Sage Grouse	No surface activity would be allowed within two miles of a sage grouse lek from March 1 through May 15 (June 15) No surface activity would be allowed within winter range for sage grouse from November 1 through March 31. NOTE: The BLM 2015 Nevada and Northeastern California Greater Sage-Grouse ARMPA supersedes these 2008 limitations	Portions of the project footprint are within winter and summer range and cannot be constructed without use of this land. Construction would need to proceed year-round to efficiently develop the project	The applicant is coordinating with the BLM to form a technical working group that will include NDOW and other stakeholders, to develop mitigation strategies that would in part provide a conservation gain to GRSG whereupon the BLM could grant an exception [1]
	Exhibit E Section 3.7.1.6	Elk/mule deer/pronghorn crucial summer range Seasonal Limitations	No surface activity would be allowed within big game calving/fawning/kidding/lambing grounds from April 15 through June 30	Portions of the project are located within the elk/mule deer/pronghorn crucial summer range and cannot be constructed without use of this land. Construction would need to proceed year-round to efficiently develop the project	The applicant is coordinating with the BLM to form a technical working group to develop mitigation strategies for ungulates (in addition to the GRSG)[1]. The applicant will request an exception for this seasonal limitation from the BLM

Comprehensive Management Plan	FLA Reference Section	Resource	Management Plan Limitation	Why Deviation is Required	Path Forward
	Exhibit E Section 3.7.1.6	Elk/mule deer/pronghorn crucial winter range Limitations	No surface activity would be allowed within big game crucial winter range from November 1 through March 31	Portions of the project are located within the elk/mule deer/pronghorn crucial winter range and cannot be constructed without use of this land. Construction would need to proceed year-round to develop the project	The applicant is coordinating with the BLM to form a technical working group to develop mitigation strategies for ungulates (in addition to the GRSG)[1]. The applicant will request an exception for this seasonal limitation from the BLM
	Exhibit E Section 3.7.1.7	Active raptor nest sites	No surface activity will be allowed from May 1 through July 15 within 0.5 mile of a raptor nest site that has been active within the past 5 years. Note that FLA Table 3.7-10 lists a March 1 – July 31 raptor limitation. May 1 – July 15 is a correction to the FLA	Construction would need to proceed year-round to develop the project	The applicant will conduct pre-construction surveys for raptors and migratory bird nests. Construction activities that can be delayed until the young have fledged will be scheduled as such. In areas where the construction activities cannot be temporarily halted, the applicant will coordinate with BLM and NDOW to develop appropriate mitigation and request an exception for this seasonal limitation from the BLM

Comprehensive Management Plan	FLA Reference Section	Resource	Management Plan Limitation	Why Deviation is Required	Path Forward
BLM 2015 Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment (ARMPA) Introduced in Exhibit E Section 1.2.2	Exhibit E Section 3.7.1.9	Sage Grouse Priority Habitat Management Area (PHMA)	PHMAs are subject to no surface occupancies (NSOs), with no waivers or modifications. Exceptions would be granted under two circumstances: if the proposed action would not have direct, indirect, or cumulative effects on GRSG or its habitat; or if the action is proposed to be undertaken as an alternative to a similar action occurring on a nearby parcel, and it would provide a clear conservation gain to GRSG. 2015 ARMPA Section 1.4 Table 1-4	Both temporary and permanent disturbance are within PHMA and the project cannot be constructed without use of this land	The applicant is coordinating with the BLM to form a technical working group to develop mitigation strategies that would provide a conservation gain to GRSG whereupon the BLM could grant an exception [1]
	Exhibit E Section 3.7.1.9	Sage Grouse General Habitat Management Area (GHMA)	Restrictions on development in GHMAs are intended to allow disturbance but minimize adverse effects of disturbance with restrictions. Disturbance is subject to a controlled surface use and timing limitation stipulation and subject to mitigation, with the objective of first	Both temporary and permanent disturbance are within GHMA and the project cannot be constructed without use of this land	The applicant is coordinating with the BLM to form a technical working group to develop mitigation strategies that would provide a conservation gain to GRSG whereupon the BLM could grant an exception [1]

Comprehensive Management Plan	FLA Reference Section	Resource	Management Plan Limitation	Why Deviation is Required	Path Forward
			avoiding and minimizing potential impacts on GRSG or its habitat and then compensating for unavoidable impacts on GRSG or its habitat		
	Exhibit E Section 3.7.1.9	PHMA, GHMA Seasonal Timing Limitations	Greater Sage-grouse breeding habitat within 4 miles of active/pending leks: March 1 – June 30 Greater Sage-grouse brood-rearing habitat: May 15 – September 15 Greater Sage-grouse winter habitat: November 1 – February 28	Construction would need to proceed year-round to develop the project. Note that without relief from seasonal limitations there is only a 6-week open period to construct (September 15 – November 1)	The applicant is coordinating with the BLM to form a technical working group to develop mitigation strategies that would provide a conservation gain to GRSG whereupon the BLM and NDOW could grant an exception[3]

[3] In mid-2022, the applicant requested the BLM convene a multi-stakeholder technical working group (TWG) to consider various minimization and mitigation measures to address concerns with Greater Sage Grouse (GrSG) habitat within the project area boundary. These measures would then support a potential site-specific amendment to the GrSG - Approved Resource Management Plan Amendment (ARMPA). The BLM indicated in response that pursuit of a site-specific amendment to the GrSG ARMPA would likely conflict with the national policy review of a GrSG Resource Management Plan Amendment that is currently underway.

FERC-A1-100 Exhibit E Comprehensive Plans

Section 5.3 Consistency with Comprehensive Plans, states that: (a) White Pine has begun consultation with the BLM; (b) BLM will evaluate the project to determine if it is in conformance with the goals and objectives of the Ely District Resource Management Plan (BLM 2008); and (c) White Pine proposes to continue to coordinate with BLM to adopt measures to ensure compliance with the Ely District Resource Management Plan and the 2015 Record of Decision and Approved Resource Management Plan Amendments for the Great Basin Region, Including the Greater Sage-Grouse Sub-Regions of Idaho and Southwestern Montana, Nevada and Northeastern California, Oregon, and Utah. It appears that consultation activities are not complete and that additional, relevant information from further consultation activities may be forthcoming that would be necessary to complete the FLA. As such, please: (a) explain this apparent incomplete consultation with BLM; (b) indicate if additional consultation has also just begun (or is ongoing) with other stakeholders and agencies; (c) identify when consultation activities are anticipated to be complete; and (d) identify when additional, relevant information (including potential measures) from further consultation activities may be filed with the Commission. Additionally, please explain why the Ely District Resource Management Plan is not included in the list of applicable comprehensive plans identified by White Pine as relevant to the project. If the Ely District Resource Management Plan is relevant to the project, as it appears to be because White Pine proposes to adopt measures to ensure compliance with the it, then revise the list of applicable comprehensive plans to include the plan.

Response

In the license application, the applicant reviewed the 16 federal and state comprehensive plans listed in FERC's List of Comprehensive Plans for Nevada. The applicant determined that nine of the plans were potentially applicable to the project and initially ruled out the other seven. Upon additional analysis the applicant has determined that of those nine comprehensive plans only one directly guides the use of the project lands: BLM 2015 Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment (2015 GrSG ARMPA). The BLM Ely District Resource Management Plan (BLM Ely District RMP), as amended (2008) incorporated several comprehensive plans including the Egan Resource Area Management Plan (1987). Therefore, the applicant has identified two guiding comprehensive plans, BLM Ely District RMP and the 2015 GrSG ARMPA, both of which are implemented by BLM. Consultation began with BLM in 2020 and is ongoing. In addition to obtaining a FERC license for the project, the project requires a right of way (ROW) grant on BLM administered federal lands. In early 2023, the applicant submitted a request to BLM – Bristlecone Field Office, Ely District for BLM to convene a GrSG technical working group (TWG) to facilitate discussion and assist in defining acceptable and achievable mitigation measures. The purpose of these mitigation measures is to help frame a project-specific exception to the current 2015 GrSG ARMPA that will result in a net conservation gain for GrSG population and habitat. Further discussions with BLM have resulted in broadening the scope of the TWG to discuss and consider mitigation measures for both GrSG, ungulates, and other wildlife. The BLM invited via letter several federal, state, and local agencies to participate in the TWG. Seven individuals over four organizations (NDOW, BLM, WPC, and NV-SETT) have formed the TWG along with the applicant. The first meeting of the TWG was held on June 27, 2023. Goals established include defining a boundary for wildlife impacts (both direct and indirect) and developing a comprehensive mitigation plan that includes Nevada's Conservation Credit system. Meetings are set to occur monthly, with a target end date of December 2023.

The applicant will consult with the TWG on comprehensive mitigation plans that will be incorporated into the environmental review process and inform the project-specific exception to the comprehensive plan to facilitate construction and operation of the project. The applicant expects these mitigation measures will be incorporated into the FERC environmental review process . The TWG will also allow coordination and input relating to any proposed mitigation measures between the applicant, BLM, and FERC.

While the BLM Ely District RMP is not included in the list of the 16 federal and state comprehensive plans identified in FERC's List of Comprehensive Plans for Nevada, the applicant has identified the BLM Ely District RMP as an applicable plan. This RMP includes a renewable energy goal to "provide opportunities for development of renewable energy sources such as wind, solar, biomass, and other alternative energy sources while minimizing adverse impacts to other resources." The project complies with this renewable energy goal as it will provide an opportunity for significant energy storage capability for these alternative energy sources.

FERC-A1-101 Exhibit F

Section 4.41(g)(3)(iv) of the Commission's regulations requires that the supporting design report include the stability and stress analyses for all major structures and critical abutment slopes under all probable loading conditions, including seismic and hydrostatic forces induced by water loads up to the Probable Maximum Flood as appropriate. Although the Preliminary Supporting Design Report is acceptable, the following additional analyses would need to be completed as per FERC Engineering Guidelines, Chapter 4 during the project design phase if a license is issued:

§ Considering the frequent drawdown operation expected for the project, stability evaluation for the lower and upper reservoir embankments should be completed for sudden drawdown under static and seismic loading. This stability evaluation should consider the potential impacts of linear failure and defects. Since some input parameters and considerations for these analyses may depend on other noncompleted yet studies and evaluations, the sudden drawdown stability analyses should be performed after completing the site-specific Seismic Hazard Assessment.

§ Time history seismic deformation analyses should be performed for the lower and upper reservoirs. These analyses should be performed after completing the Final Site-Specific Seismic Hazard Assessment. Refer to our Engineering Guidelines, Chapter 13, for guidance on site-specific Seismic Hazard Assessments.

RESPONSE:

The applicant acknowledges the Commissions regulations requiring additional analysis during the project design phase following issuance of a license. The applicant confirms that the following additional studies and analysis will be carried out in the next phase of design and looks forward to further input and review by the Commission on these items.

1. Site Specific Hazard Assessment
2. Rapid drawdown for both upper and lower reservoirs under static and seismic loading and with the potential impacts of linear failure and defects
3. Time history seismic deformation analysis for both upper and lower reservoirs

FERC-A1-102 Exhibit G

Although Maps G5 and G6 appear to show that the project boundary encompasses the project cable, main access, and tailrace tunnels, neither is identified in the maps. Please modify Maps G5 and G6 to identify the project facilities.

RESPONSE:

The applicant has updated the requested maps to show the location of all project works and principal features. To facilitate additional labels and facility linework, the applicant has increased the scale and number of maps to allow for additional detail.

All principle underground works within the project boundary are now shown and identified including the cable, main access and tailrace tunnels. (See Attachment 19-1 - Map G10)

FERC-A1-103 Exhibit G

Although Map G6 shows PLSS sections, it does not identify the associated Townships and Ranges. Please modify Map G6 to identify the Townships and Ranges.

RESPONSE:

The applicant has updated the requested maps to show the Townships and Ranges more clearly and included clearer Township and Range outline linework on the maps and legends (See Attachment 19-1 - Map G1 – G13)