

115 FERC ¶ 62, 109
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Power Authority of the State of New York

Project No. 2685-021

ORDER AMENDING LICENSE

(Issued April 28, 2006)

On December 22, 2005, the Power Authority of the State of New York (Power Authority), licensee for the Blenheim Gilboa Power Project, FERC No. 2685, filed a license amendment application to increase its authorized generating capacity. The project is located on Schoharie Creek, Schoharie County, New York.

BACKGROUND

On June 6, 1969, the Commission issued a license for the Blenheim Gilboa Power Project, authorizing four reversible pump generator units at 250 MW each, for a total installed capacity of 1,000 MW.¹ The project is located near the towns of Blenheim and Gilboa, New York in the northern Catskill Mountains of Schoharie County about 40 miles southwest of Albany. It consists of an upper reservoir and dike, a lower reservoir and dam, waterways connecting the reservoirs, an underground powerhouse, a spillway, and related facilities.

The lower reservoir operates at the maximum and minimum water levels at 900 ft and 860 ft, respectively. The volume of the reservoir at the maximum operating level is about 16,544 ac-ft including dead storage below 860 ft. The upper reservoir operates at the maximum and extreme minimum water levels at 2,003 ft and 1,955 ft, respectively with the normal minimum operating level at 1,966 ft. The reservoir water volume at the maximum operating level is about 18,791 ac-ft including dead storage below 1,955 ft.

Water travels between the upper and lower reservoirs through a single vertical water conveyance shaft, power tunnel, manifold and four penstocks. The four penstocks, which have an inside diameter of 12 ft and an average length of 1,960 ft, connect the manifold to the powerhouse.

¹41 FPC 712 (June 6, 1969).

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THE AMENDMENT

Power Authority proposes to rehabilitate the four 32-year-old pump turbine-motor generator units at the Blenheim Gilboa Power Plant by installing new high efficiency turbine runners and modifying the stay vanes, wicket gates, and seal systems. The new turbine runners and other upgrades would result in an increase of the project's current authorized generating capacity from 1,000 MW to 1,160 MW, or 16%. The plant's turbine hydraulic capacity would increase from 11,600 cfs to 12,800 cfs, or approximately 10.3%. The capacity increase would not affect upper or lower reservoir minimum or maximum levels, changing only the rate of flow between the two reservoirs including during the daily peaking cycle. The proposed schedule is to start work on the first unit in September of 2006, completing work on that unit in the spring of 2007; and continue on one unit at a time annually beginning each fall and completing work the following spring. Completion of work on the last unit is scheduled for the spring of 2010.

AGENCY CONSULTATION

1. Water Quality Certification

On November 30, 2005, the New York State Department of Environmental Conservation issued a Water Quality Certificate for the proposed turbine upgrades (Attachment A), pursuant to Section 401 of the Clean Water Act.² Section 401(d) of the Clean Water Act provides that the state certification shall become a condition of the project license.

2. Threatened And Endangered Species

Section 7(a)(2) of the Endangered Species Act of 1973³ requires federal agencies to ensure their actions are not likely to jeopardize the continued existence of federally listed threatened and endangered species, or result in the destruction or adverse modification of their designated critical habitat.

By letter dated November 9, 2005, the U.S. Fish and Wildlife Service (USFWS) stated that the federally-listed threatened bald eagle is known to nest along the Blenheim-Gilboa Reservoir and that future activities associated with the Blenheim-Gilboa Project should be evaluated for potential direct or indirect impacts to bald eagles. At the request

² 33 U.S.C. § 1341

³ 16 U.S.C. § 1536(a)

of the licensee, the Commission designated the licensee as the Commission's non-federal representative for informal consultation with the USFWS pursuant to Section 7 of the ESA. By letter dated April 17, 2006, the licensee requested the USFWS's concurrence with its determination that although the proposed action may affect the bald eagle, it would not likely adversely affect the species. By letter dated April 19, 2006, the USFWS stated that it concurs with the licensee's determination and that no further coordination or consultation with respect to the proposed action is required. However, if the project upgrade is not completed in 90 days from date of the USFWS letter, the USFWS recommends that the licensee check with the agency to ensure the listed species presence/absence information for the project is current.

3. Cultural Resources

By letter dated September 8, 2005, the Director of the New York State Office of Parks, Recreation, and Historic Preservation stated that the proposed turbine upgrades will have no impact upon cultural resources in or eligible for inclusion in the State or National Registers of Historic Places.

PUBLIC NOTICE

On January 24, 2006, the Commission issued a notice of the application for the amendment and soliciting comments and motions to intervene. By letter dated February 22, 2006, the U.S. Department of the Interior responded that it has no objections to the proposed license amendment. No other comments or motions to intervene were filed.

DISCUSSION AND CONCLUSIONS

1. Design Changes

Power Authority proposed replacement of the turbines' runners would change the project's authorized installed and hydraulic capacities, as shown in the following table.

Table 1

Plant Generating Mode	Existing	Proposed
Best Gate at Mid-Head Level ⁴ (ft)	1,104.5	1,104.5
Plant Discharge at Best Gate (cfs)	11,600	12,800
Authorized Generating Capacity (MW)	1,000	1,160

⁴ Based on the mean head between the normal maximum and normal minimum operating levels of the upper and lower reservoirs.

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After the upgrade of all four units, the project's total hydraulic capacity at best gate would increase from 11,600 cfs to 12,800 cfs, or 10.3%, and the total generating capacity would increase from 1,000 MW to 1,160 MW, or 16%. According to the Power Authority, the turbine and pump flows from the proposed modifications will allow for an increase in the rate of drawdown and refilling of the reservoir by approximately 1 hour every 9 hours. The Power Authority also estimates an increase in project's annual generation of about 7%.

2. Environmental Analysis

With the exception of minor, short term increases in area traffic and exhaust emissions from transporting of the new equipment, environmental impacts from the proposed amendment are not expected to be of any consequence. Releases from the lower reservoir into Schoharie Creek will not be changed, nor will flow rates into the reservoir from upstream. The proposal would also not likely result in an increased suspension of additional sediments, or affect the thermal and turbidity regime of either reservoir. Current reservoir levels will be maintained.

With respect to the project's fishery resources, it is not anticipated that operation of the upgraded turbines would measurably affect the project's populations of walleye and stocked rainbow and tiger trout. Reservoir levels and water quality parameters are not likely to be affected, nor should entrainment rates and any attendant mortality be measurably affected because of the accelerated rate of exchange of water between the upper and lower reservoirs.

For the reasons stated above, we conclude that issuance of this order would not constitute a major federal action significantly affecting the quality of the human environment.

SUMMARY

Our environmental analysis of the license amendment application did not identify any significant impacts that would result from the Commission's approval of the application to increase the authorized installed capacities.

This order approves the proposed increases of the project's installed generating capacity and turbine hydraulic capacity to 1,160 MW and 12,800 cfs, respectively. In ordering paragraph (B) we are requiring the licensee to start construction of the unit upgrades within two years and complete construction within five years from the date of this order. In ordering paragraph (C) we are requiring the licensee to notify the Commission, within 90 days from the start of construction, of the date each unit

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fabrication began. The date will be used to amend license article 26 concerning the assessment of annual charges. The licensee shall pay revised annual charges effective the date of commencement of construction of the revised capacity.⁵ Furthermore, in ordering paragraph (D) we are requiring the licensee to submit a revised as-built exhibit M describing the characteristics of the generating units, 90 days after the upgrades to all four units have been completed.

The Director orders:

(A) The application to amend the license to increase the project's installed capacities, as filed December 22, 2005, is approved as provided in this order.

(B) The licensee shall start refurbishing the four turbine-generator units and appurtenant equipment within two years from the date of this order and complete construction within five years from the date of this order.

(C) Within 90 days after the start of construction, the licensee shall notify the Commission of the date each unit fabrication began. The filing should include written documentation and photographs of all work performed since the start of construction. The date of commencement of construction will be used to amend license article 26 for the assessment of annual charges.

(D) Within 90 days from completion of the upgrades to all four units, the licensee must submit a revised as-built exhibit M describing the actual capacities of the upgraded turbines and generators and the date each unit began operation.

(E) Paragraph (B)(ii)(5) of the license is revised to read as follows:

(5) "an outdoor type powerhouse of reinforced concrete housing four pump-turbine motor-generator units with a total generating capacity of 1,160 MW (290 MW each) (see table 1);"

(F) This order is subject to the conditions of the Water Quality Certificate that was issued on November 30, 2005, by the New York State Department of Environmental Conservation for the proposed turbine upgrades (Attachment A).

⁵See, 66 FERC ¶ 61,086, issued January 18, 1994. The order states that, "With respect to substantial changes in installed capacity that receive prior approval, the effective date for revised annual charges will be the date of the commencement of construction of the revised capacity."

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(G) Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 C.F.R. § 385.713.

Joseph D. Morgan
Director
Division of Hydropower Administration
and Compliance

WATER QUALITY CERTIFICATE (ATTACHEMENT A)



New York State Department of Environmental Conservation
Division of Environmental Permits, Region 4
65561 State Route 18, Stamford, New York 13167-8503
Phone: (607) 652-7741 • FAX: (607) 652-2342
Website: www.dec.state.ny.us



November 30, 2005

Mr. William Slade
New York Power Authority
123 Main Street
White Plains, NY 10601

Dear Permittee:

The permit you applied for is enclosed. Please read it carefully and note the special conditions that are included in it. The permit is valid for only those activities expressly authorized therein. Work beyond the scope of the permit and the approved project plans may be considered a violation of the law and subject to appropriate enforcement action. Should you object to the permit as issued and are unable to resolve such objections with this office you may, within 30 calendar days of this transmittal, request a hearing in writing from the Regional Permit Administrator.

Please note the expiration date of the permit. Applications for the permit renewal must be made in advance of the expiration date. Please refer to your permit and/or 60NYCRR (Uniform Procedures) for specific instructions.

The following numbers pertain to this permit and should be referenced on all correspondence related to this permit and any future applications for permits associated with this facility/project area.

DEC PERMIT NO:	4-4398-0003-02004
FACILITY NAME:	Blenheim - Gibson Pump Storage Project
LOCATION:	Blenheim(T), Schoharie County

This Water Quality Certificate authorizes the Spherical Valve Replacement Project and the Turbine Upgrade Project. Although NYPA has not considered the need for a Water Quality Certificate for the Turbine Upgrade Project, physical changes to the turbine runners and changes in flow rates through the turbines have the potential to create additional fish mortality beyond the current situation and need to be evaluated under Section 401 of the Clean Water Act. The Department accepts your October 28, 2005 Response to the NOIA as a request to modify the Spherical Valve Project application.

Review of your Turbine Upgrade Project proposal, submitted on September 26, 2005 indicates that the project as proposed has minimal potential for additional fishery impacts and meets the State Water Quality Standards.

If you have any questions on the extent of the work authorized, or your obligations under the permit, please feel free to contact me.

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Unofficial FERC-generated PDF of 20051227-0358 Received by FERC OSEC 12/22/2006 in Docket#: P-2685-003

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Sincerely,



Kent P. Sanders
Deputy Regional Permit Administrator
Region 4 - Stamford

Enclosure

cc: M. Woychik
M. E. ...
I. ...
NCEC
J. ... NYTA

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UNOFFICIAL FILE - INFORMATIONAL PURPOSES ONLY - NOT FOR CONSTRUCTION PERMITS - 12/28/2005 10:10:00AM - 2685-021

PERMIT NUMBER P-2685-021-000000004 MULTYPERIODAL PERMIT	 PERMIT Under the Environmental Conservation Law (ECL)	DATE OF PERMIT November 30, 2005 DATE OF PERMIT May 31, 2011
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TYPE OF PERMIT (check all appropriate boxes)

ASSESS
 CHANGE
 APPROVATION
 PERMIT TO CONSTRUCT
 PERMIT TO OPERATE

<input type="checkbox"/> ARTICLE 15, TITLE 6: PROTECTION OF WATER	<input type="checkbox"/> ARTICLE 17, TITLES 7 & 8: BULK	<input type="checkbox"/> ARTICLE 27, TITLE 8, SUBCHAPTER 205: HAZARDOUS WASTE MGMT.
<input type="checkbox"/> ARTICLE 16, TITLE 10: AIRBORN SUPPLY	<input type="checkbox"/> ARTICLE 18: AIR POLLUTION CONTROL	<input type="checkbox"/> ARTICLE 24: OCEANIC, ESTUARINE MANAGEMENT
<input type="checkbox"/> ARTICLE 14, TITLE 11: WATER TRANSPORT	<input type="checkbox"/> ARTICLE 21, TITLE 22: MARINE LAND RECLAMATION	<input type="checkbox"/> ARTICLE 26: FLOODPLAIN MANAGEMENT
<input type="checkbox"/> ARTICLE 15, TITLE 12: LONG ISLAND SOUND	<input type="checkbox"/> ARTICLE 20: FRESHWATER WETLANDS	<input type="checkbox"/> ARTICLES 1, 2, 17, 18, 27, 37: SUBCHAPTER 205: RADIATION CONTROL
<input type="checkbox"/> ARTICLE 14, TITLE 13: BEACH & RECREATIONAL RESERVE	<input type="checkbox"/> ARTICLE 23: TIDAL WETLANDS	<input type="checkbox"/> ARTICLE 37, TITLE 3, SUBCHAPTER 205: WASTE TRANSPORT
<input checked="" type="checkbox"/> ARTICLE 205: WATER QUALITY CERTIFICATION	<input type="checkbox"/> ARTICLE 25, TITLE 2: SUBCHAPTER 205: SOLID WASTE MANAGEMENT	<input type="checkbox"/> OTHER:

APPLICANT TO: New York Power Authority		TELEPHONE NUMBER:
ADDRESS OF APPLICANT: 155 Main Street, White Plains, NY 10601		
PERMITTING AGENCY FOR PERMITTING WORK: William Sleight		TELEPHONE NUMBER: (914) 681-8400
NAME AND ADDRESS OF PROJECT/ACTIVITY: Spherical Valve Replacement and Turbine Upgrade Project, Nynegun - Gibbs Pump Storage Project, 347 Power Plant Access Road		
NAME OF PROJECT/ACTIVITY: Spherical Valve Replacement and Turbine Upgrade		
COUNTY: Schenectady	TOWN/VILLAGE: Schenectady	WATER COMPANY/USE: NY

DESCRIPTION OF WATER QUALITY CERTIFICATION

This water quality certification authorizes the Spherical Valve Replacement Project and the Turbine Upgrade Project. These projects include the replacement of the Main Valves controlling the flow of water between the Upper and Lower Reservoirs as well as the replacement of the existing turbines runners with an updated design allowing for greater project efficiency.

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, the General Conditions specified (see page 2) and any Special Conditions included as part of this permit.

SIGNATURE OF APPLICANT: Karl P. Sanders	DATE: NYS DEC, Region 4 Sub-Office 3601 State Highway 10, Saratoga, NY 12147-9600	DATE: 11/30/2005
SIGNATURE OF AGENCY: 		DATE: 11/30/2005

Form PERMIT 01/05

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

Item A: Permittee Assumes Legal Responsibility and Agrees to Indemnification

The permittee expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit, whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under article 78 of the New York Civil Practice Law and Rules or any common law or civil rights provision under Federal or State laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions which apply as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same penalties for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, licenses, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Superior Rights

This permit does not convey to the permittee any right to trespass upon the lands or interests with the riparian rights of others in order to perform the permitted work nor does it authorize the infringement of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

GENERAL CONDITIONS

1. Facility Inspection by the Department

The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 21-0307 and 21-0310(a).

The permittee shall provide a person to accompany the Department's representative during an inspection in the permit area when requested by the Department.

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

2. Relationship of this Permit to Other Department Orders and Determinations

Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

3. Applications for Permit Renewal or Modifications

The permittee must submit a separate written application to the Department for renewal, modification or transfer of the permit. Such application must include any terms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

The permittee must submit a renewal application at least:

- a) 180 days before expiration of permits for Best Pollutants Discharge Elimination System (SPDES), Hazardous Waste Management Facilities (HWMP), Major Air Pollution Control (APC), and Solid Waste Management Facilities (SWMP); and
- b) 30 days before expiration of all other permit types.

Submission of applications for permit renewal or modification are to be submitted to:

NYDEC Regional Permit Administrator, Region 4	NYDEC Deputy Regional Permit Administrator, Region 4
1730 North Wacker Road, Bensenville, NY 12020	Barnford Field Office, P.O. Box 604, Bantock, NY 12017
(for Albany, Cortland, Orleans, Rensselaer, Montgomery, & Schoharie Counties)	(for Delaware, Oswego, & Schoharie Counties)

4. Permit Modifications, Suspensions and Revocations by the Department

The Department reserves the right to modify, suspend or revoke this permit in accordance with § NYCRR Part 621. The grounds for modification, suspension or revocation include:

- a) materially false or inaccurate statements in the permit application or supporting papers;
- b) failure by the permittee to comply with any terms or conditions of the permit;
- c) exceeding the scope of the project as described in the permit application;
- d) newly discovered factual information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the issuing permit;
- e) non-compliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

Handwritten initials/signature

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Additional General Conditions
FOR ARTICLES 13 (FORM 2), 24, 25, 26, 27 AND 28 NYCRR PART 207

1. If future operations by the State of New York require an alteration in the position of the structure or work herein authorized, or if, in the opinion of the Department of Environmental Conservation it shall cause unreasonable obstruction to the free navigation of said waters or flood flows or endanger the health, safety or welfare of the people of the State, or cause loss or destruction of the natural resources of the State, the owner may be ordered by the Department to remove or alter the structure, work, obstructions, or hazards caused thereby without expense to the State, and if, upon the expiration or revocation of this permit, the structure, fill, excavation, or other modification of the watercourse hereby authorized shall not be completed, the owners, shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may require, remove all or any portion of the uncompleted structure or fill and restore to its former condition the navigable and flood capacity of the watercourse. No claim shall be made against the State of New York on account of any such removal or alteration.
2. The State of New York shall in no case be liable for any damage or injury to the structure or work herein authorized which may be caused by or result from future operations undertaken by the State for the conservation or improvement of navigation, or for other purposes, and no claim or right to compensation shall accrue from any such damage.
3. All necessary precautions shall be taken to preclude contamination of any wetland or waterway by suspended solids, sediments, fuels, solvents, lubricants, epoxy coatings, paints, concrete, leachate or any other environmentally deleterious materials associated with the project.
4. Any material dredged in the conduct of the work herein permitted shall be removed evenly, without leaving large refuse piles, ridges across the bed of a waterway or floodplain or deep holes that may have a tendency to cause damage to navigable channels or to the banks of a waterway.
5. There shall be no unreasonable interference with navigation by the work herein authorized.
6. If upon the expiration or revocation of this permit, the project herein authorized has not been completed, the applicant shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may require, remove all or any portion of the uncompleted structure or fill and restore the site to its former condition. No claim shall be made against the State of New York on account of any such removal or alteration.
7. If granted under NYCRR Part 206, the NYS Department of Environmental Conservation hereby certifies that the subject project will not contravene effluent limitations or other limitations or standards under Sections 301, 302, 303, 306 and 307 of the Clean Water Act of 1977 (PL 95-217) provided that all of the conditions listed herein are met.
8. Except as conditioned by this permit, all activities authorized by this permit must be in strict conformance with the approved plans and narrative submitted by the applicant or his agent as part of the permit application and listed in Special Condition 1 below.

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Special Conditions

Article 17 of the Environmental Conservation Law

1. All work authorized by this permit must be undertaken in accordance with the following approved plans:
 - a. Joint Application for Permit Narrative, Dated May 12, 2005 as amended by items b. and c.
 - b. Letter from John Sweeney to William Little and attached Draft Application for Non-Capacity Amendment of License for Project No. 2685, Dated September 26, 2005
 - c. New York Power Authority Response to NOAA, Dated October 26, 2005
2. The permittee shall notify the Department 3 to 5 days prior to the commencement of work on the approved project. Notification shall be made by completing and mailing the attached postcard to the Regional Permit Administrator.
3. The Upper Reservoir drawdown as permitted to begin no earlier than September 1 of any year the permit is in effect and extend for no more than eight weeks.

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Special Conditions