Rye Development

June 9, 2023

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

Via Electronic Filing

Re: Western Navajo Pumped Storage Project No. 2, Application for Preliminary Permit.

Dear Secretary Bose:

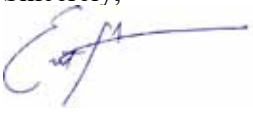
Pursuant to 18 CFR §§ 4.32 and 4.81, Rye Development, LLC, on behalf of Western Navajo Pumped Storage 2, LLC (the Applicant), is submitting to the Federal Energy Regulatory Commission (FERC or Commission) an Application for Preliminary Permit for the Western Navajo Pumped Storage Project No. 2 (Project).

The Project site is located near the Colorado River and the community of Bitter Springs in Coconino County, Arizona. The Project will involve the construction of new water storage, water conveyance, and generation facilities, as well as primary transmission lines. The Applicant is submitting this application to secure and maintain priority of the application for license while undertaking activities to assess the feasibility of the Project and to support an Application for License.

The Project would be located entirely on Navajo Nation lands, and the Navajo Nation through its Navajo-Hopi Land Commission office (NHLCO), has provided its support for the Applicant to conduct the preliminary screening studies described in this Application for Preliminary Permit to evaluate the potential development of the Project. The Navajo Nation's letter of support is included in Attachment A to this Application for Preliminary Permit.

If there are any questions or comments regarding the Application for Preliminary Permit, please contact me at (503) 998-0230, via email at erik@ryedevelopment.com, or at the address below.

Sincerely,



Mr. Erik Steimle
Vice President
Rye Development, LLC
830 NE Holladay St.
Portland, OR 97232

Attachment: Application for Preliminary Permit for the Western Navajo Pumped Storage Project No. 2

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

APPLICATION FOR PRELIMINARY PERMIT
FOR THE
WESTERN NAVAJO PUMPED STORAGE PROJECT NO. 2
FERC PROJECT NO. _____-_____

Prepared by:

WESTERN NAVAJO PUMPED STORAGE 2, LLC

June 9, 2023

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LIST OF FIGURES

LIST OF ABBREVIATIONS

Applicant	Western Navajo Pumped Storage 2, LLC
feet	ft
cubic feet per second	cfs
FERC or Commission	Federal Energy Regulatory Commission
FPA	Federal Power Act
GSU	Generator Step-up Units
GWh	Gigawatt-hour
kV	Kilovolt
msl	Mean sea level
MW	Megawatts
MVA	Megavolt Amperes
Project	Western Navajo Pumped Storage Project No. 2

UNITED STATES OF AMERICA

BEFORE THE

FEDERAL ENERGY REGULATORY COMMISSION

Application for Preliminary Permit

for the

Western Navajo Pumped Storage Project No. 2

June 2023

INITIAL STATEMENT

(1) Western Navajo Pumped Storage 2, LLC, a limited liability company (the Applicant), hereby applies to the Federal Energy Regulatory Commission (FERC or the Commission) for a preliminary permit for the proposed Western Navajo Pumped Storage Project No. 2 (Project), as described in the attached exhibits. This application is made so that the Applicant may secure and maintain priority of application for a license for the Project under Part I of the Federal Power Act (FPA) while obtaining the data and performing the acts required to determine the feasibility of the Project and to support an application for a license.

(2) The location of the Project is:

State or Territory:	Arizona
Counties:	Coconino
Township or nearby town:	Bitter Springs
Stream or body of water:	Colorado River

(3) The exact name and address of the Applicant is:

Western Navajo Pumped Storage 2, LLC
100 S. Olive Street
West Palm Beach, FL 33401

(4) The exact name and business address of each person authorized to act as agent for the Applicant in this application is:

Mr. Erik Steimle
Vice President
Rye Development, LLC
830 NE Holladay St.
Portland, OR 97232
(503) 998-0230
erik@ryedevelopment.com

(5) Western Navajo Pumped Storage 2, LLC is a limited liability company organized and existing pursuant to the laws of the State of Arizona, and as such the Applicant is qualified under Section 4(e) of the FPA to apply for and hold hydroelectric licenses issued under Part I of the FPA. The Applicant is not claiming preference under Section 7(a) of the FPA.

(6) The proposed term of the requested permit is 48 months.

(7) No dams, spillways, waterways, powerhouses, tailraces, or other structures currently exist at the proposed site of the Project.

INFORMATION REQUIRED BY 18 C.F.R. § 4.32

1. Identify every person, citizen, association of citizens, domestic corporation, municipality, or state that has or intends to obtain and will maintain any proprietary right necessary to construct, operate or maintain the project:

The Applicant, Western Navajo Pumped Storage 2, LLC, intends to obtain and will maintain any proprietary rights necessary to construct, operate, and maintain the licensed Project.

2. Identify (providing names and mailing addresses):

(i) Every county in which any part of the project and any Federal facilities that would be used by the project would be located;

County Clerk Coconino County Courthouse 200 N. San Francisco Street Flagstaff, AZ 86001

(ii) Every city, town, or similar local political subdivision:

i. In which any part of the Project, and any Federal facility that would be used by the project, would be located; or

The proposed Project would be located within the following Navajo Nation Chapters:

Bodaway Gap Chapter PO Box 1546 Gap, AZ 86020
Coppermine Chapter PO Box 1323 Page, AZ 86040
LeChee Chapter PO Box 4270 Page, AZ 86040

A portion of the proposed Projects transmission line would be located in the following city:

City of Page 697 Vista Avenue Page, AZ 86040

ii. That has a population of 5,000 or more people and is located within 15 miles of the project dam.

The proposed Project would be located within 15 miles of the following cities/townships that have a population of 5,000 or more people:

City of Page
697 Vista Avenue
Page, AZ 86040

(iii) Every irrigation district, drainage district, or similar special purpose political subdivision (A) in which any part of the project is located, and any Federal facility that is or is proposed to be used by the project is located, or (B) that owns, operates, maintains, or uses any project facility or any Federal facility that is or is proposed to be used by the project:

There is no irrigation district, drainage district, or similar special purpose political subdivision in which any part of the Project is located or that owns, operates, maintains, or uses any Project facility.

No federal facility is proposed to be used by the Project.

(iv) Every other political subdivision in the general area of the project that there is reason to believe would likely to be interested in, or affected by the notification are:

Navajo Nation
Office of the President
100 Parkway, PO Box 7440
Window Rock, AZ 86515

(v) All potentially affected Indian tribes[1]

Fort McDowell Yavapai Nation, Arizona Ruben Balderas President PO Box 17779 Fountain Hills, AZ 85268-7779 rbalderas@ftmcdowell.org	Havasupai Tribe of the Havasupai Reservation, Arizona Thomas Siyuja Chairman 13067 E. Highway 66 Truxton Canon Agency Valentine, AZ 86437 htchair@havasupai-nsn.gov
Hopi Tribe of Arizona Stewart Koyiyumptewa THPO P.O. Box 123 Kykotsmovi, AZ 86039 skoyiyumptewa@hopi.nsn.us	Hualapai Indian Tribe of the Hualapai Indian Reservation, Arizona Martina Dawley THPO PO Box 310 Peach Springs, AZ 86434 mdawley@hualapai-nsn.gov

[1] U.S. Department of Housing and Urban Development's Tribal Directory Assessment Tool (https://egis.hud.gov/TDAT/), accessed May 1, 2023.

Kaibab Band of Paiute Indians of the Kaibab Indian Reservation, Arizona Roland Maldonado Chairperson HC 65, Box 2 Fredonia, AZ 86022-9600 rolandm@kaibabpaiute-nsn.gov	Las Vegas Tribe of Paiute Indians of the Las Vegas Indian Colony, Nevada Deryn Pete Chairwoman One Paiute Drive Las Vegas, NV 89106 dpete@lvpaiute.com
Moapa Band of Paiute Indians of the Moapa River Indian Reservation, Nevada Darren Daboda THPO 1 Lincoln Street Moapa, NV 89025 moapathpo@moapabandofpaiutes.org	Navajo Nation, Arizona, New Mexico & Utah Richard Begay THPO P.O. Box 4950 Window Rock, AZ 86515 r.begay@navajo-nsn.gov
Paiute Indian Tribe of Utah (Cedar Band of Paiutes, Kanosh Band of Paiutes, Koosharem Band of Paiutes, Indian Peaks Band of Paiutes, and Shivwits Band of Paiutes) Corrina Bow Chairwoman 440 N. Paiute Drive Cedar City, UT 84720-2613	San Carlos Apache Tribe of the San Carlos Reservation, Arizona Vernelda Grant THPO P.O. Box 0 San Carlos, AZ 85550 apachevern@yahoo.com
San Juan Southern Paiute Tribe of Arizona Johnny Lehi Jr. President 67 Nw Maple St Tuba City, AZ 86045	White Mountain Apache Tribe of the Fort Apache Reservation, Arizona Mark Altaha THPO P.O. Box 507 Fort Apache, AZ 85926 markaltaha@wmat.us
Yavapai-Apache Nation of the Camp Verde Indian Reservation, Arizona Chris Coder Tribal Archaeologist 2400 West Datsi Street Camp Verde, AZ 86322 ccoder@yan-tribe.org	

VERIFICATION STATEMENT

This application for preliminary permit is executed in the

STATE OF: OREGON

COUNTY OF: MULTNOMAH

By: Mr. Erik Steimle, being duly sworn, deposes and says that the contents of this application for prelminary permit are true to the best of his knowledge and belief. The undersigned applicant has signed this application for preliminary permit this 9th day of June 2023.

Mr. Erik Steimle
Vice-President
Rye Development, LLC
830 NE Holladay St.
Portland, OR 97232
Telephone: (503) 998-0230

Subscribed and sworn to before me, a Notary Public of the State of OREGON, this 9th day of June 2023.

Notary Public

Seal:

OFFICIAL STAMP
DIANA JEFFRIES SOTO
NOTARY PUBLIC - OREGON
COMMISSION NO. 1026874
MY COMMISSION EXPIRES AUGUST 17, 2026

1 EXHIBIT 1 – DESCRIPTION OF THE PROPOSED PROJECT (18 CFR §4.81(b))

1.1 General Project Configuration

The proposed Project is located near the Village of Bitter Springs, Arizona in Coconino County, Arizona (Figure 3.1-1).

The Project is proposed as a closed-loop pumped storage hydroelectric generating facility, which will involve the construction of new water storage, water conveyance, and generation facilities at off-channel locations where no such facilities exist at this time. The proposed Project concept is based on traditional pumped storage technologies of "storing" electric energy in the form of hydraulic potential, by pumping water to an upper reservoir during off-peak times and allowing it to flow back through hydroelectric turbines when electric demand is peaking. Because the Project is proposed as a closed-loop pumped storage project, it will derive the benefits of traditional pumped storage, essentially increasing off-peak load and increasing generating capacity during peak demand periods, but in an improved manner that reduces and avoids many of the environmental impacts of the traditional pumped storage facility design.

The existing Project site features topography beneficial to a closed loop system. A plateau near US Route 89 is proposed to be utilized as the lower reservoir. Water will be circulated between a lower and upper reservoir to store/generate power. Water from the Colorado River is proposed to be used to initially fill the lower reservoir and as a source of make-up water to periodically replace water lost to evaporation and infiltration. Water is proposed to be supplied to the Project from the future Western Navajo water supply line project.

Dams and Embankments:

The lower reservoir will be located approximately 4,200 feet (ft) west from the proposed upper reservoir. A zoned rockfill embankment dike approximately 75 ft high and 6,200 ft long is proposed to be constructed to enclose the perimeter of the 55-acre lower reservoir with a water surface elevation of 5,475 ft mean sea level (msl). The embankment ring dike will have an impermeable clay core and an impermeable concrete liner on water side slope.

Lower Reservoir Configuration	
Structure Type	Zoned rockfill embankment ring dike
Height	75 ft
Length	6,200 ft

The upper reservoir will be located approximately 4,200 ft east from the proposed lower reservoir. A zoned rockfill embankment dike approximately 75 ft high and 6,500 ft long is proposed to be constructed to enclose the perimeter of the 55-acre upper reservoir with a water surface elevation of 6,475 ft msl. The embankment ring dike will have an impermeable clay core and an impermeable concrete liner on water side slope.

Upper Reservoir Configuration	
Structure Type	Zoned rockfill embankment ring dike
Height	75 ft
Length	6,500 ft

Intake /Water Conveyance Structures:

During generation, the proposed system will draw water from the upper reservoir through a steel reinforced concrete intake structure, using the force of gravity, down a 1,000 foot-long, 24-foot diameter vertical power tunnel/shaft connecting to a 4,600-foot-long horizontal power tunnel to the powerhouse. The horizontal power tunnel will have a horse-shoe configuration with an approximate area of 452 square-feet. Flow will then be conveyed through a steel manifold, to four (4) reversible pump-turbine units, before discharging into the lower reservoir. To prevent debris from being entrained, steel trashracks with 3.75-inch bar spacing will be installed to span the intakes in both the upper and lower reservoirs.

Water Conveyance Structure Configuration	
Total Length Horizontal Power Tunnel	4,600 ft
Total Length Vertical Power Tunnel	1,000 ft
Power Tunnel Diameter	24 ft
Intake Structure Composition	Steel/concrete

Powerhouse:

The proposed 120-foot wide by 500-foot-long, 100-foot-high reinforced-concrete powerhouse will be located on the eastern edge of the lower reservoir with an integral intake and four (4) Francis pump-turbine units. The proposed powerhouse will contain four 99-Megawatt (MW) pump-turbine units with a combined capacity of 396 MW under a design head of approximately 1,000 ft. As a pumped storage project, the facility will be configured to generate 396 MW in cycling or peaking mode for approximately eight hours a day, with 16 hours of the remainder of the daily cycle used to pump the water from the lower reservoir back up to the upper reservoir, using the reversible turbines as pumps running on off-peak power.

During pumping operations, water will be drawn through the four (4) reversible Francis pump-turbine units into four 12-foot-diameter steel pipes that will merge into a 24 foot-diameter penstock, which will convey water to the upper reservoir. During generation, operations will be reversed.

Powerhouse Configuration	
Pump-Turbine Type	Reversible Francis
Number of Units	4
Rated Discharge (per unit)	1,560 cfs
Total Rated Project Discharge	6,240 cfs
Installed Generation Capacity (per unit)	99 MW
Total Installed Generation Capacity	396 MW
Hydraulic Head	1,000 ft

Refill Conduit/Pumping Station:

While further studies will be performed to develop an understanding of existing groundwater hydrology and surface water resources, it is proposed that the Colorado River will be used for the initial filling of the lower reservoir and for periodically replenishing water lost to evaporation and or infiltration. A concrete pump station with a capacity of 100 cfs is proposed along the southern bank of the Colorado River, which will be used to convey water through a 2,640-feet-long, 2.5-foot diameter steel conduit to the lower reservoir.

Refill Conduit/Pumping Station Configuration	
Pumping Station Capacity	100 cfs
Refill Conduit Length	2,640 feet
Refill Conduit Diameter	2.5 ft

1.2 Reservoirs

1.2.1 Upper Reservoir

The Project will include a proposed upper reservoir constructed with a normal maximum water surface elevation of approximately 6,475 ft msl. The upper reservoir would cover approximately 55 acres and the perimeter would be contained by a zoned rockfill embankment approximately 75 feet high. The approximate storage volume of the upper reservoir will be 4,125 acre-ft. The upper reservoir will receive water pumped from the proposed lower reservoir during normal Project operation.

Upper Reservoir	
Surface Area at Maximum Pool	55 acres
Active Storage Capacity	4,125 acre-ft
Maximum Water Surface Elevation	6,475 ft, msl

1.2.2 Lower Reservoir

The proposed lower reservoir would be constructed in an existing canyon and would cover approximately 55 acres and the remaining perimeter of the lower reservoir would be contained by a 75-foot-high zoned rockfill ring dike. The lower reservoir would have a normal maximum water surface elevation of approximately 5,475 ft msl, and a storage capacity of approximately 4,125 acre-ft.

Lower Reservoir	
Surface Area at Maximum Pool	55 acres
Active Storage Capacity	4,125 acre-ft
Maximum Water Surface Elevation	5,475 ft, msl

1.3 Transmission Lines

The proposed Project would include a new 30-mile long, 230 kV overhead transmission line that will extend from a proposed substation near the proposed powerhouse to an interconnection point with the existing substation adjacent to Glen Canyon Dam approximately 2 miles northwest of Page, Arizona. The transmission route will follow an approximately 150-foot-wide corridor west until the proposed route meets an existing 200-foot-wide transmission corridor. The proposed transmission lines will cross the Colorado River. The proposed substation will include two 200 MVA Generator Step-up Units (GSUs), relays and controls, breakers, and switches as required by the existing substation owner/electric service provider.

1.4 Estimate of Annual Energy Production

The powerhouse will be equipped with four (4) reversible Francis pump-turbines with a total installed capacity of 396 MW under a design head of 1,000 ft. The estimated average annual energy production is 1,156 Gigawatt-hours (GWh). This value is based on an assumed operation in cycling or peaking mode for approximately eight hours a day, with 16 hours of the remainder of the daily cycle used to pump the water. The turbine/generating units will be newly manufactured for the Project.

1.5 Lands of the United States

The Commission's regulations for Exhibit 1 of a preliminary permit application (18 CFR §4.81(b)(5)) provide that FERC Form 587 must be included in the application for Projects with boundaries that include lands of the United States. As currently contemplated, most of the Project would occupy lands within the Navajo Nation. As part of Applicant's feasibility assessments, additional work will determine whether the

Project occupies federal land within the Navajo Nation. Additionally, a portion of the proposed Project's transmission line will be located on federal land within the Glen Canyon National Recreation Area, and the point of interconnection will be located at the Glen Canyon Dam substation. Accordingly, Applicant has included a FERC Form 587 in this application (see Attachment B) with respect to federal lands within Glen Canyon National Recreation Area.

1.6 Public Interest

The proposed Project will fulfill the public interest in the following manner.

- Provide a reliable source of green, renewable power.
- Add much needed peaking capacity.
- Offer sustainable development with direct investment into the local and regional economy.
- Improve black start capability of the regional power grid.
- Increase transmission system performance and reliability.
- Improve thermal plant efficiency by reduced operation in inefficient rapid response mode.
- Reduce thermal generation reserve requirement.
- Reduce volatility of electricity prices, adding balance to load disparities in the market.
- Provide a method to store intermittently generated energy, such as wind and solar energy.

2 EXHIBIT 2 – DESCRIPTION OF PROPOSED STUDIES (18 CFR § 4.81(c))

2.1 Description of Studies

Upon issuance of a Preliminary Permit, the Applicant proposes to conduct detailed studies to determine the overall feasibility of the Project and potentially support the preparation of an Application for License, as described below.

2.1.1 Description of Proposed Studies

The Applicant has performed preliminary review of the proposed Project as part of a prefeasibility study. The Applicant proposes to conduct a more detailed feasibility study of the technical features of the Project. The feasibility study will be designed to evaluate various Project concepts, layouts, and equipment arrangements to optimize Project configuration, while considering potential environmental impacts. The study will be in sufficient depth and breadth to provide information needed for the preparation of an Application for License and construction of the Project. The feasibility study is expected to include, but not be limited to, the following.

1. Evaluations of alternative Project configurations, and selection of preferred alternative.
2. Topographic land surveys.
3. Geotechnical and seismic investigations.
4. Public resources investigations, including but not limited to:
    - water supply investigations,
    - water quality investigations,
    - fisheries surveys,
    - wildlife and botanical surveys,
    - wetland surveys,
    - endangered and threatened species investigations,
    - recreation assessments,
    - aesthetic and visual resource surveys,
    - socio-economic/environmental justice assessments, and
    - cultural resource surveys.
5. Engineering studies to optimize Project configuration, while avoiding and minimizing potential Project impacts.
6. Power marketing assessments and preliminary power sales analyses.
7. Transmission interconnection planning.
8. Cost estimating, economic feasibility, and financial planning investigations.

If the result of the feasibility analysis is favorable, the following activities are envisioned to take place during the remaining preliminary permit term to support the FERC licensing and development of the Project.

9. Develop Notice of Intent and Pre-Application Document.
10. Stakeholder consultation and discussion.
11. Additional study plan preparation and scoping, as needed.
12. Develop Application for License.

2.1.2 Water Supply

The Colorado River is preliminarily identified as a water supply for replenishing water lost due to evaporation and/or infiltration as well as the initial filling of the lower reservoir. The lower reservoir is located less than a mile away from a branch of the future Western Navajo Pipeline, a proposed water supply line that would distribute water from the Colorado River to communities in the western regions of the Navajo Nation. It is proposed that the Western Navajo Pumped Storage 2 fill/refill conduit and pump station

described in Section 1.1 be connected to the Western Navajo Pipeline once constructed. However, to investigate other potential water supply sources, including the Colorado River, studies will be conducted to gain an understanding of local hydrology, hydrogeology, groundwater resources, seasonal variability in river water resources, groundwater/surface water relationships, and potential impacts to river flows.

2.1.3 Need for New Roads

New access roads may be needed to complete the studies described above. If the geotechnical and engineering studies proposed in Section 2.1.1 require new or additional temporary access routes, those routes and their restoration will be coordinated with applicable landowners. The location of potential new roads are shown in Figure 3.2-1.

2.2 Work Plan for New Dam Construction

2.2.1 Description of Field Studies

The upper and lower reservoir locations will be investigated by borehole drilling, test pits, sampling and in-situ and laboratory testing. Measures will be taken to avoid or minimize disturbance at the drill sites. There will be no investigations in wetland areas or navigable streams. The locations and timing of such investigations have yet to be determined; however, the drilling will be conducted within the identified Project footprint.

2.2.2 Proposed Schedule

A proposed schedule showing the approximate intervals at which studies, investigations, tests, or surveys are anticipated to be completed during the permit term (i.e., 48 months) is provided below and is subject to change as determined by field conditions and/or additional information.

Task	From beginning of Month	To end of Month
Evaluations of alternative Project configurations, and selection of preferred alternative	0	12
Topographic land surveys	6	18
Geotechnical and seismic investigations	6	18
Public resources investigations	12	36
Engineering studies to optimize Project configuration	12	24
Power marketing assessments and preliminary power sales analyses	24	36
Transmission interconnection planning	12	24
Cost estimating, economic feasibility, and financial planning investigations	12	36
Preparation, consultation, and filing of Application for License	24	48

2.3 Waiver

It is anticipated that preliminary field studies, tests, and other activities to be conducted under the permit would not adversely affect cultural resources or endangered species and would cause only minor alterations or disturbances of lands and waters, and that any land altered or disturbed would be adequately restored. The Applicant therefore requests waiver of the full requirement of 18 CFR § 4.81(c)(2).

2.4 Statement of Cost and Financing

2.4.1 Estimated Costs

The total cost for completing items 1 through 8 in Section 2.1-1 is estimated to range from $1,000,000 to 1,500,000. If items 9 through 12 in Section 2.1-1 are undertaken the total cost is estimated to range from $750,000 to $1,250,000 for completing those four items.

2.4.2 **Project Financing**

The expected source of financing to conduct the activities identified in Section 2.1-1 is the Applicant. The source of funding for these activities is from private funds expected to be available to the Applicant.

3 EXHIBIT 3 – PROJECT MAPS (18 CFR § 4.81(d))

This section contains maps showing the location, the Project layout, and the Project boundary for the proposed Project.

3.1 General Location of Proposed Project

The proposed Project location is shown on Figure 3.1-1.

3.2 Project Features

The probable locations of the primary Project features are shown in Figure 3.2-1.

3.3 Proposed Project Boundary

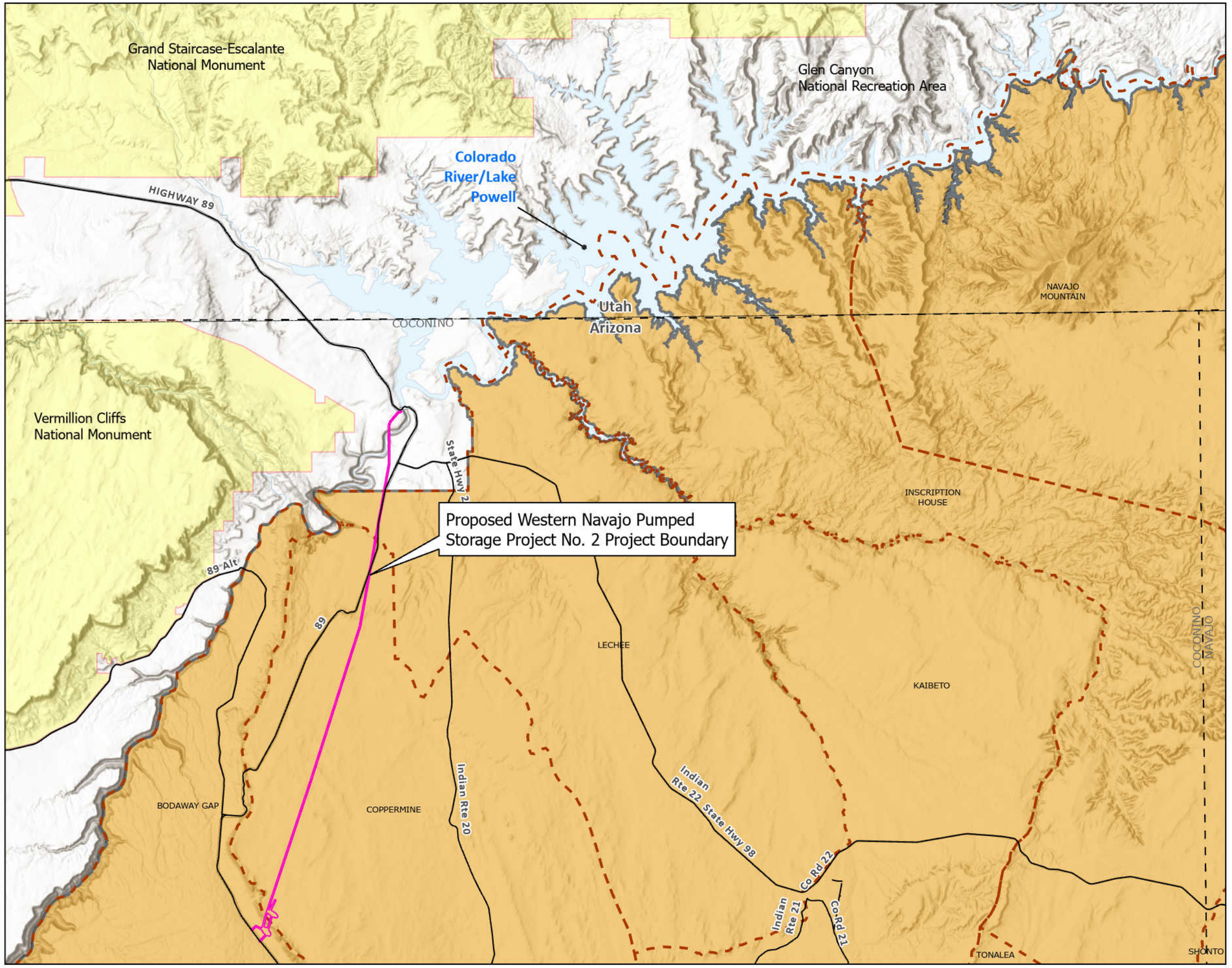
The proposed Project boundary is shown on Figure 3.3-1.

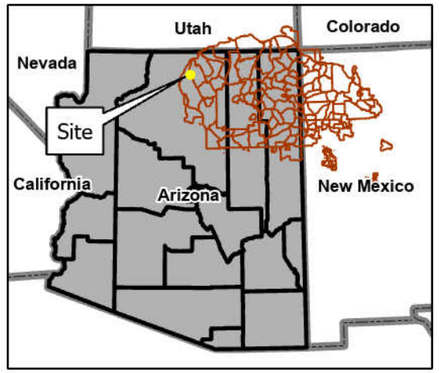
3.4 National Wild and Scenic River Systems

The proposed Project boundary does not include any areas designated as or being considered for inclusion in the National Wild and Scenic Rivers System. There are no areas designated as or being considered for inclusion in the National Wild and Scenic Rivers System within 15 miles of the proposed Project area.

3.5 Designated Wilderness Areas

The proposed Project boundary does not include any areas designated as or recommended for designation as a wilderness area or wilderness study area under the Wilderness Act. The Paria Canyon-Vermillion Cliffs Wilderness Area is located within the Vermillion Cliffs National Monument approximately 10 miles west of the proposed Project area but would not be affected by the proposed Project





Preliminary Permit Application
Copper Mine Pumped Storage Project

Figure 3.1-1:
Proposed Project Location Map

Legend

- County Boundary
- Navajo Nation Chapter Boundary
- Proposed Project Boundary
- National Monument
- Navajo Nation Lands
- Roads
- National Recreation Area

Service Layer Credits: World Terrain Base: Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, Bureau of Land Management, EPA, NPS
World Hillshade: Esri, NASA, NGA, USGS

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Rye Development

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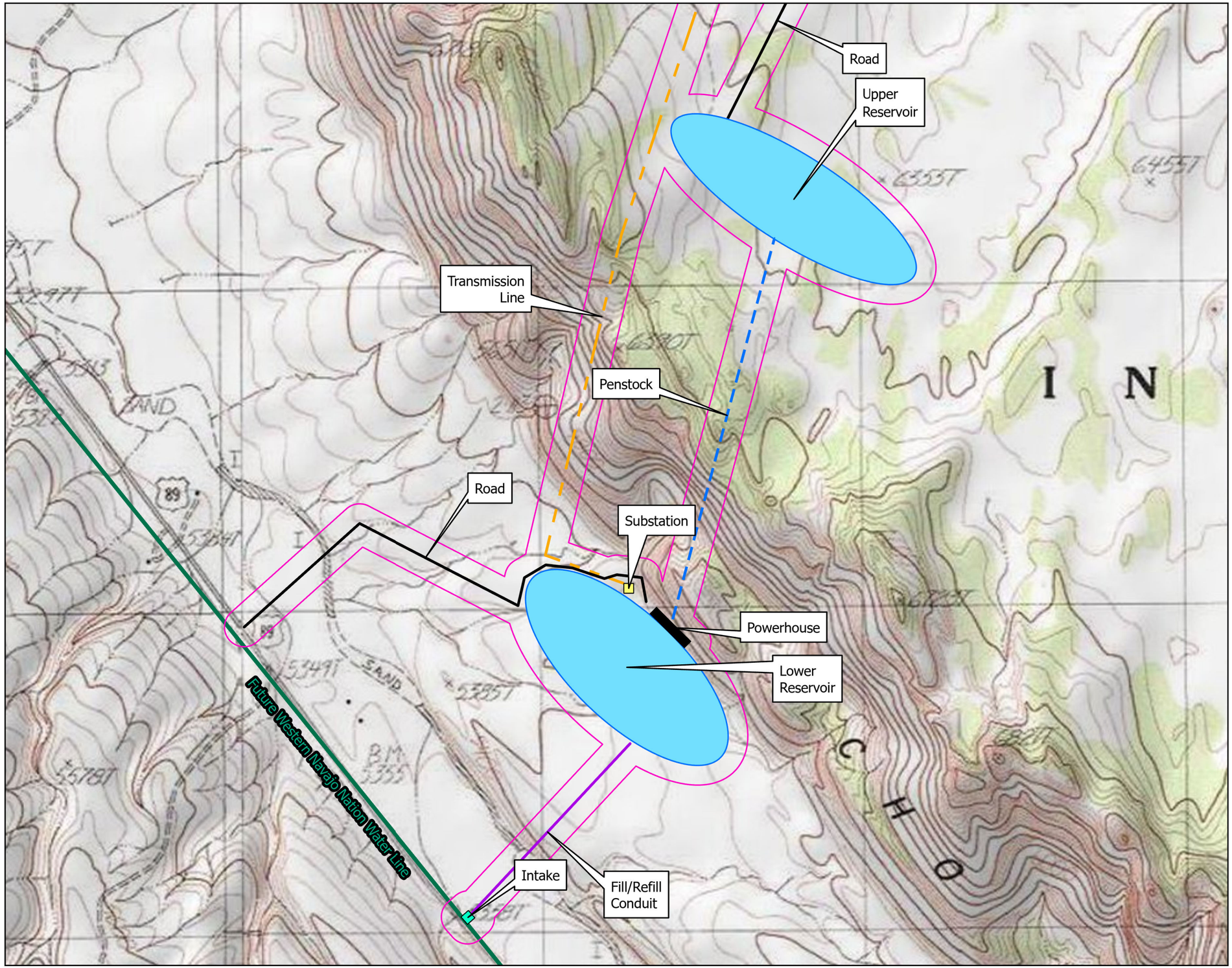

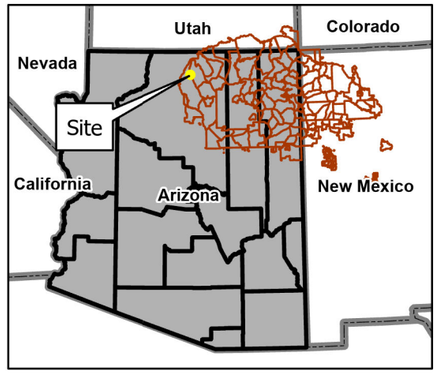

Preliminary Permit Application
Copper Mine Pumped Storage Project

Figure 3.2-1:
Proposed Project Features

Legend

- Proposed Project Boundary
- Intake
- Reservoir
- Powerhouse
- Substation
- Fill/Refill Conduit
- Penstock
- Road
- Transmission Line
- Future Western Navajo Water Line

N

0 500 1,000 2,000 Feet

Rye Development

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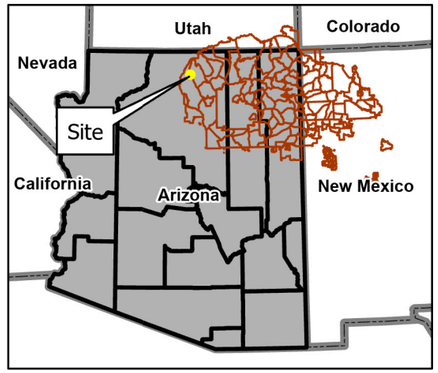
Existing Substation
Glen Canyon Dam

Proposed Copper Mine
Project Boundary



Preliminary Permit Application
Copper Mine Pumped Storage Project

Figure 3.3-1:
Proposed Project Boundary

Legend

- Proposed Project Boundary
- Future Western Navajo Water Line

N

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Rye Development

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ATTACHMENT A-NAVAJO NATION LETTER OF SUPPORT

February 6, 2023

Mr. Erik Steimle, Vice President
Rye Development
830 NE Holladay St.
Portland, Oregon 97232

Dear Mr. Steimle:

I am writing as the Executive Director of the Navajo Hopi Land Commission Office (NHLCO) to express this Office's support for Rye Development to complete the preliminary screening studies to evaluate the potential development of closed loop hydropower pumped storage projects.

We appreciate Rye Development's early outreach and education efforts on low-impact hydroelectric power pumped storage, and this administration wishes to work with Rye Development to understand the full potential for projects to be developed within the Navajo Nation.

This administration understands that a significant amount of energy storage needs to be developed for the region to meet its clean energy goals. Variable renewable energy resources like wind and solar need the kind of support that a closed-cycle pumped storage hydro project provides.

We understand that Rye Development would complete these preliminary screening studies which would identify potential development sites, and then Rye would present this information to the Navajo Nation and relevant Chapter(s) to explain the results of such analysis. At that point, more detailed discussion about water and land resources would commence. This letter does not obligate the Navajo Nation to advance a pumped storage project.

Please keep me and my office informed of your efforts and progress.

Respectfully,

R MM

Raymond Maxx, Executive Director
Navajo Hopi Land Commission Office

RM:cgp

xc: Patrick J. Sandoval, Chief of Staff, Office of the President and Vice President
File/Chrono

ATTACHMENT B-FORM 587

Form FERC-587
OMB No. 1902-0145
(Expires 12/31/2024)

LAND DESCRIPTION

Public Land States
(Rectangular Survey System Lands)

1. STATE Arizona 2. FERC PROJECT NO. Pending

3. TOWNSHIP T41 N RANGE R 8 E MERIDIAN Gila-Salt River

4. Check one:

____License
__X__Preliminary Permit

Check one:

_____Pending
_____Issued

If preliminary permit is issued, give expiration date:_____

5. EXHIBIT SHEET NUMBERS OR LETTERS

Section 6	**5**	**4**	**3**	**2**	**1**
7	**8**	**9**	**10**	**11**	**12**
18	**17**	**16**	**15**	**14**	**13**
19	**20**	**21**	**22**	**23**	**24** National Park Service Exhibit 3
30	**29**	**28**	**27**	**26**	**25** National Park Service Exhibit 3
31	**32**	**33**	**34**	**35**	**36** National Park Service Exhibit 3

6. contact's name Erik Steimle

telephone no. (503-998-0230)

Date submitted 6/9/2023

This information is necessary for the Federal Energy Regulatory Commission to discharge its responsibilities under Section 24 of the Federal Power Act.