# UNITED STATES OF AMERICA 136 FERC ¶ 62,092 FEDERAL ENERGY REGULATORY COMMISSION

Reliable Storage 2, LLC

Project No. 14114-000

# ORDER ISSUING PRELIMINARY PERMIT AND GRANTING PRIORITY TO FILE LICENSE APPLICATION

(August 1, 2011)

1. On March 18, 2011, Reliable Storage 2, LLC filed an application for a preliminary permit, pursuant to section 4(f) of the Federal Power Act (FPA), to study the feasibility of the proposed Rockaway Pumped Storage Hydroelectric Project No. 14114 (Rockaway Pumped Storage Project or project) to be located at the Mount Hope Mine site in Rockaway Township, Morris County, New Jersey.

#### I. <u>Project Proposal</u>

- 2. The proposed pumped storage project would be comprised of four stages of developments, each with a powerhouse and an upper and lower reservoir. Some of the reservoirs would be included in more than one development; with a lower reservoir for one development serving as an upper reservoir for another.
  - (a) Stage 1 of the project would consist of the following features: (1) a new upper reservoir with a surface area of 45 acres on a 60-acre upland site west of Mount Hope Lake and a total storage capacity of 3,500 to 4,000 acre-feet. The upper reservoir would be filled with water pumped out of the Mount Hope Mine Complex and have a normal maximum water surface elevation of 900 feet mean sea level (msl). The Mount Hope inactive mine would provide access to the lower reservoir located at 1,000 feet below the ground surface; (2) a reinforced concrete intake/outlet structure capable of discharging 1,500 cubic feet per second (cfs); (3) a 10-foot-diameter, 1,300-foot-long reinforced concrete vertical intake shaft; (4) an 8-foot-diameter underground penstock; (5) a powerhouse approximately 1,300 feet below ground level containing one reversible pump turbine with a total installed generating capacity of 250 megawatts (MW); (6) a transformer hall; (7) a lower reservoir; (8) a ventilation shaft and ventilation building at the northern end of the lower reservoir; and (9) various ancillary access shafts and tunnels. The proposed Stage 1 would generate over 500 gigawatt-hours per year.

<sup>&</sup>lt;sup>1</sup> 16 U.S.C. § 797(f) (2006).

- (b) Stage 2 of the project would consist of the following features: (1) the lower reservoir utilized in Stage 1, located 1,000 feet below the ground surface, would serve as the upper reservoir in Stage 2 and would have a total storage capacity of 5,000 to 5,800 acre-feet. The upper reservoir would be filled with water pumped out of the Mount Hope Mine Complex and have a normal maximum water surface elevation at 900 feet below the ground surface. The Mount Hope inactive mine would provide access to the lower reservoir located at 1,700 feet below the ground surface; (2) a reinforced concrete intake/outlet structure capable of discharging 1,500 cfs; (3) a 10-foot-diameter, 1,000-foot-long reinforced concrete vertical intake shaft; (4) an 8-foot-diameter underground penstock; (5) a powerhouse approximately 2,000 feet below ground containing one reversible pump turbine with a total installed generating capacity of 250 MW; (6) a transformer hall; (7) a lower reservoir; (8) a ventilation shaft and ventilation building at the northern end of the lower reservoir; and (9) various ancillary access shafts and tunnels. The proposed Stage 2 would generate over 500 gigawatt-hours per year.
- (c) Stage 3 of the project would consist of the following features: (1) the lower reservoir utilized in Stage 2, located 1,700 feet below the ground surface, would serve as the upper reservoir in Stage 3 and would have a total storage capacity of 4,000 to 5,000 acre-feet. The upper reservoir would be filled with water pumped out of the Mount Hope Mine Complex and have a normal maximum water surface elevation at 1,600 feet below the ground surface. The Mount Hope inactive mine would provide access to the lower reservoir located at 2,500 feet below the ground surface; (2) a reinforced concrete intake/outlet structure capable of discharging 1,500 cfs; (3) a 10-foot-diameter, 1,100-foot-long reinforced concrete vertical intake shaft; (4) an 8-foot-diameter underground penstock; (5) a powerhouse approximately 2,800 feet below ground containing one reversible pump turbine with a total installed generating capacity of 250 MW; (6) a transformer hall; (7) a lower reservoir with a storage capacity of 4,200 to 5,000 acre-feet; (8) a ventilation shaft and ventilation building at the northern end of the lower reservoir; and (9) various ancillary access shafts and tunnels. The proposed Stage 3 would generate over 500 gigawatt-hours per year.
- (d) Stage 4 would be a separate development with identical features as of Stage 3, including the following: (1) the lower reservoir utilized in Stage 2, located 1,700 feet below the ground surface, would serve as the upper reservoir in Stage 4 and would have a total storage capacity of 4,000 to 5,000 acre-feet. The upper reservoir would be filled with water pumped out of the Mount Hope Mine Complex and have a normal maximum water surface elevation at 1,600 feet below the ground surface. The Mount Hope inactive mine would provide access to the lower reservoir located at 2,500 feet below the ground surface; (2) a reinforced concrete intake/outlet structure capable of discharging 1,500 cfs; (3) a 10-foot-

diameter, 1,100-foot-long reinforced concrete vertical intake shaft; (4) an 8-foot-diameter underground penstock; (5) a powerhouse approximately 2,800 feet below ground containing a reversible pump turbine with a total installed generating capacity of 250 MW; (6) a transformer hall; (7) a lower reservoir which would consist of the lower reservoir of Stage 3; (8) a ventilation shaft and ventilation building at the northern end of the lower reservoir; and (9) various ancillary access shafts and tunnels. The proposed Stage 4 would generate over 500 gigawatt-hours per year.

The total rated capacity of the turbines and generators of the project is 1,000 MW. Upon completion, the proposed project would generate over 2,000 gigawatt-hours annually. The proposed project would also include two parallel 10.60-mile-long, 500-kilovolt transmission lines interconnecting with the proposed Jefferson Substation, located approximately 5.3 miles north-northwest of Mt. Hope Lake. The transmission line right-of-way would parallel an existing transmission line owned by Public Services Electric and Gas Company for 4.3 miles and would traverse mostly undeveloped forest lands, two lakes, and five streams. The primary transmission line of the proposed project would be located in part on federal land. Specifically, the transmission line would traverse a portion of the northern and eastern edge of the U.S. Army's Picatinny Arsenal for a total of approximately 2.4 miles.

### II. Background

3. The Commission issued public notice of Reliable Storage 2's permit application on May 17, 2011. Timely motions to intervene were filed by the Township of Rockaway, Morris County, New Jersey and White Meadow Lake, a lake community in Morris County, New Jersey. Comments were filed by the U.S. Department of the Interior (Interior), the U.S. Environmental Protection Agency (EPA), and Mr. David Helmer with the Morris County Park Commission, New Jersey.

#### III. Discussion

#### A. Consultation and Study Requirements Under the Permit

4. Interior recommends that Reliable Storage 2 be required to coordinate with the U.S. Fish and Wildlife Service and other State natural resource agencies, including the New Jersey Division of Fish and Wildlife and the New Jersey Natural Heritage Program to consider development and operations that would be compatible with existing fish and

<sup>&</sup>lt;sup>2</sup> Timely, unopposed motions to intervene are granted by operation of Rule 214 of the Commission's regulations. 18 C.F.R. § 385.214 (2011).

wildlife resources. Interior recommends that the permittee conduct studies to determine potential impacts of the proposed project on federally listed endangered species, migratory birds that breed and forage in the project area, state-listed mammals, reptiles and amphibians, state-listed plants and other species of concern, freshwater wetlands, and fish resources in the area. EPA is concerned that the permit application does not provide detailed environmental information and recommends that a general conformity applicability analysis be prepared to determine any potential effects of the proposed project on air quality due to non-attainment status of Morris County under the Clean Air Act. EPA also states that if the permittee receives federal financial assistance such as a grant or loan to construct the project, EPA would need to review the project under the Safe Drinking Water Act. EPA recommends that an interagency meeting be held with the state and federal resource agencies to discuss the project as soon as possible. Mr. David Helmer recommends consultation with the Morris County Park Commission prior to project planning to address any impacts on public park properties.

5. The Commission has not sought to place all relevant study requirements in preliminary permits.<sup>3</sup> Rather, the studies to be undertaken by a permittee are shaped by the Commission's filing requirements for development applications. Potential development applicants are required to consult with appropriate state and federal resource agencies and affected Indian tribes, conduct all reasonable studies requested by the agencies, and solicit comments on the applications before they are filed.<sup>4</sup> Further, permit conditions have been framed to ensure that the permittee does not tie up a site without pursuing in good faith a study of the project's feasibility.<sup>5</sup>

#### B. Issues Related to Project Construction and Operation

- 6. Interior recommends that the permittee provide more project specific information, including preliminary plans and more detailed location maps. Interior would like to know an estimate in acres of forest or number of trees that would be cleared for the proposed project. Interior notes that project activities may alter the hydrology of any wetlands or generate sediments which could degrade known or potential bog turtle habitat.
- 7. A preliminary permit does not authorize a permittee to undertake construction of the proposed project. The purpose of a preliminary permit is to study the feasibility of

<sup>&</sup>lt;sup>3</sup> See, e.g., Continental Lands Inc., 90 FERC ¶ 61,355 at 62,177 (2000).

<sup>&</sup>lt;sup>4</sup> See 18 C.F.R. § 4.38 (2011).

<sup>&</sup>lt;sup>5</sup> See City of Richmond, Va., 53 FERC ¶ 61,342 at 62,247 (1990).

the project, including studying potential impacts. The concerns raised in the comments are premature at the preliminary permit stage, in that they address the potential effects of constructing and operating the proposed project. Should the permittee file a license application, these issues will be addressed in the licensing process.

#### **IV.** Permit Information

- 8. Section 4(f) of the FPA authorizes the Commission to issue preliminary permits for the purpose of enabling prospective applicants for a hydropower license to secure the data and perform the acts required by section 9 of the FPA,<sup>6</sup> which in turn sets forth the material that must accompany an application for license. The purpose of a preliminary permit is to preserve the right of the permit holder to have the first priority in applying for a license for the project that is being studied.<sup>7</sup> Because a permit is issued only to allow the permit holder to investigate the feasibility of a project while the permittee conducts investigations and secures necessary data to determine the feasibility of the proposed project and to prepare a license application, it grants no land-disturbing or other property rights.<sup>8</sup>
- 9. During the course of the permit, the Commission expects that the permittee will carry out prefiling consultation and study development leading to the possible development of a license application. The prefiling process begins with preparation of a Notice of Intent (NOI) and Pre-Application Document (PAD) pursuant to sections 5.5 and 5.6 of the Commission's regulations. The permittee must use the Integrated Licensing Process unless the Commission grants a request to use an alternative process (Alternative or Traditional Licensing Process). Such a request must accompany the NOI

<sup>&</sup>lt;sup>6</sup> 16 U.S.C. § 802 (2006).

<sup>&</sup>lt;sup>7</sup> See, e.g., Mt. Hope Waterpower Project LLP, 116 FERC ¶ 61,232 at P 4 (2006) ("The purpose of a preliminary permit is to encourage hydroelectric development by affording its holder priority of application (i.e., guaranteed first-to-file status) with respect to the filing of development applications for the affected site.").

<sup>&</sup>lt;sup>8</sup> Issuance of this preliminary permit is thus not a major federal action significantly affecting the quality of the human environment. A permit holder can only enter lands it does not own with the permission of the landholder, and is required to obtain whatever environmental permits federal, state, and local authorities may require before conducting any studies. *See*, *e.g.*, *Three Mile Falls Hydro*, *LLC*, 102 FERC ¶ 61,301 at P 6 (2003); *see also Town of Summersville*, *W.Va. v. FERC*, 780 F.2d 1034 (D.C. Cir. 1986) (discussing the nature of preliminary permits).

<sup>&</sup>lt;sup>9</sup> 18 C.F.R. §§ 5.5 and 5.6 (2011).

and PAD and set forth specific information justifying the request. Should the permittee file a development application, notice of the application will be published, and interested persons and agencies will have an opportunity to intervene and to present their views concerning the project and the effects of its construction and operation.

10. A preliminary permit is not transferable. The named permittee is the only party entitled to the priority of the application for license afforded by this preliminary permit. In order to invoke permit-based priority in any subsequent licensing competition, the named permittee must file an application for license as the sole applicant, thereby evidencing its intent to be the sole licensee and to hold all proprietary rights necessary to construct, operate, and maintain the proposed project. Should any other parties intend to hold during the term of any license issued any of these proprietary rights necessary for project purposes, they must be included as joint applicants in any application for license filed. In such an instance, where parties other than the permittee are added as joint applicants for license, the joint application will not be eligible for any permit-based priority.<sup>11</sup>

#### The Director orders:

- (A) A preliminary permit is issued for the Rockaway Pumped Storage Hydroelectric Project No. 14114 to Reliable Storage 2, LLC, for a period effective the first day of the month in which this permit is issued, and ending either 36 months from the effective date or on the date that a development application submitted by the permittee has been accepted for filing, whichever occurs first.
- (B) This preliminary permit is subject to the terms and conditions of Part I of the Federal Power Act and related regulations. The permit is also subject to Articles 1 through 4, set forth in the attached standard form P-1.
- (C) This order constitutes final agency action. Any party may file a request for rehearing of this order within 30 days of the date of its issuance, as provided in section 313(a) of the Federal Power Act, 16 U.S.C. § 8251 (2006), and section 385.713 of the Commission's regulations, 18 C.F.R. § 385.713 (2011).

John B. Smith, Chief Mid-Atlantic Branch Division of Hydropower Licensing

<sup>&</sup>lt;sup>10</sup> See 18 C.F.R. § 5.3 (2011).

<sup>&</sup>lt;sup>11</sup> See City of Fayetteville, 16 FERC ¶ 61,209 (1981).

#### FEDERAL ENERGY REGULATORY COMMISSION

## TERMS AND CONDITIONS OF PRELIMINARY PERMIT

Article 1. The purpose of the permit is to maintain priority of application for a license during the term of the permit while the permittee conducts investigations and secures data necessary to determine the feasibility of the proposed project and, if the project is found to be feasible, prepares an acceptable application for license. In the course of whatever field studies the permittee undertakes, the permittee shall at all times exercise appropriate measures to prevent irreparable damage to the environment of the proposed project. This permit does not authorize the permittee to conduct any ground-disturbing activities or grant a right of entry onto any lands. The permittee must obtain any necessary authorizations and comply with any applicable laws and regulations to conduct any field studies.

Article 2. The permit is not transferable and may, after notice and opportunity for hearing, be canceled by order of the Commission upon failure of the permittee to prosecute diligently the activities for which a permit is issued, or for any other good cause shown.

Article 3. The priority granted under the permit shall be lost if the permit is canceled pursuant to Article 2 of this permit, or if the permittee fails, on or before the expiration date of the permit, to file with the Commission an application for license for the proposed project in conformity with the Commission's rules and regulations then in effect.

Article 4. No later than the last day of each six-month period from the effective date of this permit, the permittee shall file a progress report. Each progress report must describe, for that reporting period, the nature and timing of what the permittee has done under the pre-filing requirements of 18 C.F.R. sections 4.38 and 5.1-5.31 and other applicable regulations; and, where studies require access to and use of land not owned by the permittee, the status of the permittee's efforts to obtain permission to access and use the land. Progress reports may be filed electronically via the Internet, and the Commission strongly encourages e-filing. Instructions for e-filing are on the Commission's website at <a href="http://www.ferc.gov/docs-filing/efiling/efiling.asp">http://www.ferc.gov/docs-filing/efiling/efiling.asp</a>. To paper-file instead, mail four copies of the progress report to the Secretary, Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426.