

UNITED STATES OF AMERICA  
BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

**FINAL APPLICATION FOR NEW LICENSE FOR MAJOR PROJECT –  
EXISTING DAM**

**EXHIBIT D – STATEMENT OF  
COSTS AND FINANCING**

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July 2020

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**GREGORY B. JARVIS PROJECT  
RELICENSING**

FERC NO. 3211



**NY Power  
Authority**

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## 1 Introduction

The Gregory B. Jarvis Power Project (Project) is located on West Canada Creek, a tributary to the Mohawk River, approximately ½ mile upstream of the Hamlet of Hinckley, in the Towns of Remsen, Russia, Ohio, and Trenton, in the counties of Oneida and Herkimer, New York. The Project is owned and operated by the Power Authority of the State of New York (d/b/a “New York Power Authority”) and referred to as “the Power Authority”).

This exhibit is required under the Federal Energy Regulatory Commission (FERC or Commission) regulations which can be found in Title 18 of the Code of Federal Regulations (CFR) Section 4.51(e). The information provided herein covers the specifics prescribed for Exhibit D and serves the purpose of providing a statement of costs and financing.

## 2 Original Cost of Existing Unlicensed Facilities (18 CFR Section 4.51(e)(1))

This section is not applicable to the Project because the Power Authority is not applying for an initial (original) license. The Project was originally licensed in 1982.

### 3 Estimated Amount Payable Upon Takeover Pursuant to Section 14 of the Federal Power Act (18 CFR Section 4.51(e)(2))

The Power Authority is a corporate municipal instrumentality of the State of New York, a body corporate and politic, a political subdivision of the state exercising governmental and public powers. The Applicant is also a “municipality” within the meaning of Section 3(7) of the Federal Power Act (FPA). Because it is a state subdivision, the Project is not subject to the takeover provisions of Section 14 of the FPA. Accordingly, the Commission’s regulations do not require the Power Authority to include an estimate of take-over costs.

#### 4 Estimated Cost of New Development (18 CFR Section 4.51(e)(3))

##### **4.1 Land and Water Rights (18 CFR Section 4.51(e)(3)(i))**

The Power Authority is not proposing to expand land or water rights as a consequence of this license application.

##### **4.2 Cost of New Facilities (18 CFR Section 4.51(e)(3)(ii))**

The Power Authority is not proposing any new development at the Project.

## 5 Estimated Average Annual Cost of the Project (18 CFR Section 4.51(e)(4))

The average annual cost of the Project includes capital costs and annual operating costs. The average annual costs also include any costs associated with the proposed protection, mitigation, and enhancement measures. The Power Authority is a subdivision of the State of New York and pays no federal, state, or local taxes.

### 5.1 Capital Costs

Net investment is the total amount of money that a company spends on capital assets, minus the cost of the depreciation of those assets. As of the end of the year 2019, the current net investment in the Project is \$17.5 million.

### 5.2 Operational Costs

[Table 5.2-1](#) presents the Project’s operational costs from 2010-2019. Operating costs include the costs of purchased power and related expenses, fuel consumed, operation and maintenance, and administrative expenses.

Table 5.2-1. Project Annual Operating Costs (Millions)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Operating Expenditure	\$1.71	\$1.78	\$1.70	\$1.70	\$2.69	\$2.77	\$2.12	\$2.90	\$3.48	\$3.21

The operating expenditures are expected to be higher than the average in 2020 because the Power Authority will undertake repairs to the eroded streambank downstream of the dam that are estimated to cost \$1.46 million. Such repair work is considered a safety improvement and will entail repair of the upstream tailrace abutment, repair of the downstream tailrace abutment, repair of bank erosion downstream of the tailrace abutment for approximately 500 feet of shoreline, repair and treatment of the concrete abutment foundation, and repair and treatment of an eroded section of the south concrete training wall.

### 5.3 Costs of Proposed Environmental Measures

[Table 5.3-1](#) presents a summary of the costs associated with the Power Authority’s proposed environmental measures.

Table 5.3-1. Estimated Cost of Proposed Environmental Measures

Proposed PME Measure	Existing or Proposed	Capital Cost (2020 dollars)	Annual Operations and Maintenance Cost (2020 dollars)
Minimum flow release of 160 cfs	Existing	N/A	N/A
Power Authority Boat Launch for Hinckley water levels between El. 1213 and El. 1225	Existing	N/A	\$12,160
Power Authority Scenic Overlook	Existing	N/A	\$0
Improve directional signage at the Power Authority Boat Launch and Scenic Overlook, including placing along New York State Route 365 one sign north of each site and one site south of each site indicating the sites' location ahead.	Proposed	\$1,200 <sup>1</sup>	\$130 <sup>2</sup>
Replace informational kiosk at Power Authority Boat Launch	Proposed	\$5,000	\$0
Provide a portable toilet facility at the Power Authority Boat Launch during the site's operational season.	Proposed	\$7,000 <sup>3</sup>	\$1,800 <sup>4</sup>
Improve the Power Authority Boat Launch so it can operate between Hinckley water levels of El. 1208 and El. 1225	Proposed	\$11,098	\$0
DO Enhancement Measure(s)	Proposed	TBD	TBD
TOTAL (less DO enhancements)		\$24,298	\$14,090

<sup>1</sup> Installation of four 12" x 18" signs or equivalent.

<sup>2</sup> Washing each of the four signs twice a year.

<sup>3</sup> Installation of a 7.25' x 5.5' concrete pad.

<sup>4</sup> Includes maintenance and cleaning by the portable toilet facility rental company.



## 6 Estimated Annual Value of Project Power (18 CFR Section 4.51(e)(5))

As with other entities active in the New York electricity market, the Power Authority participates in the New York Independent System Operator (NYISO) competitive wholesale electricity market. The NYISO, governed by FERC, coordinates energy producers' bids and utility demands to secure reliable, low-cost energy throughout New York. The Hinckley Dam and Reservoir's primary function is to provide adequate water for Canal operations. As such, the Project generates electricity with the water that is available in accordance with the 2012 Operating Diagram. When feasible, the Project generates low-cost electricity utilizing a within day peaking schedule to align generation with demand.

The NYISO market also values the installed capacity (ICAP) and ancillary services provided by generation facilities. ICAP is required by the NYISO to ensure reliability of the electric system. The NYISO market rewards those generating units capable of meeting the NYISO's reliability rules.

[Table 6-1](#) provides operating revenues for the Project from 2010 through 2019. Operating revenues include revenues from wholesale customers and market-based power sales.

**Table 6-1. Project Annual Operating Revenue (Millions)**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Operating Revenue	\$6.98	\$7.29	\$3.97	\$6.15	\$7.76	\$2.99	\$0.58	\$0.89	\$0.93	\$0.91

## 7 Sources and Extent of Financing (18 CFR Section 4.51(e)(6))

The Power Authority finances capital projects using a combination of debt obligations and internal funding sources. The Power Authority has adequate financial resources for the operation of the Project for the term of a new license.

## 8 Cost to Develop License Application (18 CFR Section 4.51(e)(7))

Costs to develop the license application are estimated to be \$2.68 million.

## 9 On-Peak and Off-Peak Values of Project Power (18 CFR Section 4.51(e)(8))

The Project's power is dispatched into the NYISO's wholesale market. Prices in this market are determined on an hourly basis by location. The Project is located in NYISO's Mohawk Valley Load Zone (Zone E). Real-Time Market Locational-Based Marginal Pricing (LBMP) data for that zone for 2019 is provided in 5-minute-increments on the NYISO website ([www.nyiso.com](http://www.nyiso.com)). This data (RTD Zonal LBMP) is summarized into hourly values, and assigned each value as either on-peak or off-peak according to the following definitions:

- On-peak – The 16-hour period 7:00 a.m. - 11:00 p.m. on non-holiday weekdays (Monday - Friday)
- Off-peak – All other times
- Holidays – New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day

On-peak, off-peak, and overall averages on a monthly and annual basis were then calculated; the results are summarized in [Table 9-1](#). This process was then analyzed for the adjacent load zones; annual results are summarized in [Table 9-2](#).

Table 9-1. 2019 Real-Time Market Locational-Based Marginal Pricing – Mohawk Valley Load Zone (E)

Month	On-Peak (\$/MWh)	Off-Peak (\$/MWh)	Overall (\$/MWh)
January	39.43	26.48	31.78
February	28.64	23.95	26.18
March	31.64	26.01	28.56
April	22.41	18.26	20.29
May	18.86	13.77	15.75
June	17.68	12.65	14.91
July	26.84	22.14	23.97
August	23.91	18.45	21.04
September	20.61	14.24	16.52
October	19.49	13.34	16.40
November	27.75	15.84	20.09
December	30.75	17.35	21.67
Annual	25.48	18.47	21.42

Table 9-2. 2019 Real-Time Market Locational-Based Marginal Pricing – Mohawk Valley Load Zone (E) and Adjacent Load Zones

Load Zone	On-Peak (\$/MWh)	Off-Peak (\$/MWh)	Overall (\$/MWh)
North	21.04	15.99	18.12
Mohawk Valley	25.48	18.47	21.42
Capital	30.07	24.64	26.93
Hudson Valley	29.94	23.36	26.14

## 10 Estimated Average Annual Increase or Decrease in Project Generation or Value of Project Power (18 CFR Section 4.51(e)(9))

The Power Authority proposes no changes to Project operations. The Power Authority anticipates no major changes to average Project generation or the value of Project power as both are driven by the NYISO market.