

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**

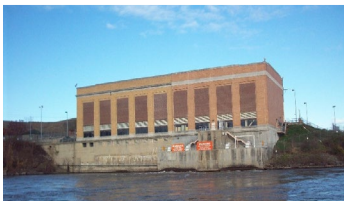
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**CRESCENT HYDROELECTRIC PROJECT
RELICENSING**

FERC NO. 4678



**NY Power
Authority**

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1 Introduction

The Crescent Project (FERC No. 4678) is an 11.8 MW conventional hydroelectric project located on the Mohawk River, approximately 4 miles upstream from its confluence with the Hudson River. The Crescent Project is located in Saratoga, Albany, and Schenectady Counties, New York, and in the towns of Waterford, Colonie, Halfmoon, Clifton Park, and Niskayuna. It is located approximately 2 miles upstream of the School Street Hydroelectric Project (FERC No. 2539) owned by Erie Boulevard Hydropower, L.P. The Crescent impoundment is approximately 10 miles long and the upstream terminus of the impoundment is located at the Vischer Ferry Project Dam (FERC No. 4679). 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), Sections 4.51(e) and 5.18(a)(5)(iii). 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))

Because the Power Authority is not applying for an initial (original) license for the Project, the requirements of Section 4.51(e)(1) do not apply. The Project was originally licensed in 1984.

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 requirements for estimated take-over costs under Section 4.51(e)(2) do not apply.

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))

Because the Power Authority is not proposing to expand land or water rights as a consequence of this license application, the requirements of Section 4.51(e)(3)(i) do not apply.

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

Because the Power Authority is not proposing any new development at the Project, the requirements of Section 4.51(e)(3)(ii) do not apply.

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 2021, the current net investment in the Project is \$41 million.

5.2 Operational Costs

Table 5-1 presents the Project's operational costs from 2012 through 2021. Operating costs include the costs of purchased power and related expenses, fuel consumed, operation and maintenance, and administrative expenses.

Table 5-1 Crescent Project Annual Operating Costs (Millions)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Operating Expenditure	\$3.73	\$3.66	\$3.31	\$3.34	\$4.30	\$6.55	\$4.47	\$5.18	\$5.13	\$7.91

5.3 Costs of Proposed Environmental Measures

Table 5-2 presents a summary of the costs associated with the Power Authority's proposed environmental measures.

Table 5-2 Estimated Cost of Proposed Environmental Measures

Proposed PME Measure	Existing or Proposed	Capital Cost (2021 dollars)	Annual Operations and Maintenance Cost (2021 dollars)
Seasonal minimum flow release of 100 cubic feet per second (cfs) or 250 cfs	Existing	N/A	N/A
Provision of downstream fish passage notch in Dam A flashboards and operation of the acoustic deterrent system	Existing	N/A	\$60,000
Provision and maintenance of two Project recreation sites; Picnic Area, Tailwater Fishing Access	Existing	N/A	\$5,000
Prepare Recreation Management Plan	Proposed	\$10,000 (plan only)	TBD

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 Crescent Dam and impoundment's primary function is to provide adequate water for Canal operations. The Crescent Project is operated on a run-of-river basis and contributes to the continued operation of the Barge Canal System, as well as the generation of low cost, emissions-free, renewable base load electricity.

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 2012 through 2021. Operating revenues include revenues from wholesale customers and market-based power sales.

Table 6-1 Crescent Project Annual Operating Revenue (Millions)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Operating Revenue	\$1.60	\$2.90	\$3.26	\$1.32	\$1.23	\$2.05	\$2.64	\$2.03	\$1.23	\$3.15

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 Licensing Costs (18 CFR Section 4.51(e)(7))

Costs to develop the license application are estimated to be \$819,476.

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

Because the Crescent Project is operated run-of-river, the on-peak and off-peak values of Project power do not apply.

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.