



November 30, 2011

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
DHL, PJ-14
Washington, D.C. 20426

Re: Application for Preliminary Permit
Cortez Pumped Storage Project

Dear Ms. Bose,

Please find attached an Application for Preliminary Permit for the Cortez Pumped Storage Project.

If you have any questions or need additional information, please contact me at (425) 635-1000 or e-mail at d.thompson@incainc.com.

Sincerely,

A handwritten signature in black ink that reads "Donald Thompson". The signature is written in a cursive, flowing style.

Donald Thompson
Project Manager

INCA Engineers Inc.

400 112th Ave NE, Suite 400, Bellevue, WA 98004
Tel: 425.635.1000 Fax: 425.635.1150 www.incainc.com

VERIFICATION STATEMENT

This Application for Preliminary Permit for the Cortez Pumped Storage Project is executed in the:

State of Washington

County of King

By: Donald Thompson
INCA Engineers, Inc.
400 112th Avenue N.E., Suite 400
Bellevue, WA 98004

Donald Thompson, being duly sworn, deposes and says that the contents of this Application for Preliminary Permit are true to the best of his knowledge or belief. The undersigned applicant has signed the application this 30th day of NOVEMBER, 2011.

By: Donald Thompson

Donald Thompson, Project Manager

Subscribed and sworn to before me, a Notary Public of the State of Washington this 30th day of NOVEMBER, 2011.

Jaime A. Hillman

My commission expires: 5-09-14



BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

Application for Preliminary Permit

1. INCA Engineers, Inc. applies to the Federal Energy Regulatory Commission for a preliminary permit for the proposed Cortez Pumped Storage Project, as described in the attached exhibits. This application is made in order that the Applicant may secure and maintain priority of application for a license for this Project under Part I of the Federal Power Act 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 proposed project is:
 - State or Territory: Colorado
 - County: Montezuma County
 - Township or Nearby Town: Dolores
 - Stream or Other Body of Water: Plateau Creek
3. The exact name, business address, and telephone number of the Applicant is:
 - INCA Engineers, Inc.
 - 400, 112th Ave. N.E., Suite 400
 - Bellevue, WA, 98004
 - Phone: (425) 635-1000
 - Fax (425) 635-1150

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

Donald Thompson
INCA Engineers, Inc.
400, 112th Ave. N.E., Suite 400
Bellevue, WA, 98004
Phone: (425) 635 1000
Fax (425) 635-1150
E-mail: d.thompson@incainc.com

4. INCA Engineers, Inc. is a domestic corporation and is not claiming preference under section 7(a) of the Federal Power Act.
5. The proposed term of the requested permit is 36 months.
6. The proposed project will not require the use of an existing dam.
7. The following exhibits are filed herewith and are hereby made a part of this application.
 - Exhibit 1: Project Description
 - Exhibit 2: Study Plan
 - Exhibit 3: Project Maps

Information per 18 CFR 4.32(a)

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.

INCA Engineers, Inc.
400 112th Avenue N.E.
Suite 400
Bellevue, WA 98004
Tel: 425-635-1000

2. Identify:

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

Montezuma County
Montezuma County Courthouse
109 West Main Street
Cortez, CO 81321
970-565-8317

Dolores County
County Clerk
409 North Main Street
P.O.Box 58
Dove Creek, CO 81324
970-677-2381

- (ii) Every city, town, or similar local political subdivision:
 - a. In which any part of the project, and any Federal facilities that would be used by the project, would be located:

None

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

City of Cortez
Cortez City Hall
210 E. Main Street
Cortez, CO 81321
970-565-8172

- (iii) 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:

None

- b. That owns, operates, maintains, or uses any project facilities or any Federal facilities that would be used by the project:

None

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

U.S. Forest Service
Rocky Mountain Region
740 Simms Street
Golden, CO 80401
303-275-5350

U.S. Bureau of Reclamation
Upper Colorado Region
125 South State Street
Room 6107
Salt Lake City, Utah 84138-1147

Dolores Water Conservancy District
60 S. Cactus
P.O.Box 1150
Cortez, CO 81321
970-565-7562

(v) All Indian tribes that may be affected by the project:

None known

EXHIBIT 1

PROJECT DESCRIPTION

Project Location

The lower reservoir of the Cortez Pumped Storage Project will be located on Plateau Creek, approximately 8 miles north of the Town of Dolores, Colorado. The upper reservoir will be located on a mesa immediately west of the lower reservoir. The Project is located in Montezuma County, Colorado, Sections 21, 22, 27, and 28 of Township 39N, Range 15W.

Drainage Area and Streamflow

The drainage area above the proposed dam on Plateau Creek is approximately 83 square miles. Average annual flow at the diversion is estimated to be 74 cfs, based on limited recorded daily flows at the discontinued USGS gage 09167450.

Proposed Project Facilities

The project will consist of the following features:

1. Upper dam and reservoir.
2. Two steel penstocks, 15 feet in diameter, each consisting of a surface penstock, a vertical shaft, and an inclined tunnel.
3. An underground powerhouse, containing two 250-MW vertical shaft, reversible pump turbines, rated at 875 feet of net head.
4. Two Tailrace Tunnels, 27 feet in diameter and 850 feet long.
5. Switchyard
6. Plateau Dam and reservoir.
7. A 230 kV transmission line, 7 miles in length from the switchyard to an interconnection with an existing 230 kV transmission line to the east.

The Upper Dam will be located on a mesa to the west of Plateau Creek, as shown in Figure 1. The surface area of the reservoir will be 275 acres at normal maximum operating level, El 8015. The 8,000 ac-ft active storage reservoir will have a minimum operating level of El. 7955. The

Upper Dam will consist of either a roller-compacted concrete or embankment dam constructed across a ravine draining into Dry Canyon on the west side of the mesa and extending to the east and north as shown in Fig. 1. The dam will be 6,500 feet in length and have a maximum height of 130 feet with the crest at El. 8018. An ungated spillway will be sized to discharge the approximate 7,800 cfs of pumping capacity back to the lower reservoir without overtopping the Upper Dam.

Plateau Dam will be located in Plateau Creek Canyon, as shown in Figure 1. The dam type will be determined during the study phase, but will be a maximum height of 270 feet with the crest at El. 7170 and crest length of approximately 800 feet. Normal maximum and minimum reservoir elevations will be El. 7165 and El. 7080, respectively, which will provide 9,500 ac-ft of active storage capacity. Reservoir surface area is approximately 200 acres at El. 7165. The dam will incorporate a spillway within the structure capable of passing the inflow design flood, and a low-level outlet works to maintain downstream flow.

Estimated Average Annual Energy Generation

Annual generation will vary depending on the final adopted operating plan. Estimates of annual generation may vary between 600 and 1,500 GWh.

Lands of the United States

The entire project will be located within the San Juan National Forest, and will encompass approximately 1,000 acres of federal lands.

EXHIBIT 2

STUDY PLAN

During the term of the preliminary permit period, technical, economic, and environmental studies will be conducted to determine the feasibility of the project. The studies will consist of both office and field investigations to refine preliminary dimensions, project arrangement, operating parameters, costs and environmental or institutional constraints.

The Applicant's Study Plan will generally consist of the following:

1. Consult and work with state, federal and local resource agencies, tribes and nongovernmental organizations that have interest in the project's development.
2. Evaluate potential and unavoidable project impacts to environmental resources.
3. Analyze the benefits and costs of alternative sizes, locations, alignments and materials to the major project facilities.
4. More fully develop the project arrangement.
5. Obtain permission to access project lands for conducting studies, and begin negotiations to use such lands for project purposes. All project lands are currently federally owned.
6. Conduct power operation studies.
7. Evaluate power sales and power purchase options.
8. Conduct additional studies of the flow in Plateau Creek.
9. Conduct geotechnical and geological investigations of the proposed Upper and Plateau Dam sites following consultation with appropriate resource agencies.

No new roads will need to be constructed for the purpose of conducting the studies. Field studies, tests, and other activities to be conducted under the Preliminary Permit would include topographic mapping, geologic/geotechnical investigations, streamflow data collection in Plateau Creek, and surveys to support various environmental resource studies for preparation of a license application. Access is available via Forest Service roads. Field studies will be primarily conducted on foot. Disturbances to land or water would be minor, and any such disturbance or

alteration would be adequately restored in accordance with local ordinances, and State and Federal laws.

Statement of Costs and Financing

The cost to conduct the studies and investigations identified in Exhibit 2 is estimated to range between \$2,000,000 and \$3,000,000. This cost will be borne by the Applicant and private investors.

Generation from the project will be marketed to several electric utilities in the region. Based on preliminary review, the proposed project is feasible and will be a valuable addition to firming up existing generation resources in the region.

EXHIBIT 3
PROJECT MAPS

Figures 1 and 2 show the general features of the project. Figure 3 shows the proposed project boundary. An index to these figures is also enclosed.

The Project will be located on lands entirely within the San Juan National Forest. The Applicant has researched the status of lands within the Project boundary and has found no lands to have been designated as wilderness under the Wilderness Act or included in the National Wild and Scenic Rivers System. The Applicant is not aware of any Project lands to be presently under study for inclusion therein.

LAND DESCRIPTION

**Public Land States
(Rectangular Survey System Lands)**

1. STATE COLORADO 2. FERC PROJECT NO. _____
3. TOWNSHIP 39N RANGE 14W MERIDIAN NEW MEXICO PRINCIPAL

4. Check one:

☐ License
☐ 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 |
| EXHIBIT 3 | EXHIBIT 3 | EXHIBIT 3 | | | |
| 30 | 29 | 28 | 27 | 26 | 25 |
| 31 | 32 | 33 | 34 | 35 | 36 |

6. contact's name DON THOMPSON

telephone no. (425-709-9954)

Date submitted 11/30/2011

LAND DESCRIPTION

Public Land States
(Rectangular Survey System Lands)

1. STATE COLORADO 2. FERC PROJECT NO. _____
3. TOWNSHIP 39 N RANGE 15 W MERIDIAN NEW MEXICO PRINCIPAL

4. Check one:

☐ License
☒ Preliminary Permit

Check one:

☐ Pending
☐ Issued

If preliminary permit is issued, give expiration date: _____

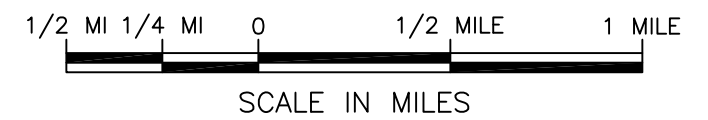
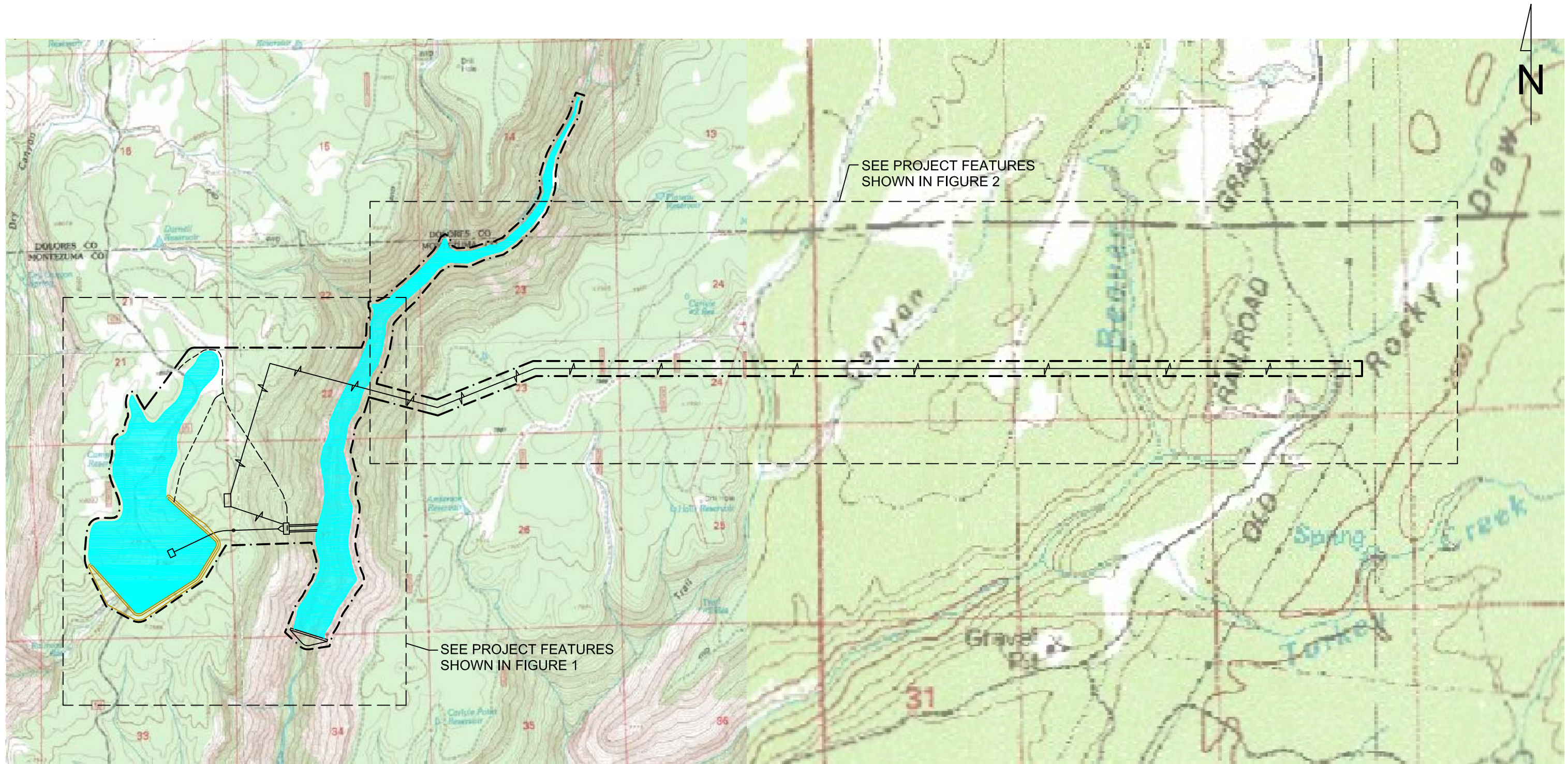
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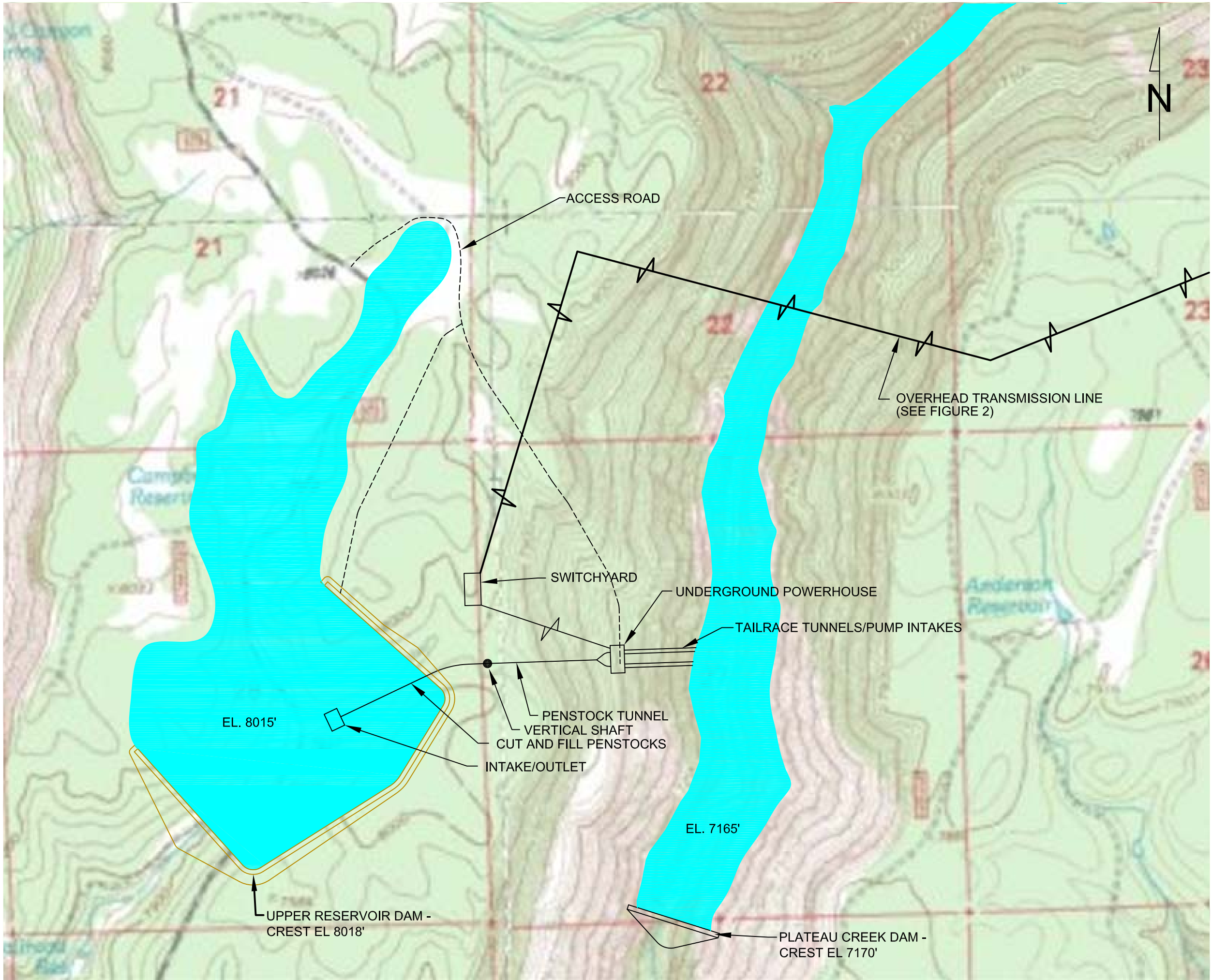
6. contact's name DON THOMPSON

telephone no. 425-709-9954

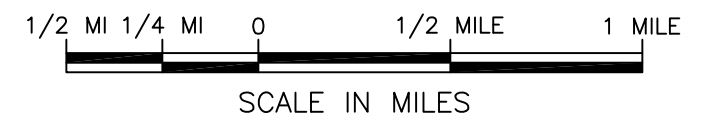
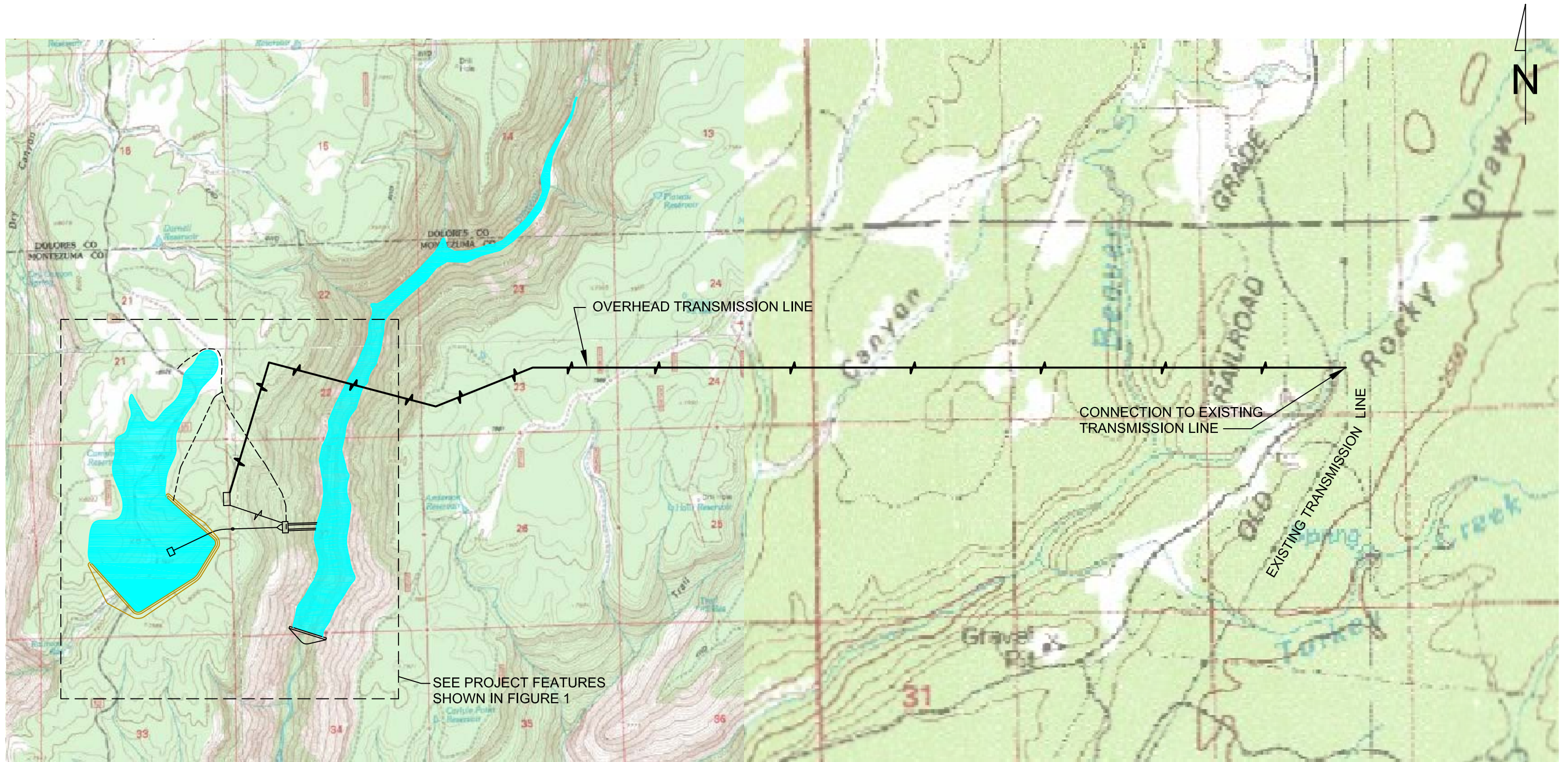
Date submitted 11/30/2011



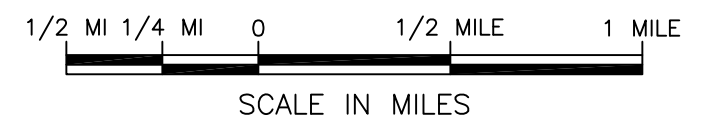
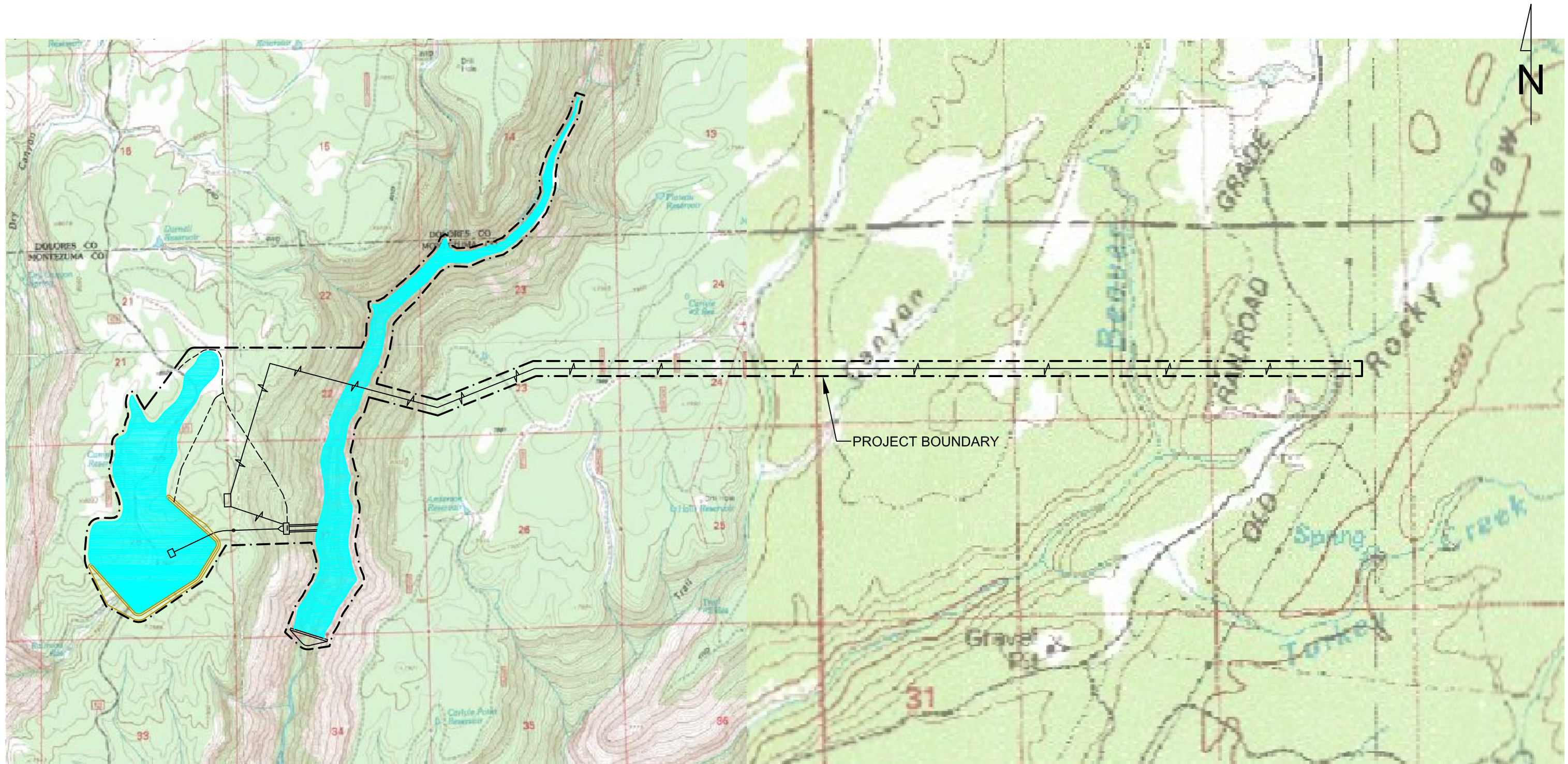
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| APPLICATION FOR PRELIMINARY PERMIT INCA ENGINEERS, INC. | |
| CORTEZ PUMPED STORAGE PROJECT | |
| INDEX SHEET | |
| NOV. 2011 | FIGURE 0 |



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| APPLICATION FOR PRELIMINARY PERMIT INCA ENGINEERS, INC. | |
| CORTEZ PUMPED STORAGE PROJECT | |
| PROJECT FEATURES | |
| NOV. 2011 | FIGURE 1 |



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| APPLICATION FOR PRELIMINARY PERMIT INCA ENGINEERS, INC. | |
| CORTEZ PUMPED STORAGE PROJECT TRANSMISSION LINE | |
| NOV. 2011 | FIGURE 2 |



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| APPLICATION FOR PRELIMINARY PERMIT INCA ENGINEERS, INC. | |
| CORTEZ PUMPED STORAGE PROJECT | |
| PROJECT BOUNDARY | |
| NOV. 2011 | FIGURE 3 |