#### ESSEX ENERGY PARTNERS, LLC 27 VAUGHAN AVENUE NEWPORT RHODE ISLAND 02840

VAUGHAN AVENUE NEWPORT RHODE ISLAND 0284 p:401.619.4872 f:401.619.4874

June 13, 2011

Secretary Federal Energy Regulatory Commission (FERC) 888 First Street, N.E. Washington, D.C. 20426

Re: Application for Preliminary Permit – Albion Hydropower Project

Dear Secretary:

On behalf of Albion Hydro, LLC, The Essex Energy Partners, LLC (Essex) is pleased to submit the attached, completed application for preliminary permit pursuant to 18 CFR 4.30 for hydropower development at the Albion Dam on the Blackstone River in Cumberland and Lincoln, RI.

Pursuant to 18 CFR 4.32, a listing of the names and mailing addresses is provided in Attachment 1 for every county, city, and town with population of 5,000 or greater within 15 miles of the proposed project; every irrigation district, drainage district or similar purpose political subdivision; and any affected Indian tribes. Each of these entities has been notified of this application. All parties identified on the FERC regional service list including State and Federal government agencies and other local stakeholder groups not identified on the FERC list that would likely be interested in or affected by the application have also been notified. A complete copy of the notification mailing list is provided as an attachment.

Sincerely,

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Bruce DiGennaro Managing Partner Essex Energy Partners, LLC

enclosures

## ATTESTATION Section 4.32(a)(4)(i)

This (application, etc.) is executed in the

State of	Rhode Island		
County of:	Newport		
by:	Essex Energy Partners, LLC		
(Name)	Jonathan Petrillo		
(Address)	27 Vaughan Ave. Newport RI 02840		

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 2 day of June, 2011.

(Applicant(s)) By:

Subscribed and sworn to before me, a [Notary Public, or title of other official authorized by the state to notarize documents, as appropriate] of the State of Rhode Island this \_\_\_\_\_\_ day of June, 2011.

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Kathleen Stubbs Notary ID #751233 Commission Expires 12-11-13

# ATTACHMENT 1 Section 4.32(a)(2) Information

# (i) Counties in which project is located:

Providence County

# (ii) City, town, or similar local political subdivision

## (A) In which project is located:

Town of Cumberland

Town of Lincoln

## (B) Population of 5,000 and within 15 miles of the project:

Municipality	Street Address:	City:	State:	Zip:
Town of North Providence	2000 Smith Street	North Providence	RI	02911
City of Central Falls	580 Broad Street	Central Falls	RI	02863
City of Cranston	869 Park Avenue	Cranston	RI	02910
City of East Providence	145 Tauton Avenue	East Providence	RI	02914
City of Pawtucket	137 Roosevelt Avenue	Pawtucket	RI	02860
City of Providence	25 Dorrance Street	Providence	RI	02903
City of Warwick	3275 Post Road	Warwick	RI	02886
City of Woonsocket	169 Main Street	Woonsocket	RI	02895
Town of Barrington	283 County Rd.	Barrington	RI	02806
Town of Burrillville	105 Harrisville Main Street	Harrisville	RI	02830
Town of Cumberland	45 Broad Street	Cumberland	RI	02864
Town of Glocester	1145 Putnam Pike	Chepatchet	RI	02814
Town of Johnston	1385 Hartford Avenue	Johnston	RI	02919
Town of Lincoln	P.O. Box 100	Lincoln	RI	02865
Town of North Smithfield	One Main Street P.O. Box 248	North Smithfield	RI	02876
Town of Scituate	195 Danielson Pike	No. Scituate	RI	02857
Town of Smithfield	64 Farnum Pike	Smithfield	RI	02917
Town of Warren	514 Main Street	Warren	RI	02885
City of Attleboro	77 Park Street	Attleboro	MA	02703
City of Taunton	15 Summer Street	Taunton	MA	02780
Town of Bellingham	10 Mechanic Street	Bellingham	MA	02019
Town of Blackstone	15 St. Paul Street	Blackstone	MA	01504
Town of Dighton	979 Somerset Avenue	Dighton	MA	02715
Town of Douglas	29 Depot Street	Douglas	MA	01516
Town of Foxborough	40 South Street	Foxborough	MA	02035
Town of Franklin	355 East Central Street, Rte. 140	Franklin	MA	02038
Town of Hopedale	78 Hopedale Street	Hopedale	MA	01747
Town of Mansfield	6 Park Row	Mansfield	MA	02048
Town of Medway	155 Village Street	Medway	MA	02053
Town of Mendon	20 Main Street	Mendon	MA	01756
Town of Milford	52 Main Street	Milford	MA	01757
Town of Millis	900 Main Street	Millis	MA	02054
Town of Norfolk	1 Liberty Lane	Norfolk	MA	02056
Town of North Attleboro	43 South Washington Street	North Attleboro	MA	02760
Town of Northbridge	7 Main Street	Whitinsville	MA	01588

Municipality	Iunicipality Street Address:		State:	Zip:
Town of Norton	70 East Main Street	Norton	MA	02766
Town of Plainville	142 South Street, PO Box 1717	Plainville	MA	02762
Town of Rehoboth	148 Peck Street	Rehoboth	MA	02769
Town of Seekonk	100 Peck Street	Seekonk	MA	02771
Town of Swansea	81 Main Street	Swansea	MA	02777
Town of Upton	1 Main Street	Upton	MA	01568
Town of Uxbridge	21 South Main Street	Uxbridge	MA	01569
Town of Walpole	135 School Street	Walpole	MA	02081
Town of Wrentham	79 South Street, Rm. 213	Wrentham	MA	02093

# (iii) Irrigation and drainage districts

None

# (iv) Other political subdivisions with interest:

None

#### ATTACHMENT 2 LAND DESCRIPTION

#### **Non-Public Land States**

The Albion Dam and associated features are currently owned by the Rhode Island Department of Transportation (RIDOT). The dam, water rights and abutting property was taken by eminent domain in 1999 for "highway purposes". Property adjacent to the dam parcel is currently owned by the Town of Cumberland (a partner in the proposed hydropower project).

The project would be located entirely in the State of Rhode Island which is a non-public land state.

#### ATTACHMENT 3 DISTRIBUTION LIST

The following entities were notified of the filing of this permit application. This list includes parties identified by the FERC for the region as well as other local stakeholder groups that may be interested in or affected by the application.

Org Name	Address1	Address2	City	State	Zip
Advisory Council On Historic Preservation	Executive Director	1100 Pennsylvania Ave NW	Washington	DC	20004
American Canoe Association	Executive Director	108 Hanover St	Fredericksburg	VA	22401
American Rivers	1025 Vermont Ave., NW	Suite 720	Washington	DC	20005
American Whitewater	Executive Director	P.O. Box 1540	Cullowhee	NC	28723
Blackstone Paddle Club		175 Main Street	Pawtucket	RI	02860
Blackstone River Coalition		Po Box 70477	Worcester	MA	01607
Blackstone River Watershed Association		271 Oak Street	Uxbridge	MA	01569
Blackstone River Watershed Council		Po Box 8068	Cumberland	RI	02864
Blackstone Valley Tourism Council		175 Main Street	Pawtucket	RI	02860
Bureau Of Indian Affairs	Regional Director	545 Marriott Drive	Nashville	TN	37214
Bureau Of Indian Affairs	Director	1849 C Street NW	Washington	DC	20240
Coastal Resources Management Council		4808 Tower Hill Road	Wakefield	RI	02879
Environmental Protection Agency		One Congress Street	Boston	MA	02114
Environmental Protection Agency	1 Congress Street	Suite 1100	Boston	MA	02114
Federal Emergency Management Agency	Regional Administrator	99 High Street	Boston	MA	2110
Federal Emergency Management Agency		500 C Street SW	Washington	DC	20472
Federal Energy Regulatory Commission		19 W 34th St Rm 400	New York	NY	10001- 3006
Federal Energy Regulatory Commission	Regional Engineer	19 West 34th Street	New York	NY	10001- 3006

Org Name	Address1	Address2	City	State	Zip
FEMA	J. W. McCormack Post Office & Courthouse Building	Room 442	Boston	MA	02109- 4595
Hydropower Reform Coalition		830 Reville St.	Bellingham	WA	98229-
Narragansett Bay Estuary Program	Uri Bay Campus	Box 27	Narragansett	RI	02882
Narragansett Tribal Nation		Po Box 700	Wyoming	RI	02898
National Oceanic And Atmospheric Administration	Regional Administrator	One Blackburn Drive	Gloucester	MA	01930- 2298
National Oceanic And Atmospheric Administration	Director	55 Great Republic Dr	Gloucester	MA	01930- 2276
National Oceanic And Atmospheric Administration		1401 Constitution Ave NW	Washington	DC	20230
National Park Service	U.S. Custom House	200 Chestnut Street, 5th Flr.	Philadelphia	PA	19106
National Park Service	Director	1849 C Street NW	Washington	DC	20240
Naval Seafloor Cable Protection Office		1322 Patterson Ave Se	Washington	DC	20374- 5065
Northern RI Conservation District		17 Smith Ave	Greenville	RI	02828- 1730
Office Of Senator Reed		728 Hart Senate Office Building	Washington	DC	20510
Office Of Senator Whitehouse		502 Hart Senate Office Building	Washington	DC	20510
Office Of The Attorney General		150 S. Main Street	Providence	RI	02903
Office Of The Governor		State House	Providence	RI	02903- 1196
Rhode Island Department Of Environmental Management		235 Promenade St	Providence	RI	02908- 5734
Rhode Island Department Of Environmental Management	Dam Safety Section	291 Promenade St	Providence	RI	02908- 5720
Rhode Island Department Of Environmental Management		235 Promenade St	Providence	RI	02908- 5734

Org Name	Address1	Address2	City	State	Zip
Rhode Island		235 Promenade	Providence	RI	02908-
Department Of		St			5734
Environmental					
Management					
Rhode Island		235 Promenade	Providence	RI	02908-
Department Of		St			5734
Environmental					
Management					
Rhode Island		235 Promenade	Providence	RI	02908-
Department Of		St			5734
Environmental					
Management					
Rhode Island Div. Of	Dept. Of	235 Promenade	Providence	RI	02908-
Coastal Resources	Environmental	St			5734
	Management				0.0.
Rhode Island Div. Of	Government	4808 Tower Hill	Wakefield	RI	02879
Fish & Wildlife	Center	Road	. ranonoid		02070
		235 Promenade	Providence	RI	02009
Rhode Island Div. Of	Dept. Of Environmental		Fiovidence	RI	02908- 5734
Land Resources		St Unit 190			5734
	Management	004 D	Decile		00000
Rhode Island Div. Of	Dept. Of	291 Promenade	Providence	RI	02908-
Water Resources	Environmental	St			5720
	Management	0 11 404	<u> </u>	<u> </u>	
Rhode Island	315 Iron	Suite 101	Providence	RI	02908
Economic	Horse Way				
Development					
Corporation					
Rhode Island Historic		150 Benefit St	Providence	RI	2903
Preservation &					
Heritage Comm					
Rhode Island Office		One Capitol Hill	Providence	RI	02908
Of Energy Resources					
Rhode Island Water	100 N Main St	Suite 5	Providence	RI	02903-
Resources Board					1325
RI State Conservation		17 Smith Ave	Greenville	RI	02828-
Committee			Oreenville	IXI	1730
Save The Bay		100 Save The	Providence	RI	02905
Save The Day		Bay Drive	FIUNICETICE	IXI	02903
-			<u> </u>		
Trout Unlimited		2208 Mendon	Cumberland	RI	02864
		Road			
U.S Coast Guard	MSO	20 Risho Ave	East	RI	02914-
	Providence		Providence		1297
U.S. Army Corps Of	Division	302 General	Brooklyn	NY	11252-
Engineers	Commander	Lee Avenue			6700
U.S. Army Corps Of	District	696 Virginia	Concord	MA	01742-
Engineers	Engineer	Road			2751
U.S. Army Corps Of	Commander	441 G Street	Washington	DC	20314
Engineers		NW	0		
U.S. Bureau Of Indian	545 Marriott	Suite 700	Nashville	TN	37214
Affairs	Drive			I I N	51214
7 (1011)	DING				

Org Name	Address1	Address2	City	State	Zip
U.S. Bureau Of Indian	Natural	911 Ne 11th	Portland	OR	97232
Affairs	Resources	Avenue			
U.S. Bureau Of Indian Affairs		1849 C Street, NW	Washington	DC	20420
U.S. Bureau Of Land Management	State Director	7450 Boston Boulevard	Springfield	VA	22153
U.S. Bureau Of Land Management	Director	1849 C Street NW	Washington	DC	20240
U.S. Bureau Of Reclamation	Commissioner	1849 C Street NW	Washington	DC	20240
U.S. Department Of Agriculture - Forest Service	Regional Forester	626 East Wisconsin Avenue	Washington	DC	53202
U.S. Department Of Agriculture - Forest Service	Chief	1400 Independence Ave SW	Washington	DC	20250- 0003
U.S. Department Of Commerce	Secretary	1401 Constitution Avenue NW	Washington	DC	20230
U.S. Department Of Interior		408 Atlantic Ave Ste 142	Boston	MA	02109
U.S. Environmental Protection Agency	Regional Administrator	5 Post Office Square, Suite 100	Boston	MA	02109- 3912
U.S. Environmental Protection Agency	Administrator	1200 Pennsylvania Ave NW	Washington	DC	20460
U.S. Fish And Wildlife Service		70 Commercial St Ste 300	Concord	NH	03301- 5031
U.S. Fish And Wildlife Service	Field Supervisor	70 Commercial Street	Concord	NH	03301- 5087
U.S. Fish And Wildlife Service	Regional Director	300 Westgate Center Drive	Hadley	MA	01305- 9589
U.S. Fish And Wildlife Service		300 Westgate Center Dr	Hadley	MA	01035- 9587
U.S. Fish And Wildlife Service		300 Westgate Center Dr	Hadley	MA	01035- 9587
U.S. Fish And Wildlife Service	Director	1849 C Street NW	Washington	DC	20240- 0001
U.S. Forest Service		1400 Independence Avenue SW	Washington	DC	20250- 0003
U.S. National Park Service	15 State Street	10th Floor	Boston	MA	02109
United States Department Of Agriculture		40 Quaker Lane	Warwick	RI	02886
United States Geological Survey	Director	12201 Sunrise Valley Dr	Reston	VA	20192
United States Geological Survey	Regional Director	12201 Sunrise Valley Dr	Reston	VA	20192

Org Name	Address1	Address2	City	State	Zip
US Army Corps Of	N E Div /	696 Virginia Rd	Concord	MA	01742-
Engineers	Regulatory				2718
US Department Of	1 Congress St	Suite 1101	Boston	MA	02114
Energy					
US Geological Survey		101 Pitkin St	East Hartford	СТ	06108
Representative David	1070 Main	Suite 300	Pawtucket	RI	02860
Cicilline	Street				
Representative	300	Suite 200 South	Warwick	RI	02886
James Langevin	Centerville				
	Rd.				
Wampanoag Tribe Of		20 Black Brook	Aquinnah	MA	02535
Gay Head (Aquinnah)		Rd			

## **BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION**

Application for Preliminary Permit for Hydroelectric Development of the Albion Dam on the Blackstone River Providence County, Rhode Island

Submitted by:

Albion Hydro, LLC 27 Vaughan Ave. Newport, RI 02840

June 13, 2011

## **INITIAL STATEMENT**

In accordance with the Code of Federal Regulations (CFR), Title 18, Volume 1, Part 4, Section 4.81, Albion Hydro, LLC applies to the Federal Energy Regulatory Commission (FERC) for a preliminary permit for the proposed Albion Dam 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 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.

The location of the proposed project is:

State of Rhode Island Providence County Town of Cumberland Blackstone River

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

Albion Hydro, LLC 27 Vaughan Ave. Newport, RI 02840 ph: (401) 619-4872 fax: (401) 619-4874

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

Fred Szufnarowski, P.E.			
Jonathan Petrillo			
Bruce DiGennaro	Seth Handy, Esq.		
Essex Energy Partners, LLC	Handy Law, LLC		
27 Vaughan Ave.	42 Weybosset Street		
Newport, RI 02840	Providence RI 02903		
ph: (401) 619-4872	ph: (401) 626-4839		
fax: (401) 619-4874	fax: (401)753-6306		

Albion Hydro, LLC is a limited liability corporation formed to develop the hydropower resource of the Albion Dam to provide municipal benefits. However, Albion Hydro, LLC and its affiliates are **NOT** claiming municipal preference under section 7(a) of the Federal Power Act.

The proposed term of the requested permit is for **36 months**.

The existing Albion Dam is currently owned by:

Rhode Island Department of Transportation 2 Capitol Hill Providence, RI 02903 ph: (401) 222-2411

## **EXHIBIT 1: DESCRIPTION OF THE PROPOSED PROJECT**

The proposed project will consist of rehabilitating an abandoned hydroelectric project associated with the existing Albion Dam (a.k.a. Berkshire Hathaway Dam) located on the Blackstone River in Providence County, Cumberland, Rhode Island (Exhibit 3 – Sheets 1&2). The existing Albion Dam (State ID #60, National ID #RI00808) is a 400-ft long, 25-ft high masonry structure originally constructed in 1850, consists of an overflow spillway and gate control structure. The spillway is 300 ft long with a hydraulic height of 12 ft and extends from the right abutment wall spanning a major part of the river channel. The gate structure adjacent to the left abutment contains two gated openings. A massive masonry wall separates both water retaining structures. Project facilities will include the existing dam, a new powerhouse and generating equipment at the project dam, fish passage/protection measures and a switchyard with interconnection facilities.

The existing reservoir impounded by the Albion Dam has a surface area of approximately 55 acres with a normal storage of approximately 235 acre feet at approximately 87.5 ft (NGVD 29) and a maximum storage of approximately 347 acre feet. The project would be operated as a run-of-river facility. The existing impoundment would not be affected by the project.

Preliminary analysis favors installation of new generating equipment at the project spillway (Exhibit 3 – Figure 3). Generating equipment would consist of a single double regulated bulb turbine and generator. The unit would have a total installed capacity of approximately 1,200 kw at a rated head of 12-ft and 850 cfs flow. The average annual generation is estimated to be approximately 4,000 MWH.

The project will be configured to eliminate or minimize the creation of a bypass reach to the extent practicable. Turbine flows will be routed through a new intake at the upstream face of the existing dam and will discharge in a restored tailrace channel immediately downstream of the spillway. A new powerhouse will be constructed in the location of the existing abandoned gates on river left. The powerhouse will be integral to the dam and will contain the new generating equipment and controls.

A new, single circuit overhead line would be built to connect the project to the existing National Grid 13.8 KV distribution line at existing Bell Atlantic utility pole number 31-1 on Albion Rd.

There are no lands of the United States that are enclosed within the proposed project.

Albion Hydro, LLC anticipates operating the project according to the following provisions:

- Operate the project in run-of-river mode;
- Provide instream flows at levels determined in consultation with the Rhode Island Department of Environmental Management (RIDEM) and the United States Fish

and Wildlife Service (FWS) to be protective of aquatic resources and water quality;

- Provide fish passage and protection measures in a manner and schedule approved by the RIDEM and the FWS;
- Protect cultural and historic resources;
- Maintain opportunities for public access, and;
- Implement a flow monitoring program for the project.

# **EXHIBIT 2: DESCRIPTION OF STUDIES TO BE CONDUCTED**

Albion Hydro, LLC proposes to pursue a license exemption for a minor water power project in accordance with 18 CFR 4.3. Albion Hydro, LLC will prepare a First Stage Consultation Document (FSCD) and initiate Stage 1 of the Traditional Licensing Process (TLP) in accordance with 18 CFR 4.30. The FSCD will outline existing information and necessary studies and be used as the basis for a Joint Meeting with resource agencies and the public to be held shortly after issuance of a preliminary permit. Based on consultation with resource agencies, Albion Hydro, LLC will conduct necessary studies and prepare a development application. The application will include:

- Introductory statement.
- Optimization analysis outlining rationale for equipment selection and project configuration.
- Exhibit A describing the small hydroelectric project and its proposed mode of operation.
- Exhibit E providing an environmental report reflecting pre-filing consultation requirements. Commensurate with the scope and environmental impact of the construction and operation of the small hydroelectric power project, the exhibit will include a description of the project's environmental setting, the expected environmental impacts, and proposed measures to protect the environment.
- Exhibit F providing drawings showing the project structures and equipment.
- Exhibit G providing a map of the project and boundary.

Albion Hydro, LLC will utilize existing and newly acquired information as appropriate to complete the optimization study and exhibits noted above. We anticipate collecting and evaluating information relative to the following within the term of the permit:

- Hydrology and Hydraulics;
- Site Survey Data;
- Geotechnical Data;
- Natural Resources;
- Optimization Study;
- Cultural and Historic Resources;
- Constructability, and;
- Project Economics.

The cost for studies and preparation of the development application is estimated to be \$250,000. The expected sources and extent of financing available to Albion Hydro, LLC to conduct the necessary studies are:

- Private Financing;
- Public-Private Partnerships, and;
- Renewable Energy Development Grant Programs.

The potential need for any new construction, including the optimal size, location, and nature of such construction will be determined based on the results of the investigations noted above. A work plan and schedule for any new construction will be prepared as appropriate.

Albion Hydro, LLC does not anticipate the need to construct any new roads for the purposes of conducting the feasibility study noted above.

Albion Hydro, LLC has held preliminary discussions with the following stakeholder groups:

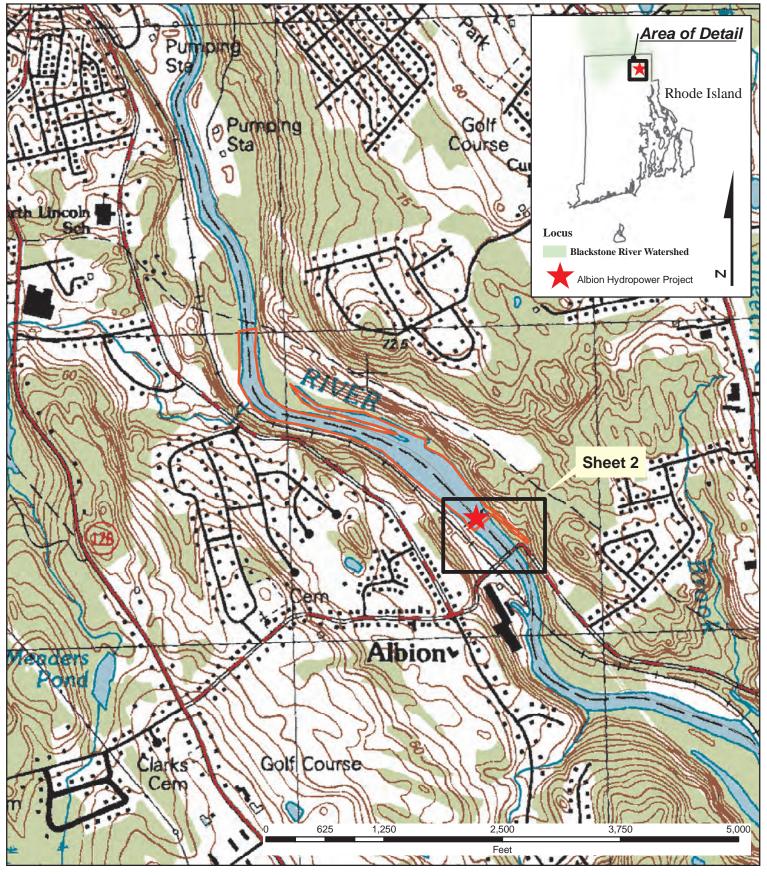
- Blackstone River Valley Tourism Council;
- Blackstone River Watershed Council;
- The National Park Service;
- The Rhode Island Economic Development Corporation (RIEDC);
- The Rhode Island Department of Environmental Management (RIDEM);
- Town of Lincoln;
- Town of Cumberland;
- Town of Glocester;
- The City of Pawtucket;
- The City of Central Falls;
- Conservation Law Foundation;
- Narragansett Bay Estuary Program;
- Rhode Island Office of Energy Resources, and;
- Save the Bay.

# EXHIBIT 3: MAPS

Attached are the following drawings:

Sheet 1 – Locus and Project Boundary

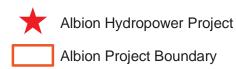
Sheet 2 – General Arrangement



Albion Hydro, LLC Albion Hydropower Project

Sheet 1 Project Location / Boundary

Legend

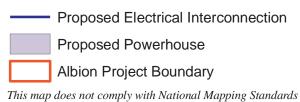


This map does not comply with National Mapping Standards and is intended for informational purposes only.



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Sheet 2 General Arrangement



and is intended for informational purposes only.