



Janel E. Neuman
janel.neuman@tonkon.com

503.802.5722 direct
503.221.1440 main

October 29, 2019

HAND DELIVERED

Ms. Mary S. Graineey
Hydroelectric Program Coordinator
Oregon Water Resources Department
725 Summer St. NE, Suite A
Salem, OR 97301

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OCT 30 2019

OWRD

Re: Swan Lake North Pumped Storage Project

Dear Ms. Graineey:

On behalf of my client, Swan Lake North Hydro, LLC ("Swan Lake"), please find enclosed two related water right applications and corresponding checks to cover the related application fees to secure water and water rights for the proposed Swan Lake North Pumped Storage Project ("Project") in Klamath County. As you are aware, the Project received License No. 13318-003 from the Federal Energy Regulatory Commission on April 30, 2019.

The enclosures consist of the following documents:

1. Final Application HE-617 to Develop a Major Hydroelectric Project ("Hydro Application") with Appendices 1 through 9 and Exhibits A through G;¹
2. Permanent Transfer Application ("Transfer Application");
3. Hydro Application fee in the amount of \$80,000.00, as required by ORS 543.280(3)(b) and OAR 690-051-0095; and
4. Transfer Application fee in the amount of \$3,370.00, as required by OAR 690-380-3000(25).

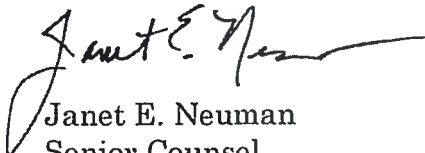
¹ The required exhibits are described and identified by letter in OAR 690-051-0100, so we used separately-numbered appendices to submit additional pertinent materials.

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Since the two applications are interdependent, Swan Lake requests that the Department process the Hydro Application and the Transfer Application concurrently with coordinated review and completion timelines. With its Hydro Application, Swan Lake seeks the right to appropriate groundwater for initial construction uses and for the initial fill and occasional refill of the Project reservoirs throughout the term of any approved hydroelectric license. Under the Transfer Application, Swan Lake requests a permanent transfer of a lesser amount of groundwater to maintain Project reservoir water levels to account for annual losses due to evaporation. In addition, Swan Lake requests that the public hearing required by OAR 690-051-0095(3)(a) be scheduled as soon as is feasible, preferably no later than early December.

Thanks very much for your consideration of these applications. Should you have any comments or questions regarding the enclosed, please do not hesitate to contact me.

Sincerely,


Janet E. Neuman
Senior Counsel

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cc: Erik Steimle, Swan Lake North Hydro Project President
Peter Mohr, Attorney for Edgewood Ranch, Inc.

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Swan Lake North Hydro, LLC

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Application for Permanent Water Right Transfer (T-_____)



Oregon Water Resources Department
725 Summer Street NE, Suite A
Salem Oregon 97301-1271
(503) 986-0900
www.wrd.state.or.us

Application to Develop a Major
Hydroelectric Project
(More than 100 theoretical horsepower)

Please type or print in dark ink. If your application is found to be incomplete or inaccurate, we will return it to you. If any requested information does not apply, please insert "n/a". Please read and refer to the instructions guide when completing your application. A summary of review criteria and procedures that are applicable to minor hydroelectric projects is available at www.wrd.state.or.us Thank you.

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1. APPLICANT INFORMATION

Applicants: Swan Lake North Hydro, LLC, by Erik Steimle
First Last

Organization: Swan Lake North Hydro, LLC ("Swan Lake") is a Delaware limited liability company registered to do business in the State of Oregon. Erik Steimle is Swan Lake's Project President for the Swan Lake North Pumped Storage Project ("Project") in Klamath County, Oregon. Additional corporate information required by OAR 690-051-0100(4) and (5) is included in APPENDIX 1.

Mailing Address: Erik Steimle, Swan Lake North Hydro, LLC, 220 NW 8th Ave. Portland, OR 97209

City State Zip

Phone: (503) 998-0230

Home X Work Other

*Fax: E-mail address: erik@ryedevelopment.com

*Optional Information

2. PROPERTY OWNERSHIP

Do you own all the land where you propose to divert, transport, and use water? This includes diversion location and place of use; roads; rights-of-way; and canals or ditches.

[] Yes, (Skip to section 3 "Water Use")

[X] No, Please check the appropriate box below.

[X] I have a recorded easement or written authorization permitting access.

[] I do not currently have written authorization or easement permitting access.

Note: A water right cannot be issued without written authorization or easement provided to the Department.

List the names and mailing addresses of all affected landowners.

Landowners affected by reservoirs, penstock, and powerhouse:

Edgewood Ranch, Inc.
Mr. Lauren Jespersen, CFO
12941 Swan Lake Rd
Klamath Falls, OR 97603

Green Diamond Resource Company
Mr. Andy Elsbree, Vice President
Green Diamond Resource Company
6400 Hwy 66
Klamath Falls, OR 97601

Mr. Galen Schuler, General Counsel
Green Diamond Resource Company
1301 Fifth Ave., Suite 2700
Seattle, WA 98101

United States Bureau of Land Management
Attention: Don Holmstrom
Klamath Falls District Office
7879, 2795 Anderson Avenue, #25
Klamath Falls, OR 97603

Landowners affected by transmission line:
SEE APPENDIX 2.

Attach a separate sheet if needed.

3. WATER USE

Last updated: 9/20/2005

HYDRO

A. Proposed Source and Amount of Water

Groundwater will be used in a closed-loop hydroelectric generation project (the "Project"), also known as a pumped storage hydro project ("PSH"). The Project will generate electrical power by cycling water between an upper reservoir ("Upper Reservoir") and a lower reservoir ("Lower Reservoir") (together the "Project Reservoir System"). The Federal Energy Regulatory Commission ("FERC") issued License 13318-003 for the Project on April 30, 2019 ("FERC License"); a copy of the license is attached as **APPENDIX 3**. Water use will include Project construction, initial reservoir fill, annual maintenance of reservoir level, and occasional reservoir refills as may occur throughout the term of the license. *SEE* Remarks in Section 8, further describing the sources and amount of water to be used in the Project.

Provide the commonly used name of the water body from which water will be diverted, and the name of the stream or lake it flows into. If unnamed, say so. If the source will be a reservoir, list reservoir name and/or permit number: GROUNDWATER, well numbers listed below.

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Provide the amount of water you propose to use from each source, for each use, in cubic feet-per-second (CFS) or gallons per minute (GPM). If the proposed use is from storage, provide the amount in acre-feet (AF): GROUNDWATER, amounts listed below.

(1 cubic foot per second = 448.8 gallons per minute 1 acre-foot = 43,560 cubic feet)

Source	Tributary to	Amount (AF, CFS, GPM)
Well KLAM 2263	Anderson Creek/Swan Lake Basin	731.1 AF; 3.05 CFS
Well KLAM 2259	Anderson Creek/Swan Lake Basin	742.5 AF; 3.09 CFS
Well KLAM 2260	Anderson Creek/Swan Lake Basin	722.1 AF; 3.01 CFS
Well KLAM 2262	Edgewood Creek	891.6 AF; 3.72 CFS

B. Period of Use

Indicate the time of year when you propose to use water:

Under this application, groundwater will be withdrawn *only* during the irrigation season for Project construction, initial fill of the “Project Reservoir System,” and occasional re-fill of the Project Reservoir System, if required during the term of the FERC License. Additionally, groundwater will be withdrawn during the irrigation season for annual maintenance of the Project Reservoir System water levels, pursuant to the terms and conditions of a final order approving a permanent water right transfer application concurrently filed with this hydroelectric application. Except for the groundwater used for Project construction, all groundwater used in the Project will be used year-round for hydroelectric generation.

C. Power Development

Project operation and power generation is described in **Exhibit A**, submitted as part of the Applicant’s 2015 FERC License application and further updated in March, 2019. In summary, the Project is a 393.3 MW closed-loop/pumped storage hydroelectric generation project. The Project will use off-peak energy (i.e., energy available during periods of low electrical demand) to pump water from the Lower Reservoir to the Upper Reservoir and will then generate energy during periods of peak energy demand by releasing water from the Upper Reservoir and conveying it by penstock down to and through a powerhouse (“Powerhouse”), from which it will empty back into the Lower Reservoir. Generation timing will be based on peak/off-peak power considerations, the need to augment the production of renewable wind and solar power generation, and/or the need to provide ancillary power services.

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The Project is designed to pump approximately 2,110 acre-feet of water from the Lower Reservoir to the Upper Reservoir in approximately 11.5 hours; it will provide a maximum of 9.5 hours of generation per day at maximum generating output. Under typical operations, a full pumping/generation cycle will take approximately 30 hours (1.2 days). During operation, the maximum water level fluctuation in the Upper Reservoir will be approximately 44 feet, and in the Lower Reservoir, it will be approximately 50 feet.

D. Location

All of the following locations are in Klamath County:

1. The primary point of appropriation (Well KLAM 2263) is located within the SW ¼ of the SE ¼ of Section 9, Township 37S, Range 10E, W.M. Additional points of appropriation include Wells KLAM 2259 and 2262. KLAM 2259 is located in the SW ¼ of the SW ¼ of Section 8, Township 37S, Range 10E, W.M. KLAM 2260 is located in the SW ¼ of the NE ¼ of Section 8, Township 37S, Range 10E, W.M. KLAM 2262 is located in the NW ¼ of the SW ¼ of Section 8, Township 37S, Range 10E, W.M.
2. The Upper Reservoir is located within the NW ¼ of the NW ¼ and the NW, SW, and SE ¼s of the SE ¼ of Section 3, Township 37S, Range 10E, W.M., in Klamath County. .
3. The Lower Reservoir and the adjacent Powerhouse containing the generating units (as further described below in Section E) is located in the SW & SE ¼ of the NE ¼, the NE & SE ¼ of the SW ¼, and in the SE ¼ of Section 16, Township 37S, Range 10E, W.M..
4. The penstock between the Upper Reservoir and the Powerhouse is located within the NW & SW ¼ of the NE ¼ of Section 16, Township 37S, Range 10E, W.M.

E. Project Facilities

Project facilities are described in detail in **Exhibit A**. Project drawings, also submitted as part of the 2015 FERC application and updated in May, 2019, are included in **Exhibit F**. In summary, the Project will consist of the Upper and Lower Reservoirs, a high-pressure steel penstock connecting the Upper Reservoir with the Powerhouse, the Powerhouse (including generating/pumping facilities), three low-pressure steel penstocks connecting the Powerhouse to the Lower Reservoir, a transmission line and substation, and access roads to the Upper Reservoir and the Lower Reservoir.

1. Reservoirs.

a. Upper Reservoir. An off-channel reservoir constructed of asphalt and concrete, with a geomembrane lining, will be formed behind an approximately 7,972-foot-long, 58-foot-high earthen embankment, with a surface area of approximately 64.21 acres and a storage capacity of no less than 2,568 acre-feet at a maximum surface elevation of 6,128 feet above mean sea level (msl).

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A bell-mouth intake fitted with a 38.6-foot-wide by 29.8-foot-long inclined screen and head gate will withdraw water from the Upper Reservoir and deliver it to the Powerhouse through a 13.8-foot-diameter, 9,655-foot-long, high-pressure steel penstock that will be predominantly above-ground with a 14-foot-long buried segment.

b. Lower Reservoir. An off-channel reservoir constructed of asphalt and concrete, with a geomembrane lining, will be formed behind an approximately 8,003-foot-long, 65-foot-high earthen embankment, with a surface area of approximately 60.14 acres and a storage capacity of no less than 2,581 acre-feet at a maximum surface elevation of 4,457 feet msl.

Both reservoirs will be fitted with drainage systems designed to detect, collect, and monitor water leakage from the reservoirs. A 500-foot-long, riprap-lined trapezoidal spillway will be built into the crests of the Upper Reservoir and Lower Reservoir embankments at an elevation of approximately 6,135 feet msl and 4,464 feet msl, respectively.

3. Powerhouse. The Powerhouse will be partially buried and will be constructed adjacent to the Lower Reservoir and contain three 131.1-MW variable speed reversible pump-turbine units for a total installed nameplate capacity of 393.3 MW. Upon entering the Powerhouse, the steel penstock will trifurcate to distribute flow to each pump-turbine unit, with flow distribution controlled by a spherical valve located at the intake of the pump-turbine units. The total maximum hydraulic capacity of the turbines will be 3,230 cfs. Each turbine will discharge into the Lower Reservoir through a separate 9.8-foot-diameter, 1,430-foot-long steel low pressure penstock that will be predominantly above-ground with a 78-foot-long buried segment.

4. Water Supply Facilities. Groundwater for construction of the Project, initial fill, annual maintenance of the Project Reservoir System water levels, and occasional refill of the Project Reservoir System will be supplied by Landowner Edgewood Ranch, Inc.'s three existing agricultural wells identified in Section 3.A above and their related pumping systems. Groundwater will be conveyed through the existing irrigation water distribution pipelines to a dedicated and metered Project pipeline through which the water will initially be conveyed to the Lower Reservoir and then pumped up to the Upper Reservoir for use for hydroelectric power generation. Metering is further addressed in Section 4 below.

5. Power generated by the Project will be transmitted from the Powerhouse to a new adjacent fenced substation and from there through a new 32.8-mile-long, 230-kilovolt above-ground transmission line to interconnect with the existing and currently operating Malin Substation, which serves PacifiCorp, the Bonneville Power Administration ("BPA"), and a group of California utilities. The Applicant is finalizing an interconnection agreement with PacifiCorp, and may enter agreements with the other parties served by the substation in the future.

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6. Temporary/Permanent Access to Project Facilities. Applicant will improve approximately 10.7 miles of existing roads and construct 3.4 miles of new permanent road to access the Lower Reservoir, Upper Reservoir, laydown areas, Powerhouse, substation and some of the power transmission towers. Applicant will also construct approximately 8.3 miles of temporary project access road to construct portions of the power transmission line.

7. Additional Project Information. As noted above, Exhibits A and F contain more detailed Project descriptions and project drawings.

4. WATER MANAGEMENT

A. Monitoring

How will you monitor your diversion to be sure you are within the limits of your water right and you are not wasting water?

Weir Meter Periodic Sampling

Have you planned for a minimum bypass flow?

Describe: N/A (all water to be sourced from groundwater wells)

The three agricultural wells proposed to provide water for the Project will be metered with totalizing flow meters. The Project pipeline intake that receives water from the three wells and the related irrigation water distribution pipeline will also be equipped with a totalizing flowmeter and will be metered to confirm the amount of water used solely by the Project. Meter readings will be taken monthly during construction, initial reservoir fill, annual maintenance of reservoir levels, and (to the extent necessary) during occasional reservoir re-fill throughout the term of the hydroelectric license. Meter readings will be reported annually to the Oregon Water Resources Department. Records will be available for Watermaster inspection as required by OWRD.

5. RESOURCE PROTECTION

In granting permission to use water from a stream or lake, the state requires careful control of activities that may affect the waterway or streamside area. Please indicate any of the practices you plan to undertake to protect water resources.

Diversion will be screened to prevent uptake of fish and other aquatic life. N/A.

Describe planned actions: Project reservoirs will be constructed fully off channel and not near any natural waterways. They will be lined, filled with groundwater, and will not contain fish or other aquatic life.

Excavation or clearing of banks will be kept to a minimum to protect riparian or streamside areas. N/A.

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Describe planned actions: Project reservoirs will be constructed in areas that do not contain riparian or streamside areas or habitat. SEE Section 3.3.4 of FERC's Final Environmental Impact Statement, attached as **Exhibit E**.

Operating equipment in a water body will be managed and timed to prevent damage to aquatic life. N/A.

Describe: In addition to being constructed and operating off-channel and solely sourced by groundwater, Project reservoirs will not contain fish or other aquatic life. SEE Section 3.3.3 of FERC's Final Environmental Impact Statement, attached as **Exhibit E**.

Water quality will be protected by preventing erosion and run-off of waste or chemical products.

Describe: Water quality considerations are addressed under the following documents/statements:

1. On-site Construction Water Tanks: Water required for construction will be contained in Baker Tanks and any water not consumed upon completion of construction will be removed offsite.

2. During the FERC licensing process, the Oregon Department of Environmental Quality ("DEQ") submitted a letter stating that 401 water quality certification is not required for this Project. A copy of the letter is attached as **APPENDIX 4**.

3. FERC License Article 302. *Contract Plans and Specifications*: Requires the Applicant to provide the Commission's Division of Dam Safety and Inspections (D2SI)-Portland Regional Engineer with final contract drawings and specifications and a supporting design document, a Quality Control and Inspection Program, Temporary Construction Emergency Action Plan, and Soil Erosion and Sediment Control Plan. Pertinent terms from Article 302 consist of the following:

"At least 60 days prior to the start of any construction, the licensee must submit one copy of its plans and specifications and supporting design document to the Commission's Division of Dam Safety and Inspections (D2SI)-Portland Regional Engineer, and two copies to the Commission (one of these must be a courtesy copy to the Director, D2SI). The submittal to the D2SI-Portland Regional Engineer must also include as part of preconstruction requirements: a Quality Control and Inspection Program, Temporary Construction Emergency Action Plan, and Soil Erosion and Sediment Control Plan. Where project features, such as access roads, are located on U.S. Bureau of Reclamation (Reclamation) or U.S. Bureau of Land Management (BLM) lands, the licensee must consult with Reclamation or BLM prior to filing the plans and specifications with the Commission and explain how it has addressed any Reclamation or BLM recommendations in the plans and specifications. The licensee may not begin construction until the D2SI-Portland Regional Engineer has reviewed and commented on the plans and specifications, determined that all preconstruction requirements have been satisfied, and authorized start of construction."

4. FERC License Article 401. Reservoir Water Quality Monitoring Plan: Requires the Applicant to prepare a reservoir water quality monitoring plan in concert with ODEQ and the Oregon Department of Fish and Wildlife (ODFW). Pertinent terms from Article 401 consist of the following:

“Within one year of license issuance, the licensee must file for Commission approval, a reservoir water quality monitoring plan.

The plan must include, at a minimum:

(1) specific methods to be used to annually monitor the levels of total dissolved solids, nutrients, and heavy metals in the project reservoirs, including type(s) of equipment, sampling location(s), and timing of monitoring;

(2) a provision for filing with the Commission a report by March 31 of each year that contains the water quality data recorded during the previous year along with any recommendations to address deteriorating water quality or modifications to the monitoring program. The licensee must allow a minimum of 30 days for the Oregon Department of Environmental Quality (Oregon DEQ), and Oregon Department of Fish and Wildlife (Oregon DFW) to comment on the report before filing it with the Commission; and

(3) an implementation schedule.

The plan must be developed after consultation with the Oregon DFW and Oregon DEQ. The licensee must include with the plan documentation of consultation, copies of recommendations on the completed plan after it has been prepared and provided to Oregon DFW and Oregon DEQ, and specific descriptions of how Oregon DFW’s and Oregon DEQ’s comments are accommodated by the plan. The licensee must allow a minimum of 30 days for Oregon DFW and Oregon DEQ to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing must include the licensee’s reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. Implementation of the plan must not begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee must implement the plan, including any changes required by the Commission.

The Commission reserves the right to direct the licensee to modify project structures or operations, or conduct other appropriate actions if the monitoring results or other applicable information indicate that such actions are necessary to protect water quality within the project reservoirs.”

5. FERC License Article 402: Hazardous Substances Spill Prevention and Cleanup Plan: Requires the Applicant to prepare a hazardous substances spill prevention and cleanup plan in concert with ODEQ. Pertinent terms from Article 402 consist of the following:

At least six months prior to the start of project construction, the licensee must file for Commission approval, a hazardous substances spill prevention and cleanup plan.

The plan must include, at a minimum, measures to:

- (1) establish fueling areas at locations that will avoid or minimize potential spills into nearby waterbodies;
- (2) inspect vehicles and equipment for leaks;
- (3) store hazardous materials in protective containers;
- (4) clean up spills immediately;
- (5) provide employee training to prevent and respond to spills; and
- (6) report any spills to Oregon Department of Environmental Quality (Oregon DEQ) and the Commission within 48 hours.

The plan must be developed after consultation with the Oregon DEQ. The licensee must include with the plan documentation of consultation, copies of recommendations on the completed plan after it has been prepared and provided to Oregon DEQ, and specific descriptions of how Oregon DEQ’s comments are accommodated by the plan. The licensee must allow a minimum of 30 days for the Oregon DEQ to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing must include the licensee’s reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. Implementation of the plan must not begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee must implement the plan, including any changes required by the Commission.

SEE Remarks in Section 8 identifying additional Resource Protection Plans required under FERC License Articles 403 through 408 and 417.

6. FINANCES AND SCHEDULE

The estimated cost of the Project is:

\$800-850 million (USD), as detailed in Exhibit D submitted as part of the 2015 FERC license application and updated in May 2019. This total from the May 2019 update includes \$100 million in contingency and soft costs added to the cost estimate included in the original FERC application.

The proposed use or market for the power to be developed is: Oregon and Washington State Utilities including, but not limited to, Portland General Electric, PacifiCorp, and Avista. The successful integration of large amounts of wind and solar power to the existing electric generation system in the Pacific Northwest and California will increasingly depend on the ability to store large amounts of renewable energy on a daily basis so that it can be dispatched on demand when and where it is needed. PSH is the most economical bulk energy storage solution to create greater energy efficiencies in the face of the following challenges presented by other forms of renewable energy:

- *Storing renewable energy and absorbing over-generation:* PSH facilities can store large amounts of surplus energy for later distribution and use when needed, a feature that is particularly valuable during periods when solar and wind power production exceeds demand.
- *Meeting peak demand:* PSH resources are uniquely suited to releasing stores of renewable energy over long durations during periods of peak demand.
- *Capturing oversupply of California solar power:* PSH can support the efficient storage of large amounts of California solar power for delivery to Pacific Northwest consumers at times of peak demand.
- *Minimizing curtailment and transmission congestion:* Renewable resources are often located in remote areas with limited transmission. When transmission lines become congested, renewable generation sources are forced to curtail their production. PSH acts as a buffer, optimizing the use of existing transmission lines and minimizing strain on the electrical grid, thereby reducing the need for transmission upgrades.

In addition, PSH can provide most (if not all) of the grid reliability services currently provided by fossil fuel-fired power plants, such as primary frequency and voltage response. These ancillary services are critical to maintaining a reliable electricity grid. For these reasons, PSH is the best available bulk energy storage technology for supporting renewables integration.

Project completion schedule following issuance of a final non-appealable order granting the hydroelectric water license (“Final Order”): Construction is expected to (a) begin immediately upon issuance of the Final Order, and (b) be completed within four years of start of construction, with power to be generated and sold thereafter. A detailed Project development/construction schedule submitted as part of the 2015 FERC license application, as updated in May 2019, is attached as Exhibit C (the “Project Construction Schedule”).

The Federal Energy Regulatory Commission issued a 50-year License for the Project on April 30, 2019. However, the Project is designed for a 100+ year lifespan and the Licensee has the option to relicense the facility with FERC prior to the expiration of the current FERC License in 2069. If and when the Applicant pursues federal relicensing, it will also pursue state reauthorization under ORS 543A.120-543A.150. Upon a decision to terminate Project operations, the Project must be decommissioned under applicable Oregon laws. Upon Project termination, the method of removal required by the FERC License Article 30 is Project site restoration to pre-Project conditions.

7. NEIGHBORS

The following individuals own property within 1,000 feet of the project boundary (include names, physical addresses, and mailing addresses):

Ownership within 1,000 feet of the reservoirs, powerhouse, and penstock:

Edgewood Ranch, Inc., Attn. Mr. Lauren Jespersen, 12941 Swan Lake Rd, Klamath Falls, OR 97603

Green Diamond Resource Company, Attn. Mr. Andy Elsbree, 6400 Highway 66, Klamath Falls, OR 97601

United States Bureau of Land Management, Attention: Don Holmstrom, Klamath Falls District Office, 7879, 795 Anderson Avenue, #25, Klamath Falls, OR 97603

Ownership within 1,000 feet of the transmission line: **SEE APPENDIX 2.**

8. REMARKS

If you would like to clarify any information you have provided in the application, please do so here and reference the specific application question you are addressing.

Additional information for Section (Question) 3: Water Use

A. Proposed Source and Amount

All land access and use requirements for the location, construction, and operation of the reservoirs, the Powerhouse, and all related water rights and water supply infrastructure for the provision of water for construction and operation of the Project have been secured by the Applicant through written agreements it has entered into with Edgewood Ranch, Inc. (“Edgewood”), as attested to in Affidavits of Consent filed with this Application (and which are further referenced below).

1. Reservoir, Powerhouse and Water Supply Infrastructure: Access to and Use of Affected Lands.

Pursuant to Applicant's agreements with Edgewood, upon the issuance of a Final Order approving this application (as defined in Section 6 above) and the issuance of a separate final, non-appealable order approving the Applicant's accompanying permanent water rights transfer application to provide 420 acre-feet of water for annual maintenance of the Project Reservoir System water levels ("Transfer Order", *discussed further below*), Edgewood will convey to Applicant easement interests in all affected portions of Edgewood's lands (the "Edgewood Lands") necessary for access to and from, and for the location, construction, and operation of the Project Reservoir System, the powerhouse, and related water supply and conveyance infrastructure.

2. Water and Water Rights

a. *Application for Use of 3,001 Acre-feet for Construction, Initial Fill, and Occasional Refill of Lower Reservoir.*

Applicant requests the right to use 3,001 acre-feet of water required for Project construction and for the initial fill of the Project Reservoir System following Project completion, as well as for any subsequent Project Reservoir System refill as may be required throughout the term of an approved hydroelectric license (the "Reservoir Water Right"). Water will be obtained from the four Edgewood irrigation wells identified in Section 3.A above (the "Edgewood Wells"). Pursuant to the written agreements entered into between the Applicant and Edgewood, as attested to in the Affidavit of Consent to Forbear Water Use submitted with this Application (*SEE APPENDIX 8*), all use of the 3,001 acre-feet under the Reservoir Water Right will be fully offset, and therefore mitigated, in time, place, and amount by Edgewood's concurrent forbearance from appropriation of an equal amount of water authorized for irrigation use under Water Rights Certificates 92375, 29530, and 87006 (the "Edgewood Water Rights"). Applicant estimates that it will take one irrigation season to fill the Project Reservoir System, though two irrigation seasons may be required. A description of the portions of the Edgewood Water Rights that shall be dedicated to offset and mitigate use of this requested Reservoir Water Right for hydroelectric generation, together with mapping further identifying the irrigated lands to be dried up during the Applicant's use of the Reservoir Water Right is attached hereto as **APPENDIX 5**.

In addition to the information provided under this Application in Section 3, OWRD has previously confirmed the Edgewood Wells as a sufficient water source for the Project. In conjunction with an earlier permit application for the Project (HE-592), a report titled "Groundwater Interference Testing Report" was prepared by GeoDesign and reviewed by OWRD groundwater staff. OWRD's review noted that the pumping for use of the Project will not be new pumping, but rather will be simply a different use for some of the water that is already pumped from the Edgewood Wells for irrigation on their ranch, and concluding that the water use by the Project should not injure existing groundwater or surface water rights, since the drawdown impact on the neighboring wells and surface water should be the same as currently experienced from

pumping the same amount of water for irrigation use, and that minimal drawdown that might occur at the neighboring wells should not affect the operation of those wells. A copy of the GeoDesign Report is attached as **APPENDIX 6** and a copy of the OWRD Review is attached as **APPENDIX 7**.

b. *Permanent Transfer Application for 420 Acre-feet for Annual Maintenance of Project Reservoir Water Levels.*

The Project will require 420 acre-feet of water for annual maintenance of the Reservoir water levels (to account for evaporation losses) throughout the operating life of the Project. This water will be secured by Applicant's and Edgewood's proposed permanent transfer of a specified portion of the Edgewood Water Rights. Concurrent with the submittal of this hydroelectric license application, the Applicant is submitting a permanent water rights transfer application to change the use and place of use of 420 acre-feet of the Edgewood Water Rights from irrigation use to use for hydroelectric generation in the Project (the "Reservoir Maintenance Water Right").

3. *Affidavit of Consent for Project Location, Affidavit of Consent to Forbear Water Use, and Affidavit of Consent to Transfer.*

Affidavits of Consent executed by Edgewood and attached as **APPENDIX 8** confirm (a) Applicant's rights to access and use the Edgewood Lands for the construction and operation of the Project; (b) Edgewood's commitment to forbear from using portions of the Edgewood Water Rights necessary to offset Applicant's appropriation and use of groundwater for the construction of the Project, the initial fill, and periodic re-fill of the Project Reservoir System; and (c) Edgewood's consent to convey title to a portion of the Edgewood Water Rights to permanently transfer such water rights for annual maintenance of the water levels of the Project Reservoir System.

Additional information for Section (Question) 5: Resource Protection (in addition to water quality matters specifically requested by Section 5)

Numbering is continued from the response to Section 5.

6. FERC License Article 403. *Wildlife Habitat Restoration and Enhancement Plan.* Within one year of license issuance, or at least 90 days prior to the start of any ground-disturbing activity, whichever comes first, the licensee must file for approval a wildlife habitat restoration and enhancement plan to mitigate the loss of wildlife habitat from project construction. The plan must include the measures in the draft Wildlife Habitat and Restoration and Enhancement Plan filed on April 18, 2016, and supplemented on July 25, 2016, except for the following: providing U.S. Bureau of Land Management (BLM) administrative access to a private road and making road

improvements to a temporary access road for BLM's sole use in conducting its habitat improvement projects, and funding BLM to conduct western juniper removal and mixed conifer forest thinning. The plan must also include the following measures:

(1) a description of the 585 acres of wildlife conservation land to be purchased or acquired under a long-term lease, a map showing the parcels, an explanation as to how the parcels were selected based on their proximity to the project site and their habitat values, management plans for the parcels, and a schedule for acquisition of the parcels and implementation of the management plans;

(2) a map identifying the 232 acres of western juniper/mixed conifer forest habitats to be thinned and replanted with bitterbrush and mountain mahogany on Bryant Mountain and the 50 acres of juniper and mixed conifer forest thinning in areas near the reservoirs or along the transmission line to improve wildlife habitat, the specific actions to be implemented, a monitoring plan to ensure successful revegetation, and an implementation schedule;

(3) a map identifying the location of the two wildlife waterers that are to be constructed/repared and operated for the life of the license, and a description of the inspection and maintenance procedures that will be followed to ensure that they continue to function properly; and:

(4) a provision for filing with the Commission by March 31 of each year, a report that describes the activities undertaken the prior year, activities planned for the following year, and proposed modifications to the plan, if any. The licensee must allow a minimum of 30 days for the Klamath Tribes, Oregon Department of Fish and Wildlife (Oregon DFW), U.S. Fish and Wildlife Service (FWS), and BLM to comment on the report before filing it with the Commission.

The licensee must prepare the plan after consultation with the Oregon DFW, the Klamath Tribes, BLM, and the FWS. The licensee must include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the Klamath Tribes and agencies, and specific descriptions of how the Klamath Tribes' and agencies' comments are accommodated by the plan. The licensee must allow a minimum of 30 days for the Klamath Tribes and agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing must include the licensee's reasons, based on project-specific information.

Because the licensee will be responsible for the ongoing maintenance of habitat improvements on the 585 acres conservation land, the licensee must file revised Exhibit G drawings incorporating the conservation land acquired by item 1 above within 60 days of the Commission's approval of the acquired lands.

The Commission reserves the right to require changes to the plan. Implementation of the plan must not begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee must implement the plan, including any changes required by the Commission.

7. FERC License Article 404. *Revegetation and Noxious Weed Management Plan.* Within one year of license issuance, or at least 90 days prior to the start of any ground-disturbing activity, whichever comes first, the licensee must file for approval a Revegetation and Noxious Weed Management Plan. The plan must include the provisions in the draft Revegetation and Noxious Weed Management Plan filed on October 28, 2015 (Appendix E-7 of the license application). The plan must also include the following items:

(1) a description of the seed mixes and plant species to be used (including culturally important plant species if available), the planting densities and methods, and fertilization and irrigation requirements;

(2) detailed monitoring methods, criteria for measuring the success of revegetation efforts, and a monitoring schedule that addresses short-term (first 3 to 5 years) and long-term monitoring needs;

(3) protocols for managing vegetation and noxious weeds on project lands during project operation; and

(4) an implementation schedule; and

(5) a provision for filing with the Commission a report by March 31 of each year that contains the revegetation monitoring results with recommendations for either continuing, discontinuing, or modifying monitoring efforts, and recommendations, if any, for additional revegetation or noxious weed control. The licensee must allow a minimum of 30 days for the Klamath Tribes, Oregon Department of Fish and Wildlife (Oregon DFW), U.S. Fish and Wildlife Service (FWS), U.S. Bureau of Land Management (BLM), and Klamath County Public Works to comment on the report before filing it with the Commission.

The licensee must prepare the plan after consultation with the Oregon DFW, FWS, BLM, the Klamath Tribes, and Klamath County Public Works. The licensee must include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the Klamath Tribes and agencies, and specific descriptions of how the Klamath Tribes' and agencies' comments are

accommodated by the plan. The licensee must allow a minimum of 30 days for the Klamath Tribes and agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing must include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. Implementation of the plan must not begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee must implement the plan, including any changes required by the Commission.

8. FERC License Article 405. *Avian Protection Plan*. Within one year of license issuance, or at least 90 days prior to the start of any ground-disturbing activity, whichever comes first, the licensee must file for Commission approval an avian protection plan. The plan must include the avian protection measures included in the draft Wildlife Habitat and Restoration and Enhancement Plan filed on April 18, 2016, and supplemented on July 25, 2016, with the following modifications:

(1) conduct a preconstruction survey in February to identify any early nesting raptors in addition to the two planned surveys between May 1 and July 31; expand the preconstruction survey area from 0.25 mile to 0.5 mile around project features; and based on the survey results, adjust the spatial and temporal restrictions for construction activities defined in the draft plan based on site-specific environmental conditions and nesting status and following consultation with Oregon Department of Fish and Wildlife (Oregon DFW), the U.S. Bureau of Land Management (BLM), and the U.S. Fish and Wildlife Service (FWS);

(2) install flight diverters on the approximately 2-mile-long section of transmission line between Hopper Hill and the temporary access road in Swan Lake Valley, in addition to the five high-risk areas identified in the draft Wildlife Habitat and Restoration and Enhancement Plan; and

(3) include a detailed avian collision and electrocution monitoring plan, that describes methods, implementation schedule, quantifiable thresholds for determining when corrective measures would need to be implemented to address high-collision and electrocution areas along the transmission line or at the reservoir fences, and procedures for documenting and reporting bird fatalities and injuries to Oregon DFW, BLM, and the FWS; and

(4) a provision for filing with the Commission a report by March 31 of each year that includes: the results of any surveys or monitoring, any occurrence of project-related avian injuries/mortalities, estimated fatality rates, and any recommendations for corrective measures, if necessary. The licensee must allow a minimum of 30 days for the resource agencies to comment on the report before filing it with the Commission.

The plan must address how the licensee considered the Avian Power Line Interaction Committee's recommendations provided in the *Avian Power Line Interaction Committee's Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006*, and *Reducing Avian Collisions with Power Lines: The State of the Art in 2012* (or the most recent version of these guidance documents) in the design specifications.

The licensee must prepare the plan after consultation with the Klamath Tribes, Oregon DFW, FWS, and BLM. The licensee must include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee must allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing must include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. Implementation of the plan must not begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee must implement the plan, including any changes required by the Commission.

9. FERC License Article 406. *Eagle Conservation Plan*. Within six months of license issuance, the licensee must file for approval an eagle conservation plan to protect nesting and roosting bald and golden eagles during project construction. The plan must include the eagle conservation measures included in the draft Wildlife Habitat and Restoration and Enhancement Plan filed on April 18, 2016, and supplemented on July 25, 2016, with the following additional measures:

(1) conduct two preconstruction winter roost surveys for two winter seasons; and

(2) include helicopter flight paths, except for the flight path from the airport to construction site, in preconstruction surveys for eagle nests and winter roosts; and

(3) a provision for filing with the Commission a report by March 31 of each year that surveys are conducted and construction is underway that includes: the results of any surveys or monitoring, measures taken to prevent disturbing nesting and roosting eagles, and any occurrence of project-related disturbance of nesting or roosting eagles. The licensee must allow a minimum of 30 days for the resource agencies to comment on the report before filing it with the Commission.

The licensee must prepare the plan after consultation with the Klamath Tribes, Oregon Department of Fish and Wildlife, U.S. Fish and Wildlife Service, and U.S. Bureau of Land Management. The licensee must include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are

accommodated by the plan. The licensee must allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing must include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. Implementation of the plan must not begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee must implement the plan, including any changes required by the Commission.

10. FERC License Article 407. *Ungulate Protection Plan*. Within one year of license issuance, or at least 90 days prior to the start of any ground-disturbing activity, whichever comes first, the licensee must file for Commission approval an ungulate (deer, elk, and pronghorn antelope) protection plan. The plan must include the ungulate protection measures included in the draft Wildlife Habitat and Restoration and Enhancement Plan filed on April 18, 2016, and supplemented on July 25, 2016. The plan must also include the following measures:

(1) install a big game waterer near the upper reservoir and one near the lower reservoir; a description of the type and location of the waterers chosen in consultation with Oregon Department of Fish and Wildlife (Oregon DFW); and a schedule for operating, inspecting and maintaining the waterers;

(2) a schedule for inspecting and making any necessary reservoir fence repairs;

(3) a provision to file a map, as built drawings, and pictures of the waterers within 30 days of installing the waterers; and

(4) a provision for filing a report with the Commission by March 31 of each year documenting any occurrence of project-related ungulate injuries/mortalities, and the results of its reservoir fence monitoring. The licensee must allow a minimum of 30 days for the resource agencies to comment on the report before filing it with the Commission.

The licensee must prepare the plan after consultation with the Klamath Tribes, Oregon DFW, U.S. Fish and Wildlife Service, and U.S. Bureau of Land Management. The licensee must include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee must allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing must include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. Implementation of the plan must not begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee must implement the plan, including any changes required by the Commission.

11. FERC License Article 408. *Sensitive Plant Survey Plan.* Within one year of license issuance, the licensee must file for Commission approval a plan for conducting preconstruction surveys for sensitive plants. The plan must include, but not be limited to, the following:

(1) a description of the preconstruction survey methodology for sensitive plants, including slender Orcutt grass and Greene's tuctoria;

(2) a provision for filing a report containing a map showing the areas surveyed, the results of the surveys, and specific measures to be employed to protect species if they are affected by construction, operation, or maintenance of the project. Specific species' location information should be included as an appendix to the report and marked "Confidential, Contains Privileged Information, Do Not Release" and filed separately with a request that the Secretary file it in the Commission's privileged file; and

(3) an implementation schedule.

The licensee must develop the plan after consultation with the Oregon Department of Fish and Wildlife, the U.S. Fish and Wildlife, and the U.S. Bureau of Land Management. The licensee must include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee must allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing must include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. Implementation of the plan must not begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee must implement the plan, including any changes required by the Commission.

12. FERC License Article 417. *Programmatic Agreement and Historic Properties Management Plan.* The licensee must implement the "Programmatic Agreement Between the Federal Energy Regulatory Commission, and the Oregon State Historic Preservation Office, and The Advisory Council of Historic Preservation for Managing Historic Properties that May be Affected by Issuing a License to Swan Lake North Hydro LLC for the Operation and Maintenance of the Swan Lake

North Pumped Storage Hydroelectric Project in Klamath County, Oregon (FERC No. 13318-003),” executed on April 3, 2019, and including but not limited to the Historic Properties Management Plan (HPMP) for the project. Pursuant to the requirements of this Programmatic Agreement, the licensee must file, for Commission approval, a HPMP within one year of issuance of this order. The Commission reserves the authority to require changes to the HPMP at any time during the term of this license. If the Programmatic Agreement is terminated prior to Commission approval of the HPMP, the licensee must obtain approval from the Commission, the Oregon State Historic Preservation Office, and Advisory Council of Historic Preservation before engaging in any ground-disturbing activities or taking any other action that may affect any historic properties within the project’s area of potential effects.

13. FERC License Article 306. *Public Safety Plan.* At least 60 days before start of construction, the licensee must submit one copy to the Commission’s Division of Dam Safety and Inspections (D2SI)-Portland Regional Engineer and two copies to the Commission (one of these copies must be a courtesy copy to the Commission’s Director, D2SI) of a Public Safety Plan. The plan must include a description of all safety devices and signage needed to warn the public of project-related hazards or to otherwise protect the public in the use of project lands and waters. Such measures must include, but not be limited to, specific measures to protect hikers from possible hazards related to project construction activities, and minimize disruption of use, along the Oregon, California, and Eastern Woods Line State Trail during construction, including notification procedures, signage, and establishing a temporary alternative route around the construction area.

Additional Information for Section (Question) 6: Finances and Schedules

The Project Construction Schedule anticipates a start date immediately upon issuance of a non-appealable final order approving this application. The Upper Reservoir and Lower Reservoir are expected to be finished and ready for initial fill of the Lower Reservoir and of the Upper Reservoir within one year after issuance of the order. The water available from Edgewood's three wells is expected to allow the reservoir fill to be completed during one irrigation season, though if necessary, the fill would be accomplished over two irrigation seasons. Annual reservoir maintenance refills covered by permanent transfer of a portion of the Edgewood Water Rights will occur during the irrigation season of each year beginning one year after completion of initial fill.

9. MAP REQUIREMENTS

The Department cannot process your application without accurate information showing the source of water and location of water use. You must include a map with this application form that clearly indicates the township, range, section, and quarter-quarter section of the proposed diversion location and powerhouse. See the map guidelines sheet for detailed map specifications.

SEE APPENDIX 5.

RECEIVED

OCT 30 2019

OWRD

10. SIGNATURE

By my signature below I confirm that I understand:

- X I am asking to use water specifically as described in this application.
- X Evaluation of this application will be based on information provided.
- X I cannot legally use water until the Water Resources Department issues a water right to me.
- X If I get a water right, I must not waste water.
- X If development of the water use is not according to the terms of the water right, the water right can be canceled.
- X The water use must be compatible with local comprehensive land use plans.
- X Even if the Department issues a water right to me, I may have to stop using water to allow senior water right holders, instream water rights or minimum bypass flows to get water they are entitled to, and

I affirm that all information provided in this application is true and correct to the best of my knowledge.



Project President,

10/25/2019

Signature of applicant Swān Lake North Hydro, LLC

Date

Signature of applicant

Date

11. EXHIBITS

The following Exhibits must be included as a part of this application:

Exhibit A Narrative Statement describing the proposed project from the point(s) of diversion to the water return area.

Provide a detailed written description of each component of the proposed Project from the point(s) of diversion to the water return area. The reader should be able to draw a basic picture of the Project based on the Narrative Statement. Such features include points of

diversion, dams and appurtenant works and structures, storage, diverting or forebay reservoirs connected therewith, conduits or pipes, powerhouses, water wheels, and primary lines transmitting power to the point of junction with a distributing system, or with any interconnected primary system, miscellaneous works and structures used in connection with the Project or any part thereof, rights of way, lands, flowage rights and all other properties, rights and structures necessary or appropriate in the use, operation and maintenance of the Project.

Exhibit B Project Operations Plan and Energy Production

Exhibit C Construction Schedule

Exhibit D Project Costs and Financing

Exhibit E Environmental Report

- a) Project location in environmental setting
- b) Water Use and Quality
- c) Fish Resources
- d) Wildlife Resources
- e) Plant Resources
- f) Recreation Resources
- g) Historical, Cultural and Archaeological Resources (SHPO)
- h) Land Resources – geology and soils
- i) Land Use

Exhibit F Project Drawings – Plans and Elevations

Exhibit G Project Maps

Before you submit your application be sure you have:

- Answered each question completely.
 - Attached a legible map which includes township, range, section and quarter-quarter section.
 - Attached an assessor's map showing tax lots within 300 feet of powerhouse.
 - Included a Land Use Information Form or receipt stub signed by a local official from a city or county planning office.
 - Included a check payable to the Water Resources Department for \$4000. (If a water right is approved, an additional \$1000 is required before the right can be issued.)
-

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039306/00001/10478215v1

Appendix 1

**Applicant's Corporate Status
Information
(Application Question 1)**

AMENDED ANNUAL REPORT



Corporation Division
www.filinginoregon.com

E-FILED
Sep 04, 2019
OREGON SECRETARY OF STATE

REGISTRY NUMBER

114783897

REGISTRATION DATE

09/23/2015

BUSINESS NAME

SWAN LAKE NORTH HYDRO, LLC

BUSINESS ACTIVITY

WIND AND SOLAR ENERGY

MAILING ADDRESS

40 SYLVAN RD
WALTHAM MA 02451 USA

TYPE

FOREIGN LIMITED LIABILITY COMPANY

PRIMARY PLACE OF BUSINESS

40 SYLVAN RD
WALTHAM MA 02451 USA

JURISDICTION

DELAWARE

REGISTERED AGENT

15872088 - CORPORATION SERVICE COMPANY

1127 BROADWAY ST NE STE 310
SALEM OR 97301 USA

If the Registered Agent has changed, the new agent has consented to the appointment.

MANAGER

PAUL JACOB

40 SYLVAN ROAD
WALTHAM MA 02451 USA



Corporation Division
www.filinginoregon.com

OREGON SECRETARY OF STATE

I declare, under penalty of perjury, that this document does not fraudulently conceal, fraudulently obscure, fraudulently alter or otherwise misrepresent the identity of the person or any officers, managers, members or agents of the limited liability company on behalf of which the person signs. This filing has been examined by me and is, to the best of my knowledge and belief, true, correct, and complete. Making false statements in this document is against the law and may be penalized by fines, imprisonment, or both.

By typing my name in the electronic signature field, I am agreeing to conduct business electronically with the State of Oregon. I understand that transactions and/or signatures in records may not be denied legal effect solely because they are conducted, executed, or prepared in electronic form and that if a law requires a record or signature to be in writing, an electronic record or signature satisfies that requirement.

ELECTRONIC SIGNATURE

NAME

MITCHELL CARROLL

TITLE

SECRETARY

DATE SIGNED

09-04-2019

State Of Delaware

Entity Details

10/21/2019 7:06:44PM

File Number: 5109173

Incorporation Date / Formation Date: 2/13/2012

Entity Name: SWAN LAKE NORTH HYDRO, LLC

Entity Kind: Limited Liability Company

Entity Type: General

Residency: Domestic

State: DELAWARE

Status: Good Standing

Status Date: 9/18/2015

Registered Agent Information

Name: CORPORATION SERVICE COMPANY

Address: 251 LITTLE FALLS DRIVE

City: WILMINGTON

Country:

State: DE

Postal Code: 19808

Phone: 302-636-5401

Tax Information

Last Annual Report Filed: 0

Tax Due: \$ 0

Annual Tax Assessment: \$300

Total Authorized Shares:

Filing History (Last 5 Filings)

Seq	Description	No of Pages	Filing Date mm/dd/yyyy	Filing Time	Effective Date mm/dd/yyyy
1	Renewal for Void 9000010	1	9/18/2015	2:45 PM	9/18/2015
2	Conversion	1	2/13/2012	7:12 PM	2/13/2012
3	Formation	1	2/13/2012	7:12 PM	2/13/2012

Delaware

The First State

Page 1

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED ARE TRUE AND CORRECT COPIES OF ALL DOCUMENTS ON FILE OF "SWAN LAKE NORTH HYDRO, LLC" AS RECEIVED AND FILED IN THIS OFFICE.

THE FOLLOWING DOCUMENTS HAVE BEEN CERTIFIED:

CERTIFICATE OF CONVERSION, FILED THE THIRTEENTH DAY OF FEBRUARY, A.D. 2012, AT 7:12 O`CLOCK P.M.

CERTIFICATE OF FORMATION, FILED THE THIRTEENTH DAY OF FEBRUARY, A.D. 2012, AT 7:12 O`CLOCK P.M.

CERTIFICATE OF REVIVAL, FILED THE EIGHTEENTH DAY OF SEPTEMBER, A.D. 2015, AT 2:45 O`CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID CERTIFICATES ARE THE ONLY CERTIFICATES ON RECORD OF THE AFORESAID LIMITED LIABILITY COMPANY, "SWAN LAKE NORTH HYDRO, LLC".




Jeffrey W. Bullock, Secretary of State

5109173 8100H
SR# 20197663880

Authentication: 203840943
Date: 10-22-19

You may verify this certificate online at corp.delaware.gov/authver.shtml

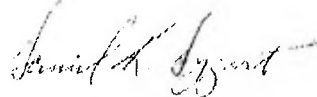
**CERTIFICATE OF CONVERSION
FROM A NON-DELAWARE LIMITED LIABILITY COMPANY TO
A DELAWARE LIMITED LIABILITY COMPANY PURSUANT TO
SECTION 18-214 OF THE DELAWARE LIMITED LIABILITY COMPANY ACT**

SWAN LAKE NORTH HYDRO, LLC

1. The jurisdiction where the Non-Delaware Limited Liability Company was first formed is Utah.
2. The jurisdiction of the Non-Delaware Limited Liability Company immediately prior to filing this Certificate of Conversion is Utah.
3. The date on which the Non-Delaware Limited Liability Company was first formed is April 28, 2010.
4. The name of the Non-Delaware Limited Liability Company immediately prior to filing this Certificate of Conversion is: Swan Lake North Hydro, LLC
5. The name of the Limited Liability Company as set forth in the Certificate of Formation is: Swan Lake North Hydro, LLC

IN WITNESS WHEREOF, the undersigned has executed this Certificate of Conversion on the 9th day of February, 2012.

By: Symbiotics, LLC, manager of Swan Lake North Hydro, LLC



By: _____
Daniel K. Dygert, Secretary

STATE OF DELAWARE
LIMITED LIABILITY COMPANY
CERTIFICATE OF FORMATION

SWAN LAKE NORTH HYDRO, LLC

THIS CERTIFICATE OF FORMATION is executed by the undersigned in order to form a limited liability company (the "Company") under the Delaware Limited Liability Company Act.

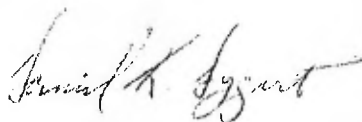
FIRST: The name of the Company is:

Swan Lake North Hydro, LLC

SECOND: The address of the registered office of the Company in the State of Delaware is 1209 Orange Street, Wilmington, Delaware 19801, and the name of the registered agent for service of process on the Company in the State of Delaware at such address is The Corporation Trust Company

IN WITNESS WHEREOF, the undersigned has executed this Certificate of Conversion on the 9th day of February, 2012.

By: Symbiotics, LLC, manager of Swan Lake North Hydro, LLC



By: _____
Daniel K. Dygert, Secretary

STATE OF DELAWARE
CERTIFICATE OF REVIVAL OF
A DELAWARE LIMITED LIABILITY COMPANY
PURSUANT TO TITLE 6, SEC. 18-1109

1. Name of the Limited Liability Company _____

SWAN LAKE NORTH HYDRO, LLC

2. Date of the original filing with the Delaware Secretary of State:

02/13/2012

3. The name and address of the Registered Agent is

Corporation Service Company
2711 Centerville Road Suite 400
Wilmington DE 19808

4. (Insert any other matters the members determine to include herein).

5. This Certificate of Revival is being filed by one or more persons authorized to
Execute and file the Certificate of Revival.

In witness whereof, the above name Limited Liability Company does hereby certify that
the Limited Liability Company is paying all annual Taxes, penalties and interest due to
the State of Delaware.

BY: _____

Authorized Person

Name: Joshua Pearson, VP & Associate GC

Print or Type

Appendix 2

**Transmission Line Owners
(Application Question 2)**

Transmission Line Owners

OWNER_NAME	OWNER_ADDR3	OWNER_CSZ	Total parcels
7 GRAND INC	3872 REDONDO WAY	KLAMATH FALLS, OR 97603	5
ANGEL SEVEN A RANCH INC	7950 EGERT RD	DAIRY, OR 97625	1
BRADLEY THOMAS E & SALLY C	7108 PHILPOTT LN	BONANZA, OR 97623	1
BUCK BUTTE LLC	304 S JONES BLVD #1066	LAS VEGAS, NV 89107	2
BUFFINGTON DAVID & CORY CODY &	7116 PHILPOTT LN	BONANZA, OR 97623	1
BYRNE MATTHEW & PAIGE	7432 PHILPOTT LANE	BONANZA, OR 97623	1
CALEDONIA PROPERTIES LLC	PO BOX 744	CLEMENTS, CA 95227	1
CALIFORNIA GIANT INC	PO BOX 1359	WATSONVILLE, CA 95077	2
CANEVARI MARSHALL R & CAROLE D	18429 140 HWY E	DAIRY, OR 97625	2
CENTURY RANCH LLC	4721 HARPOLD RD	BONANZA, OR 97623	1
CHAMBERLAIN ALLISON D	410 TRINITY ST	KLAMATH FALLS, OR 97601	1
COCHRAN EDWIN K & ALTA M	19715 140 HWY E	DAIRY, OR 97625	1
COHAN DANNY R TRUSTEE &	7810 PHILPOTT LN	BONANZA, OR 97623	2
COLAHAN PATRICK T & COCHRAN ALTA MARIE	19715 140 HWY E	DAIRY, OR 97625	4
DOYLE N CARL TRUSTEE &	PO BOX 154	ADIN, CA 96006	1
EDGEWOOD RANCH INC	12941 SWAN LAKE RD	KLAMATH FALLS, OR 97603	1
EDGEWOOD RANCH INC &	12501 SWAN LAKE RD	KLAMATH FALLS, OR 97603	1
	19055 140 HWY E	DAIRY, OR 97625	1
	19055 HWY 140 E	DAIRY, OR 97625	3
FALKOWSKI VIRGINIA	PO BOX 7771	KLAMATH FALLS, OR 97602	1
FOX DELBERT E & DIAHN S	20990 140 HWY E	DAIRY, OR 97625	1
GRAHAM BILL J TRUSTEE &	23939 HOLL RD	MALIN, OR 97632	1
GREEN DIAMOND RESOURCE COMPANY	1301 FIFTH AVE #STE 2700	SEATTLE, WA 98101-2613	4
	1301 FIFTH AVE STE 2700	SEATTLE, WA 98101-2613	7
	13013 FIFTH AVE STE 2700	SEATTLE, WA 98101	2
HAMEL HOWARD ANDREW	18598 140 HWY E	DAIRY, OR 97625	1
	18598 HWY 140 E	DAIRY, OR 97625	2
HARTER REVOCABLE TRUST ET AL	34530 MINNEOLA RD	NEWBERRY SPRINGS, CA 92365	1
HARTMAN RYAN E & JENNIFER L &	PO BOX 148	MALIN, OR 97632	3
HOBBS JONATHAN R & LAUREN E S	27392 NORTH POE VALLEY RD	KLAMATH FALLS, OR 97603	1
HORSEFLY IRRIGATION DIST	PO BOX 188	BONANZA, OR 97623	1
HUNTER DOUGLAS L & BARLOW-HUNTER LESL	7648 PHILPOTT LANE	BONANZA, OR 97623	1
IVERSEN MATTHEW P & GRETCHEN M	5921 BURGDORF RD	BONANZA, OR 97623	1
IVERSEN MATTHEW P & GRETCHEN M Total			1
JESPERSEN SWAN LAKE INC	19055 140 B HWY	DAIRY, OR 97625	9
	19055 HWY 140 B	DAIRY, OR 97625	4
JESPERSEN-EDGEWOOD INC	19055 140 HWY E	DAIRY, OR 97625	1

KAUR SUKHJIT	2154 SECO WAY	PITTSBURG, CA 94518	1
KING DAVID E & ROBIN M TRUSTEES & KLAMATH COUNTY	17575 MAUPIN ROAD HARPOLD QUARRY HARPOLD TIRE PIT	MALIN, OR 97632 (blank) (blank)	1 1 1
KORDAHL VERNON JAMES & ANN & LOVENESS VINTON ALAN & LYNCH JOHN P & CHRISTINE A	1000 NORTH POINT APT #506 PO BOX 148 7071 HARPOLD RD	SAN FRANCISCO, CA 94109 MONTGOMERY CREEK, CA 96065 KLAMATH FALLS, OR 97603	3 1 1
LYNCH JOHN P & CHRISTINE A Total			1
LYON RODNEY R & LYON MARIE M	20302 PAYGR RD	MALIN, OR 97632	3
MADSEN DOUGLAS D & CHERYL L	13411 HRICZISCSE RD	BONANZA, OR 97623	1
MCLIN DAVID R TRUSTEE & MOLEN ACRES LLC	21330 140 HWY E 21330 HWY 140 E 18231 N. POE VALLEY RD	DAIRY, OR 97625 DAIRY, OR 97625 KLAMATH FALLS, OR 97603	1 2 1
NETERER RODNEY & CHRISTINE	7540 PHILPOTT LANE	BONANZA, OR 97623	1
OLSON GEORGE & ANGELA	6441 HARPOLD RD	KLAMATH FALLS, OR 97603	1
OREGON STATE PARK & RECREATION	725 SUMMER ST NE STE C	SALEM, OR 97310	1
PACIFIC POWER & LIGHT CO	825 NE MULTNOMAH SUITE 1900	PORTLAND, OR 97232	1
PATRICK BILLIE J	PO BOX 5	BONANZA, OR 97623	1
REID JESSICA	5808 BURGDORF RD	BONANZA, OR 97623	1
SACCHI RICHARD	PO BOX 313	MALIN, OR 97632	5
SCARBOROUGH STEPHEN T & SHARON WALLA	7756 PHILPOTT LN	BONANZA, OR 97623	1
SIGNES MICHAEL JOHN & LAURA NOEL	6510 SOUTH 6TH ST PMB #221	KLAMATH FALLS, OR 97603	1
SMITH KEITH A & SHARON J	PO BOX 243	BONANZA, OR 97623	1
SMITH LYLE R & SMITH BONNIE J	6615 HARPOLD RD	KLAMATH FALLS, OR 97603	1
STAPP BRIAN E & KAREN F	6640 PHILPOTT LN	BONANZA, OR 97623	1
STATE OF OREGON DEPT. OF STATE LANDS	775 SUMMER ST NE STE 100	SALEM, OR 97301-1279	3
STEWART BRYAN & CHERI & STURM LESTER RAY TRUSTEE & UNITED STATES	PO BOX 444 36121 STASTNY RD (blank)	BONANZA, OR 97623 MALIN, OR 97632 (blank)	1 3 3
UNITED STATES OF AMERICA & VALE RANCHES LLC	PO BOX 65 1606 AMARAL CT	MALIN, OR 97632 FAIRFIELD, CA 94534	1 1
WHITNEY WILLIAM E & SANDRA L	PO BOX 114	BONANZA, OR 97623	1
WINDY RIDGE LLC	4721 HARPOLD RD	BONANZA, OR 97623	2
WORTHINGTON WILLIAM PAUL & YOUNG GARRY A & TINA L	26589 SOUTH POE VALLEY RD 6320 PHILPOTT LN	KLAMATH FALLS, OR 97603 BONANZA, OR 97623	2 1
Grand Total			121