BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION:

APPLICATION FOR

PRELIMINARY PERMIT

INITIAL STATEMENT

1. CAT CREEK ENERGY, LLC (Applicant) applies to the Federal Energy Regulatory Commission (FERC) for a successive preliminary permit for the proposed CAT CREEK ENERGY GENERATION FACILITY (CCEG), a pump storage project as described in the attached exhibits. The application is made in order that the applicant may secure and maintain priority of application for a license for the 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 license.

2. Location of the facility is:

   State or territory: Idaho

   County: Elmore

   Township or nearby town: Sec. 2 and NW ¼ Sec. 1 of T1S R9E, and Sec 35, portions of Sec. 25, 26, and 36 of T1N R9E- Boise Meridian–Approximately 22.6 miles NE of Mountain Home, Idaho.

   Stream or body of water: Anderson Ranch Reservoir

3. The exact name and business address of the applicant is:

   CAT CREEK ENERGY, LLC
   1989 South 1875 East
   Gooding, ID 83330

4. The exact names and business addresses of each person authorized to act as agent for the applicant are:

   Ted S. Sorenson, P.E.
   Sorenson Engineering
   5203 S. 11th East
   Idaho Falls, ID 83404

   James T. Carkulis
   Cat Creek Energy, LLC
   398 S. 9th Street, Suite 240
   Boise, ID 83702
   Box 403
   Helena, MT 59625

Cat Creek Energy
398 S. 9th Street, Suite 240
Boise, ID 83702

5. The proposed term of the permit is 36 months.

6. The project would utilize the existing Anderson Ranch Reservoir, an impoundment of the Anderson Ranch Dam, a Bureau of Reclamation facility. A new earthen dam would be constructed adjacent to Anderson Ranch Reservoir. The dam would mainly impound water on privately owned/deeded ground, Wood Creek Ranch, LLC, above the existing reservoir as well as some USDA Forest Service ground. Total impoundment volume of 63,500 acre feet. A new 720 MW powerhouse would be constructed below the new earthen dam. Six 14-16 ft diameter penstocks with a net head of 840 feet would convey waters from the new impoundment through the facility for power production during peak periods of demand. The same penstocks would then be used to restore water to the impoundment via separate pumping facilities during low periods of power demand.

7. The project is located in Elmore County Idaho, c/o Elmore County Courthouse, 150 South 4th East Suite 5, Mountain Home, ID 83647.

8. CCEG is located north, north east of Mountain Home, ID and includes the proposed impoundment and surrounding area of the lake which encompasses the project site. There are no incorporated cities within 15 miles of the project boundary.

9. Any association of citizens, domestic corporation, municipality or state that has any proprietary right necessary to construct, operate, or maintain the project and any entity owning proprietary rights as an applicant:

   None

10. Every other political subdivision likely to be interested in the project:

    United States Bureau of Reclamation
    1150 N Curtis Rd
    Boise, ID 83706

11. Name and address of agencies that administer public lands within the project boundaries:

    United States Bureau of Reclamation
    1150 N Curtis Rd
    Boise, ID 83706

    USDA Forest Service
    1249 S Vinnell Way #200
    Boise, ID 83709

VERIFICATION

State of Idaho)
)ss.
Ada County)

James T. Carkulis, being first duly sworn, deposes and says that: He is the agent of Cat Creek Energy, LLC, the applicant, that he has read the foregoing application and knows the contents thereof; and that the same are true to the best of his knowledge and belief.

Applicant
Member

Subscribed and sworn to before me, a notary public of the State of Idaho this 8th day of November, 2018.

MICHAEL ARKOOSH
NOTARY PUBLIC
STATE OF IDAHO

Notary Public
For the State of Idaho
My Commission expires on 08/07/2018

EXHIBIT 1

DESCRIPTION OF PROPOSED PROJECT

1. The project would utilize the existing Anderson Ranch Reservoir, an impoundment of the Anderson Ranch Dam, a Bureau of Reclamation facility. A new earthen dike would be constructed adjacent to Anderson Ranch Reservoir. The dike would mainly impound water on privately owned/deeded ground, Wood Creek Ranch, LLC, above the existing reservoir as well as some Bureau of Reclamation ground. Total reservoir area and impoundment volume would be about 1,040 acres and 63,500 acre feet, respectively. A new 720 MW powerhouse would be constructed underground adjacent to the dike or, alternatively, in a location just offshore within Anderson Ranch Reservoir. Six 14-16 ft diameter penstocks with a net head of 840 feet would convey waters from the new impoundment through the facility for power production during peak periods of demand. The same penstocks would then be used to restore water to the impoundment via separate pumping facilities during low periods of power demand.

2. The proposed powerhouse would house twelve 60 MW ternary turbines. The powerhouse would also house additional pump facilities which would utilize the same penstocks feeding the turbine/generators to lift the stored water 840 feet for storage in the new impoundment. The penstocks would be six 14-16 ft diameter steel pipelines each 2,500 L.F. A penstock intake structures would be constructed in the new impoundment.

   The project would construct approximately 8.1 miles of new 230 kV Transmission line where it would connect to BPA. Additional line upgrades may be required beyond this point.

   The project would operate as a pump storage project, generating power during periods of peak demand and returning flows to the impoundment during periods of low power demand, an estimated 1,965.4 GWh of peak demand power would be generated annually. The possibility of supplemental power from either wind, solar, or a combination may also be utilized to supplement the lost energy due to pumping the water to the storage impoundment or to supplement revenues to offset pumping costs.

   Existing roads would access the impoundment area. Approximately 2 miles of new roads would be required to access the new dam and powerhouse.

   Upon approval, the proposed Cat Creek Energy Generation Facility will provide enhanced value to the region's water resources.

3. No existing facilities exist for this project.

4. Generating Units

Existing and future generating units:	None
Proposed generating units:	Twelve
Proposed generating output capacity	
Turbine No. 1 through 12 each:	60 MW
Total:	720 MW
Type of turbine:	Ternary
Power plant operation:	Pump Storage
Average available flow to the power plant	
Avg:	9,996 cfs
Average annual generation:	1,964.4 GW-hrs
Power plant head	
Design:	840 ft
Average:	840 ft
Turbine hydraulic capacity	
Turbine No. 1 through 12 each:	833.0 cfs
Total:	9,996.0 cfs

5. The project will utilize the existing Lands which are owned/deeded by Wood Creek Ranch, LLC, Additional land managed by USDA Forest Service under Bureau of Reclamation primacy, and easements Right-of-Ways. All project lands are located within the following sections:

Township	Range	Sections	Base Meridian
1N	9E	25,26,35,36	Boise
1S	9E	1,2,3,7,8,9,10	Boise
1S	8E	11,12	Boise

The project powerhouse and appurtenant facilities will be located on privately owned lands located within the above-mentioned project area if underground. If poolside, the powerhouse would be built on Bureau of Reclamation lands.

Owners:

CAT CREEK ENERGY, LLC
1989 South 1875 East
Gooding, ID 83330

6. Utilization and Conservation of Water Resources

The proposed project utilizes an undeveloped and renewable resource that could be an important contribution to power needs of the local area.

This project would serve to further utilize the available resources of the Anderson Ranch Reservoir adding additional value to the area.

EXHIBIT 2

DESCRIPTION OF STUDIES, TESTS AND SURVEYS TO BE CONDUCTED

i. Study Plan

Under the successive preliminary permit Cat Creek Energy, LLC's study plan will continue to focus on three major study areas. The first will consider technical aspects for the proposed project; the second will analyze environmental impacts; the third will consider legal considerations including state and local statutes relating to hydroelectric development and water rights.

Cat Creek Energy, LLC will carry out work under this permit in three phases:

Phase I: A preliminary reconnaissance Study for a brief technical and economic feasibility analysis.

Phase II: A detailed feasibility study including all aspects of the study summary as shown in Exhibit 2(i)(1).

Phase III: If the results indicate a viable project, Cat Creek Energy, LLC will prepare necessary documents and drawings for construction purposes and file a license application if required.

The above approach allowa the applicant to determine the economic feasibility before implementation of the detailed feasibility study plan.

The following outline indicates the first phase of the reconnaissance plan proposed by the applicant in order to determine preliminary feasibility. This work was largely completed under the original preliminary permit.

I. SITE DESCRIPTION
   - A. Location
   - B. Watershed characteristics
   - C. River/stream hydrology
   - D. Appurtenant structures
     1. penstock, powerhouse
     2. transmission line
     3. miscellaneous structures
   - E. Water rights, downstream requirements
   - F. Photographs
   - G. Maps

II. BUSINESS DATA

H. Method of transmitting power
I. Estimated power value details

III. ENVIRONMENTAL, INSTITUIONAL, AND SAFETY

J. Environmental
    1. River or stream classification
    2. Site locations
        a. Wildlife preserve
        b. Recreational aspects
        c. National or state parks
        d. Historical perspective
        e. Restricted activity
    3. Wilderness area
    4. Rare/endangered species
    5. Migratory fish/fish ladder

K. Institutional
    1. Usages of flow
    2. Ownership of water rights and support facilities
    3. Rights of access, development, transmission and easement rights, or other agreements

IV. PLANT CHARACTERISTICS AND POWER POTENTIAL

V. INVESTMENT COSTS

VI. OPERATING AND MAINTENANCE COSTS (O&M)

VII. ECONOMICS

ii. New Road Construction

Existing roads would access the impoundment area. Approximately 2 miles of new roads would be required to access the new dam and powerhouse.

iii. Request for Waiver: Based on applicant's use of data as described above and the applicant's belief that the proposed studies will not adversely affect cultural resources or endangered species and will not cause alterations of land or water, applicant requests that FERC waive requirements of paragraph (c) (2) pursuant to Section 1.14 (a) (2).

EXHIBIT 2 (i) (1)

SUMMARY OF STUDIES, TESTS, AND SURVEYS TO BE CONDUCTED FOR
Cat Creek Energy, LLC

I. ENGINEERING CONSIDERATIONS

A. Field surveys and site reconnaissance
   1. Review of existing mapping
   2. Aerial photos
   3. River profile and cross sections
   4. Topographic site survey

B. Study of hydrology and hydraulics
   1. review of water resource data
      a. U.S. Geological Survey
      b. State Water Resources Department
   2. flow duration curves
   3. flood flow determination
   4. computation of water surface profiles
   5. net head determination
   6. installed capacity recommendations

C. Study of civil elements
   1. powerhouse orientations
   2. foundation requirements
   3. turbine and generator arrangements
      a. equipment selection
      b. number of units
   4. hydraulic structures
      a. forebay and intake works
      b. tailrace and outlet works
      c. energy dissipation
      d. trash collection and removal
      e. ice damage protection
      f. siltation protection
      g. fish passage facilities
   5. site access

D. Study of electrical elements
   1. switchyard requirements (on-site)
   2. voltage transformation
   3. transmission line size and length
   4. grid tie-in requirements

E. Operating schedule development
   1. monthly power output projections

F. Preparation of capital construction costs
   1. structures and improvements

2. reservoirs, dams and waterways
3. waterwheels, turbines and generators
4. accessory electrical equipment
5. miscellaneous powerplant equipment
6. station equipment
7. overhead conductors
8. underground conductors

G. Project schedule and development

II. ENVIRONMENTAL CONSIDERATIONS

A. Competing water uses
1. irrigation water supply
2. low flow augmentation (riparian rights)
3. recreation
4. aesthetics

B. Historical and archeological preservation
C. Fish and wildlife preservation (fish passage requirements)
D. Turbine operation impacts on aquatic life
E. Disruption during construction (short-term impacts)

III. LEGAL CONSIDERATIONS

A. Determination of ownership of additional necessary water rights
B. Determination of additional flowage rights necessary for operation
C. Determination of additional land ownership
D. Determination of rights-of-way and ownership for project transmission line
E. Determination of necessary permits and other regulatory matters
F. Principles of state, local and federal laws concerning hydroelectric development

EXHIBIT 2 (ii) (1)

DEVELOPMENT SCHEDULE

	YEAR 1						YEAR 2						YEAR 3					
	1/19						1/20						1/21					
PRELIMINARY RECONNAISSANCE STUDY FEASIBILITY PHASE																		
▪ Equipment sizing and capital costs	x	x	x	x	x	x												
▪ Preliminary engineering costs	x	x	x	x	x	x												
▪ Preliminary legal, land and flowage	x	x	x	x	x	x												
▪ Preliminary environmental					x	x												
DETAILED FEASIBILITY PHASE																		
▪ Detailed engineering	x	x	x	x	x	x	x	x	x	x	x	x	x	x				
▪ Detailed cost estimate							x	x	x	x	x	x	x	x	x			
▪ Construction schedules							x	x	x	x	x	x	x	x	x			
▪ Negotiate power contract/letter-of intent												x	x	x	x	x		
▪ Legal investigation								x	x	x	x	x	x	x				
▪ Detailed hydrology and hydraulics							x	x	x	x	x	x	x					
▪ Field surveys				x	x	x	x	x	x	x	x							
FEDERAL ENERGY REGULATORY COMMISSION LICENSE APPLICATION																		
▪ Writings	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
▪ Studies	x	x	x	x	x	x	x	x	x	x	x	x						
▪ Editing	x	x	x	x	x	x										x	x	x
▪ Drawing					x	x	x	x	x	x	x	x	x	x	x			
▪ Legal				x	x	x	x	x	x	x	x	x	x	x	x			

EXHIBIT 2

STATEMENTS OF COST AND FINANCING

I. STUDY FOR TASKS IDENTIFIED IN EXHIBIT 2

Technical data (engineering considerations)	$270,000
Business data	$210,000
Environmental, institutional and safety considerations	$1,880,000
Plant characteristics and power potential	$110,000
Costs, benefits, economics, key tasks and legal investigations	$220,000
TOTAL	$2,690,000

II. EXPECTED SOURCES AND EXTENT OF FINANCING

Cat Creek Energy, LLC has the resources to self-finance the feasibility study, using the services of Sorenson Engineering and environmental consultants.

III. PROPOSED MARKETS FOR THE POWER

Power generated at this proposed hydroelectric project will be fed into the nearby existing electrical grid system controlled by Idaho Power Company. The existing grid system within 26 miles would provide for a corridor alongside the existing BPA 115 kV transmission line to the IPCO control area grid. The present proposed purchaser for Forward Capacity and Ancillary Services is any load service entity, generator, Balancing Authority or co-op in the WECC. Energy and energy storage services customers shall be determined as opportunities exist from virtual power agreements to oversupply of energy produced for storage time shift. Prices shall be determined per negotiated contract.

EXHIBIT 3
CAT CREEK ENERGY GENERATION FACILITY (CCEG), PROJECT MAP

I. PRINCIPAL PROJECT FEATURES

Exhibit 3 indicates the location of the project as a whole with respect to Anderson Ranch Dam and Reservoir and locates the principal project features.

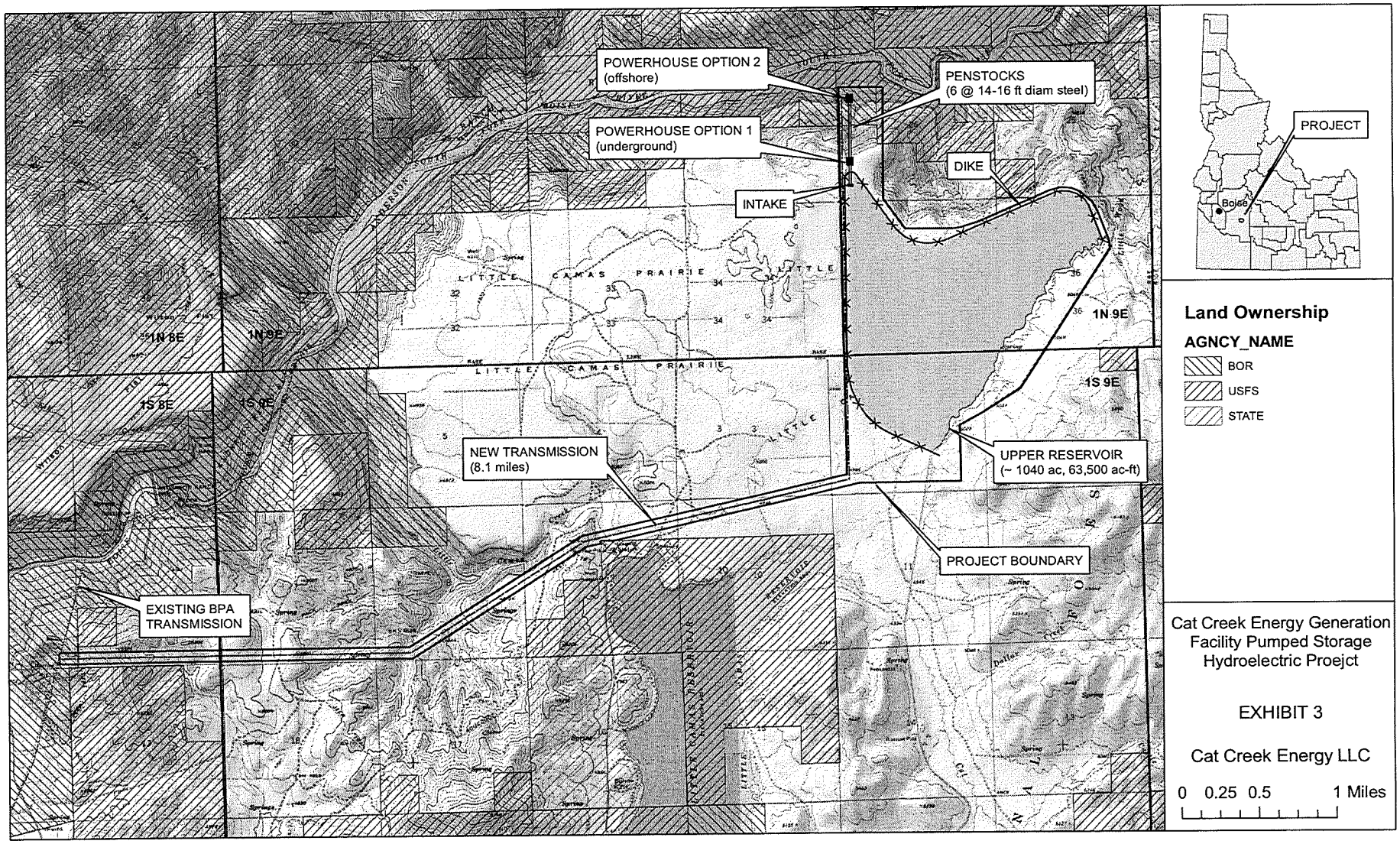
II. PROPOSED BOUNDARY FOR THE PROJECT

Exhibit 3 locates the proposed project boundary. All of the principal project features are identified and lands of the United States affected by the proposed project are identified.

III. WILDERNESS ACT

To the best knowledge of the applicant, the land within the project boundary have not been:

- Designated as wilderness areas
- Recommended for designation as wilderness areas
- Designated as wilderness study areas


POWERHOUSE OPTION 2
(offshore)
POWERHOUSE OPTION 1
(underground)
PENSTOCKS
(6 @ 14-16 ft diam steel)
DIKE
INTAKE
NEW TRANSMISSION
(8.1 miles)
UPPER RESERVOIR
(~ 1040 ac, 63,500 ac-ft)
PROJECT BOUNDARY
EXISTING BPA
TRANSMISSION
LITTLE CAMAS PRAIRIE
1N 8E
1N 9E
1S 8E
1S 9E
PROJECT
Boise
Land Ownership
AGNCY_NAME
BOR
USFS
STATE
Cat Creek Energy Generation
Facility Pumped Storage
Hydroelectric Proejct
EXHIBIT 3
Cat Creek Energy LLC
0 0.25 0.5 1 Miles

GEOSENSE, LLC
2742 ST CHARLES AVE
IDAHO FALLS, IDAHO 83404
GSENSE@CABLEONE.NET
208-528-6152

November 16, 2018

Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426

Subject: Response to request for information - Cat Creek Energy Generation Facility Pumped Storage Hydroelectric Project – FERC No. P-14655

Dear Secretary:

In your 16-Nov-2018 letter you requested additional information concerning our successive preliminary permit application filed on 9-Nov-2018. The requested information is given below:

AIR Item 1

Specifically, the dike/dam would be earthen and about 4.3 miles in length, the penstock intake structure would be located in the new impoundment, the six penstocks would be steel up to 2500 ft long, the powerhouse would consist of two 100-ft diameter concrete silos, the 230-kV transmission line would be 8.1 miles long, and the amount of new access road would about 2 miles.

AIR Item 2

Each of the six penstocks would supply two turbines.

Please let us know if there is any information you still need in order to process our application.

Regards,

Nicholas E. Josten
Agent for Cat Creek Energy, LLC

Copies
Cat Creek Energy, LLC

Document Content(s)