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2101 Main St.; Ste 202
Baker City, OR 97814
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Texas Office

5100 San Felipe Unit 244E
Houston, TX 77056
713.840.1489

August 9, 2011

Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 1st Street, N.E.
Washington, DC 20426

Re: Preliminary Permit Application for Bellwood Pumped Storage
Hydroelectric Project

Dear Ms. Bose,

Please find attached the Preliminary Permit Application for the Bellwood Pumped Storage Hydroelectric Project, located in Blair County, Pennsylvania. This document is being filed on behalf of the applicant, Bellwood Hydro, LLC. We have withdrawn a previous duplicate application (FERC No. 14226) for this site as of today.

If you have any questions or need additional information feel free to contact me at (435) 752-2580 or justin.barker@symbioticsenergy.com.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Justin Barker'.

Justin Barker
Project Development Director
Logan, Utah

PRELIMINARY PERMIT APPLICATION

FOR THE

**BELLWOOD
PUMPED STORAGE PROJECT**

PREPARED FOR:

Bellwood Hydro, LLC

PREPARED BY:

Symbiotics LLC
975 South Highway 89/91
Logan, UT 84321

August 9, 2011

Preliminary Permit Application for the Millwood Hydroelectric Project

Opening Statement

The applicant for the proposed Bellwood Pumped Storage Project is Bellwood Hydro, LLC. The information contained in this application has been prepared by Symbiotics LLC on behalf of Bellwood Hydro, LLC. The applicant, Bellwood Hydro, LLC is not claiming municipal preference under section 7(a) of the Federal Power Act.

Identification Statement

(1) For a preliminary permit or license, 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;

Bellwood Hydro, LLC
975 South State Highway 89/91
Logan, UT 84321

(2) For a preliminary permit 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;

Helen Schmitt, Chief Clerk
Blair County Commissioners' Office
423 Allegheny Street, Suite 101
Holidaysburg, PA 16648-2022

(ii) Every city, town, or similar local political subdivision: In which any part of the project, and any Federal facilities that would be used by the project, would be located; or) That has a population of 5,000 or more people and is located within 15 miles of the project dam;

Linda M. Rickens, City Clerk
Altoona City Hall
1301 12th Street, Suite 100
Altoona, PA 16601

(iii) Every irrigation district, drainage district, or similar special purpose political subdivision: In which any part of the project, and any Federal facilities that would be used by the project, would be located; or that owns, operates, maintains, or uses any project facilities or any Federal facilities that would be used by the project;

Not applicable

(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; and

Not applicable

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

Absentee-Shawnee Tribe of Indians of
Oklahoma
Tribal Historic Preservation Officer
2025 S. Gordon Cooper Drive
Shawnee, OK 74801

Seneca Nation of Indians
Tribal Historic Preservation Officer
467 Center Street
Salamanca, NY 14779

Cayuga Nation
Chief
P.O. Box 11
Versailles, NY 14168

Seneca-Cayuga Tribe of Oklahoma
Chief
P.O. Box 1283
Miami, OK 74355

Delaware Nation
President
P.O. Box 825
Anadarko, OK 73005

Shawnee Tribe
Tribal Historic Preservation Officer
PO Box 189
Miami, OK 74355

Eastern Shawnee Tribe of Oklahoma
Tribal Historic Preservation Officer
P.O. Box 350
Seneca, MO 64865

Tuscarora Nation
Chief
5616 Walmore Road
Lewistown, NY 14092

Onondaga Indian Nation
Chief
RR#1 Box 319-B
Nedrow, NY 13120


(4) (i) As to any facts alleged in the application or other materials filed, be subscribed and verified under oath in the form set forth in paragraph (a) (3)(ii) of this section by the person filing, an officer thereof, or other person having knowledge of the matters sent forth. If the subscription and verification is by anyone other than the person filing or an officer thereof, it shall include a statement of the reasons therefore.

(ii) This (application, etc.) is executed in the

State of Utah
County of Cache

by: Vince Lamarra, 975 South Highway 89/91, Logan, UT 84321

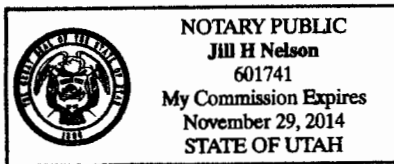
being duly sworn, depose(s) and say(s) that the contents of this (application, etc.) are true to the best of (his or her) knowledge or belief. The undersigned applicant(s) has (have) signed the (application, etc.) this 9th day of August, 2011.


 (Applicant)

By: Vince Lamarra

Subscribed and sworn to before me, a Notary Public of the State of Utah this 9th day of August, 2011.

/SEAL/



 (Notary Public)

Initial Statement

(a) Initial Statement:

Before the Federal Energy Regulatory Commission

(1) Bellwood Hydro, LLC applies to the Federal Energy Regulatory Commission for a preliminary permit for the proposed Bellwood Pumped Storage Project water power 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 the project under Part 1 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: Pennsylvania

County: Blair

Township or nearby town: Bellwood

Stream or other body of water: Tipton Run

(3) The exact name, business address, and telephone number of the applicant are:

Bellwood Hydro, LLC
975 South State Highway 89/91
Logan, UT 84321

Primary Contact:

Vincent Lamarra
Symbiotics LLC
975 South State Highway 89/91
Logan, UT 84321
P: 435-752-2580 C: 435-770-1128 F: 435-752-2581
E: vince.lamarra@symbioticsenergy.com

Secondary Contact:

Justin Barker
Symbiotics LLC
975 South State Highway 89/91
Logan, UT 84321
P: 435-752-2580 C: 435-770-3272 F: 435-752-2581
E: justin.barker@symbioticsenergy.com

A copy of the status and date of the applicant organization is provided in Attachment 1.

(4) Bellwood Hydro, LLC is a private company 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) *If there is any existing dam or other project facility, the applicant must provide the name and address of the owner of the dam and facility. If the dam is federally owned or operated, provide the name of the agency.*

Not applicable

Exhibit 1

(1) The number, physical composition, dimensions, general configuration and, where applicable, age and condition, of any dams, spillways, penstocks, powerhouses, tailraces, or other structures, whether existing or proposed, that would be part of the project;

Existing Structures Description

There are no existing structures, all features are proposed.

Proposed Intake and Penstock Description

This proposed project will be a high head advanced pumped storage facility that will incorporate technologies for quick response load following. The proposed intake structure will include a horizontal power tunnel (2,570 ft) connecting to a vertical shaft (1,200 ft) connecting to a high pressure steel lined penstock (1,000 ft) and manifold leading into the proposed power house. The intake structure will be composed of concrete and steel components, the dimensions will be determined during the permit period, however preliminary design would suggest the power tunnels and shafts would be approximately 30 ft diameter.

Proposed Powerhouse Description

The proposed powerhouse will be an excavated underground cavern, concrete reinforced containing the turbine and generator equipment, controls equipment, battery system and additional equipment required for the operation of the project. The preliminary dimensions will be 290 ft long, 140 ft wide and 120 ft high.

Proposed Turbine Description

It is currently proposed to have 3 turbine units with a generator rating of 250 MW each at 0.85 power factor.

Proposed Tailrace Description

Flow exiting the turbines will be discharged into draft tubes and steel manifold approximately 250 long, which will transition into a tailrace tunnel (4,000 ft) discharging into the proposed lower reservoir.

(2) The estimated number, surface area, storage capacity, and normal maximum surface elevation (mean sea level) of any reservoirs, whether existing or proposed, that would be part of the project;

Upper Reservoir	
Reservoir Surface Area	101 acres
Reservoir Storage Capacity	10,600 ac-ft
Normal Maximum Surface Elevation	2,440 ft (MSL)
Normal Minimum Surface Elevation	2,360 ft (MSL)
Dam Crest Elevation	2,445 ft (MSL)
Main Dam Crest Length	3,700 ft
Saddle Dam Crest Length	2,475 ft

Lower Reservoir	
Reservoir Surface Area	120 acres
Reservoir Storage Capacity	9,400 ac-ft
Normal Maximum Surface Elevation	1,460 ft (MSL)
Normal Minimum Surface Elevation	1,340 ft (MSL)
Dam Crest Elevation	1,465 ft (MSL)
Main Dam Crest Length	1,530 ft

(3) *The estimated number, length, voltage, interconnections, and, where applicable, age and condition, of any primary transmission lines whether existing or proposed, that would be part of the project [see 16 U.S.C. 796(11)];*

The proposed 7.3 mile 500 KV line will interconnect with an existing 500 kV transmission line.

(4) *The total estimated average annual energy production and installed capacity (provide only one energy and capacity value), the hydraulic head for estimating capacity and energy output, and the estimated number, rated capacity, and, where applicable, the age and condition, of any turbines and generators, whether existing or proposed, that would be part of the project works;*

The Bellwood Pumped Storage Project will have an installed generating capacity of 750 MW. At the selected size the project will use flows on average of approximately 12,000 cfs, and would have a head range of 900 to 1100 feet. The project is designed to generate up to 8 hrs and pump for 16 hrs per day on average. The proposed project requires no modification to an existing structure. On average, the project will generate 1,973 GWh per year at an estimated run time of 7.2 hours per day.

(5) *All lands of the United States that are enclosed within the proposed project boundary described under paragraph (e)(3) of this section, identified and tabulated on a separate sheet by legal subdivisions of a public land survey of the affected area, if available. If the project boundary includes lands of the United States, such lands must be identified on a completed land description form, provided by the Commission. The project location must identify any Federal reservation, Federal tracts, and townships of the public land surveys (or official protractations thereof if*

unsurveyed). A copy of the form must also be sent to the Bureau of Land Management state office where the project is located;

There are no federal lands within the proposed project boundary. All lands are owned by the State of Pennsylvania or are private.

(6) Any other information demonstrating in what manner the proposed project would develop, conserve, and utilize in the public interest the water resources of the region.

Upon approval, the proposed Project will provide enhanced value to the region's water resources, as well as urgently needed relief to the current national energy crisis.

Exhibit 2

(1) General requirement. For any proposed project, a study plan containing a description of:

- i. Any studies, investigations, tests, or surveys that are proposed to be carried out, and any that have already taken place, for the purposes of determining the technical, economic, and financial feasibility of the proposed project, taking into consideration its environmental impacts, and of preparing an application for a license for the project; and*

The applicant anticipates the need for the following studies:

- Energy production studies: Within the first six months
 - This proposed study will look at the potential energy production at the proposed site. Sizing and optimization of a facility is a critical component which needs to be determined initially. This study will ultimately determine the powerhouse size and where a suitable powerhouse will be located.
- Study on energy needs: Within the first six months
 - The study will address the potential areas for distribution of energy produced at the proposed facility.
- Water rights study: Within the first year
 - This proposed study will look at what impacts the amount of water needed for the project would have on existing water rights and determine if agreements can be made to acquire the necessary water for the project.
- Environmental impact study: Within the first two years
 - This study will address the potential environmental impacts of the project, which will include impacts on wildlife, plants, sensitive species, and cultural resources.
- Water quality study: Within the first two years
 - This study will address the potential impacts to water quality when water is released into waters of the United States.
- Engineering studies, including soils, test pits, and core holes: Within the first two years
 - This study will look at the geology and soils to determine what types of structures need to be created to meet safety standards. It will also address potential areas for building materials and ultimately determine the suitability of the site.

Additional studies may be required as issues arise through the licensing process.

- ii. The approximate locations and nature of any new roads that would be built for the of conducting the studies; and*

There are no roads planned for the study phase of the project. If new roads are required for any studies they will be presented and reviewed with the stakeholders during the licensing process.

(2) Work plan for new dam construction. For any development within the project that would entail new dam construction, a work plan and schedule

A. Description of field studies required for dam construction:

A subsurface investigation will be required to investigate the geologic nature of the site, to ensure the stability of the proposed dam sites, water conveyances and proposed underground powerhouse. The applicant aims to minimize any potential impacts while conducting the investigation and proposes to use existing roads to gain access to the site.

B. Schedule for conducting studies:

The intent of the applicant is to file a PAD/NOI during the 3 year duration of the permit. The applicant will follow the ILP schedule for studies, unless the applicant deems to request the Traditional Licensing Process to conduct the field and geologic investigations.

C. Environmental Measures to minimize impacts:

The preliminary studies are not anticipated to adversely impact the study area for cultural resources, endangered species and federal, state or private lands.

- (3) *Waiver. The Commission may waive the requirements of paragraph (c)(2) pursuant to §385.207 of this chapter, upon a showing by the applicant that the 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 requests waiver of requirements in paragraph (c) (2) pursuant to Section 1.14(a)(2).

- (4) *The estimated costs of carrying out or preparing the studies, investigations, tests, surveys, maps, plans or specifications identified under paragraph (c) of this section;*

The cost to complete the proposed studies and licensing process during the requested three year period is estimated at \$2,500,000 to \$3,000,000.

- ii. *The expected sources and extent of financing available to the applicant to carry out or prepare the studies, investigations, tests, surveys, maps, plans, or specifications identified under paragraph (c) of this section; and*

It is expected that these costs will be funded by private investors and members of Bellwood Hydro, LLC.

Exhibit 3




Exhibit 3 must include a map or series of maps, to be prepared on United States Geological Survey topographic quadrangle sheets

Please see attached the Project Location Map.



Bellwood Pumped Storage Project



Legend

-  Project Location
-  Freeways
-  Counties
-  States

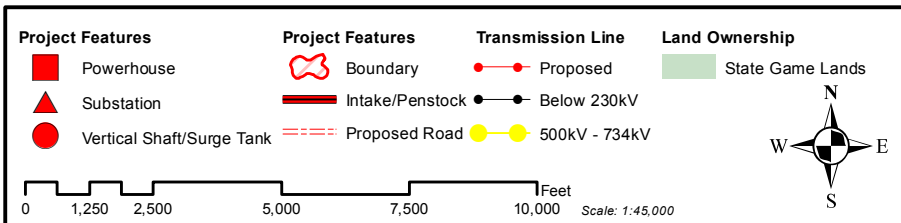
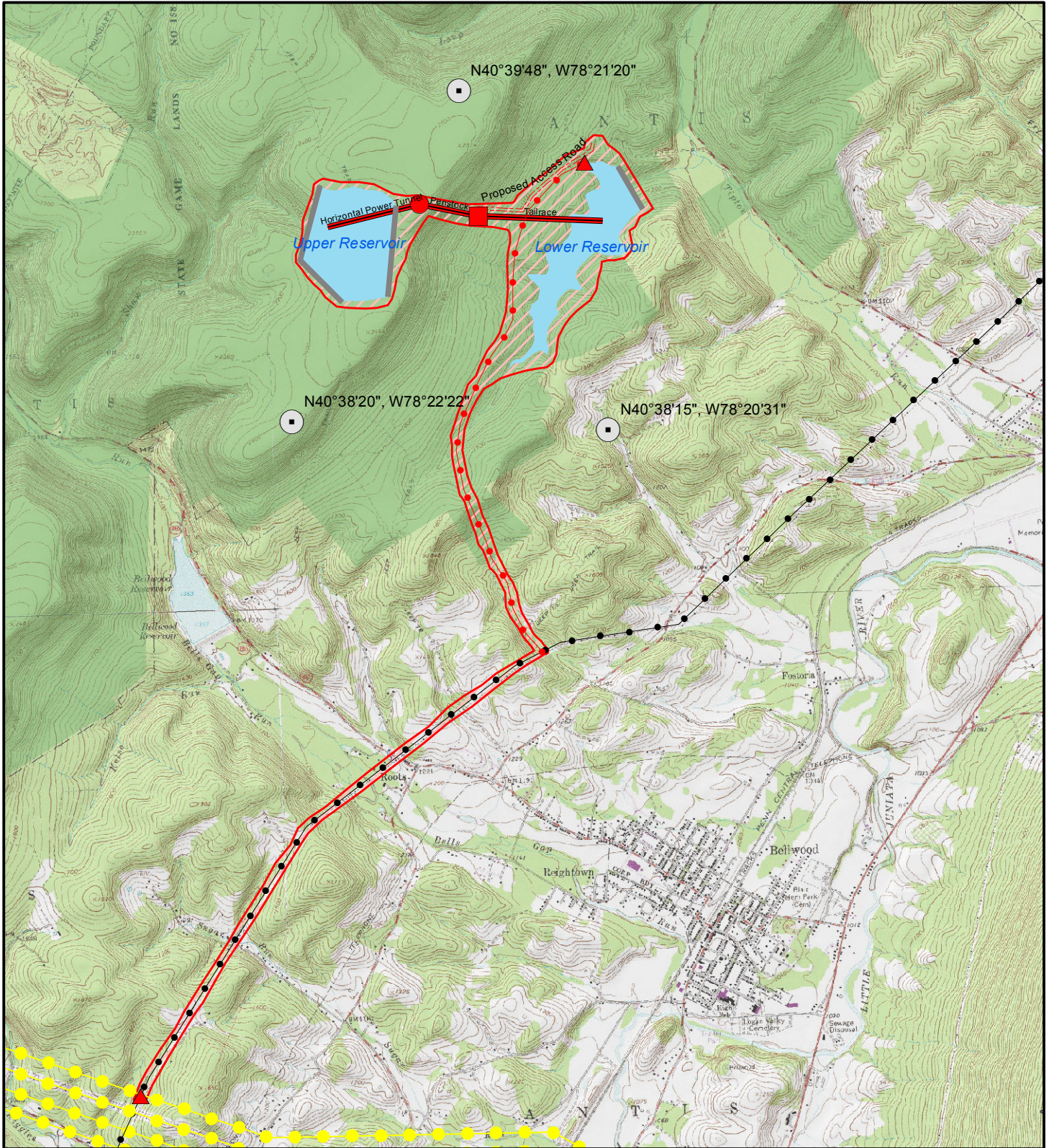
0 12.5 25 50 75 100 Miles

Overall Location Map

DATE: 07/15/2011
DRAWN: E. EVANS
COUNTY: BLAIR (PA)

EXHIBIT 3. Bellwood Pumped Storage Project



Project Location Map

DATE: 07/13/2011

DRAWN: E. EVANS

COUNTY: BLAIR (PA)

Attachment A

Utah Business Search - Details

BELLWOOD HYDRO, LLC

Entity Number: 8056084-0160

Company Type: LLC - Domestic

Address: Unknown, NA 00000

State of Origin:

Registered Agent: DANIEL K. DYGERT, P.C.

Registered Agent Address:

8607 W 9500 N PO BOX 294 Clarkston UT 84305

Status: Active

Status: Active  as of 07/21/2011

Renew By: 07/21/2012

Status Description: Good Standing

Employment Verification: Not Registered with Verify Utah

History

Registration Date: 07/21/2011

Last Renewed: N/A

Additional Information

NAICS Code: 9999 **NAICS Title:** 9999-Nonclassifiable Establishment

Refine your search by:

- Search by:
- Business Name
- Number
- Executive Name
- Search Hints

Name: